India. Meteorological Dept.

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INDIA WEATHER REVIEW, 1957.

Monthly Weather Report

January

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Chief features—

(1) Passage of nine western disturbances across the northern parts of the country, (2) An excess of rainfall in northwest India, Uttar Pradesh and northeast India and (3) Deficient or scanty rainfall over most of the remaining parts of the country.

Nine western disturbances moved across the northern parts of the country during the month. Of these, the third, fifth and the sixth ones were active and caused good rainfall over large areas of northern India. The seventh one was feeble and did not cause any precipitation. The remaining ones caused scattered or local precipitation over Jammu and Kashmir, Himachal Pradesh and the Punjab-Kumaon hills. A brief description of the three active disturbances is given in the following paragraph.

The third western disturbance moved into north Baluchistan and neighbourhood on the 7th and induced a 'low' on the same day over Sind. With its movement eastnortheastwards, the western disturbance intensified and lay as a deep depression over the Punjab (1) on the morning of the 9th. It, however, weakened rapidly during the course of the day and moved away across the western Himalayas on the 10th. The induced 'low' over Sind moved eastwards and became unimportant over Chota Nagpur and Bihar by the 11th. Under the influence of the western disturbance and the induced 'low', there was a good spell of rainfall in northwest India and west Uttar Pradesh on the 8th and 9th and in northeast India on the 10th and 11th. Some noteworthy amounts of rainfall recorded during this period were: Ajmer 7 cms, Hardoi and Agra 5 cms each on the 9th; Sabour 10 cms, Purnea 9 cms, Dumka 8 cms, Nainital 7 cms and Dehra Dun, Shillong, Darbhanga, Patna and Gaya 5 cms each on the 10th; Tura 6 cms, Midnapore, Agartala and Haflong 5 cms each on the 11th. The fifth western disturbance appeared over the northern divisions of West Pakistan on the 12th and moved across the western Himalayas by the 14th. It induced a shallow 'low' over northwest Madhya Pradesh on the 14th. Moving slowly eastwards, the 'low' filled up over south Bihar and Chota Nagpur on the 16th. Under the influence of these, fairly widespread or local rain or snow was reported from the Punjab (1) and Jammu and Kashmir on the 13th and 14th. Local or scattered thundershowers occurred in Madhya Pradesh on the 16th and 17th and in Orissa on the 16th. The sixth western disturbance which moved from Baluchistan to the Punjab-Kumaon hills between the 17th and 19th caused fairly widespread thundershowers in the Punjab (1) on the 18th and local or scattered rain or snow in Himachal Pradesh and Jammu and Kashmir on the 18th and 19th. A low pressure area induced by this western disturbance over north Gujarat and neighbourhood on the 17th moved eastnortheastwards and caused fairly widespread rainfall in Uttar Pradesh on the 18th.

The details regarding the movement and activity of each of the western disturbances are given in the following table :

(Please see attached statement on page 3)

Weather remained mainly dry over the peninsula during the month.

Night temperatures were generally normal or above normal over most parts of the country during the month.

The total rainfall of the month was in large excess in northeast India, Uttar Pradesh, the Punjab (1), Rajasthan, west Madhya Pradesh and Saurashtra and Kutch and in moderate excess in Jammu and Kashmir. It was in moderate defect in east Madhya Pradesh and in large defect over the rest of the country.

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10—D.D.G. Obs. Poona/61.

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September 14, 1999

Mean maximum temperature was normal in the Bay Islands, Assam, Gangetic West Bengal, Orissa, Chota Nagpur, Bihar, Madhya Pradesh, the Bombay State, Andhra Pradesh, the States of Madras and Mysore and in Kerala and below normal over the rest of the country. Mean minimum temperature was above normal in northeast India, Uttar Pradesh, the Punjab (1), west Rajasthan, east Madhya Pradesh, Vidarbha, coastal Andhra Pradesh and Telangana and normal elsewhere.

Mean relative humidity was in excess in Chota Nagpur, Bihar, Uttar Pradesh, the Punjab (1), Rajasthan, Madhya Pradesh, Gujarat, Saurashtra and Kutch, Maharashtra and Vidarbha and normal elsewhere over the conutry. Country

Mean cloud amount was in excess in Sub-Himalayan West Bengal, Chota Nagpur, Bihar, east Uttar Pradesh, Jammu and Kashmir and west Madhya Pradesh and in defect in Gujarat, Saurashtra and Kutch, Vidarbha, Telangana, Rayalaseema and coastal and south Mysore. It was normal over the rest of the country.

Data from the Arabian Sea Islands are not available.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amount for the 134 chief political divisions and the 289 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
The 17th July 1958.

S. S. LAL,
for *Director General of Observatories.*

Errata to Monthly Weather Report for January, 1957

Page No.	Station	Hour	Column	For	Read
Table II					
5	Maya Bandar	-	14	0	...
"	North Lakhimpur	-	11	74.7	84.7
"	Malda	-	7	-3.0	+3.0
6	Puri	-	3	+0.9	+0.8
"	Puri	-	17	15.5	15.8
"	Puri	-	18	12.9	12.8
"	Titilagarh	-	23	6	0
"	Bolangir	-	2	39.4(e)	29.4(e)
"	Ranchi	-	13	1.9	8.9
"	Daltonganj	-	12	+8.4	+8.0
"	Hazaribagh	-	20	3	5
"	Forbesganj	-	9	Blank	7
"	Gaya	-	4	26.5	27.5
"	Jamui	-	4	29.2	26.5
"	Jamui	-	8	5.6	9.6
"	Dumka	-	2	28.8	23.8
"	Dumka	-	4	26.8	29.2
"	Lakhimpur Kheri	-	10	40.0	46.0
"	Lakhimpur Kheri	-	15	4	5
"	Bahraich	-	15	5	4
"	Orai	-	14	1	18(a)
"	Mainpuri	-	6	9.1	9.1
"	Aligarh	-	7	+0.3	+0.8
"	Bareilly	-	11	50.8	60.8
"	Meerut	-	8	5.3	5.4
"	Najibabad	-	4	24.	24.1
"	Roorkee	-	23	0	2
"	Roorkee	-	24	0	1.
"	Ferozepur	-	10	36.1	6.1
"	Mandi	-	4	2 .9	23.9
"	Srinagar	-	27	Blank	0
"	Leh	-	17	3.2(a)	3.2
"	Gund	-	11	194.5	194.3
"	Churu	-	11	3.00	30.0
"	Barmer	-	17	...	9.6
"	Alwar	-	17	10.3	...
"	Sikar	-	17	7.0	10.3
"	Jaipur	-	17	...	7.0
"	Jaipur	-	24	Blank	3
"	Chambal	-	17	6.7	7.3
"	Jhalawar	-	17	4.6	6.7
8	Indore.	-	12	+5.8	-5.8
"	Rajkot (Aerodrome)	-	19	+7.	+7.7
"	Bhavnagar	-	16	-0.7	-0.1
9	Deolali	-	27	Blank	0
"	Khandala	-	12	+2.5	-2.5
"	Khandala	-	29	0	...
"	Akola	-	4	32.3	32.8

Page No.	Station	Hour	Column	For	Read
9	Gannavaram	-	28	Blank	0
"	Pamban	-	9	2	27
"	Nagapattinam	-	12	69.3	-69.3
10	Raichur	-	4	23.6	33.6
"	Palghat	-	15	2	0
"	Shillong	-	4	18.4	18.9
"	Darjiling (Raj Bhawan)	-	8	0.6	-0.6
"	Mukteswar (Kumaon)	-	8	0.2	-0.2
"	Mukteswar (Kumaon)	-	11	13.5	133.5
"	Nainital	-	8	2.2	-2.2
"	Tapoban	-	8	2.2	-2.2
"	Mussooree	-	8	2.8	-2.8
"	Mussooree	-	21	4	11
11	Dalhousie	-	13	414.3	114.3
"	Pachmarhi	-	15	Blank	3
"	Mahableshwar	-	14	0	...
"	Mercara	-	4	24.8	26.8
"	Ootacamund	-	8	1.1	-1.1
"	Yatung	-	8	11.7	-11.7
"	Lhasa	-	8	13.1	-13.1
"	Trincomalee	-	5	7 days	5 days
"	Batticoloa	-	13	11.0	111.0
"	Hambantota	-	7	+0.4	-0.4
"	Bokaro	-	2	4.2	24.2
"	Bokaro	-	17	7.1	7.2
"	Bokaro	-	23	5	2
"	Tilaiya	-	8	8.7	8.6
"	Tilaiya	-	26	Blank	0
12	Tehri	-	10	63.4	64.3(b)
"	Gorkha	-	2	16.5	16.5(b)
"	Nawakot	-	2	18.9(c)	18.9(e)
Table III					
13	Tezpur (P.B.O.)	2330	4	1015.0	1015.9
"	Gauhati	0830	12	-3	+3
"	Gauhati	0830	14	-1.5	+1.5
14	Rangiya	0830	20	Blank	0
15	Midnapore	1730	22	Blank	0
"	Midnapore	1730	26	Blank	0
"	Baripada	0830	27	11	14
"	Cuttack	0830	3	2	27
16	Chaibasa	1730	19	5	0
"	Hazaribagh	1730	11	66	65
"	Dhanbad	0830	5	996.4	986.4
"	Purnea	0830	6	-9	-0.9
"	Darbhanga	1730	10	14.3	15.3
"	Motihari	0830	10	15.3	15.6
"	Motihari	0830	19	0	1
"	Motihari	1730	5	1001.6	1005.6

Page No.	Station	Hour	Column	For	Read
16	Motihari	1730	10	15.6	15.4
"	Motihari	1730	19	1	0
"	Patna (Aerodrome)	0530	4	1014.1	1014.2
"	Patna (Aerodrome)	1130	17	1	2
"	Patna (Aerodrome)	1730	17	9	1
"	Jamui	0830	10	16.1	16.2
"	Jamui	1730	5	Blank	1004.1
"	Jamui	1730	6	-0.7	...
"	Dumka	0830	5	0 101	999.7
"	Dumka	0830	6	...	-0.7
"	Dumka	1730	13	.1	2.1
17	Bhagalpur	1730	15	3.4	3.5
"	Gorakhpur (P.B.O.)	0530	18	1	17
"	Ballia	0830	20	Blank	0
"	Varanasi (Banaras)	0830	9	11.9(e)	11.9(d)
"	Varanasi (Banaras)	0830	15	13.9	13.0(f)
"	Allahabad (Bamrauli)	0230	5	100.2	1003.2
"	Allahabad (Bamrauli)	1730	9	11.9	12.9
"	Fatehpur	1730	5	1000.6	1000.5
18	Agra	1730	3	164	169
"	Roorkee	1730	27	1	19
"	Dehra Dun	0530	27	2	23
"	Chandigarh	0830	3	847	347
"	Ludhiana	0830	3	347	247
"	Ludhiana	0830	20	Blank	3
"	Pathankot	0830	23	Blank	0
"	Pathankot	1730	8	11.3	11.8
19	Leh	0830	14	-0.5	+0.5
"	Leh	0830	22	2	0
"	Sri Ganganagar	0530	18	65	15
"	Churu	1730	27	4	2
"	Bikaner	0830	6	-1.4	-0.4
"	Bikaner (P.B.O.)	0530	3	"	224
"	Jodhpur	1130	23	3	1
"	Jaipur	0830	8	39.4	9.4
"	Jaipur (Sanganer Aerodrome)	0830	24	1	0
"	Jaipur (Sanganer Aerodrome)	0830	26	4	1
"	Jaipur (Sanganer Aerodrome)	1130	24	3	1
20	Jaipur (Sanganer Aerodrome)	2330	5	970.	970.3
"	Bhopal (Bairagarh)	1730	7	23.	23.3
21	Betul	0830	4	0016.1	1016.1
"	Betul	1730	9	3.4	9.4
"	Sutna	0830	6	+1.0	-1.0
"	Sutna	1130	4	1011.1	1016.1
"	Sutna	1130	15	6,2	6.1
"	Raipur	0530	5	979.9	979.0
"	Raipur	1730	8	17.0	17.9
"	Jagdalpur (P.B.O.)	0830	12	+8	-8
"	Jagdalpur (P.B.O.)	2330	26	2	1

Page No.	Station	Hour	Column	For	Read
21	Jagdalpur (P.B.O.)	2330	27	0	23
"	Idar	0830	25	4	3
22	Baroda (Aerodrome)	1130	17	0	1
"	Rajkot (Aerodrome)	1130	23	Blank	0
"	Rajkot (Aerodrome)	1730	25	7	4
"	Surendranagar	1730	4	1002.2	1012.2
"	Bhavnagar (Aerodrome)	0830	3	"	11
23	Veraval	0530	27	1	0
"	Veraval	1130	4	1115.8	1015.8
"	Bombay (Colaba)	0830	14	+0.4	-0.4
"	Bombay (Colaba)	1730	17	0	10
"	Bombay (Santacruz Aerodrome)	0230	23	1	0
"	Bombay (Santacruz Aerodrome)	0530	4	1011.3	1012.3
"	Bombay (Santacruz Aerodrome)	0530	5	1012.3	1011.3
"	Alibag	0830	5	101 .3	1013.3
"	Vengurla	1730	3	11	"
"	Malegaon	0830	14	+0.2	-0.2
"	Deolali	1730	5	94.8	947.8
"	Aurangabad	1730	15	4.5	10.5
"	Aurangabad (Chikalthana Aerodrome)	0830	4	1015.3	1015.0
"	Aurangabad (Chikalthana Aerodrome)	1130	20	2	0
"	Aurangabad (Chikalthana Aerodrome)	2330	21	Blank	0
"	Parbhani	1730	28	0	1
24	Baramati	1730	11	55	35
"	Sholapur	0830	14	+0.1	-0.1
"	Amravati	0830	9	16.2	10.2
"	Nagpur	0230	19	0	10
"	Nagpur	0530	19	2	12
"	Nagpur	0830	19	0	10
"	Ongole	0830	19	16	6
"	Gannavaram	1130	20	Blank	0
25	Hyderabad (Begumpet Aerodrome)	0530	4	1018.9	1013.9
"	Hyderabad (Begumpet Aerodrome)	1730	15	9.9	9.8
"	Hyderabad (Begumpet Aerodrome)	2330	23	1	3
"	Arogyavaram	0830	13	1.6	1.8
26	Nagapattinam	0830	28	Blank	0
27	Belgaum	0830	16	...	0
"	Belgaum	0830	17	...	0
"	Belgaum (Sambre Aerodrome)	0530	17	1	0
"	Belgaum (Sambre Aerodrome)	0830	7	19.2	19.6
"	Gadag	0830	12	5	-5
"	Raichur	0830	15	17.3	7.3
"	Raichur	0830	20	8	3
"	Bangalore (Aerodrome)	1130	17	0	7
"	Cochin (Naval Air Station)	0230	3	"	3
"	Punalur	0830	20	7	3

Pag

Page No.	Station	Hour	Column	For	Read
27	Punalur	0830	24	0	1
"	Punalur	1730	28	Blank	0
28	Kohima	1730	5	86 .4	962.4
"	Shillong	0830	14	-0.6	+0.6
"	Cherrapunji	0830	14	+0.2	-0.2
"	Kalimpong	0830	14	-0.3	+0.3
"	Mukteswar (Kumaon)	0830	12	+1.5	+15
"	Simla	0830	8	...	0
29	Baramul	0830	1	*	**
"	Sonepur	0830	8.	17.7	18.7
"	Bagra Tawa	0830	20	12	15
30	Katmandu)				
"	Okhaldunga)	In columns 16 to 28, insert zeros wherever dashes are given.			
"	Barahkshetra)				

Page No.	Station	Ht.in Km.	Hour	Column	For	Read
Table IV						
33	Amausi	1.5	1430	n	87	27
37	Cochin	7.2	0130	V	2.55	25.5
"	Dum Dum	Surface	1430	v	4	1.4
"	Dum Dum	0.15	1430	v	8	3.8
42	Mohanbari	0.9	0730	D	0 9	049
"	Nagpur	0.15	1430	D	2 6	226
44	Tiruchirapalli	0.3	1430	n	11	31
"	Trivandrum	-	0830	-	0730	0830*
45	Vengurla	Surface	0730	D	011	016
"	Vengurla	0.15	0730	D	045	041
"	Vengurla	0.3	0730	D	050	055
"	Vengurla	0.6	0730	D	075	074
"	Vengurla	0.9	0730	D	097	092
"	Vengurla	1.5	0730	D	107	108
"	Vengurla	2.1	0730	D	118	110
"	Vengurla	3.0	0730	D	326	347
"	Vengurla	4.5	0730	D	284	285
"	Vengurla	6.0	0730	D	294	295
Table V						
47	Gopalpur	12.0	0730	v	35.6	34.6
"	Imphal	10.5	1430	D	3 5	305
48	Santacruz	14.1	2030	D	260	269

VAZ/-

Statement showing the movement and activity of Western disturbance in the month of January 1957

S. No.	Period	Course	Regions affected	Nature of precipitation	Period	Remarks
1	1st-2nd	Baluchistan—Jammu and Kashmir.	Himachal Pradesh	Local rain or snow	2nd	
			Jammu and Kashmir.	Scattered rain or snow	2nd	
			Punjab-Kumaon hills	Widespread rain or snow.	2nd	
2	3rd-4th	Baluchistan—Jammu and Kashmir.	Jammu and Kashmir	Scattered rain or snow	4th	
			Jammu and Kashmir	Local rain or snow	5th	
3	7th-10th	North Baluchistan—Punjab-Kumaon hills.	Himachal Pradesh	Fairly widespread or local rain or snow.	8th and 9th	
			Jammu and Kashmir	Local rain or snow	8th to 10th	
			Punjab (1).	Fairly widespread or local rain.	8th to 10th	
			West Uttar Pradesh	Fairy widespread rain	9th and 10th	
3(a)	7th-9th	Sind and adjoining Rajasthan—north Madhya Pradesh —Bihar— Upper Assam	Rajasthan	Fairly widespread rain	9th	
			Gujarat	Local rain	9th	Induced by western disturbance No.3
			Bihar, Chota Nagpur and East Uttar Pradesh.	Fairly widespread rain	10th	
			Gangetic West Bengal	Local rain.	10th	
			Assam and Gangetic West Bengal.	Fairly widespread rain	11th	
4	10th-12th	South Baluchistan and adjoining north Arabian Sea— Punjab- Kumaon hills.	Jammu and Kashmir, Himachal Pradesh and the Punjab-Kumaon hills.	Local or scattered rain or snow	11th and 12th	
5	12th-14th	Northern divisions of West Pakistan—western Himalayas.	Jammu and Kashmir	Local rain or snow	13th and 14th	
			Punjab (1)	Fairly widespread rain or snow.	14th	
			Himachal Pradesh and Kumaon hills.	Fairly widespread rain or snow.	15th	
5(a)	14th-16th	Northwest Madhya Pradesh—south Bihar.	East Madhya Pradesh and Vidarbha.	Local thundershowers	16th	Induced by western disturbance No. 5.
			West Madhya Pradesh and Orissa.	Scatterd thundershowers	17th	
			Madhya Pradesh	Local thundershowers	17th	
6	17th-19th	Baluchistan—Punjab-Kumaon hills.	Jammu and Kashmir and Himachal Pradesh.	Local or scattered rain or snow.	18th and 19th	
			Punjab (1).	Fairly widespread rain	18th	
6(a)	17th-18th	North Gujarat—East Uttar Pradesh.	Uttar Pradesh	Fairly widespread thundershowers.	18th	Induced by western disturbance No. 6.
			Rajasthan and Madhya Pradesh.	Scattered thundershowers.	18th	
7	23rd-24th	Afghanistan—Jammu and Kashmir.	—	—	—	Did not cause any precipitation.
8	24th-27th	Baluchistan—western Himalayas.	Punjab(1) and Jammu and Kashmir.	Local rain or snow	27th	
			Jammu and Kashmir	Scattered rain or snow	28th	
9	29th-30th	Northern divisions of West Pakistan—western Himalayas.	Punjab (1) and north-west Uttar Pradesh.	Local rain	30th	
			Jammu and Kashmir and Himachal Pradesh.	Scattered rain	30th	

Division	Rainfall (millimeters)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity % 0830 hrs. I.S.T.	Relative humidity % 1730 hrs. I.S.T.	Cloud 0830 hrs. I.S.T.	Cloud 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura).	79·6	365	23·0	12·4	87	75	3·3	2·4
	+50·8	..	−0·1	+1·9	−1	..	+0·2	..
2. West Bengal .	64·5	571	24·5	14·6	78	63	2·0	1·8
	+53·2	..	−0·8	+2·6	+3	..	+0·3	..
3. Orissa . .	22·3	235	27·5	17·3	78	63	1·8	1·6
	+12·8	..	0	+2·4	+4	..	−0·1	..
4. Bihar . . .	84·1	522	23·3	12·2	81	67	2·6	2·5
	+68·0	..	−0·6	+2·6	+8	..	+0·9	..
5. Uttar Pradesh .	55·0	255	20·9	9·5	86	65	2·8	2·5
	+33·4	..	−1·6	+1·7	+11	..	+0·8	..
6. Punjab (I), (Including *Himachal Pradesh & Delhi).	83·5	284	19·1	7·5	89	65	2·7	3·1
	+54·1	..	−1·5	+1·2	+15	..	0	..
7. Jammu & Kashmir.	90·0	144	5·0	−3·2	71	63	6·6	6·6
	+27·4	..	−2·3	−0·8	0	..	+1·5	..
8. Rajasthan . .	30·2	438	21·8	8·3	74	41	2·1	2·0
Sub-Divisions								
1. Bay Islands . .	10·2	22	30·0	21·8	70	77	3·0	3·0
	−35·3	..	+1·0	−0·2	−1	..	−0·4	..
2. Assam (Including Manipur & Tripura).	70·0	365	23·0	12·4	87	75	3·3	2·4
	+50·8	..	−0·1	+1·9	−1	..	+0·2	..
3. Sub-Himalayan West Bengal. .	92·1	980	21·9	12·7	84	63	2·1	2·1
	+82·7	..	−1·7	+2·3	+5	..	+0·9	..
4. Gangetic West Bengal. . .	54·2	452	25·3	15·2	76	62	2·0	1·7
	+42·2	..	−0·5	+2·7	+3	..	+0·2	..
5. Orissa . .	22·3	235	27·5	17·3	78	63	1·8	1·6
	+12·8	..	0	+2·4	+4	..	−0·1	..
6. Chota Nagpur .	34·5	182	24·4	12·7	78	61	2·8	2·4
	+15·5	..	−0·3	+2·4	+8	..	+0·9	..
7. Bihar . . .	108·9	746	22·6	11·9	84	70	2·4	2·5
	+94·3	..	−0·9	+2·7	+9	..	+0·0	..
8. Uttar Pradesh (East).	41·7	241	21·6	10·4	87	65	2·9	2·3
	+24·4	..	−1·5	+2·2	+9	..	+1·1	..
9. Uttar Pradesh (West).	69·9	265	20·0	8·4	85	65	2·7	2·8
	+43·5	..	−1·7	+1·1	+13	..	+0·4	..
10. Punjab (India) Including Delhi.	83·5	284	19·1	7·5	89	65	2·7	3·1
	+54·1	..	−1·5	+1·2	+15	..	0	..
11. Himachal Pradesh	123·5	..	17·0	5·0	97	66	6·9	5·1
12. Jammu & Kashmir	90·0	144	5·0	−3·2	71	63	6·6	6·6
	+27·4	..	−2·3	−0·8	0	..	+1·5	..
13. Rajasthan (West) .	26·1	435	21·2	8·0	73	41	2·1	2·3
	+20·1	..	−1·5	+1·1	+13	..	−0·4	..
14. Rajasthan (East)	34·3	440	22·2	8·5	76	41	2·0	1·7
	+26·5	..	−1·8	−0·2	+20	..	+0·2	..
15. Madhya Pradesh (West).	17·8	170	25·0	10·1	71	41	2·6	2·0
Division—*Contd.*								
	+23·3	..	−1·7	+0·4	+17	..	0	..
9. Madhya Pradesh .	15·4	120	25·5	11·1	73	45	2·4	2·0
	+2·6	..	−0·3	+1·0	+8	..	+0·5	..
10. Bombay . .	1·2	32	29·0	14·8	67	41	1·1	1·2
	−2·6	..	0	+0·7	+9	..	−0·3	..
11. Andhra Pradesh .	1·2	14	29·8	18·2	76	52	1·8	1·5
	−7·5	..	+0·4	+1·0	+1	..	−0·6	..
12. Madras . .	1·2	3	29·1	20·5	77	56	2·9	2·9
	−36·6	..	−0·3	+0·4	−4	..	−0·4	..
13. Mysore . .	0	0	29·3	16·8	67	36	1·6	1·7
	−3·9	..	−0·2	+0·3	+1	..	−0·4	..
14. Kerala . .	3·6	21	31·0	22·9	70	62	2·5	2·7
	−13·6	..	0	+0·6	−5	..	+0 2	..
Mean of India . . (excluding Jammu & Kashmir and Himachal Pradesh).	26·4	211	25·7	13·3	75	52	2·1	1·9
	+13·9	..	−0·5	+1·1	+7	..	+0·1	..
Sub-Divisions—*Contd.*								
	+7·3	..	−0·7	+0·3	+9	..	+0·9	..
16. Madhya Pradesh (East).	12·1	74	26·2	12·4	75	50	2·0	2·0
	−4·2	..	+0·3	+2·1	+6	..	+0·1	..
17. Gujarat . .	0·7	39	28·8	12·3	69	37	0·9	1·0
	−1·1	..	−0·9	+0·7	+11	..	−0·4	..
18. Saurashtra and Kutch.	2·9	171	26·9	12·5	65	39	1·1	0·9
	+1·2	..	−0·4	+0·2	+12	..	−0·3	..
19. Konkan . .	0	0	28·8	18·9	72	62	1·3	1·0
	−2·9	..	+0·3	+0·4	+3	..	−0·2	..
20. Maharashtra .	0	0	30·3	13·9	64	31	1·2	1·5
	−4·8	..	+0·4	+0·9	+11	..	−0·2	..
21. Vidarbha . .	4·2	47	29·9	14·8	66	35	1·2	1·7
	−4·7	..	+0·5	+1·4	+8	..	−0·5	..
22. Coastal Andhra Pradesh	2·5	24	29·3	19·4	80	65	2·3	1·7
	−7·9	..	+0·5	+1·1	+3	..	−0·3	..
23. Telangana . .	0	0	30·1	16·3	70	34	1·5	1·4
	−7·7	..	+0·8	+1·1	+1	..	−0·5	..
24. Rayalaseema .	0	0	30·9	17·8	70	41	0·5	0·9
	−6·6	..	−0·3	+0·3	−1	..	−1·4	..
25. Madras . .	1·2	3	29·1	20·5	77	56	2·9	2·9
	−36.6	..	−0·3	+0·4	−4	..	−0·4	..
26. Coastal Mysore .	0	0	31·4	20·7	69	58	1·9	1·7
	−2·7	..	−0·3	+0·1	+1	..	−0·5	..
27. Mysore (North) .	0	0	29·9	16·7	59	30	1·3	1·9
	−4·4	..	+0·2	+0·5	−1	..	−0·2	..
28. Mysore (South) .	0	0	28·1	15·6	74	34	1·9	1·6
	−4·0	..	−0·5	+0·2	+4	..	−0·6	..
29. Kerala . . (Includig Laccadives).	3·6	21	31·0	22·9	70	62	2·5	2·7
	−13·6	..	0	+0·6	−5	..	+0·2	..

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

*Data of Himachal Pradesh not included.

Division and Station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	27·3	...	29·7	20	21·7	...	16·8	23	0	0	...	0	0	0	...	14·7	8·4	...	0	0	0	0	0	0	0	0	0	0
Long Island	29·7	...	30·6	20	21·3	...	18·7	24	3·1	3·1	...	3·1	9	1	...	3.5	1·6	...	1	0	0	0	0	0	0	0	0	0
Port Blair	30·0	+1·0	31.1	17,29	21·8	—0·2	18·4	21	10·2	10·2	—35·3	10·2	9	1	—1·3	10·3	7·4	—6·3	1	0	0	0	0	0	0	0	0	0
Car Nicobar	29.4	...	30·1	19	24·3	...	19·4	1	2.9	58·7	...	32·0	30	6	...	10·3	8·0	...	9	0	0	1	0	0	0	0	0	0
Nancowry	31·2	...	32.8	18	23.9	...	22·3	4.	70·7	126.4	...	63.2	26	12	...	0·5	0·2	...	14	0	0	4	0	0	0	0	0	0
Kondul	28·0	...	28.9	13,14	25·4	...	23·3	30	64·6	126·2	...	58·4	9	8	...	12·9 (a)	10·9	...	8	0	0	0	0	0	0	0	0	0
Assam (Including Manipur & Tripura).																												
Pasighat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	0	1	0	0	0	0	0	0
Digboi	21·4	...	24.8	24	11·4	...	8·3	18,24	15·6	54·1	...	9·7	11	8	...	...	...	...	11	0	0	0	5	0	0	0	0	0
Dibrugarh	22·3	+0·4	26.1	24	12·0	+1·9	9·2	16	11·9	70·8	+32·9	23·1	28	8	+4·3	2·1	1·3	+0·3	9	0	0	0	3	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome).	22·1	...	25.6	23	10.0	...	7.0	24	10·7	73·0	...	22·6	28	12	...	3·9	2·0	...	12	0	0	3	13	0	0	0	0	0
North Lakhimpur	22·2	...	25.1	24	9·9	...	6·3	18	15·8	74·7	...	26·9	13	7	...	...	...	...	10	0	0	1	0	0	0	0	0	0
Sibsagar	22·5	+1.1	25.9	24	11·3	+1·5	7·9	18	7·7	49·7	+19·0	16·8	12	6	+2·5	3·6	2·5	+0.7	6	0	0	2	23	0	0	0	0	0
Jorhat	22·3	...	24.8	23	10·8	...	8·2	17	7·9	44·0	...	14·3	10	4	...	...	...	...	4	0	0	3	20	0	0	0	0	0
Golaghat	22·6	...	25.6	25,26	...	...	...	...	6·9	44·7	...	16·5	10	4	...	...	...	...	4	0	0	0	1	0	0	0	0	0
Gohpur	22·3	...	25.4	24	9·5	...	4·9	7	15·3	60·6	...	23·4	10	5	...	4·3	3·3	...	5	0	0	0	0	0	0	0	0	0
Tezpur	23.7	+0.5	26.1	24,25	13·3	+1·9	11·1	16	16.0	57·6	+42·9	28·5	10	4	+2·5	...	...	...	7	0	0	0	2	0	0	0	0	0
Tezpur (P.B.O.)	22·9	...	25.4	27	12.0	...	9·6	17	16·1	64·8	...	33·3	10	5	...	3·3	2·0	...	7	0	0	1	2	0	0	0	0	0
Majbat	...	...	...	...	...	...	...	...	12·3	64·3	...	29·7	10	5	...	...	...	...	7	0	0	0	0	0	0	0	0	0
Chaparmukh (R)																												
Tangla	...	...	...	...	...	...	...	...	9.9	56·6	...	31·0	10	4	...	...	...	...	4	0	0	0	0	0	0	0	0	0
Gauhati	22·8	—0·9	25.2	27,28	13.3	+2·7	10·6	17	11·2	65·0	+55·3	30·2	10	5	+3·9	4·1	2·3	+0·4	6	0	0	0	6	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome).	22·9	...	25.7	27	11·6	...	8.5	17	16·9	65·7	...	39·1	10	5	...	5·7	3·3	...	6	0	0	2	14	0	0	0	0	0
Rangiya	...	...	...	...	...	...	...	...	10·7	51·1	...	23·9	10	4	...	...	...	...	4	0	0	0	16	0	0	0	0	0
Goalpara	24·0	...	26.9	28	11·7	...	8·4	14	37·1	87·8	...	72·4	10	4	...	1·9	1·3	...	4	...	...	...	...	...	...	...	...	...
Dhubri	21·9	—1.1	25.6	27	13·7	+1·9	11·1	14	30·7	81·8	+73·9	52·6	10	4	+3·2	5·6	4·8	—0·2	4	0	0	2	10	0	0	0	0	0
Dhubri (Rupsi Aerodrome).	23·3	...	26.1	25	10·7	...	7·6	14	41·4	92·5	...	55·4	10	5	...	5·5	3·2	...	5	0	0	1	4	0	0	0	0	0
Tura (R)																												
Agartala	24·6	...	27·3	30	11·9	...	8·6	14	25·4	66·1	...	50·1	11	2	...	7.7	4·2	...	2	0	0	2	6	0	0	0	1	0
Silchar	24·7	—0·9	27·8	24	12·7	+1·4	10·0	18	4·7	88·4	+68·8	45·0	13	3	+1·5	2·0	1·0	—0·8	3	0	0	1	7	0	0	0	0	0
Imphal	21·1	...	23·7	24	4·4	...	1·2	6	23·2	49·3	...	30·5	13	3	...	8·0	4·8	...	3	0	0	0	5	0	0	0	0	0
Haflong	19·7	...	23·1	25	10·6	...	7·8	15	17·2	92·2	...	48·0	11	4	...	...	...	...	4	0	0	1	5	0	0	0	0	0
Lumding	23·3	+0·2	26·2	25	10·6	+2·2	7·8	18	8·2	76·9	+62·7	27·7	10	4	+2·6	3·2	1·8	...	4	0	0	1	7	0	0	0	0	0
Sub Himalayan—West Bengal																												
Cooch Behar (C.W.O.)	23·3	...	25·9	25	10·5	...	7·2	14	27·9	81·8	+75·2	34·0	10	6	+5·5	5·6	3·3	...	6	0	0	2	15	0	0	0	0	0
Jalpaiguri	21·1	—2·5	25·1	24	12·3	+1.7	9·6	14	24·1	81·8	+73·9	30·5	10	5	+4·3	6·4	4·5	+3·1	5	0	0	2	3	0	0	0	0	0
Bagdogra	22·7	...	26·6	25	9·5	...	5·4	13	23·6	69·4	...	25·2	10	4	...	5·1	3·3	...	5	0	0	4	4	0	0	0	0	0
Malda	22·8	—0·8	26·7	30,31	13·0	—3·0	10·0	14	32·3	112·6	+98·9	69·1	10	4	+3·1	7·3	5·1	+0·8	5	0	0	1	0	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	26·1	...	30·1	29	15·0	...	11·7	22	5·1	38·4	...	27·2	11	2	...	7·5	4·6	...	2	0	0	3	6	0	0	0	0	0
Calcutta	26·4	0	29·5	29,30	15·8	+3·2	12·1	22	17·3	66·1	+56·7	39·4	11	2	+1·2	6·2	3·8	+0·6	3	0	0	2	0	0	0	0	0	0
Barrackpore	25·7	...	30·9	10	14·7	...	10·4	22	6·4	52·9	...	39·9	11	3	...	...	...	...	4	0	0	4	12	0	0	0	0	0
Saugor Island	25·2	+0·2	26·9	11	17·6	+2·8	13·1	22	0	20·8	+10·4	18·0	11	2	+1·1	...	...	...	2	0	0	2	8	0	0	0	0	0
Sandheads	...	...	...	...	...	...	...	...	0	20·1	+15·3	20·1	11	1	+0·5	...	...	...	1	0	0	2	0	0	0	0	0	0
Contai	26·0	...	27·9	6	16·7	...	12·9	23	0	17·0	...	8·9	12	2	...	6·5	4·9	...	2	0	0	0	0	0	0	0	0	0
Midnapore	26·1	—1·0	29·8	29	15.5	+2·4	12·3	21	0	68·1	+56·2	54·6	11	2	+1·1	5·9	4·5	+1·9	2	0	0	0	0	0	0	0	0	0
Purulia	24·2	...	29·6	31	14.2	...	10·3	22	0·8	11·7	...	6·9	10	2	...	5·1	3·4	...	3	0	0	1	0	0	0	0	0	0
Bankura	...	...	...	...	...	...	...	...	...	41·4	+26·7	33·0	10	2	+0·8	...	...	...	2	...	...	...	...	...	...	...	...	...
Burdwan	23·9	—2·2	28·0	31	15·0	+2·4	11·6	14	9·4	60·4	+49·0	34·2	11	2	+1·1	4·7	2·5	+0·6	3	0	0	0	0	0	0	0	0	0
Krishnagar	26·3	+0·7	31·4	30	14·1	+3·2	10·0	22	34·5	60·1	+48·7	30·7	10	2	+1·1	3·1	2·8	+1·0	3	0	0	1	0	0	0	0	1	0
Asansol	24·5	—0·9	29·4	31	14·2	+2·7	10·7	14	6·3	24·3	+7·3	15·4	10	3	+1·6	7·3	4·9	—0·4	3	0	0	1	0	0	0	0	0	0
Suri	24·1	..	28·8	30	14·2	...	10·4	14	38·8	149·6	...	132·3	10	3	...	8·0	6·0	...	3	0	2	2	2	0	0	0	0	0
Berhampore	24.4	—0·4	30·6	31	14·2	+2·4	10·7	14	46·6	92·1	+82·4	69·6	10	3	+2·0	3·3	1·9	+0·1	5	0	0	1	12	0	0	0	0	0
Orissa																												
Baripada	28·1	..	31·3	29	...	...	...	...	7·9	15·8	...	7·9	11,12	2	...	3·1	2·7	...	2	0	0	1	3	0	0	0	0	0
Balasore	26·5	—0·7	28·9	29	16·4	+2·9	12·2	22	1·0	15·7	+2·2	11·4	11	2	+1·0	8·3	4·5	+1·6	3	0	0	3	0	0	0	0	0	0
Chandbali	24·9	—2·5	26·1	11	16·9	+2·5	12·5	23	0	0	—5·1	0	...	0	—0·7	10·0	6·3	+0·5	0	0	0	0	0	0	0	0	0	0
Cuttack	29·3	+0·9	31·4	20	17·7	+2·3	13·3	24	2·0	12·2	+4·1	1·2	6	1	+0·3	4·1	2·6	+0·8	2	0	0	0	3	0	0	0	0	0

(R) Register not received.

(a) Mean of 30 days.

Division and Station	Air temperature in °F								Rainfall in millimetres					No. of rainy days (2.5mm. or more),		Wind speed Kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·8mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orissa—*contd.*																												
Bhubaneswar	28·9	..	31·1	20	17·3	..	12·9	22	0	20·3	...	20·3	12	1	...	12·2	8·9	...	1	0	0	1	3	0	0	0	0	0
Puri	27·5	+0·9	28·8	12	19·6	+2·0	15·4	23	0	3·3	−7·1	3·3	12	1	+0·4	15·5	12·9	+2·8	1	0	0	0	0	0	0	0	0	0
Gopalpur	28·0	+1·0	30·6	20	18·4	+1·6	12·9	24	0	12·2	+5·1	12·2	8	1	+0·5	15·1	11·6	+1·8	1	0	0	0	0	0	0	0	1	0
Koraput	26·0	...	28·6	18	12·6	...	6·1	24	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Titilagarah	30·3	...	31·7	3,20	15·9	..	9·2	24	0	0	...	0	...	0	...	4·0	2·8	...	0	0	0	6	10	0	0	0	0	0
Bolangir	39·4 (e)	...	...	...	15·8 (e)	...	...	...	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Angul	28·0	+0·3	29·8	29	16·3	+2·9	10·8	23	0	17·5	+6·3	17·5	7	1	+0·1	6·5	6·2	+1·4	1	0	0	1	6	0	0	0	0	0
Sambalpur	28·1	+0·4	30·0	10	15·7	+2·9	10·4	23	4·6	95·3	+84·4	90·7	16	2	+1·1	5·9	3·7	+0·3	2	0	0	1	0	0	0	0	0	0
Jharsuguda	27·4	...	30·1	20	14·0	...	9·3	22,23	17·2	61·5	...	27·5	16	4	...	8·1	6·5	...	6	0	0	5	4	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	25·7	−1·2	30·6	31	14·9	+4·2	9·6	22	2·8	18·1	+9·0	11·0	11	2	+1·1	5·5	3·6	+1·2	5	0	0	3	0	0	0	0	0	0
Jamshedpur (P.B.O.)	25·9	...	30·7	31	14·2	...	9·4	22	2·0	23·8	...	13·2	11	3	...	...	...	...	7	0	0	5	1	0	0	0	0	0
Chaibasa	26·4	+0·2	30·5	28,29,31	14·6	+3·8	9·3	22	3·0	33·8	+17·5	13·7	11	4	+2·6	2·0	1·6	−0·5	5	0	0	2	0	0	0	0	0	0
Ranchi	23·3	+0·2	27·4	29	10·1	−0·5	7·1	22	21·4	31·8	+8·4	1·9	11	4	+2·2	4·1	3·0	−2·6	6	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	22·8	...	26·3	29	11·9	...	7·6	21	7·0	13·8	...	3·1	16	2	...	12·7	8·3	...	8	0	0	4	6	0	0	0	0	0
Daltonganj	24·3	−0·1	28·9	28,30	12·2	+3·6	7·8	14	21·7	31·4	+8·4	25·7	10	2	+0·1	5·2	2·9	0	3	0	0	2	1	0	0	0	0	0
Hazaribagh	22·1	−0·6	26·0	30	11·6	+1·4	7·3	22	17·3	57·2	+34·6	41·9	10	3	+1·1	9·5	7·5	−0·9	3	0	1	4	4	0	0	0	0	0
Dhanbad	24·6	...	28·9	31	13·8	...	9·9	14	6·6	22·2	...	17·3	10	2	...	...	...	...	3	0	1	1	19	0	0	0	0	0
Bihar																												
Purnea (R)	22·9	−0·8	26·1	25,31	10·7	+2·0	5·3	7	48·3	138·5	+128·1	86·4	10	3	+2·2	6·2	3·2	+0·9	4	0	0	1	2	0	0	0	0	0
Forbesganj	23·9	...	26·8	4 days	10·7	...	6·9		25·7	93·1	...	40·4	10	3	...	7·8	4·7	...	6	0	0	3	13	0	0	0	0	0
Dharbhanga	22·7	−0·8	26·4	30,31	12·1	+2·2	7·7	7	32·0	113·8	+102·6	57·7	9	3	+2·0	2·8	1·0	−1·3	4	0	0	1	3	0	0	0	0	0
Motihari	21·3	−1·5	25·3	30	11·6	+3·3	6·6	7	16·8	72·5	+60·6	29·7	10	3	+1·9	4·2	3·6	+1·2	6	0	0	5	19	0	0	0	0	0
Muzaffarpur (R)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chapra	...	...	...	...	...	...	...	...	...	84·3	+69·8	48·3	9	3	+1·7	...	...	...	4	...	...	...	...	...	...	...	...	...
Arrah	...	...	...	...	...	...	...	...	...	204·2	+187·2	103·1	31	3	+1·7	...	...	...	3	...	...	...	...	...	...	...	...	...
Patna	22·1	−0·7	26·7	30	12·8	+2·2	6·6	7	32·8	105·0	+90·0	57·4	9	2	+0·7	6·2	5·9	+2·4	4	0	0	3	4	0	0	0	0	0
Patna (Aerodrome)	21·5	...	26·2	30	11·5	...	6·8	7	34·5	105·0	...	51·8	10	2	...	6·6	3·4	...	4	0	0	4	7	0	0	0	1	0
Dehri	22·7	...	28·3	30	13·2	...	8·7	22	5·8	40·1	+22·8	18·3	9	3	+1·5	5·9	4·0	..	3	0	2	3	0	0	0	0	0	0
Gaya	22·8	−0·7	26·5	30	12·0	+2·4	8·4	22	25·4	63·0	+44·7	48·2	10	3	+1·7	9·1	6·9	+1·8	4	0	1	2	3	0	0	0	2	0
Jamui	23·1	...	29·2	30	12·5	...	5·6	14	45·7	84·6	...	56·1	10	3	...	6·5	3·5	...	6	0	0	0	0	0	0	0	0	0
Dumka	28·8	−0·6	26·8	30	12·9	+2·4	9·8	14	3·6	138·7	+121·7	75·7	10	4	+2·7	...	...	...	4	0	0	4	0	0	0	0	0	0
Bhagalpur	22·8	...	26·8	30	13·2	...	10·6	7	49·6	115·7	...	91·2	10	2	...	7·3	5·3	...	5	0	0	4	0	0	0	0	0	0
Sabour	22·3	−1·0	26·2	10	11·4	+4·2	7·7	7	52·1	129·2	+115·5	99·6	10	2	+0·9	7·5	4·5	−0·5	5	0	0	3	1	0	0	0	1	0
U.P. East																												
Gonda	21·2	−2·0	25·0	30	9·9	+2·2	5·7	7	31·3	84·9	+72·0	17·6	19	6	+4·8	4·2	3·5	−0·8	6	0	0	0	0	0	0	0	0	0
Nautanwa	22·9	...	27·6	25	10·2	...	6·5	6	16·5	55·9	...	33·0	10	3	...	5·1	3·7	...	4	1	0	0	17	0	0	0	0	0
Gorakhpur	20·3	−2·5	24·9	26	11·6	+2·4	7·8	7	8·9	30·1	+15·1	29·2	10	2	+0·7	3·3	1·5	−0·3	3	0	0	0	0	0	0	0	0	0
Azamgarh	22·5	...	26·7	29	10·9	...	5·7	7	7·6	57·9	...	38·9	9	4	...	...	...	...	4	0	0	0	0	1	0	0	0	0
Ballia	22·5	...	26·7	30,31	8·9	...	3·9	7	17·6	64·1	...	39·6	9	2	...	5·5	3·5	...	4	0	1	1	1	0	0	0	0	0
Varanasi *(Banaras)	22·6 (d)	−0·8	30	30	12·0 (d)	+3·1	5	13	4·5	39·2	+20·4	22·3	9	4	+2·5	...	...	...	5	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome)	22·3	...	26·8	28,29	10·9	...	6·2	9	4·4	19·2	...	12·7	9	4	...	9·9	6·5	...	4	0	0	4	11	0	0	0	0	0
Allahabad(Bamraualli)	23·1	−0·7	29·0	31	10·7	+2·3	6·3	7	2·3	11·7	−9·9	3·3	18	2	+0·9	6·5	4·0	−0·2	5	0	0	0	3	0	0	0	0	0
Banda	23·7	...	30·0	28	10·6	...	5·4	11	0·5	4·8	...	4·3	18	1	...	2·1	0·9	...	2	0	0	0	5	0	0	0	0	0
Fatehpur	21·8	−2·2	27·8	31	9·8	+1·8	4·8	7	1·6	18·0	+4·3	9·9	18	2	+0·6	7·0	3·4	+0·2	2	0	0	0	0	0	0	0	0	0
Kanpur	21·9	−0·3	26·7	31	10·0	+2·4	5·0	7	15·0	53·8	+39·6	33·0	18	3	+1·6	12·3	8·7	+5·0	3	0	0	2	5	0	0	0	0	0
Lucknow*	21·3	−2·0	26	29,31	10·5 (a)	+2·1	7	7,10,11	8·7	15·4	−3·9	8·7	10	2	+0·5	...	...	...	2	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	21·7	−1·2	25·9	29,31	9·2	+1·6	3·4	7	18·1	56·4	+37·1	22·1	9	3	+1·5	10·9	7·2	...	3	0	0	2	5	0	0	0	0	0
Hardoi	21·2	...	25·7	30,31	9·5	...	5·6	10	37·9	81·9	...	54·9	9	3	...	7·9	4·9	...	3	0	0	0	7	0	0	0	0	0
Lakhimpur Kheri	21·4	...	25·6	30	9·7	...	5·3	12	40·0	69·1	...	28·7	31	4	...	3·8	2·3	...	5	0	0	1	1	0	0	0	0	0
Bahraich*	20·7 (b)	−1·9	25	25,29,30	10·3 (d)	+1·9	6	6	12·1	66·0	+45·2	39·4	10	5	+2·4	...	...	...	6	0	0	0	0	0	0	0	0	0
U.P. West																												
Orai	22·0	..	27·2	29	7·9	...	3·3	11	2·3	37·1	...	30·3	1	2	...	10·5	5·9	...	4	0	0	0	0	0	0	0	0	0
Jhansi	22·6	−1·9	28·1	28	9·3	+0·7	5·6	6	7·1	43·4	+29·7	36·8	18	2	+0·8	4·3	3·6	+0·1	3	0	0	0	0	0	0	0	0	0
Agra	20·5	−2·1	24·8	27	7·1	+0·3	4·5	9	26·1	71·8	+58·9	49·5	9	4	+2·8	4·6	3·3	−0·1	4	0	0	0	2	0	0	0	0	0
Mainpuri*	21·8 (a)	−1·1	26	1,29,30	9·1	+1·5	6	7,10,11	23·8	30·9	+16·4	18·5	10	3	+1·7	...	...	...	3	0	0	0	0	0	0	0	0	0
Aligarh	19·9	−1·7	28·9	23,27	8·1	+0·3	4·9	23	41·4	52·9	+41·2	26·2	18	3	+1·8	7·0	6·0	+0·7	4	0	1	2	3	0	0	0	0	0
Bareilly	20·5	−1·1	24·2	30	9·6	+1·7	6·8	10	31·8	50·8	+35·7	23·4	9	6	+4·1	3·6	2·1	−0·3	6	0	0	1	7	0	0	0	0	0
Meerut	18·9	−2·2	23·0	25	8·5	+1·3	5·3	24	...	76·4	+44·7	31·7	9	3	+2·3	...	3·9	...	6	0	0	0	0	0	0	0	0	

(c) Mean of 26 days.
(d) Mean of 27 days.
(R) Register not received.
(a) Mean of 30 days.
(b) Mean of 29 days.
*Data extracted from Indian Daily Weather Reports.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—JANUARY, 1957

Division and Station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm or more)		Wind speed, Kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm or m	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
U. P. West—*contd.*																												
Najibabad	19.3	...	24.	25	8·6	...	4.4	5	100.1	150·2	...	43·4	10	9	...	6·0	4·0	...	11	0	0	0	0	0	0	0	0	0
Roorkee	18·2	−2·0	23.9	25	8·3	+1·8	5.2	5	42·1	83·7	+41·3	26·9	10	8	+5·2	5·2	3·7	+0·8	11	0	0	0	0	0	0	0	0	0
Dehra Dun	17·6	−1.3	23.9	27	7·3	+0.6	4.8	10	69·6	138·9	+80.0	55.1	10	8	+4.1	3.1	2·2	−0.2	12	0	0	1	0	0	0	0	0	0
Punjab (I), Delhi																												
New Delhi	19 3	−1.8	25.1	27	8·6	+1.3	5.0	6	25·6	51·3	+26.2	27·4	9	3	+1.0	11·1	8·6	−0.4	6	0	0	1	7	0	0	0	0	0
Hissar	19 6	−2.0	28.6	27	6·4	+ 1·2	2.2	6	14.5	40·6	+27·9	12·2	18	5	+3·6	7·1	5·2	−0·1	7	0	0	1	0	1	0	0	0	0
Karnal	18.3	...	24.1	25	8·4	...	4.7	6	22·7	79·8	...	32·5	9	8	...	0·2	0·6	...	10	0	0	1	0	0	0	0	0	0
Patiala	18 3	...	24.4	26	8·1	...	4.1	6	22·3	102.4	+64·8	35·6	9	8	+5·0	8·3	7·4	...	11	0	0	1	0	0	0	0	0	0
Ambala	19.4	−1·2	25.2	25	7·8	+1·5	3.9	6	21·3	85.7	+52·2	31·7	9	9	+6·5	7·6 (a)	6·4	+2·4	9	0	0	0	0	0	0	0	0	0
Chandigarh	18.3	...	24.6	25	8·2	...	4.3	6	51·5	149.2	...	33.0	18	9	...	...	...	...	11	0	0	0	0	0	0	0	0	0
Ludhiana	18.2	−1·2	24.2	27	7.3	+0.8	2.4	5	22.5	137.6	+99.3	46.0	9	8	+5.3	5.3	3.6	+1.5	8	0	0	0	0	0	0	0	0	0
Ferozepur	17.6	...	24.9	26	6.3	...	3.6	5	36.1	154.2	...	45.2	2	6	...	4.2	2.4	...	7	0	0	0	0	0	0	0	0	0
Amritsar	17.0	...	23.2	26	5.5	...	−0.7	6	30.5	117.1	...	35.5	9	8	...	8.3	6.7	...	8	0	1	1	2	0	0	0	0	0
Pathankot	17·3	...	23·1	26	7·8	...	4·5	5	45·8	214·1	...	57·1	27	9	...	1·1	0·5	...	12	0	0	0	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur	17·7	...	24·6	26	5·9	...	1·8	6	50·3	107·2	...	27·7	9	9	...	2·3	2·0	...	13	0	0	1	18	0	0	0	0	0
Mandi	16·3	...	25·9	25	4·1	...	1·3	17	34·6	109·7	...	26·2	10	7	...	2.9	2·5	...	12	0	0	1	0	0	0	0	0	0
Jammu & Kashmir																												
Banihal (R)																												
Srinagar	3·3	−1·7	7·3	6	−1·5	+1·1	−3·6	16	19·4	102·9	+29·2	49·6	27	10	+3·9	2·8	2·5	−1·0	16	13	0	0	1	0	0	0	0	0
Gulmarg (R)																												
Sonamarg*																												
Dras (R)																												
Kargil	...	...	...	...	...	...	...	...	...	0	−33 5	0	...	0	−3·8	...	...	...	0	...	...	...	...	...	...	...	...	...
Leh	−5·7	−4·3	−0·1	28	−15·3	−2·0	−22·1	20	7·6	24·6	+14·9	4·8	27	5	+4·0	3·2 (a)	3·1 (a)	+1·3	11	11	0	0	0	0	0	0	0	0
Skardu (R)																												
Gureg	...	...	...	...	...	...	...	...	...	147·4	+9·5	45·7	25	10	+0·3	...	...	...	10	0	0	0	0	0	0	0	0	0
Gilgit (R)																												
Misgar (R)																												
Jammu	17.4	−1·0	22·8	24	7·2	−1·6	4·2	9,11	...	175·2	+117 0	44·5	27	9	+5·6	...	...	...	12	0	0	1	0	0	0	0	0	0
Gund	...	...	...	...	...	...	...	...	...	194·5	...	50·8	27	15	...	...	...	...	18	0	0	0	0	0	0	0	0	0
Pandras	...	...	...	...	...	...	...	...	...	19·5	...	1·8	27	0	...	...	...	...	22	...	...	...	...	...	...	...	...	...
Panamik	...	...	...	...	...	...	...	...	...	13·4	...	4·3	22	2	...	...	...	...	7	...	...	...	...	...	...	...	...	...
Kangral (R)																												
Digar	...	...	...	...	...	...	...	...	...	19·1	...	7·6	14	3	...	...	...	...	8	0	0	0	0	0	0	0	0	0
Khalatse (R)																												
Mulbik	...	...	...	...	...	...	...	...	...	56·7	...	12·7	28	9	...	...	...	...	12	...	...	...	...	...	...	...	...	...
Rajasthan, (West)																												
Sriganganagar	18·2	−1·7	26·1	26	6·4	+3·0	3·3	6	15·2	44·2	+32·8	19·6	9	4	+2·7	5·0	3·8	−1·8	5	0	0	0	9	0	0	0	0	0
Churu	19·2	...	27·5	27	6·6	...	1·7	6	22·1	3·00	...	15·0	9	3	...	7·3	5·6	...	4	0	0	1	8	0	0	0	0	0
Bikaner	19·9	−2·0	28·4	26	6·3	+1·4	1·2	6	17·0	23·8	+16·9	14·2	9	2	+1·2	4·7	3·6	−1·2	7	0	0	0	4	0	0	0	0	0
Jaisalmer	21·9	...	29·4	25,26	6·5	...	2·1	6	7·6	7·6	...	7·6	9	1	..	12·5	9·6	...	1	0	0	0	0	0	0	0	0	0
Phalodi	20·1	...	28·6	26	7·7	...	4·4	16	16·5	24·6	+21·0	16·5	9	2	+1·5	12·5	9·2	...	2	0	0	0	0	0	0	0	0	0
Jodhpur	23·1	−1·5	28·9	26	9·5	+0·3	5·1	31	15·0	29·7	+25·9	29·7	9	1	+0·7	9·9	8·6	−2·5	1	0	0	1	1	0	0	0	0	0
Barmer	23·7	−1·0	31·1	26	9·9	−0·1	4·6	15	0	8·4	+3·8	8·4	9	1	+0·6	...	7·6	0	1	0	0	0	1	0	0	0	0	0
Rajasthan, (East)																												
Alwar	20·3	..	25·0	27,28	...	...	...	...	52·0	60·9	...	30·4	18	2	...	10·3	..	...	3	0	0	0	0	0	0	0	0	0
Sikar	18·7	...	27·2	27	5·8	...	0	6	20·9	25·8	...	19·1	9	1	...	7·0	7·2	...	6	0	0	0	0	0	0	0	0	0
Jaipur	20·3	−2·6	25·6	26	8·4	+6·2	4·6	6	44·4	58·5	+47·3	37·1	9	2	+1·0	...	5·2	−0·4	4	0	0	1		0	0	0	0	0
Jaipur (Sanganer Aerodrome)	20·1	...	25·4	26	8·4	...	3·9	6	39·2	62·0	...	45·2	9	2	...	...	...	...	3	0	0	1	0	0	0	0	0	0
Dholpur (R)																												
Ajmer	19·8	−2·8	26·1	26	6·6	−1·0	3·6	11	3·8	39·1	+29·7	35·3	9	1	0	7·8	5·5	+2·9	2	0	0	1	0	0	0	0	0	0
Kotah	23·5	−1·6	29·4	27	10·7	+0·1	8·2	7,10	1·0	38·4	+32·3	34·3	9	2	+1·4	4·5	2·7	+0·6	3	0	0	3	0	0	0	0	0	0
Chambal	25·7	...	30·6	27	6·2	...	2·0	30	0·3	10·2	...	8·4	9	1	...	6·7	4·7	...	3	0	0	0	0	0	0	0	0	0
Jhalawar	24·3	−1·2	29·6	27	8·9	+0·1	5·7	14	0	3·1	−4·0	3·1	9	1	+0·3	4·6	3·8	+0·6	1	0	0	0	0	0	0	0	0	0
Udaipur	25·3	−1·0	27·2	24	8·0	−0·6	3·9	31	0	32·5	+27·4	32·5	9	1	+0·6	4·6	2·6	...	1	0	0	0	0	0	0	0	0	0
Kringsera (Jawai Dam)	25·4	...	28·1	24	9·4	...	3·4	16	0	36·8		36·8	9	1	...	6·6	5·4	...	1	0	0	1	0	0	0	0	0	0

*Data rejected.

(a) Mean of 30 days.

(R) Registes not received.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—JANUARY, 1957

Division and station.	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm or more)		Wind speed, Kms. per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madhya Pradesh (West).																												
Gwalior (P. B. O.)	22·3	−0·6	27·1	28	8·6	+0·8	1·9	6	3·8	50·6	+31·8	40·1	9	2	+0·5	8·8	5·8	...	4	0	0	0	6	0	0	0	0	0
Sheopur Kalan	23·1	...	27·2	27	7·6	...	4·7	10	0	25·9	...	21·6	9	2	...	7·9	6·1	...	3	0	0	2	2	0	0	0	0	0
Guna	24·0	−1·1	27·9	4	7·7	+0·1	3·9	23	4·9	11·6	+5·0	4·1	10	2	+0·8	8·1	4·6	+1·2	4	0	0	1	0	0	0	0	0	0
Rajgarh	26·3	...	29·4	27	8·8	...	4·2	11	0	0	...	0	...	0	...	10·1	7·3	...	0	0	0	0	0	0	0	0	0	0
Neemuch	23·6	−1·5	27·6	27	9·4	+0·2	6·2	15	2·8	10 5	+5·4	7·4	9	1	−0·6	8·4	7·0	+0·6	4	0	0	0	0	0	0	0	0	0
Ratlam	25 8	...	28·9	23	10·8	...	7·2	10	2·0	2·0	...	2·0	10	0	...	8·7	8·7	...	1	0	0	0	0	0	0	0	0	0
Alirajpur	27·7	...	32·2	22,23	10·9	...	7·3	31	0·8	0·8	...	0·8	10	0	...	7·5	4·4	...	1	0	0	0	0	0	0	0	0	0
Indore	26·1	−0·3	28·9	4	9·4	−0·3	6·1	11	0·3	0·3	+5·8	0·3	10	0	−0·5	12·0	9·8	...	1	0	0	0	0	0	0	0	0	0
Bhopal (Bairagarh)	25·0	−1·3	28·2	4	10·1	+0·2	5·8	11	0·5	3·5	−2·6	1·5	17,18	0	−0 8	11·9	9·4	+1·2	3	0	0	2	1	0	0	0	0	0
Khandwa	29·4	+0·1	32·9	22	12·1	+0·7	7·3	25	0	2·0	−5·9	2·0	17	0	−0·6	8·0	5·2	+0·9	1	0	0	0	0	0	0	0	0	0
Hoshangabad	26·0	−0·9	29·4	4	13·2	+0·9	9·1	11	0·5	26·9	+15·7	24·9	17	1	+0·1	7·0	5·2	+1·0	2	0	0	2	0	0	0	0	0	0
Betul	26 5	...	29·4	5	11·2	...	6·0	25	0	10·9	...	10·9	17	1	...	8·0	5·1	...	1	0	0	1	0	0	0	0	0	0
Chhindwara	25·4	...	27·6	5	11·6	...	4·8	26	2·5	5·0	...	2·5	16,17	2	...	7·5	5.0	...	2	0	0	0	0	0	0	0	0	0
Seoni	25·7	−0·3	28·4	5	12·4	+1·3	7·9	24	2·8	18·1	+4·1	15·0	16	1	−0·2	8·8	6·3	+2·6	4	0	0	2	0	0	0	0	0	0
Sagar	23·8	−1·4	27·8	4	11·4	0	6·9	11	6·4	32·7	+18·2	14·5	18	3	+1·7	6·6	5·6	...	5	0	0	4	2	0	0	0	0	0
Nowgong	23·7	−0·1	29·1	28	7·1	−1·0	3·4	6,13	11·5	21·6	+6·6	13·2	18	2	+0·5	5·6	3·5	+1·7	3	0	0	0	1	0	0	0	0	0
Madhya Pradesh, East																												
Satna	23·5	−0·4	29·3	31	9·8	+0·9	5·9	13	6·5	35·1	+14.0	19·3	18	2	+0·2	5·9	3·9	+0·5	5	0	0	0	2	0	0	0	0	0
Umaria	24·4	−0·6	28·3	28,31	10·3	+2·2	5·6	23	6·4	13·0	−12·7	5·6	16	2	−0.1	5·5	3·2	−0·2	4	0	0	0	1	0	0	0	0	0
Jabalpur	25·7	+0·5	29·2	28,31	11·5	+2·7	6·8	23	11·2	14·3	−5·5	14·3	17	1	−0·7	5·9	3·7	+1·4	1	0	0	0	7	0	0	0	0	0
Mandla	25·4	...	27·9	5	10·8	...	5·1	23	52·1	55·0	...	31·0	2	3	...	5·0	2·3	...	3	0	0	3	14	0	0	0	0	0
Pendra	23·5	−0·2	26·7	29	12·1	+1·8	8·0	22,23	12·5	17·7	−3·9	6·1	10	4	+2·3	11·5	7·6	...	5	0	1	4	6	0	0	0	0	0
Ambikapur	23·7	...	26·9	30	10·1	...	4·8	23	19·1	34·6	...	18·5	16	2	...	9·3	6·9	...	5	0	0	4	7	0	0	0	0	0
Champa	27·1	...	29·9	30	15·5	...	10.9	23	3·6	38·1	...	26·4	16	2	...	4·6	3·5	...	4	0	0	3	0	0	0	0	0	0
Raigarh	27·7	...	30·7	10	15·6	...	10·7	23	14·3	45·8	...	19·3	16	3	...	6·4	4·9	...	4	0	0	2	0	0	0	0	0	0
Raipur	28·1	+0·5	30·5	30	15·6	+2·4	11.1	24	0	8·9	−0·5	8·9	16	1	+0.2	7·5	5·4	+0·9	1	0	0	0	1	0	0	0	0	0
Kanker	28·4	+0·3	30·6	18	14·1	+2·8	7.2	24	0	0	−5·1	0	..	0	−0·5	4·7	2·8	−0·1	0	0	0	0	0	0	0	0	0	0
Jagdalpur (P.B.O.)	29·6	+1·7	33·1	19	13·3	+1·8	7·2	24	0	0	−9·9	0	..	0	−0·7	6·3	3·8	...	0	0	0	0	0	0	0	0	0	0
Gujarat																												
Deesa	26·5	...	32·3	23	11·2	...	6·0	28	0	5·8	...	5·8	9	1	...	9·9	8·6	...	1	0	0	0	0	0	0	0	0	0
Idar	26·3	...	30·7	24	13·9	...	7·8	31	0	5·8	...	5·8	9	1	...	10·3	8·1	...	1	0	0	0	0	0	0	0	0	0
Ahmedabad	27·6	−1·5	32·4	23	11·2	−0·4	6·1	15	0	2·5	+2·0	2·5	9	1	+0·9	11·3	6·7	+2·7	1	0	0	0	0	0	0	0	0	0
Dohad	26·8	−2·1	30·2	22	11·8	+0.7	8·5	15	0	0·8	−1·5	0·8	9	0	−0·2	9·5	9·1	+5·1	1	0	0	0	0	0	0	0	0	0
Baroda	29·4	−0·8	33·9	23	11·4	+1.6	6·7	31	0	0·5	−1·0	0·5	10	0	−0·1	5·1	3·9	−0·4	1	0	0	0	2	0	0	0	0	0
Baroda (Aerodrome)	28·9	...	33·6	23	12·6	...	8·3	30	0	0	...	0	...	0	...	8·5	6·5	...	0	0	0	0	0	0	0	0	0	0
Broach	31 0	...	36·9	23	12·6	...	8·4	31	0·8	0·8	...	0·8	10	0	...	7·1	5·4	...	1	0	0	0	2	0	0	0	0	0
Surat	31·3	+0·9	37·0	24	15·0	+0·7	12·3	16	0	0	−2·8	0	...	0	−0·2	4·0	4·0	−0·5	0	0	0	0	1	0	0	0	0	0
Saurashtra & Kutch																												
Bhuj	26·0	−0·3	32·3	24	10·8	−0·5	5·8	16	0	0·8	−1·2	0·8	9	0	−0·2	10·3	6·6	0	1	0	0	0	0	0	0	0	0	0
Bhuj (P. B. O.)	...	...	...	...	...	...	..	...	0	0·8	...	0·8	9	0	...	8·8	4·7	...	1	0	0	0	0	0	0	0	0	0
Bhuj (Aerodrome)	26 2	...	31·7	24	10·2	...	5·2	16	0	0·5	...	0·5	9	0	...	15·6 (e)	9·6	...	1	0	0	0	0	0	0	0	0	0
Kandla	25·8	...	30·6	24	13·5	...	9.8	16	0	0	...	0	...	0	...	12·9	11·1	...	0	0	0	0	0	0	0	0	0	0
Mandvi	24·8	...	29·3	24	13·6	...	9·8	16	0	0·8	...	0·8	11	0	...	17·9	15·1	...	1	0	0	0	3	0	0	0	0	0
Dwarka	25·6	+0.1	34·0	24	16·0	+0·7	11·8	16	0	3·3	+0·8	3·3	11	1	+0·7	18·1	14·8	+1·6	1	0	0	0	0	0	0	0	0	0
Porbunder	28·1	...	34·1	25,26	15.4	...	11·6	16	0	2·0	...	2·0	11	0	...	11·0	10·2	...	1	0	0	0	1	0	0	0	0	0
Jamnagar	...	...	...	...	12·5	+2·3	7·3	21	0	7·4	+6·1	4·1	9	2	+1·9	...	...	...	2	0	0	0	1	0	0	0	0	0
Rajkot (Aerodrome)	27·6	−0·9	33.5	24	11·1	+0·5	6·6	15,16	0·5	5·1	+4·1	4·6	9	1	+0·9	18·1	14·3	+7·	2	0	0	0	0	0	0	0	0	0
Surendranagar	27·5	...	33·0	24	12·7	...	7·8	15	0	2·0	...	2·0	9	0	...	12·8	9·9	...	1	0	0	0	0	0	0	0	0	0
Bhavnagar	28·5	−0·4	32·8	24	12·2	0	9·1	16	0	0	−2·3	0	...	0	−0·7	10·0	7·5	+1·7	0	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome)	27·3	...	31·1	24	13·2	...	10·0	15	...	2·8	...	2·8	9	1	...	...	13·9	...	1	0	0	0	0	0	0	0	0	0
Mahuva	29·4	...	33·1	24	14·4	..	11·2	10	0	0	...	0	...	0	...	12·7	8·4	...	0	0	0	0	0	0	0	0	0	0
Keshod	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	13·1	12·2	...	...	0	0	0	0	0	0	0	0	0
Veraval	27·8	...	32·8	25	14·6	...	10·1	18	0·5	0·5	−0·5	0·5	10	0	−0·1	17·7 (f)	15·3 (g)	...	1	0	0	0	0	0	0	0	0	0
Konkan																												
Dahanu	27·3	−0·3	34·4	22,23	16·8	+0·1	14·6	1	0	0	−2·3	0	...	0	−0·2	17·2	12·5	+0·3	0	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	29·5	+1·1	33·9	22	19·5	+0·2	17·3	2,29	0	0	−3·6	0	...	0	−0·2	9·9	8·1	−2·5	0	0	0	0	0	0	0	0	0	0
Bombay (Santacruz Aerodrome)	30·3	+1·3	35·0	22	16·6	+1·3	13·7	2	0	0	−3·6	0	...	0	−0·2	12·5	8·0	...	0	0	0	0	0	0	0	0	0	0
Alibag	28·4	+0·3	33·5	22	17·9	+0·4	16·0	29	...	0	−1·3	0	...	0	−0·2	...	7·9	+0·5	0	0	0	0	0	0	0	0	0	0
Harnai	27·6	−0·1	32·7	25	22·1	+0·8	18·7	29	0	0	−2·5	0	...	0	−0·6	15·5	13·2	+1·0	0	0	0	0	0	0	0	0	0	0

(e) Mean of 26 days. (f) Mean of 25 days. (g) Mean of 24 days.

Division and Station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squal	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan—*contd.*																												
Ratnagiri	30·4	...	34·9	24	19·3	...	16·7	3	0	0	−2·0	0	...	0	−0·1	...	...	...	0	0	0	0	0	0	0	0	0	0
Devgad	29·5	−0·5	32·2	22,23	20·8	−0·3	19·4	26,28	0	0	−4·8	0	...	0	−0·4	17·5	14·1	−3·0	0	0	0	0	0	0	0	0	0	0
Vengurla	31·7	...	35·0	23	18·5	...	15·8	25	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Maharashtra																												
Jalgaon	30·5	...	33·6	22	12·0	...	7·4	31	0	0	−8·6	0	...	0	−0·6	6·6	4·9	...	0	0	0	0	0	0	0	0	0	0
Malegaon	30·6	+0·5	33·2	23	12·2	+0·9	8·6	25	0	0	−4·3	0	...	0	−0·3	6·4	5·0	−0·8	0	0	0	0	0	0	0	0	0	0
Deolali	29·3	...	32·3	21	11·6	...	8·2	25	0	0	...	0	...	0	...	9·1	5·4	...	0	0	0	0	0	0	0	0	0	0
Aurangabad	29·8	+0·5	31·7	21	14·5	+0·8	10·6	26	0	0	−7·4	0	...	0	−0·5	8·0	7·3	−0·1	0	0	0	0	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	29·1	...	30·6	15,23	10·9	..	5·6	25	0	0	...	0	...	0	...	9·1	6·3	...	0	0	0	0	0	0	0	0	0	0
Khandala	...	...	...	...	...	...	...	...	0	0	+2·5	0	...	0	−0·1	...	...	..	0	...	...	...	...	...	...	...	...	0
Ahmednagar	29·8	+0·6	31·8	22	13·1	+1·3	9·4	26	0	0	−5·3	0	...	0	−0·4	7·3	4·9	−1·1	0	0	0	0	0	0	0	0	0	0
Parbhani	30·9	...	32·2	15,16	14·9	...	9·4	25	0	0	−9·1	0	...	0	−0·7	8·1	5·2	...	0	0	0	0	0	0	0	0	0	0
Poona	31·0	+0·7	33·4	16	13·1	+1·4	10·3	25	0	0	−1·5	0	..	0	−0·2	4·2	2·4	−3·6	0	0	0	0	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	29·9	...	32·3	22	13·7	...	10.7	25	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Baramati	30·4	...	32·4	15	13·5	...	9·9	25	0	0	...	0	...	0	...	7·8	6·5	...	0	0	0	0	0	0	0	0	0	0
Jeur	30·8	...	32·4	14	12·9	...	5·7	25	0	0	...	0	...	0	...	6·1	4·0	...	0	0	0	0	0	0	0	0	0	0
Sholapur	30·7	−0·1	32·3	14,21	16·3	+1·1	10·7	25	0	0	−3·8	0	...	0	−0·3	9·1	7·3	−1·9	0	0	0	0	0	0	0	0	0	0
Miraj	30·1	0	32·3	15	13·9	−0·3	8·9	26	0	0	−0·3	0	...	0	−0·1	10·2	7·9	+0·8	0	0	0	0	2	0	0	0	0	0
Kolhapur	30·6	+0·2	32·6	15,21	14·6	−0·1	11·1	26	0	0	−2·5	0	...	0	−0·4	10·7	7·6	−1·1	0	0	0	0	2	0	0	0	0	0
Vidarbha																												
Buldhana	27·7	...	29.7	20,23	15·1	...	11·0	25	0	2·0	...	2·0	17	0	...	9·0	7·0	...	0	1	0	0	0	0	0	0	0	0
Akola	31·0	+0·9	32·3	15,20	14·1	+1·4	9·8	26	0	2·3	−6·6	1·5	18	0	−0·7	7·0	5·3	+1·0	2	0	0	0	0	0	0	0	0	0
Amravati	29·8	+0·5	31·6	16	15·6	+0·5	11·8	12	0	0	−9·4	0	...	0	−0·8	8·8	7·4	+1·6	0	0	0	0	0	0	0	0	0	0
Yeotmal	29·6	...	31·3	3	16·3	...	12·2	11	0	7·1	...	7·1	16	1	...	7·2	4·5	...	1	0	0	0	0	0	0	0	0	0
Nagpur	29·0	+0·4	30·9	5,10	14·2	+1·4	9·4	25	0	12·4	+3·0	10·9	16	1	+0·2	10·0	7·5	...	2	0	0	2	0	0	0	0	0	0
Gondia	27·5	...	29·6	5	15·2	...	10·1	24	0	41·7	...	41·7	16	1	...	5·9	3·7	...	1	0	0	2	0	0	0	0	0	0
Brahmapuri	28·7	...	30·4	20	15·0	...	9·6	25	0	0	...	0	...	0	...	7·3	4·7	...	0	0	0	0	0	0	0	0	0	0
Chanda	29·7	+0·1	31·1	5,22	15·2	+2·2	7·9	24	2·0	2·0	−5·9	2·0	16	0	−0·5	6·4	4·1	+1·5	1	0	0	1	0	0	0	0	0	0
Sironcha	31·1	...	32·7	19,20	16·5	...	9·8	24	0	0	...	0	...	0	...	6·5	4·2	...	0	0	0	0	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	30·1	+0·5	32·2	11,12	20·2	+0·5	18·3	25	0	0	−33·3	0	...	0	−1·4	9·3	5·7	+1·2	0	0	0	0	0	0	0	0	0	0
Ongole	29·1	...	30·1	20,21	20·1	...	18·3	27	0	0	...	0	...	0	...	7·7	4·5	...	0	0	0	0	0	0	0	0	0	0
Rentachintala	31·6	+0·9	33·3	21,22	17·8	+1·3	12·6	24	0	0	−0·3	0	...	0	0	6·0	3·6	−1·7	0	0	0	0	0	0	0	0	0	0
Gannavaram	30·2	...	32·8	22	19·2	...	17·1	24	0	0	...	0	...	0	...	12·5	8·4	...	0	0	0	0	1	0	0	0		0
Masulipatam	28·3	0	30·7	22	20·0	+1·1	17·1	9	2·8	8·2	+3·1	4·1	15	2	+1·7	11·7	7·6	+1·3	3	0	0	0	9	0	0	0	0	0
Nidadavolu	30·3	...	32·3	22	19·1	...	16·2	24	0·8	0·8	...	0·8	15	0	...	7·7	5·2	...	1	0	0	0	0	0	0	0	0	0
Kakinada	28·5	+1·2	30·7	22	20·1	+1·0	16·7	25,26	0	6·6	−0·5	5·3	15	1	+0·5	13·3	9·7	+0·8	2	0	0	0	0	0	0	0	0	0
Visakhapatnam	29·4	+0·1	31·7	21	18·5	+0·6	13·7	24	0	0	−10·9	0	...	0	−0·5	15·3	7·7	+3·0	0	0	0	0	0	0	0	0	0	0
Callingapatam	27·7	0	30·1	13,21	19·6	+2·1	13·7	24	0	0	−5·6	0	...	0	−0·6	14·0	10·3	+2·6	0	0	0	0	0	0	0	0	0	0
Telangana																												
Ramagundam	31·7	...	33·9	20	18·0	...	11·4	25	0	0	...	0	...	0	...	8·3	5·7	...	0	0	0	0	0	0	0	0	0	0
Nizamabad	30·5	+0·4	32·1	16	16·7	+2·5	10·6	25	0	0	−5·1	0	...	0	−0·4	5·5	4·6	+1·2	0	0	0	0	0	0	0	0	0	0
Mahabubnagar	30 8	...	31·8	13	16·8	...	12·7	26	0	0	...	0	...	0	...	10·3	7·5	...	0	0	0	0	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	29·0	+0·7	30·6	13	14·5	−0·2	9·5	25	0	0	−7·9	0	...	0	−0·5	12·3	9·4	+2·2	0	0	0	0	0	0	0	0	0	0
Hakimpet	28 3	...	30·1	21	16·1	...	12·8	24	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Hanamkonda	30·7	+1·3	32·3	14	17·7	+1·1	11·6	24	0	0	−10.2	0	...	0	−0·7	10·5	7·7	+1·9	0	0	0	0	1	0	0	0	0	0
Bhadrachallam	31 4	...	32·9	21	16·9	...	11·1	25	0	0	...	0	...	0	...	8·4	5(5	...	0	0	0	0	15	0	0	0	0	0
Khammameth	31 1	...	32·8	1?,20	18·5	...	13·6	25	0	0	...	0	...	0	...	5·6	4·0	...	0	0	0	0	0	0	0	0	0	0
Rayalaseema																												
Arogyavaram	26·9	...	29·6	11,12	14·9	...	12·3	1	0	0	...	0	...	0	...	9·0	6·5	...	0	0	0	0	0	0	0	0	0	0
Cuddapah	30·3	−0·9	32·8	12	18·7	0	16·3	1	0	0	−9·9	0	...	0	−0·6	10·3	7·2	−3·4	0	0	0	0	0	0	0	0	0	0
Anantapur	30·0	...	32·7	13	16·5	...	14·1	1,26	0	0	−6·1	0	...	0	−0·3	9·4	8·3	...	0	0	0	0	0	0	0	0	0	0
Kurnool	31·5	+0·2	33·3	13	16·9	+0·5	13·9	24,26	0	0	−3·8	0	...	0	−0·3	7·2	5·5	+0·8	0	0	0	0	0	0	0	0	0	0
Madras																												
Palayamcottai	31·7	...	33·3	11,30	20·8	...	18·5	8	0	0·5	−42·9	0·5	19	0	−2·7	15·2	10·9	...	1	0	0	0	0	0	0	0	0	0
Tuticorin*	27·2	...	28·1	12	21·9	...	19·9	23	0	5·6	...	5·6	19	1	...	24·0	23·1	...	1	0	0	0	0	0	0	0	0	0
Pamban	27·7	−0·4	28·9	11	23·4	−0·2	20·2	2	1·8	11·9	−53·4	8·6	19	1	−3·0	16·0	15·0	−0·8	3	0	0	0	0	0	0	0	0	0
Mathurai	30·5	+0·6	32·3	13	20·7	+0·5	18·5	25	0	0	−19·8	0	...	0	−1·5	9·9	6·5	−0·7	0	0	0	0	0	0	0	0	0	0
Nagapattinam	27·9	0	28·8	13	23.6	+1·5	19·6	26,27	0	0	69·3	0	...	0	−3·0	19·8	20·5	+7·8	0	0	0	0	0	0	0	0	0	0
Tiruchirapalli	30·2	−0·3	31·6	12	19.9	−0·2	17·4	25	0	0	−25·1	0	...	0	−1·7	10·6	7·9	−0·8	0	0	0	0	0	0	0	0	0	0

*Rainfall from 15-1-1957 relates to the rainguage at the Post Office.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—JANUARY, 1957

Division and Station.	Air temperature in °C								Rainfall in millimeters					No. of rainy days (2·5 m m. or more)		Wind speed, Kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours.	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras—(*Contd.*) Coimbatore	29·3	−0·7	32·6	11	19·1	+0·8	16·7	5	0	0	−16·0	0	...	0	−1·1	10·9	7·7	+3·5	0	0	0	0	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	29·7	....	35·9	12	18·0	...	14·9	5	0	0	...	0	...	0	...	15·6	11·4	...	0	0	0	0	0	0	0	0	0	0
Salem	31·3	+0·1	32·9	11	18·6	+0·3	16·5	7	0	0	−7·4	0	...	0	−0·7	9·1	9·2	+2·9	0	0	0	0	0	0	0	0	0	0
Kallakurichi	30·0	...	32·9	13	20·2	...	17·7	24	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Cuddalore	27·9	−0·3	29·3	13	20·8	+0·3	18·2	26	0	0	−59·7	0	...	0	−2·4	12·5	8·6	+1·4	0	0	0	0	0	0	0	0	0	0
Vellore	28·2	−0·6	31·4	11	17·8	−0·1	15·4	23	0	0	−36·8	0	...	0	−2·1	8·0	7·1	+3·2	0	0	0	0	2	0	0	0	0	0
Madras	28·5	−1·1	29·9	12	20·3	+0·8	17·8	26	0	0	−35·8	0	...	0	−1·7	13·7	8·7	−1·0	0	0	0	0	3	0	0	0	0	0
Madras (Nungam Bakkam)	28·2	...	29·4	12,28	20·2	...	17·1	26	..	0	...	0	...	0	...	...	4·5	...	0	0	0	0	0	0	0	0	0	0
Coastal Mysore Karwar	30·7	...	35·5	23	18·7	...	14·1	25	0	0	−1·3	0	...	0	−0·1	...	...	...	0	0	0	0	0	0	0	0	0	0
Honavar	31·5	−0·3	35·7	21	20·0	+0·1	16·6	25	0	0	−4·1	0	...	0	−0·1	8·5	7·7	+2·9	0	0	0	0	0	0	0	0	0	0
Mangalore	31·3	−0·4	36·1	21	21·5	+0·1	19·7	24	0	0	−2·8	0	...	0	−0·2	13·0	9·9	+2·2	0	0	0	0	0	0	0	0	0	0
Mangalore (Bajpe Aerodrome)	32·4	...	36·6	21	20·1	...	17·9	1	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Mysore (North) Bidar	28·8	0	30·4	19	16·5	−0·2	13·8	24	0	0	−5·6	0	...	0	−0·5	12·5	10·0	−0·3	0	0	0	0	0	0	0	0	0	0
Gulbarga	30·8	+0·1	32·6	21	16·0	+0·4	11·2	25	0	0	−5·3	0	...	0	−0·3	10·8	8·2	+0·6	0	0	0	0	0	0	0	0	0	0
Bijapur	30·2	+0·1	31·8	15	16·5	+0·8	11·1	25	0	0	−4·6	0	...	0	−0·2	7·8	5·6	+1·1	0	0	0	0	0	0	0	0	0	0
Belgaum	28·9	+0·1	30·6	16	15·0	+0·7	10·6	25	0	0	−3·1	0	...	0	−0·2	5·9	5·1	+0·6	0	0	0	0	15	0	0	0	0	0
Belgaum (C.T.O.)	30.1	0	32·0	15	14·3	+0·5	9·9	25,26	0	0	−3·1	0	...	0	−0·2	10.9	6.3	+0·5	0	0	0	0	0	0	0	0	0	0
Belgaum (Sambre Aerodrome)	29·2	...	30·6	21	15·1	...	11·2	26	0	0	...	0	...	0	...	15·5	12·5	...	0	0	0	0	0	0	0	0	0	0
Gadag	30·4	+0·8	32·4	13	17·2	+0·8	14·8	4	0	0	−4·3	0	...	0	−0·2	10·6	7·8	+0·4	0	0	0	0	0	0	0	0	0	0
Raichur	30·6	+0·2	23·6	13	18·1	−0·1	15·6	25	0	0	−3·3	0	...		−0·2	10.2	10·0	+1·3	0	0	0	0	0	0	0	0	0	0
Mysore (South) Bellary	30.3	−0·7	33·2	13	17·6	+0·8	14·4	26	0	0	−2·5	0	...	0	−0·3	7·7	3·8	−0·5	0	0	0	0	0	0	0	0	0	0
Chitaldrug	28·9	−0·4	32·3	13	16·9	−0·1	12·7	1	0	0	−6·3	0	...	0	−0·3	9·2	5·8	−1·6	0	0	0	0	0	0	0	0	0	0
Shimoga	29·8	...	31·9	13	13·8	...	9·5	25	0	0	...	0	...	0	...	8.6	3·5	...	0	0	0	0	12	0	0	0	0	0
Belchonnur	27·1	−0·1	28·6	8,12	14·3	−0.4	11·1	25	0	0	−1·3	0	...	0	−0·2	...	...	...	0	0	0	0	0	0	0	0	0	0
Hassan	27·7	−0·5	30·4	13	14·3	+0·4	11·5	1	0	0	−4·3	0	...	0	−0·3	8·3	5·4	+0·4	0	0	0	0	0	0	0	0	0	0
Mysore	27·9	−1·1	30·0	11	15·9	−0·1	13·3	1	0	0	−3·6	0	...	0	−0·3	15·1	11·9	+2·4	0	0	0	0	2	0	0	0	0	0
Bangalore (Central Observatory)	26·5	−0·3	28·8	11	14·8	+0·7	12·1	1	0	0	−6·1	0	...	0	−0·5	12·4	10·2	+2·0	0	0	0	0	6	0	0	0	0	0
Bangalore (Aerodrome)	27·8	...	30·1	11	14·6	..	11·8	1	0	0	...	0	...	0	...	...	...	...	0	0	0	0	7	0	0	0	0	0
Kerala (iocluding Lacadivea) Kozhikode	30·9	−0·2	31·9	6,7	21·8	+0·2	19·4	8	0	0	−8·9	0	...	0	−0.6	9.7	10·9	+2·5	0	0	0	0	0	0	0	0	0	0
Palghat	33·2	...	34·9	12	21·7	...	20.0	27	0	0	...	0	...	2	...	13·5	10·4	...	0	0	0	0	0	0	0	0	0	0
Fort Cochin	30·2	−0·3	32·1	5	24·6	+1·5	22·9	6	0	10·6	−12.0	8·6	29	1	−0·1	10·8	7·7	+1.1	2	0	0	0	0	0	0	0	0	0
Cochin (Naval Air Station)	31·2	...	33.1	4	21·4	...	19.1	8	14·0	42·0	...	28·8	31	2	...	8.5	4.9	...	3	0	0	0	0	0	0	0	0	0
Alleppey	31 7	...	35·0	22	21·5	...	18.3	6	2·5	27·6	...	24·6	30	2	...	14.6	10·0	...	3	0	0	0	0	0	0	0	0	0
Punalur	33·4	...	36.1	11	18·7	...	15.7	9	0	0	...	0	..	0	...	11.9	6·7	...	0	0	0	0	0	0	0	0	0	0
Trivandrum	31·9	+0.6	34.4	4	22.2	0	20.1	25	0	0.3	−19.8	0·3	30	0	−1.7	8·6	6·5	+2.0	1	0	0	0	1	0	0	0	0	0
Trivandrum (Aerodrome)	30·6	..	32.3	22	21·4	...	18.8	24	..	7.4	...	6.9	30	1	...	...	7·1	...	2	0	0	0	0	0	0	0	0	0
Hill Stations excluding Kashmir. Wilong (R)																												
Kohima	14·1	...	17.3	25	7.6	...	5·4	14	15·0	48.3	...	21·6	13	4	...	(i) 4·9	(i) 3·9	...	4	0	0	0	3	0	0	0	0	0
Aijal (R)																												
Shillong	15·2	−0·4	18.4	25	4·1	+0·3	2.2	2	45·7	90·7	+77·5	52·3	10	4	+2·9	2·5	1·3	−1·1	6	0	0	1	2	0	0	0	0	0
Cherrapunji	15·3	−0·4	19.2	24	7·3	−0·5	4.9	14	44·7	103·6	+84·5	40·6	11	5	+3·5	6·5	6·1	+0·5	5	0	0	0	2	0	0	0	0	0
Mawsynram	...	...	...	...	...	...	...	...	...	91·6	...	38·1	9	5	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Darjiling (Raj Bhawan)	9·6	+0·4	17.4	24	2·7	−0·2	0.6	9	134.6	239.8	+226·3	134.6	10	3	+1·8	2·5	2·1	+1·0	4	1	0	0	17	0	0	0	0	0
Kalimpong	13·8	−1·4	14.7	7 days	5·1	−2.8	2·5	10	20.3	76·2	+65·8	40·6	10	2	+1·1	5·8	4·6	−6·2	2	0	0	0	5	0	0	0	0	0
Katmandu	17·7	−0.4	22.8	25	3·0	+0·7	0.8	2,3	10·4	61·8	+52·1	30·2	10	3	+2·2	0·6	0·3	−1·6	6	0	0	2	16	0	0	0	0	0
Mukteswar (Kumaon)	8·4	−1.5	17.3	26	1·3	−0.6	0.2	3	62.3	13· 5	+78·6	38.1	10	9	+5·4	11·0	12·5	+3·5	9	9	1	2	10	0	0	0	0	0
Nainital	9·7	...	18.3	26	1·2	...	2.2	31	122·0	203·3	...	69·9	10	11	...	8·8	7·3	...	11	6	0	0	0	0	0	0	0	0
Tapoban	10·9	...	18.9	23,26	3·8	...	2.2	31	...	39·1	...	9·1	31	7	...	...	...	...	9	...	...	...	...	...	...	...	...	...
Badrinath (R)			...																									
Lokpal	12·0	...	14.0	4 days	4·9	...	2.0	4,5,16	...	492·2	...	57·4	3	18	...	...	...	...	13	5	...	...	...	...	...	...	...	...
Jammuna Chetty	...	...	...	...	...	...	...	...	...	136·5	...	25·4	2,11	9	...	...	...	...	9	...	...	...	...	...	...	...	...	...
Mussooree	9·7	0	20·7	26	2·5	−0·2	2.8	12	37·9	96.6	+27·8	17·0	14	13	+8·0	7·4	6·7	−0·4	13	4	2	1	0	0	0	0	0	0
Kharsali	...	...	...	...	...	...	...	...	...	272·4	...	61·0	12	12	...	...	...	...	12	...	...	...	...	...	...	...	...	...

(i) Mean of 22 days.

(R) Register not received.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—JANUARY, 1957

Division and Station.	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm or more)		Wind speed, Kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations (excluding Kashmir,)—*Contd.*																												
Rana	...	...	...	...	...	...	...	...	...	254·1	...	40·1	25	19	...	...	...	...	22	...	...	...	...	...	...	...	...	...
Simla	7·1	—1·5	17·4	26	0·9	—1·0	-4·9	12	31·8	71·7	+5·4	16·5	10	8	+3·2	4·8	4·4	—1·6	12	13	0	1	0	0	0	0	0	0
Dharampore	...	...	...	...	...	...	...	...	...	277·1	+206·7	81·3	10	11	+7.0	...	...	...	13	...	...	...	...	...	...	...	...	...
Kyelang	...	...	...	...	...	...	...	...	...	86.6	+22·9	29·2	26	9	+3·3	...	...	...	10	...	..	...	...	...	...	...	...	...
Gondia	...	...	...	...	...	...	...	...	...	105·7	...	18·8	29	8	...	...	...	...	15	...	...	...	...	...	...	...	...	...
Kothi	...	...	...	...	...	...	...	...	...	329·9	...	64·3	7	17	...	...	...	...	17	...	...	...	...	...	...	...	...	...
Koksar	...	...	...	...	...	...	...	...	...	321·0	...	48·8	30	17	...	...	...	...	17	...	...	...	...	...	...	...	...	...
Dalhousie	8·9	...	19·6	25	1·2	...	-4·3	31	195·8	450·3	+269·4	414·3	9	17	+9·6	4·7	3·4	...	17	8	0	0	0	0	0	0	0	0
Dharamshala	13·0	...	19·5	23	5·8	...	1·6	31	75·8	257·3	...	37·6	8	17	...	6·3	4.9	...	13	1	0	1	0	0	0	0	0	0
Abu	18·5	—0.3	23·9	23,26	8·4	—2·0	3·8	15	0	7·9	+1·3	7·9	9	1	+0.4	10·3	6·2	+0.6	1	0	0	0	0	0	0	0	0	0
Pachmarhi	22·1	—0·1	24·4	4,5,15	8·9	+0·2	5·0	25	44·7	107·9	+91·6	94·2	17		+1·7	6·8	4·3	+0·4	4	0	1	1	1	0	0	0	0	0
Mahabaleshwar	24·5	+0·9	26·9	21	13·4	—0·5	10·6	28	0	0	—3·6	0	0	0	—0·2	8·5	9·3	—0·2	0	0	0	0	0	0	0	0	0	0
Nandi Hills	22·6	...	24·5	13	12·5	...	9·5	2	...	0	...	0	..	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Mercara	24·9	—0·2	24·8	12	13·9	—0·1	10·0	8	0	0	—4·1	0	..	0	—0·3	13·0	11·3	+4·9	0	0	0	0	0	0	0	0	0	0
Kodaikanal	17·2	+0·4	20·0	28	7·2	—0·9	4·9	25	0·8	1·6	—79·4	0·8	19.31	0	—4·0	16·6	15·9	+2·1	2	0	0	0	5	0	17	0	0	0
Ootacamund	20·6	+1·8	23·3	10	4·4	—1·7	1·1	6,8	0	0	—32·8	0	..	0	—1·8	2·1	2·7	—2·3	0	0	0	0	0	0	17	0	0	0
Coonoor	19·0	0	22·2	27	7·8	—0·5	5·1	7	...	0	—62·5	0	..	0	—2·7	...	4·8	—0·5	0	0	0	0	0	0	0	0	0	0
Sikkim																												
Thangu	...	...	...	...	...	...	.	...	...	177·5	...	81·3	10	6	...	...	...	...	8	...	...	...	...	...	...	...	...	...
Chungthang	...	...	...	...	...	...	...	...	...	38.8	...	13·2	15	5	...	...	...	...	8	...	...	...	...	...	...	...	...	...
Lachen	8·4	...	13·3	3	...	...	...	...	...	160·5	...	66·0	10	8	...	...	...	...	8	...	...	...	...	...	...	...	...	...
Tibet																												
Yatung	6·9	—0·4	10·0	31	—7·5	—0·6	11·7	13	...	187·3	+173·1	53·3	9	6	+4·3	...	...	...	6	0	0	0	0	0	0	0	0	0
Lhasa	7·5	...	13·9	31	—1·1	...	13·1	2	...	0	...	0	..	0	...	...	13·2	...	0	0	0	0	0	0	0	0	0	0
Ceylon																												
Colombo	30·5	0	32·0	9 days	21·5	—0·7	18·0	27,28	17·3	63·0	—33·3	25·7	17	5	—0·3	...	...	...	7	0	0	0	0	0	0	0	0	0
Trincomalee	27·4	—0.4	29.0	7 days	24·2	+0·5	21·0	5 days	62·4	160·7	—12 5	50·0	30	7	—1·1	...	...	...	10	0	0	1	0	0	0	0	0	0
Batticola	27·3	...	29·0	6	23·1	...	19·0	27	38·7	253·9	...	11·0	30	11	...	...	...	...	14	0	0	0	0	0	0	0	0	0
Hambantota	29·4	+0·1	33·0	15	22·0	+0·4	18·0	3	28.5	84·8	—15·5	45·2	18	3	—3.0	...	...	...	7	0	0	0	0	0	0	0	0	0
Mannar	28·8	...	30·0	7 days	23·5	...	19·0	27	20·1	44·7	...	21·6	12	4	...	...	...	...	6	0	0	0	0	0	0	0	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																												
Damodar Catchment																												
Bokaro	4·2	...	29·4	31	11·4	..	6·7	22	1·8	33·5	...	32·0	10	1	...	7·1	5·2	...	4	0	0	5	2	0	0	0	0	0
Hazaribagh	21·3	...	25·3	31	11·1	...	7·2	14	21·9	63·4	...	44·5	10	3	...	8·5	6·5	...	6	0	0	0	2	0	0	0	0	0
Tilaiya	22·4	...	26·9	31	12·7	...	8·7	14	18·1	83·8	...	55·4	10	5	...	...	...	...	6	0	1	2	8	0		0	0	0
Ramgarh	25·1	...	30·1	31	11·0	...	5·4	22	6·0	23·1	...	8·4	8	4	...	4·8	2·5	...	5	0	0	2	5	0	0	0	0	0
Panchet Hills	25·3	...	29·9	30,31	13·1	...	9·5	22	3·6	30·0	...	20·1	10	2	...	8·6	5·0	...	4	0	0	2	0	0	0	0	0	0
Durgapur	25.4	...	29·4	30,31	15·9	...	12·3	14	0	18·8	...	14·7	10	2	...	...	...	...	2	0	0	0	2	0	0	0	0	0
Asansol	...	...	...	...	...	...	...	...	...	24·4	...	15·5	10	3	...	...	...	...	3	...	...	...	...	...	...	...	...	...
Dhanwar	...	...	...	...	...	...	...	...	...	56·7	...	49·5	15	3	...	...	..	...	3	...	...	...	...	...	...	...	...	...
Dumri	...	...	...	...	...	...	...	...	...	0	...	0	...	0	...	...	...	...	0	...	...	...	...	...	...	...	...	...
Bishungarh	...	...	...	...	...	...	...	...	...	72·5	...	41·9	10	5	...	...	...	...	6	...	...	...	...	...	...	...	...	...
Palganj (Giridih)	...	...	...	...	...	...	...	...	...	65·6	...	53·9	10	3	...	...	...	...	5	..	..	...	...	..	..	...	...	...
Chandwa	...	...	...	...	...	...	...	...	...	15·7	...	8·4	10	3	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Mahanadi Catchment																												
Baramul	29·3	...	30·6	31	15·6	...	10·6	26	0	1.0	...	1·0	12	0	...	2·5	1·3	...	1	0	0	0	4	0	0	0	0	0
Hirakud	28 0	...	30·2	10	16·5	...	11·7	23	4·6	27·9	...	21·6	16	2	...	3·5	3·2	...	4	0	0	0	0	0	0	0	0	0
Khijrawan	28·9	...	31·1	16	13·4	...	6·8	24	0	0	...	0	...	0	...	8·1	4·2	...	0	0	0	0	0	0	0	0	0	0
Sonepur	29·0	...	31·0	4 (days)	16·0	...	10·0	23	...	0	...	0	...	0	...	...	4·0	...	0	...	...	...	...	...	...	...	..	...
Ginabahar	27·0	...	30·0	5,30	11·0	...	5·4	22,23	...	40·6	...	12·7	10	5	...	...	...	...	6	...	...	...	...	...	...	...	...	...
Narbada Catchment																												
Punasa	29.5	...	32·2	22	11·9	...	7·0	11	0·8	2·5	...	2·5	17	1	...	5·3	4·4	...	1	0	0	1	0	0	0	0	0	0
Bagra Tawa	26·5	...	30·3	4	11·5	...	7·6	24	21·3	33·8	...	23·4	17	3	...	7·2	3·9	...	3	0	0	1	0	0	0	0	0	0
Thikri	29·5	...	32·8	22,23	12·2	...	9·0	25,31	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Tapti Catchment																												
Nandurbar	30·0	...	34·4	23	15·9	...	12·3	25	...	0	...	0	...	0	...	...	...	...	0	...	...	...	...	...	...	...	...	...
Sabarmati Catchment																												
Jhadol	23·5	...	28·1	23	6·3	...	-0·3	15	...	3·1	...	3·1	9	1	...	...	...	...	1	●	●	●	●	●	●	●	●	●
Sainwara	...	...	...	...	...	...	...	...	...	25.4	...	25.4	9	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...

TABLE 11—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—JANUARY, 1957

Division and Station	Air temperature in °C								Rainfall in millmetes					No. of rainy days(2·5mm. or more)		Wind speed, Kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
HYDROMETEORO-LOGICAL OBSER-VATORIES—(*contd.*)																												
Damodar Catchment —(*contd.*)																												
Bikrani	...	...	...	...	...	...	...	...	...	0	...	0	...	0	...	...	...	...	0	...	...	...	...	...	...	...	...	...
Tarpal	...	...	...	...	...	...	...	...	...	27·9	...	27·9	8	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Kotra Cantonment	...	...	...	...	...	...	...	...	...	12·7	...	12·7	10	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Dharoi	26·6	...	31·5	23	12·2	...	4·1	31	0	0	...	0	...	0	...	...	...	..	0	...	...	...	...	...	...	...	...	...
Ganga Catchment Mukhim	10·2	...	18·8	26	2·7	...	−2·7	9	24·7	79·7	...	13·5	2	9	...	...	...	...	10	8	0	0	15	0	0	0	0	0
Tehri	17·1		23·6	26	5·7	...	0·4	21	63·4	131·3	...	0·3	10	11	...	...	...	...	13	1	0	0	13	0	0	0	0	0
Gandak Catchment Gorkha	16·5	...	20·1	25	8·8	...	6·0	12	...	116·7	...	46·2	9,10	5	...	...	...	...	7	...	...	...	...	...	...	...	...	...
Pokhara	18·9	...	23·1	24	7·9	...	4·1	13	...	99·9	...	54·9	9	4	...	...	...	...	8	...	...	...	...	...	...	...	...	...
Nawakot	(c) 18·9	...	21·5	24,26	8·9	...	6·4	10	...	70·5	...	33·0	9	3	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Gogra Catchment (Trans Himalayan Region) Dailekh	14·1	...	18·2	22	...	...	...	...	48·3	93·1	...	30·4	10	8	...	...	...	...	9	...	...	...	...	...	...	...	...	...
Gogra Catchment Dandeldhura	10·1	...	18·5	26	3·8	...	−1·5	10	52·1	112·4	...	45·7	10	7	...	...	...	...	11	...	...	...	...	...	...	...	...	...
Munsiyari	11·1	...	18·7	26	2·9	...	−1·9	31	93·7	197·0	...	43·7	10	10	...	...	...	...	11	...	...	...	...	...	...	...	...	...
Sallyana	(a) 15·7	...	19·7	22,24	...	...	...		51·9	143·6	...	35·8	9	6	...	...	...	...	7	...	...	...	...	...	...	...	...	...
Bagmati Catchment Katmandu	17·2	...	21·8	25	3·4	...	0·9	3	11·2	60·8	...	29·2	10	3	...	0·7	0·3	...	6	0	0	2	19	0	2	0	0	0
Kosi Catchment Chautara	16·7	...	21·2	25	6·7	...	2·8	10	17·8	89·2	...	46·5	10	4	...	...	...	...	4	...	...	...	...	...	...	...	...	...
Okhaldhunga	13·7	...	19·4	24	4·6	...	1·7	13	20·6	79·8	...	34·3	10	4	...	4·5	2·6	...	5	0	0	1	4	0	0	0	0	0
Barahkshetra	22·1	...	26·3	24	12·2	...	10·1	13	15·2	87·2	...	26·2	10	4	...	7·2	5·6	...	4	0	1	2	0	0	0	0	0	0
Angbung	18·1	...	22·2	1	8·2	...	3·7	9	...	63·7	...	38·3	9	4	...	...	...	...	5	0	0	0	5	0	4	0	0	0
Taplejung	13·4	...	19·2	24	5·3	...	1·3	13	20·4	99·3	...	34·8	9	4	...	...	...	...	6	...	...	...	...	...	...	...	...	...
Tapkethok	18·1	...	20·6	14	4·7	...	0·6	21	...	77·8	...	44·7	10	3	...	...	...	...	6	...	...	...	...	...	...	...	...	...
Wallangchung Gola	4·6	...	6·1	1	−5·4	...	−7·8	12	...	69·2	...	15·7	11	10	...	...	...	...	11	...	...	...	...	...	...	...	...	...
Bhojpur	...	...	...	...	5·4	...	1·4	10	14·2	80·2	...	35·0	10	3	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Chainpur	16·4	...	19·8	26	7·9	...	3·1	9	...	53·3	...	36·8	9	3	...	...	...	...	3	...	...	...	...	...	...	...	...	...
Tista Catchment Gangtok	11·9	...	19·3	24	3·6	...	−0·5	9,10	26·4	88·5	...	41·1	10	4	...	...	...	...	11	1	1	0	15	0	3	0	0	0
Geyzing	16·2	...	22·2	24	5·2	...	1·1	9,11	15·2	94·5	...	50·8	9	3	...	...	...	...	4	...	...	...	...	...	...	...	...	...

(a) Mean of 30 days. (b) Mean of 29 days. (c) Mean of 26 days. (R) Register not received.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p h.): 62 or more	Wind speed (Kms.p h.): 20 to 61	Wind speed (Kms.p h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1013.9	1011·2	...	26·0	22·4	20·5	24·1	72	...	2·3	...	4·9	0	0	23	3	13	1	0	0	3	0	3	8	0
	1730	,,	1010·9	1008·3	...	25·9	22·2	20·3	23·9	71	...	3·2	...	6·8	0	0	28	4	19	2	0	0	0	0	3	3	0
Long Island	0830	33	1014·7	1011·0	...	26·3	23·0	21·3	25·4	75	...	3·1	...	2·1	0	0	18	0	1	0	0	0	3	2	12	13	0
	1730	,,	1011·8	1008·0	...	25·6	22·4	20·8	24·8	75	...	4·6	...	1·0	0	0	10	1	0	0	0	0	1	0	8	21	0
Port Blair	0530	79	1011·6	1002·5	...	22·3	21·1	20·4	26·3	89	...	2·5	...	1·3	0	0	6	0	5	1	0	0	0	0	0	25	0
	0830	,,	1013·5	1004·6	−0·2	27·6	23·6	21·5	26·2	70	−1	3·0	−0·4	5·8	0	0	23	2	16	5	0	0	0	0	0	8	0
	1130	,,	1012·1	1003·3	...	29·1	24·0	21.5	26·0	64	...	2·2	...	10·6	0	0	29	0	22	7	0	0	0	0	0	2	0
	1730	,,	1010·7	1001·8	...	25·3	22·5	21.0	25·1	77	...	3·0	...	7·6	0	0	24	1	20	3	0	0	0	0	0	7	0
	2330	,,	1012·4	1003·3	...	23·8	21·9	20·8	24·6	84	...	1·2	...	6·7	0	1	17	1	13	4	0	0	0	0	0	13	0
Car Nicobar	0830	10	1012·6	1011·4	...	27·7	24·1	22.3	27·7	74	...	4·0	...	7·2	0	0	29	2	21	5	1	0	0	0	0	2	0
	1730	,,	1009.7	1008·5	...	26·6	23·7	22·3	27·2	78	...	4·0	...	5·1	0	0	28	2	18	7	1	0	0	0	0	3	0
Nancowry	0830	26	1012·2	1009·3	...	28·2	25·4	24·1	29 6	78	...	4·3	...	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	1009·3	1006·4	...	26·7	25·0	23·2	30·3	83	...	4·0	...	0·3	0	0	2	0	0	0	1	1	0	0	0	29	0
Kondul	0830	8	1012·0	1011·1	...	26·8	25·9	25·5	33·5	92	...	5·6	...	7·4	0	0	27	0	27	0	0	0	0	0	0	4	0
	1730	,,	1009·4	1008·5	...	26·9	25·7	25·1	32·8	92	..	6·4	...	7.5	0	0	28	0	28	0	0	0	0	0	0	3	0
Assam (Inccluding Manipur Tripura)																											
Pasighat	0830	...	...	...	...	...	...	...	...	...	...	4·7	...	...	0	19	9	14	2	0	0	0	0	0	12	3	0
	1730	...	...	...	...	...	...	...	...	...	...	4·6	...	...	0	5	15	10	0	0	0	0	0	0	10	11	0
Digboi	0830	...	...	...	...	13·9	13·1	12·4	14·4	90	...	4·8	...	...	0	0	31	0	17	1	1	0	9	2	1	0	0
	1730	...	...	...	...	19·3	16·3	14·2	15·9	73	..	5·2	...	...	0	0	31	3	14	3	1	1	6	0	3	0	0
Dibrugarh	0830	106	1017·4	1004·9	−1·2	16·5	14·8	13·5	15·5	83	−8	4·1	0	2·0	0	0	20	4	2	11	1	1	0	0	1	11	0
	1730	,,	1013·7	1001·3	...	17·7	15·5	13·9	15·9	79	...	3·4	...	0·4	0	0	4	1	1	2	0	0	0	0	0	27	0
Dibrugarh (Mohanbari Aerodrome).	0230	111	1015·0	1001·7	...	11·6	11·4	11·2	13·5	97	...	3·5	...	0·6	0	0	3	0	0	1	0	1	0	1	0	28	0
	0530	,,	1015·4	1002·1	...	10·9	10·7	10·5	13·1	98	...	4·3	...	0·3	0	0	2	1	1	0	0	0	0	0	0	29	0
	0830	,,	1017·7	1004·6	...	16·1	14·4	13·1	15·1	82	...	4·1	...	3·8	0	0	19	3	13	2	1	0	0	0	0	12	0
	1130	,,	1015.7	1002·8	...	19·9	15·8	12·5	14.7	64	...	4·2	...	3·5	0	0	18	5	7	3	2	0	0	1	0	13	0
	1730	,,	1013·8	1000·8	...	16·6	14·7	13·3	15·3	81	...	4·1	...	0·8	0	0	4	0	3	1	0	0	0	0	0	27	0
	2330	,,	1015·5	1002·3	...	12·6	12·2	11·7	14·4	95	...	3·6	...	0·6	0	0	2	0	1	0	1	0	0	0	0	29	0
North Lakhimpur	0830	102	1017·4	1005·4	...	15·6	14·1	12.8	14·8	84	...	4·1	...	...	0	0	21	12	7	1	0	0	0	0	1	10	0
	1130	,,	1015·8	1004·0	...	20·2	15·9	12·7	14·7	64	...	4·5	...	...	0	0	26	12	6	6	1	1	0	0	0	5	0
Sibsagar	1730	,,	1014.0	1002·0	...	16·5	15·0	13·7	15·7	84	...	4·4	...	...	0	0	10	6	1	1	0	0	1	0	1	21	0
	0830	97	1017·8	1006·4	−0·5	16·0	14·9	14·0	16·1	89	−4	4·5	−1·9	2·8	0	0	23	4	7	4	2	2	2	0	2	8	0
	1730	,,	1014·0	1002·7	...	17·9	16·1	14·8	17·2	82	(b)	4·2	...	1·9	0	0	13	6	2	1	0	0	0	1	3	18	0
Jorhat	0530	90	1015·3	1004·4	...	11·3	11·2	11·1	13·2	99	...	6·0	...	...	0	0	7	1	3	0	1	0	1	0	1	24	0
	0830	,,	1017·3	1006·7	...	14·9	14·2	13·7	15·7	93	...	5·4	...	3·5	0	0	14	3	3	2	0	4	1	1	0	17	0
	1130	,,	1015·7	1005·3	...	20·0	16·5	13.7	14·1	68	...	3·8	...	...	0	1	30	7	9	5	1	0	3	3	3	0	0
	1730	,,	1013·3	1002·8	...	17·1	15·3	13·8	16·0	81	...	2·7	...	...	0	0	9	5	3	0	0	1	0	0	0	22	0
Golaghat	0830	...	...	...	...	15·1	13·6	12·9	14·3	88	...	4·5	...	...	0	0	7	0	2	0	3	0	0	0	2	24	0
	1730	...	...	...	...	20·9	16·7	14·4	15·5	67	...	4·3	...	...	0	0	2	0	0	0	2	0	0	0	0	29	0
Gohpur	0830	...	...	...	...	14.6	13·8	13.2	15·2	92	...	2·5	...	3·0	0	0	28	0	7	4	11	2	3	0	1	3	0
	1730	...	...	...	...	19·0	16·5	13·9	16·0	70	.	2·2	...	3·4	0	0	28	1	13	0	11	0	3	0	0	3	0
Tezpur	0830	79	1018·1	1008.8	−0·7	15·2	14·3	13·7	15·6	91	+3	3·7	+1·0	...	0	1	26	1	1	24	0	1	0	0	0	4	0
	1730	,,	1013·7	1003·2	...	18·6	16·4	15·6	17·3	79	...	1·6	...	...	0	0	5	0	0	5	0	0	0	0	0	26	0
Tezpur (P. B. O.)	0230	78	1015·3	1005·9	...	13·3	12·9	12·5	14·5	96	...	3·2	...	2·0	0	0	11	4	1	3	1	0	1	0	1	20	0
	0530	,,	1015·8	1006·4	...	12·4	12·1	11.7	13·6	95	...	3·3	...	1·1	0	0	5	3	1	1	0	0	0	0	0	26	0
	0830	,,	1017·8	1008·5	...	16·2	14·7	13·4	15·4	84	...	3·5	...	3·6	0	0	19	5	8	4	2	0	0	0	0	12	0
	1130	,,	1016·5	1007·3	...	20·3	16.5	13·6	15·7	66	...	2·7	..	5·8	0	0	27	6	4	11	0	1	1	1	2	4	1
	1730	,,	1014·1	1004·8	...	18·0	16·0	14·4	16·7	80	...	2·1	...	1·5	0	0	5	1	0	2	1	0	0	0	0	26	1
	2330	,,	1015·0	1006·5	...	14.7	14·1	13·4	15·5	93	...	2·2	...	0·9	0	0	5	0	2	1	1	0	0	0	1	26	0
Majbat	0830	...	...	...	...	...	...	...	...	...	...	4·2	...	...	0	0	24	0	0	24	0	0	0	0	0	7	0
	1730	...	...	...	...	...	...	...	...	...	...	4.2	...	...	0	0	1	0	0	1	0	0	0	0	0	30	0
Chaparmukh (R)	0830	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
	1730	,,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0
Tangla																											
	0830	78	...	...	...	...	...	...	...	...	...	2·7	...	...	...	...	...	0	14	16	0	0	0	0	0	1	0
	1730	,,	...	...	...	...	...	...	...	...	...	2·5	...	...	...	...	...	1	0	0	0	0	0	11	0	19	0
Gauhati	0830	55	1017·4	1010·8	−0·8	15·2	14·4	13·8	15·5	91	−3	3·5	−1·5	2·2	0	0	22	3	2	4	10	3	0	0	0	9	0
	1730	,,	1013·0	1006·5	...	20.2	16·7	14·1	16·3	69	...	2·4	...	1·1	0	0	10	1	2	0	6	0	1	0	0	21	0

(b) Mean of 29 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam—*contd.*																											
Ganhati (Kaikuchi Aerodrome).	0230	49	1014·6	1008·8	...	13·0	12·7	12·3	14·4	96	...	2·6	...	2·2	0	1	6	0	2	2	0	1	1	1	0	24	0
	0530	„	1014·9	1009·0	...	12·5	12·2	11·9	14·0	97	...	3·2	...	1·8	0	0	7	0	4	1	0	0	1	1	0	24	0
	0830	„	1017·2	1011·3	...	16·2	15·1	14·0	16·2	88	...	3·5	...	4.7	0	0	20	3	11	2	1	0	1	0	2	11	0
	1130	„	1015·9	1010·1	...	20·8	17·0	14·1	16·9	66	...	2·8	...	7·5	0	0	29	9	12	2	0	0	0	2	4	2	0
	1730	„	1013·3	1007·6	...	18·3	16·1	14·7	16·5	80	...	2·9	...	2·0	0	0	10	1	2	1	0	1	3	1	1	21	0
	2330	„	1015·4	1009 5	...	14·0	13·6	13·1	15·1	95	...	3·0	...	2·0	0	1	7	0	1	1	1	1	3	0	1	23	0
Rangiya . . .	0830	[illegible]	...	...	...	15·4	14·3	13·4	15·4	88	...	...	...	...	...	...	...	0		17	2	1	0	0	0	11	0
	1730	„	...	...	...	20·3	17·8	16·1	18·4	77	...	...	...	...	...	...	...	0	1	8	0	0	1	3	0	18	0
Goalpara . . .	0830	38	1016 7	1012·4	...	14·8	13·9	13 0	15·2	88	...	3·9	...	0·5	0	0	5	0	1	1	2	0	1	0	0	26	0
	1730	„	1013·3	1008·9	...	21.1	17·6	15 3	17·1	69	...	2·1	...	0·9	0	0	8	0	0	2	1	1	0	2	2	23	0
Dhubri . . .	0830	35	1017·4	1013·2	−0·5	17·2	15·1	14·3	15·5	88	+4	2·0	+0·3	5·3	0	0	30	2	18	7	1	0	1	0	1	1	0
	1730	„	1013·9	1009·8	...	18·3	16·7	15·6	18·0	82	...	1·2	...	3·7	0	0	27	0	10	2	0	2	10	2	1	4	0
Rupsi Aerodrome	0830	36	...	1011·8	...	16·5	14·8	13·7	15·7	83	...	2·5	...	3·7	0	0	23	2	6	12	2	1	0	0	0	8	0
	1130	„	...	1011·0	...	20·7	16·7	14·0	15·6	65	...	2·7	...	5·9	0	0	28	1	6	4	12	1	2	0	2	3	0
	1730	„	...	1008·6	...	16·8	15·4	14·3	16 2	86	...	1·5	...	1·2	0	1	3	0	1	2	0	0	0	1	0	27	0
Tura (R) . . .	0830	370	...	...	...	...	...	...	...	...	...	...	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0
(R)	1730	„	...	...	...	...	...	...	...	...	...	...	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0
Agartala . . .	0230	16	1013·4	1011·5	...	13·6	13·0	12·6	14·6	93	...	1·8	...	2·2	0	0	12	1	3	3	2	2	1	0	0	19	0
	0530	„	1013·5	1011·6	...	12·5	12·1	11·7	13·7	95	...	1·9	...	2·3	0	0	13	2	3	4	1	2	0	0	1	18	0
	0830	„	1015·8	1013·9	...	18.1	16.0	14·3	16·5	80	...	1·8	...	3.3	0	0	16	2	3	4	0	1	0	1	5	15	0
	1130	„	1014·7	1012·9	...	23·1	17·4	13·3	15·3	55	...	2·5	...	7·1	0	0	26	7	0	1	2	1	1	7	7	5	0
	1730	„	1012·6	1010·8	...	20·7	17·0	14·4	16·3	67	...	2.2	...	2·7	0	0	14	5	1	0	0	0	3	2	3	17	0
	2330	„	1014·3	1012·4	...	15·2	14·3	13 6	15·6	91	...	1·2	...	2·9	0	0	13	0	2	0	1	2	1	5	2	18	0
Silchar . . .	0830	29	1017·0	1013·5	−1·0	16·4	14·8	13·4	15·7	84	+1	2·0	+0·2	0·9	0	0	8	1	3	3	1	0	0	0	0	23	0
	1730	„	1013·1	1009·7	...	21·3	17·3	14·4	16·3	66	...	1·7	...	0·2	0	0	2	0	1	0	1	0	0	0	0	29	0
Imphal . . .	0830	801	1018·8	927·2	...	12·3	10.1	8·1	10 7	77	...	2·0	...	2·7	0	0	18	1	0	0	4	6	5	1	1	13	0
	1130	„	1014·9	925·5	...	18·2	13·2	8·9	11·5	56	...	2·3	...	7·3	0	0	29	1	1	2	6	11	6	0	0	2	2
	1730	„	1013·5	923·4	...	15·7	11·7	7·6	10·9	61	...	1·9	...	11·3	0	5	22	0	2	1	1	4	6	10	3	4	0
Haflong . . .	0830	682	1016·3	938·4	...	14·3	12·4	11·0	13·2	81	...	3·5	...	...	0	0	31	1	9	0	3	6	11	0	1	0	0
	1730	„	1012·7	935·4	...	16·0	13·4	11·3	13·7	75	...	3·3	...	...	0	0	31	4	0	0	0	10	17	0	0	0	0
Lumding . . .	0830	149	1017·9	1000·2	...	13·9	13·1	12 6	14·5	91	+1	4·9	...	1·7	0	0	12	0	3	5	2	1	0	0	1	19	0
	1730	„	1013.2	995·9	...	20·1	16·1	14·7	15·3	71	...	4·4	...	0·7	0	0	5	0	0	2	1	0	0	1	1	26	0
Sub-Himalayan West Bengal—Cooch Behar	0830	43	1016·7	1011·7	...	15·6	14·3	13·3	15·5	86	...	2·7	...	8·1	0	1	28	1	6	20	1	0	0	0	1	2	0
	1130	„	1016·0	1010·9	...	21·0	16·8	13·7	15·3	64	...	2·7	...	7·6	0	0	29	0	4	15	2	0	2	0	0	2	6
	1730	„	1013·5	1008·7	...	18·2	15·9	14·2	16·3	78	...	2·3	...	1·1	0	0	4	0	0	3	0	0	1	0	0	27	0
Jalpaiguri . . .	0830	83	1017·2	1007·2	−0·6	13·5	12·7	11·9	14·0	91	+5	1·9	+0·5	3·2	0	0	20	10	4	1	1	0	0	0	4	11	0
	1730	„	1013·5	1003·9	...	20·8	15·9	12·0	13·9	59	...	1·8	...	4·6	0	0	21	1	1	2	1	3	11	2	0	10	0
Bagdogra . . .	0530	131	1014·4	998·7	...	10·9	10·6	10·2	12·8	95	...	3·0	...	3·3	0	0	20	11	5	2	0	0	0	0	2	11	0
	0830	„	1016·7	1001·3	...	15·7	14·2	13·0	14·7	84	...	3·2	...	3·9	0	0	21	3	8	7	2	0	1	0	0	10	0
	1130	„	1015·8	1000·6	...	20·7	16·2	12·6	15·2	61	...	3·7	...	7·4	0	0	31	1	1	4	16	4	4	0	1	0	0
	1730	.	1013·1	997·9	...	17·7	15·6	13·9	15·9	79	...	4·7	...	2.8	0	0	17	1	0	0	3	1	9	1	2	14	0
	2330	„	...	...	...	13·0	12·4	11·9	13·8	94	...	3 0	...	1·9	0	0	16	8	3	2	1	0	0	1	1	15	0
Malda. . . .	0830	31	1017.0	1013·2	−0·7	17·2	14·9	13·0	15·3	77	+5	2·3	+1·3	6·3	0	0	29	6	4	3	1	1	2	4	8	2	0
	1730	„	1013·5	1009·8	...	20·5	16·7	13·7	15·7	67	...	2·5	...	4·5	0	0	27	4	2	2	0	0	0	6	13	4	0
Gangetic West Bengal Dum Dum	0230	6	1013·8	1013·0	...	16·3	15·6	15·0	17·4	92	...	1·7	...	3·3	0	0	14	7	4	1	0	0	2	0	0	17	0
	0530	„	1014·0	1013·2	...	15·5	14·9	14 3	16·5	93	...	1·5	...	2·1	0	0	9	4	1	2	1	1	0	0	0	22	0
	0830	„	1016·4	1015·6	...	18·9	16·6	14·8	17·2	77	...	1·3	...	6·4	0	0	25	12	3	1	2	4	2	0	1	6	0
	1130	6	1015·6	1014·8	...	24·0	18·2	14·2	16·0	55	...	2.5	...	9·2	0	0	31	10	5	2	1	5	3	1	4	0	0
	1730	„	1012·9	1012·1	...	22·7	18·3	15·5	18·2	64	...	2·0	...	3.6	0	0	20	11	4	0	0	2	2	1	0	11	0
	2330	„	1014·7	1013·9	...	17·2	16·1	15·2	17·5	89	...	1·0	...	2·8	0	0	13	4	4	1	0	2	2	0	0	18	0
Calcutta . . .	0830	6	1016·6	1015·9	−0.8	19·9	17·0	14·8	16·8	74	−8	1·5	−0·3	5·1	0	0	25	4	7	3	2	0	5	0	4	6	0
	1130	„	1015·6	1014·9	...	24·5	18·6	14·6	16·8	55	...	1·7	...	8·4	0	1	28	8	3	1	1	0	9	0	7	2	0
	1730	„	1013·1	1012·4	...	22·5	18·1	15·0	17·1	68	...	2·0	...	3·3	0	1	17	4	2	0	1	1	3	0	7	13	0
Barrackpore . .	0530	7	1014 1	1013·3	...	14·8	14·5	14 3	16·4	96	...	1·3	...	1·4	0	0	9	3	3	0	1	0	1	0	1	22	0
	0830	„	1016·7	1015·9	...	19·4	17·0	15·2	17·2	77	...	1·7	...	4·2	0	0	21	4	8	1	1	2	3	0	2	10	0
	1130	„	1015·9	1015·1	...	23·7	18·5	14·8	17·0	59	...	2·5	...	8·3	0	0	28	6	2	1	0	2	3	5	9	3	0
	1730	„	1013·1	1012·3	...	21·2	17·9	15·8	18·9	72	...	2·1	...	3·1	0	0	17	7	2	2	0	1	3	0	2	14	0
	2330	„	1014·9	1014·1	...	16·6	15·8	15·1	17·1	93	...	1·0	...	2·9	0	1	10	2	1	3	1	1	1	1	1	20	0

(R) Register not received.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level.	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
West Bengal—*contd.*																											
Saugor Island	0830	3	1015·6	1015·2	−1·6	20·9	18·3	16·4	19·1	76	−4	1·5	−0·7	...	0	7	24	10	11	1	2	3	2	0	2	0	0
	1730	,,	1012·4	1012·1	...	23·3	19·1	16·3	18·6	66	...	1·2	...	...	0	5	26	7	5	0	4	7	5	1	2	0	0
Sandheads	0530	10	1013·7	1012·6	..	22·7	19·7	17·7	20·3	74	...	1·1	...	...	0	6	24	6	9	2	2	1	6	2	2	1	0
	0830	,,	1016·2	1015·1	−1·0	23·4	19·9	17·6	20·8	70	+7	1·7	−0·1	...	0	3	28	8	10	3	0	3	5	1	1	0	0
	1130	,,	1016·0	1014·9	...	24·3	20·1	17·4	19·8	67	...	1·5	...	...	0	1	30	8	11	1	1	1	5	2	2	0	0
	1730	,,	1012·9	1011·8	...	24·5	20·2	17·5	19·9	65	...	0·9	...	...	0	2	23	5	8	3	1	5	1	0	2	6	0
	2330	,,	1014.6	1013.5	...	23.3	19.9	17.6	20.7	71	...	0.2	...	...	0	2	25	3	7	1	2	8	4	0	2	4	0
Contai	0830	11	1016.4	1015.2	...	21.5	18.3	17.1	18.2	72	...	1.4	...	3.5	0	0	25	7	6	1	2	3	4	0	2	6	0
	1730	,,	1013.0	1011.8	...	22.9	18.9	16.2	18.9	66	...	1.5	...	2.5	0	0	16	4	2	0	4	5	1	0	0	15	0
Midnapore	0830	45	1016.7	1011.4	−0.8	21.3	17.2	14.2	16.1	64	0	1.6	−0.2	5.6	0	1	22	7	8	2	0	3	2	1	0	8	0
	1730	,,	1012.6	1007.4	...	24.0	18.2	13.8	16.1	55	...	1.8	...	3.6	0	0	20	4	14	0		1	1	0		11	0
Purulia	0830	255	1017.2	987.4	...	17.1	14.5	12.1	14.5	74	...	3.0	...	2.6	0	0	26	4	1	0	7	0	2	6	6	5	0
	1730	,,	1013.0	984.0	...	23.1	17.0	12.7	14.3	57	...	2.8	...	2.8	0	0	21	8	6	0	1	2	0	2	2	10	0
Burdwan	0830	32	1016·5	1012.7	−1·1	18·9	16·5	14·9	16·6	77	+7	2·5	+0·7	1.1	0	0	11	0	4	0	0	1	1	1	4	20	0
	1730	,,	1013·2	1009·5	...	22·2	...	...	[illegible]	...	...	1·7	...	0·1	0	0	1	0	0	0	0	0	0	0	1	30	0
Krishnagar	0830	15	1017·0	1015·3	−0.4	18·5	16·3	14·8	16·7	80	+7	1·8	+0·5	3·0	0	0	16	6	2	1	0	3	1	2	1	15	0
	1730	,,	1013·4	1011·7	...	22·1	18·0	15·3	17·2	66	...	1·2	...	0·2	0	0	1	0	0	1	0	0	0	0	0	30	0
Asansol	0230	126	1014·1	999·3	...	15·7	14·2	12·9	15·1	84	...	2·0	...	2·6	0	0	11	0	1	2	3	1	0	0	4	20	0
	0530	,,	1014·5	999·6	...	14·6	13·5	12·5	14·5	87	...	2·0	...	1·6	0	0	8	1	0	1	2	1	0	0	3	23	0
	0830	,,	1016·9	1002·1	−0·6	17·6	15·4	13·4	15·7	76	+10	2·4	+0·5	4·5	0	0	21	2	2	2	0	1	0	6	8	10	0
	1130	,,	1015·9	1001·3	...	22·2	16·7	12·4	14·4	56	..	2·2	...	7·6	0	1	26	3	5	2	1	0	0	7	9	4	0
	1730	,,	1013·0	998·4	...	21·8	16·7	12·7	14·8	58	...	2·4	...	3·7	0	0	16	1	6	0	0	1	0	3	5	15	0
	2330	,,	1015·0	1000·2	...	16·9	14·7	12·9	14·9	78	...	1·8	...	2·0	0	0	11	0	3	2	2	0	0	2	2	20	0
Suri	0830	77	1016·9	1008·0	...	17·4	15·1	13·2	15·5	77	.	2·3	...	5·6	0	0	27	6	4	2	0	1	1	8	5	4	0
	1730	,,	1013·8	1004·9	...	21·4	17·0	13·7	15·7	63	...	2.3	...	4·3	0	0	22	6	3	1	0	1	2	3	6	9	0
Berhampore	0830	19	1016·1	1013·8	−1·7	16·1	14·7	13·6	15·7	86	+9	2·6	+0·8	1·7	0	0	14	2	2	1	1	5	1	2	0	17	0
	1730	,,	1013·2	1011·0	...	21·6	17·4	14·6	16·5	66	...	1·5	...	0·8	0	0	4	0	1	0	0	1	0	2	0	27	0
Orissa																											
Baripada	0830	54	1017·2	1010·9	...	19·5	17·3	15·5	18·0	80	...	1·9	...	1·8	0	0	17	9	1	0	0	0	1	0	6	11	0
	1730	,,	1013·3	1007·1	...	23·5	...	...	...	...	...	2·3	...	1·5	0	0	11	5	1	0	4	1	0	0	0	20	0
Balasore	0830	20	1016 3	1014·0	−1·2	20·6	17·6	15 6	17·6	73	+1	2·0	+0·2	6·6	0	0	30	12	6	1	0	3	4	0	4	1	0
	1730	,,	1012·6	1010·3	...	23·2	18·8	15·8	18·0	64	...	2·7	...	4·3	0	0	20	0	1	1	12	6	0	0	0	11	0
Chandbali	0830	6	1016·3	1015·6	−1·2	21·6	19·3	17·6	20·7	78	+3	1·2	−0·6	4·9	0	0	31	2	3	0	1	0	7	0	18	0	0
	1730	,,	1012·8	1012·1	...	23·6	19·5	16·7	19·2	66	...	0·8	.	5·7	0	0	31	1	12	7	10	0	1	0	0	0	0
Cuttack	0830	2	1015·5	1012·4	−2·0	19·8	18·4	17·3	20·1	85	+7	1·7	−0 3	0·5	0	0	3	0	2	0	0	0	0	0	1	28	0
	1730	,,	1011·9	1008·8	...	26 5	20·3	16·2	19·0	54	...	1·6	...	1·1	0	0	5	0	1	1	0	0	3	0	0	26	0
Bhubaneswar	0230	46	1013 3	1007 8	...	19·0	18·2	17·3	18.9	92	...	1·7	...	4·0	0	0	25	6	5	2	1	1	4	2	4	6	0
	0530	,,	1013·7	1008 2	...	17·9	17·2	16·6	19·2	94	...	1·9	..	3·7	0	0	20	8	7	0	0	0	2	3	0	11	0
	0830	,,	1016 0	1010·6	...	21·8	19·1	17·3	19·7	77	...	2·3	...	7·8	0	0	30	6	11	1	0	1	3	4	4	1	0
	1130	,,	1015·2	1009·8	...	26·6	20·6	16·8	18·9	56	...	3·0	...	14 6	0	6	25	7	7	0	2	4	7	1	3	0	0
	1730	,,	1012·3	1007·1	...	25·3	20·2	16·9	19·7	61	...	2·6	...	10·8	0	3	26	4	4	2	3	10	3	0	3	2	0
	2330	,,	1014·5	1009 0	...	20·0	18·7	17·9	20·3	88	...	1·9	...	4·8	0	1	26	2	7	3	1	2	8	2	2	4	0
Puri	0830	6	1016 3	1015·6	−0 7	22·6	19·6	18·0	20·3	75	−2	2·1	+0·3	10·8	0	4	27	15	6	3	0	0	2	3	2	0	0
	1730	,,	1012·9	1012·2	...	24·9	21·1	19·0	21·8	70	...	1·5	...	18·0	0	9	22	1	0	5	8	11	5	1	0	0	0
Gopalpur	0530	17	1013·8	1011·8	...	19·3	17·9	16·7	19·1	85	...	0·9	...	5·8	0	0	31	7	0	0	0	0	2	1	21	0	0
	0830	,,	1016 2	1014·2	−0·8	22·2	19·1	17·1	19·9	73	−1	1·7	+0·3	7 0	0	1	28	13	0	0	0	0	2	1	13	2	0
	1130	,,	1015·6	1013·6	...	27·1	21·5	18·1	20·6	60	...	1·4	...	11·1	0	2	29	2	4	6	9	6	3	0	1	0	0
	1730	,,	1012·7	1010·7	...	25·1	21·0	18·5	21·3	68	...	1·3	...	15 0	0	3	28	0	1	7	14	8	1	0	0	0	0
	2330	,,	1014·6	1012·7	...	21·9	19·6	18·1	21·5	80	...	1.1	...	7·4	0	2	25	1	0	0	2	2	10	2	10	4	0
Koraput	0830	913	1533·7	914·6	...	16·3	13·6	11·4	13·5	78	...	0·4	...	...	0	0	31	1	0	0	1	26	3	0	0	0	0
	1730	,,	1514·4	911·1	...	22·6	15·3	9·6	12·2	44	...	1·9	...	...	0	0	31	14	1	3	1	3	1	7	1	0	0
Titilagarh	0830	211	1015·7	991·3	...	20·0	16·7	14·1	16·3	69	...	0·9	...	1·5	0	0	14	1	2	0	4	4	3	0	0	17	0
	1730	,,	1011·1	987·5	...	28·2	19·7	13·8	15 8	42	...	1·5	...	2·4	0	0	23	3	15	1	2	0	2	0	0	8	0
						(e)	(e)	(e)	(e)	(e)		(e)		(e)			(e)										
Bolangir	0830	...	...	...	...	21·2	19.6	18·7	21·4	87	...	6·0	...	2·0	0	0	18	3	3	4	1	2	1	1	3	8	0
	1730	...	...	...	...	(e) 22·3	(e) 20.4	(e) 19·4	(e) 22.4	(e) 83	...	(e) 6·0	...	(e) 3·0	0	0	(e) 26	2	1	3	1	0	2	8	9	0	0
Angul	0830	139	1016·2	1000 0	−1·2	18·9	17·2	15·0	18·9	83	+10	2·3	0	4·1	0	0	24	4	2	1	3	3	1	8	2	7	0
	1730	,,	1011·7	996·2	...	26·1	18·7	13·5	15·5	47	...	1·9	...	4·4	0	0	30	4	1	5	6	5	2	3	4	1	0
Sambalpur	0830	148	1016·5	999·3	−1·0	19·9	17·8	16·3	20·8	80	+9	1·5	−0·3	2·7	0	0	26	3	11	5	4	2	1	0	0	5	0

(e) mean of 26 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C.: Dry bulb	Mean temperature in °C.: Wet bulb	Mean temperature in °C.: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amovnnt (Oktas): Mean amount	Cloud amovnnt (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.,p.h.): 62 or more	Wind speed (Kms.,p.h.): 20 to 61	Wind speed (Kms.,p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—*(Contd.)*	1730	,,	1012·4	995·4	...	24·2	20·6	18·4	21·3	71	...	1·7	...	1·7	0	0	15	5	2	1	2	2	0	0	3	16	0
Jharsuguda . .	0230	230	1013·7	986·9	...	16·3	15·4	14·5	16·9	90	...	1·1	...	6·3	0	0	25	6	11	1	0	1	0	0	6	6	0
	0530	,,	1013·9	987·0	...	15·4	14·8	14·2	16·4	93	...	1·1	...	4·5	0	0	23	6	14	2	0	1	0	0	0	8	0
	0830	,,	1016.3	989·6	...	18·1	16·1	14·5	16·7	80	...	2·3	...	6·2	0	0	28	4	19	0	0	1	0	1	3	3	0
	1130	,,	1015·1	988·9	...	23·8	18·2	14·1	16·5	57	...	1·8	...	8·3	0	0	29	6	6	2	1	2	5	3	4	2	0
	1730	,,	1011·9	985·8	...	24·2	18·9	15·1	17·5	48	...	1·8	...	3·5	0	0	17	2	3	0	1	5	1	4	1	14	0
	2330	,,	1014·7	987·7	...	18·0	16·3	15·1	17·2	84	...	1·4	...	4·3	0	1	21	3	13	0	0	2	0	0	4	9	0
Chota Nagpur																											
Jamshedpur . .	0830	129	1016·7	1001·6	−1·2	17·6	15·6	14·1	15·2	81	+7	2·2	+0 3	3·4	0	0	19	0	2	5	1	0	0	7	4	12	0
	1730	,,	1012·5	997·7	...	23·5	17·8	13.5	15·5	56	...	2·1	...	3·7	0	0	22	1	3	6	2	1	1	3	5	9	0
Jamshedpur (P. B. O.)	0530	145	1014·2	997·1	...	15·5	14·5	13·5	15·5	89	...	2·2	...	2·5	0	0	17	2	1	2	0	0	1	2	9	14	0
	0830	,,	1016·7	999·7	...	17·5	15·4	13·9	15·6	80	...	2·5	...	3·7	0	0	24	1	5	3	0	0	2	3	10	7	0
	1130	,,	1015·7	999·0	...	22·8	17·3	13·1	15.2	55	...	2·7	...	7·2	0	1	27	3	3	2	1	1	6	6	6	3	0
	1730	145	1012·4	995·8	...	23·9	17·9	13·3	15·4	54	...	2·9	...	4·8	0	1	25	4	5	4	1	0	4	0	8	5	0
	2330	,,	1014·9	997.9	...	17·7	15·9	14·5	16·9	82	...	1·9	...	3·3	0	0	22	0	10	2	0	0	1	0	9	9	0
Chaibasa . .	0830	226	1016·3	990·1	−1·0	18·2	15·8	14·3	15·8	76	0	2·5	+0·5	0·9	0	0	10	1	2	0	0	2	3	2	0	21	0
	1730	,,	1012·2	986·4	...	23·0	17·8	14·0	16·0	60	...	2·7	...	0·6	0	0	5	5	3	0	0	1	1	0	0	26	0
Ranchi . . .	0830	655	1017·0	942·1	−0·3	14·9	12·7	10·8	13·0	77	+18	3·7	+1·6	1·2	0	0	9	3	0	2	0	0	0	0	4	22	0
	1730	,,	1013·0	939·4	...	18·9	14·8	11·8	13·7	67	...	2·4	...	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Ranchi(G W. O.) .	0530	652	1015·1	940·1	...	12·4	10·9	9·5	12·1	84	...	2·5	...	3·1	0	1	8	0	0	2	0	2	1	1	3	22	0
	0830	,,	1016·3	942·1	...	16·2	13·4	11·7	13·4	73	...	2·7	...	5·2	0	1	23	1	2	6	2	2	2	5	4	7	0
	1130	,,	1014·9	941·7	...	19·7	14·4	10·0	12·5	57	...	2·4	...	9·0	0	1	30	0	1	7	3	4	4	8	4	0	0
	1730	,,	1012·5	939·4	...	19·8	14·5	9·8	12·8	56	...	2·8	...	7·4	0	0	27	2	3	5	2	1	4	4	6	4	0
Daltonganj . .	0830	221	1017·4	991·5	−0·9	16·5	14·0	11·8	13·9	75	−5	2·8	+1·2	2·5	0	1	10	0	0	2	0	0	0	8	1	20	0
	1730	,,	1012·8	987·5	...	21·7	16·7	12·5	14·4	59	...	2·7	...	2·2	0	0	15	2	2	1	2	0	0	2	6	16	0
Hazaribagh . .	0830	611	1016·7	946·7	−0·8	15·1	12·9	11·1	13·2	79	+19	3·0	+1·1	6·7	0	0	26	2	1	2	3	6	2	1	9	5	0
	1730	,,	1013·0	943·9	...	18·5	14·5	11·3	13·8	66	...	2·2	...	7·1	0	0	24	6	4	0	1	1	1	1	10	7	0
Dhanbad . . .	0830	257	1016·3	996·4	...	17·7	14·4	12·2	14·1	70	...	2·7	...	3·3	0	0	31	5	3	4	1	5	0	10	3	0	0
	1730	,,	1012·8	983·2	...	20 3	15·9	12·3	14·3	62	...	2·5	...	3·3	0	0	31	11	3	3	2	2	0	2	8	0	0
Bihar																											
Purnea . . .	0830	38	1017·1	1012·5	−9	15·6	14·3	13·1	15 0	86	+1	2·5	+1·1	2·9	0	0	22	1	1	4	0	2	9	5	0	9	0
	1730	,,	1013·7	1009·3	...	18·2	15·9	14·2	16·3	78	...	1·8	...	0 7	0	0	4	0	1	1	0	0	0	2	0	27	0
Forbesganj . .	0830	61	1016·5	1009·3	...	13·8	13·1	12·3	14·3	93	...	3·3	...	5·3	0	1	25	3	3	6	2	1	2	9	0	5	0
	1730	,,	1013·1	1006·0	...	20·0	16·3	13·5	15·6	67	...	2·8	...	5·3	0	1	24	2	0	3	0	0	2	18	0	6	0
Darbhanga . .	0830	49	1016.8	1010·9	−1·0	14·3	13·4	12·6	14·8	91	+9	2·9	+1·3	2·2	0	0	21	0	0	4	2	0	3	9	3	10	0
	1730	,,	1013·7	1007·9	...	19·6	16·0	13·3	14·3	68	...	3·3	...	1·1	0	0	9	0	0	1	2	0	2	3	1	22	0
Motihari . .	0830	66	1017·7	1009·8	+0·4	16·6	14·9	13·6	15.3	83	+5	3·0	+1·0	3·2	0	0	26	0	0	9	0	1	0	15	0	5	0
	1730	,,	1013·4	1001·6	...	18·3	15·7	13·9	15·6	76	...	3·3	...	2 8	0	0	24	1	0	8	0	0	0	16	0	7	0
Patna . . .	0830	53	1016·7	1010·5	−1.3	16·0	14·0	12·3	14·5	79	+8	2·1	+0·4	6·1	0	0	27	0	4	3	1	3	8	6	2	4	0
	1730	,,	1013·6	1007·5	...	19·3	15·5	12·6	14·6	66	...	2·6	...	5·0	0	0	21	0	4	2	1	2	0	8	4	10	0
Patna (Aerodrome) .	0530	60	1014·1	1007·1	...	12·6	12 0	11·6	13 6	93	...	1·8	...	1·6	0	0	8	1	1	2	1	0	0	3	0	3	0
	0830	,,	1016·4	1009·3	...	15·2	13·8	12·6	14·6	85	...	2·5	...	6·8	0	1	22	1	2	2	3	1	3	9	2	8	0
	1130	,,	1016·0	1009·0	...	19·9	16·1	13·5	15·1	68	...	3·4	...	8·7	0	1	25	2	1	5	3	1	1	8	6	4	0
	1730	,,	1013·0	1006·1	...	19·5	16·5	14·2	16·3	72	...	2·6	...	4·3	0	9	15	1	1	1	2	0	0	5	6	15	0
	2330	52	1015·4	1009·2	...	16·2	14·9	13·6	16·3	84	...	1·7	...	1·9	0	0	4	0	1	1	2	0	0	0	0	27	0
Dehri . . .	0830	107	1016·9	1004·2	...	16·6	14·8	12·8	15·6	81	...	2·7	...	3·8	0	0	28	2	0	1	6	2	15	1	1	3	0
	1730	,,	1012·9	1000·4	...	20·6	16·9	13·5	16·4	65	...	2·4	3·8	3·1	0	0	25	4	3	4	0	1	0	4	9	6	0
Gaya . . .	0230	116	1013·4	999·6	...	14·2	13·4	12·5	15 0	90	...	2·0	...	3·1	0	0	15	0	4	3	1	1	2	2	2	16	0
	0530	,,	1013·5	999·7	...	12·8	12·3	11·7	14·2	94	...	2·6	...	3·7	0	1	15	1	2	2	2	2	5	1	1	15	0
	0830	,,	1015·5	1001·8	−2·4	15·3	14·0	12·9	15 3	86	+23	2·4	+0·7	4·7	0	1	16	0	0	2	2	2	7	2	2	14	0
	1130	,,	1015·3	1001·8	...	20·7	16·0	12·0	14·6	59	...	3·0	...	10·8	0	4	25	1	3	6	1	1	3	8	6	2	0
	1730	,,	1012·2	998·7	...	20·4	16·3	13·1	15·5	64	...	2·2	...	5·6	0	1	20	5	4	4	1	0	0	0	7	10	0
	2230	,,	1014·1	1000·4	...	15·3	13·9	12·6	14·6	84	...	1·5	...	3·5	0	1	14	1	2	4	4	0	1	2	1	16	0
Jamui . . .	0830	82	1016·6	1006·7	..	15·3	14·5	13·3	16·1	88	...	2·1	...	3·5	0	0	23	0	0	13	4	0	0	1	5	8	0
	1730	,,	1013 ·8		−0·7	20·1	16·7	14·4	16·4	72	...	2·3	...	2·5	0	0	14	0	0	2	1	0	0	1	10	17	0
Dumka . .	0830	149	1017·1	0 101	...	18·1	15·1	12·8	14·6	78	+7	2·1	+0·7	...	0	0	30	2	1	8	2	0	1	12	4	1	0
	1730	,,	1013·4	996·2	...	21·3	16·5	1 3·0	15·0	60	...	·1	...	...	0	0	30	4	1	2	2	0	0	13	8	1	0

—data not available

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour.	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*Contd.*																											
Bhagalpur	0530	49	1014·8	1009·0	...	13·8	13·0	12·5	14·3	93	...	1·7	...	3·8	0	1	15	0	0	4	0	0	8	3	1	15	0
	0830	,,	1016·8	1011·1	...	15·6	14·2	12·9	15·4	84	...	2·0	...	2·7	0	0	14	0	0	4	0	0	6	4	0	17	0
	1130	,,	1016·8	1011·1	...	19·3	15·9	13·3	15·8	69	...	2·5	...	6·3	0	0	28	0	1	7	0	1	2	15	2	3	0
	1730	,,	1013·5	1007·8	...	19·5	16·6	14·5	17·0	73	...	1·8	...	3·4	0	0	22	0	0	2	1	0	2	13	4	9	0
	2330	,,	1015·5	1009·7	...	15·8	14·4	13·2	15·5	85	...	1·5	...	3·0	0	0	19	0	0	3	3	0	4	7	2	12	0
Sabour	0830	37	1016·7	1012·3	−1·3	15·8	14·8	13·9	15·8	90	+8	2·1	+0·3	5·1	0	0	26	2	1	3	1	0	11	7	1	5	0
	1730	,,	1013·3	1008·9	...	19·9	17·5	16·0	18·3	79	...	2·3	...	2·7	0	0	12	0	0	2	0	0	0	3	7	19	0
U.P. East																											
Gonda	0830	110	1016·5	1003·4	...	13·2	12·2	11·4	14·4	90	+10	2·7	+0·4	1·4	0	0	13	1	0	5	0	0	0	3	4	18	0
	1730	,,	1014·1	1001·3	...	18·2	15·3	13·2	15·4	75	...	1·7	...	0 3	0	0	3	0	0	1	0	0	0	1	1	28	0
Nautanwa	0830	99	1015·4	1003·4	...	12·8	12·2	11·5	13·8	93	...	2·8	...	4·1	0	0	20	3	4	2	6	1	0	1	3	11	0
	1730	,,	1013·2	1001·5	...	18·6	15·8	13·3	15·4	73	...	2·0	...	4·0	0	1	15	1	1	1	1	2	7	3	0	15	0
Gorakhpur	0830	77	1016·4	1007·2	−1·0	13·9	12·8	11·8	13·9	89	+10	2·3	+0·9	1·0	0	0	7	0	0	1	0	0	0	6	0	24	0
	1730	,,	1014·0	1005·0	...	19·3	15·4	12·7	14·5	68	...	2·1	...	0·7	0	0	5	0	1	1	0	0	0	3	0	26	0
Gorakhpur (P.B.O.)	0230	78	1014·4	1005·0	...	13·2	12·2	11·3	13·5	89	...	2·1	...	3·4	0	1	15	3	2	0	0	0	1	8	2	15	0
	0530	,,	1014·3	1004·9	...	12·5	11·7	11·0	13·1	90	...	2·3	...	0·4	0	0	1	2	2	1	0	1	1	7	3	14	0
	1130	,,	1016·6	1007·5	...	19·4	15·5	12·4	13·4	65	...	3·1	...	6·0	0	0	28	0	2	6	4	3	4	6	3	3	0
	2330	,,	1015·4	1006·1	...	14·3	13·0	11·9	13·9	87	...	1·5	...	4·0	0	0	20	4	1	0	1	0	2	9	3	11	0
Azamgarh	0830	78	1015·9	1006·4	...	13·4	12·8	12·3	14·3	93	...	2·5	...	2·1	0	0	16	2	0	5	0	0	0	9	0	15	0
	1730	,,	1013·0	1003·4	...	19·1	16·6	14·7	16·7	75	...	1·5	...	0·3	0	0	3	0	0	3	0	0	0	0	0	28	0
Ballia	0830	64	1016·0	1008·3	...	14·1	12·9	12.2	13·9	87	...	2·7	...	3·0	0	0	23	0		6	6	3	8	0	0	8	0
	1730	,,	1012.8	1005.7	...	20.3	16·0	12.8	14·7	63	...	3·4	...	3.5	0	0	29	0	2	6	4	2	9	6	0	2	0
Varanasi* (Banaras)	0830	76	1017·3	1008·3	−0·5	(b) 15·2	(b) 13·7	(a) 11·9	(b) 14·0	(d) 84	+6	(b) 3·0	+1·4	13·0	0	4	22	1	8	0	3	1	10	1	2	3	0
	1730	,,	1013·2	1004·5	...	20·2	15·8	12·2	14·1	61	...	2·3	...	11·8	0	5	24	4	8	0	1	0	5	6	5	2	0
Varanasi (Banaras) (Babatpur Aerodrome).	0530	85	1015.5	1005·2	...	11·8	11·3	10·7	13·1	95	...	2·5	...	4·4	0	0	20	1	1	8	0	0	6	4	0	11	0
	0830	,,	1017·5	1007·3	...	14·7	13·5	12·5	14·5	87	...	2·5	...	8·0	0	0	27	1	2	5	2	3	3	9	2	4	0
	1130	,,	1017·3	1007·3	...	20·3	15·7	12.2	11·3	61	...	2.2	...	10·4	0	3	27	2	1	6	5	2	3	8	3	1	0
	1730	,,	1014·2	1004·2	...	19.5	15·7	12·5	14·8	65	...	2·3	...	6·0	0	1	25	2	5	6	1	0	2	9	1	5	0
	2330	,,	1016·1	1005·9	...	14·1	12·9	11·9	14·0	88	...	1·7	...	4·4	0	0	18	2	4	3	0	1	3	2	3	13	0
Allahabad (Bamrauli)	0230	98	1014·9	100·2	...	12·6	11·7	10·7	13·1	89	...	1·8	...	3·7	0	0	17	0	4	2	1	0	3	6	1	14	0
	0530	,,	1014·9	1003.2	...	11·8	11·1	10·4	12·6	91	...	2·0	...	5 5	0	0	25	2	3	6	1	0	5	8	0	6	0
	0830	,,	1017·0	1005·3	−1·1	13·8	12 4	11·2	13·4	84	+4	2·9	0 6	5 5	0	0	28	2	0	8	3	3	3	7	2	3	0
	1130	,,	1016.8	1005·3	...	20·4	15·4	11·4	13·4	57	...	2·8	...	8·4	0	0	18	2	5	3	1	0	0	6	1	13	0
	1730	,,	1013·4	1002·0	...	20·3	16·2	11·9	15·0	64	...	2·1	...	3.2	0	0	20	2	7	2	1	0	1	2	5	11	0
	2330	,,	1015·7	1003·9	...	13·9	12·4	10·9	13·4	79	...	1·5	...	4.3	0	0	20	2	7	2	1	0	1	2	5	11	0
Banda	0830	121	1017·3	1002·8	...	13·1	12·4	11·6	13·8	91	...	3·1	...	0·7	0	0	5	0	1	0	2	0	0	1	1	26	0
	1730	,,	1014·5	1000·3	...	20·9	17·3	14·5	17·1	69	...	1·7	...	0·6	0	0	5	0	0	0	1	0	2	2	0	26	0
Fatehpur	0830	114	1017·1	1003 5	...	13·4	12·0	10·7	12·9	84	+15	3·1	+1.2	2·3	0	0	15	1	0	8	1	0	0	5	0	16	0
	1730	,,	1013·6	1000·6	...	19·7	15·4	11·6	13·5	63	...	2·3	...	0·8	0	0	7	0	0	4	0	0	0	3	0	24	0
Kanpur	0830	126	1017·3	1002·3	−0·5	12·1	11·1	10·2	12·4	88	+10	3·0	+1·7	6·2	0	0	21	1	2	5	1	1	3	4	4	10	0
	1730	,,	1014·1	999.4	...	19·6	14·9	10·6	13·1	58	...	2·9	...	6·8	0	0	27	3	5	3	1	1	1	9	4	4	0
Lucknow*	0830	113	(a) 1017·6	(a) 1004·1	−0·1	(a) 12·9	(a) 11·5	(a) 10·2	(a) 12·4	(a) 84	+6	(a) 2·9	+1·1	(b) 2·3	0	0	18	2	2	7	0	0	0	5	3	11	0
	1730	,,	1013·9	1000·7	...	18·9	15·3	12·3	14·5	66	...	2·3	...	2·8	0	0	17	2	0	2	0	2	1	7	3	14	0
Lucknow (Amausi Aerodrome).	0230	128	1015·2	999·9	...	11·0	10·5	9·8	12·3	93	...	2·5	...	7·6	0	1	22	1	3	7	0	1	0	2	9	8	0
	0530	,,	1014·8	999·4	...	10·1	9·6	9·0	11·4	93	...	2·4	...	6·5	0	2	19	1	3	5	2	0	0	2	8	10	0
	0830	,,	1016·9	1001·6	−1·0	12·2	11·4	10·0	13·0	90	+13	3·0	+1·2	6·3	0	0	23	4	0	3	3	0	1	3	9	8	0
	1130	,,	1016·7	1001·8	...	18·8	14·2	10·3	12·7	59	...	2·4	...	11·4	0	2	28	3	2	1	6	3	1	3	11	1	0
	1730	,,	1013·6	998·7	...	18·4	14·6	11·3	13·3	64	...	2·5	...	7·4	0	1	26	0	2	5	3	0	3	3	11	4	0
	2330	,,	1016·0	1000·7	...	11·9	11·1	10·2	12·4	90	...	2·1	...	7·4	0	2	21	4	4	3	0	1	1	4	6	8	0
Hardoi	0830	142	1016·5	999·4	...	11·1	10·5	9·9	12·3	93	...	2·1	...	3·1	0	1	20	3	2	3	2	0	1	7	3	10	0
	1730	,,	1013.3	996·7	...	18·4	15·0	12·6	14·4	69	...	2·1	...	3·8	0	0	23	2	1	3	2	0	2	8	5	8	0
Lakhimpur Kheri	0830	147	1016·4	998·8	...	11·6	10·9	10·1	12·8	91	...	3·0	...	0·8	0	0	8	0	0	0	1	0	0	7	0	23	0
	1730	,,	1013·6	996·5	...	18·0	15·0	12·6	14·3	72	...	3·0	...	1·4	0	0	12	0	0	2	1	0	0	9	0	19	0
Bahraich*	0830	124	(c) 1016·4	(c) 1001·7	−0·8	(d) 13·7	(d) 12·6	(d) 11·3	(d) 13·3	(e) 88	+7	(c) 2·8	+1·3	(c) 2·4	0	0	15	1	2	2	2	0	4	1	3	13	0
	1730	,,	(a) 1013·1	(a) 998·5	...	(a) 19·0	(a) 15·1	(b) 11·6	(a) 13·9	(c) 64	...	(a) 2·5	...	(a) 2·0	0	0	11	1	1	0	3	0	1	0	5	19	0
U. P. West																											
Orai	0830	141	1018·3	1001·6	...	14·3	12·4	10·5	12·9	80	...	1·2	...	4·6	0	0	28	1	1	0	10	1	3	0	12	3	0
	1730	,,	1014·1	997·8	...	20·5	15·6	12·4	13·1	57	...	(g) 0·9	...	3·8	0	0	31	6	4	3	1	0	2	2	13	0	0
Jhansi	0830	251	1016·9	987·1	−1·8	12·2	11·0	9·9	12·1	82	+20	(c) 2·6	+0·9	2·5	0	0	15	1	4	4	1	0	0	0	5	16	0
	1730	,,	1013·3	984·6	...	21·4	16·0	11·7	13·8	55	...	1·9	...	3·1	0	0	26	3	4	1	2	2	1	1	12	5	0
Agra	0830	169	1017·7	997·5	−0·6	11·5	9·9	8·3	11·2	82	+18	1·7	−0·5	1·8	0	0	17	0	0	7	2	1	1	6	0	14	0

*Data extracted from Indian Daily Weather Report.

(a) Mean of 30 days. (b) Mean of 29 days. (c) Mean of 28 days. (d) Mean of 27 days. (f) Mean of 25 days. (g) Mean of 24 days.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean Temperature in °C: Dry bulb	Mean Temperature in °C: Wet bulb	Mean Temperature in °C: Dew point	Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Kms. pch.): 62 or more	Wind speed (Kms. pch.): 20 to 61	Wind speed (Kms. pch.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
U. P. West—Contd.	1730	164	1014·3	994·6	...	18·5	13·7	9·5	11·8	59	...	1·9	...	2·7	0	0	19	0	0	3	1	0	2	10	3	12	0
			(a)	(a)		(a)	(a)	(b)	(a)					(b)													
Mainpuri	0830	157	1017·9	999·2	−0·1	13·4	11·9	5·3	12·9	64	+11	1·8	−0·4	3·5	0	0	14	1	0	6	0	1	0	4	2	15	0
			(a)	(a)		(a)	(a)	(c)	(c)			(a)		(a)													
	1730	„	1014·1	995·7	...	18·2	14·7	11·7	13·8	65	...	2·3	...	0·8	0	0	3	0	0	1	0	0	0	1	1	27	0
Aligarh	0830	187	1016·7	995·2	...	10·8	9·9	9·4	11·8	88	+24	2·3	+0·8	0·8	0	0	15	0	0	5	0	1	0	9	0	16	0
	1730	„	1014·1	992·1	...	16·8	13·4	10·0	12·6	67	...	2·7	...	0·4	0	0	11	0	0	4	0	0	0	7	0	20	0
Bareilly	0830	173	1016·5	995·9	−1·0	12·4	11·0	9·6	12·1	84	+3	3·1	+0·8	2·8	0	0	15	1	1	4	2	0	0	5	2	16	0
	1730	„	1013·5	993·3	...	17·4	13·8	10·5	12·9	65	...	3·0	...	1·5	0	0	8	0	0	0	0	0	0	4	4	23	0
Bareilly (P. B. O.)	0230	172	1015·2	994·9	...	12·4	11·1	10·2	12·4	89	...	1·9	...	5·0	0	1	18	2	2	5	1	0	0	5	4	12	0
	0530	„	1014·8	994·2	...	11·0	10·2	9·3	11·8	90	...	2·0	...	5·3	0	0	19	2	2	5	1	0	0	5	4	12	0
	1130	„	1016·7	996·5	...	16·9	13·8	11·1	13·3	69	...	2·8	...	8·1	0	1	24	1	2	5	5	0	1	6	5	6	0
	2330	„	1016·0	995·6	...	13·0	11·7	10·5	12·9	86	...	1·7	...	4·1	0	0	15	3	1	3	0	0	1	4	3	16	0
Meerut	0830	222	1017·4	990·9	0	10·9	9·7	8·4	11·0	84	+7	3·2	+0·7	2·2	0	0	15	0	0	4	0	0	0	8	3	16	0
Najibabad	0830	270	1017·6	985·3	...	10·5	9·6	8·7	11·8	90	...	2·7	...	4·1	0	0	16	4	4	2	2	1	0	0	3	15	0
	1730	„	1015·9	984·5	...	17·5	13·6	10·4	12·4	65	...	2·5	...	3·3	0	0	14	5	2	0	1	1	0	0	5	17	0
Rourkee	0830	274	1018·1	985·3	+0·1	10·2	9·5	8·8	11·5	92	+9	4·0	+1·4	0·9	0	0	10	0	0	0	7	0	0	0	3	21	0
	1730	„	1014·3	982·8	...	16·0	13·1	10·5	12·7	72	...	4·3	...	1·2	0	0	12	0	0	0	4	0	0	0	8	1	0
Dehra Dun	0530	682	1015·7	986·0	...	8·3	7·5	6·5	9·8	89	...	3·2	...	1·0	0	1	7	3	2	0	0	0	0	1	2	2	0
	0830	„	1017·4	987·8	−0·4	9·2	8·0	6·6	10·1	85	+12	3·2	−0·2	1·6	0	0	12	3	4	0	1	0	1	2	1	19	0
	1130	„	1016·5	988·5	...	14·9	10·9	7·1	10·4	61	...	3·3	...	2·0	0	0	20	1	1	1	0	4	3	10	0	11	0
	1730	„	1014·1	986·2	...	14·5	11·4	9·1	11·0	71	...	3·7	...	1·9	0	0	16	3	1	0	1	3	3	3	2	15	0
	2330	„	1016·8	987·5	...	9·9	8·9	7·9	10·6	88	...	3·2	..	1·0	0	0	12	5	6	0	0	1	0	0	0	19	0
Punjab (I) including Delhi																											
New Delhi	0230	216	1015·9	990·0	...	10·6	9·6	8·5	10·9	87	...	2·3	...	7·8	0	1	23	3	2	3	3	0	2	3	8	7	0
	0530	„	1015·7	990·0	...	9·7	8·9	8·2	10·7	89	...	2·5	...	6·8	0	1	19	1	1	3	1	0	0	5	9	11	0
	0830	„	1017·3	991·3	−1·0	10·3	9·3	8·2	10·7	87	+11	3·7	+0·4	9·5	0	3	26	2	4	2	2	1	2	8	8	2	0
	1130	„	1017·6	992·1	...	16·1	12·6	9·3	11·6	65	...	3·4	...	13·9	0	3	28	0	2	5	3	2	2	7	10	0	0
	1730	„	1014·5	989·1	...	17·3	13·1	9·2	11·7	61	...	3·8	...	10·3	0	3	27	3	1	4	2	0	0	3	17	1	0
	2330	„	1016·7	990·9	...	11·9	10·6	7·4	11·7	85	...	2·0	...	7·1	0	1	23	3	2	3	1	1	1	5	8	7	0
Hissar	0530	221	1015·9	989·8	...	8·8	7·8	7·5	10·1	91	...	2·8	...	3·8	0	0	20	4	2	2	4	1	2	2	3	11	0
	0830	„	1017·8	991·1	−1·1	8·6	7·6	6·8	9·7	90	+21	2·8	+0·6	2·3	0	0	21	2	2	4	2	1	5	4	1	10	0
	1130	„	1017·9	991·9	...	16·5	12·3	8·1	11·1	60	...	2·7	...	5·6	0	1	24	2	2	2	6	4	1	4	4	6	0
	1730	„	1015·0	989·2	...	17·0	12·3	7·3	10·7	55	..	3·0	...	3·0	0	0	29	6	4	2	2	0	1	1	13	2	0
	2330	„	1016·9	990·5	...	10·3	9·3	8·7	10·9	88	...	2·9	...	2·6	0	0	12	1	0	0	2	2	0	4	3	19	0
Karnal	0830	249	1017·2	987·3	...	9·9	9·1	8·2	10·9	89	...	3·4	...	0·7	0	0	7	0	2	0	2	0	1	1	1	24	0
	1730	„	1014·2	985·0	...	16·9	12·6	8·1	11·0	59	...	4·8	...	0·2	0	0	2	0	0	0	0	0	0	1	1	29	0
Patiala	0830	251	1017·3	987·1	...	10·1	8·9	7·4	10·5	85	...	3·8	...	4·0	0	0	22	4	2	1	7	0	0	2	6	9	0
	1730	„	1015·1	985·8	...	15·6	12·4	8·9	12·0	67	...	4·2	...	6·9	0	0	29	9	2	2	4	0	1	2	9	2	0
Ambala	0830	272	1017·1	984·4	−1·0	9·7	9·2	8·2	11·1	91	+16	2·7	−0·1	1·6	0	0	14	0	0	0	6	0	0	0	8	17	0
	1730	„	1014·8	982·8	...	15·9	13·2	10·3	12·9	70	...	2·8	...	2·6	0	0	16	0	0	0	4	0	0	0	12	15	0
Ambala (P. B. O.)	0230	278	1015·2	982·6	...	10·6	9·7	8·9	11·2	90	...	2·8	...	9·3	0	3	21	4	1	1	7	1	0	3	7	7	0
	0530	„	1014·9	982·0	...	9·9	9·2	8·5	10·9	92	...	3·1	...	7·2	0	1	20	2	2	2	5	0	0	1	9	10	0
	1130	„	1017·0	984·6	...	15·3	12·7	10·8	12·7	75	...	3·7	...	8·4	0	1	27	1	2	2	6	2	0	3	11	3	1
	2330	„	1016·1	983·3	...	11·6	10·6	9·6	11·9	88	...	2·1	...	8·9	0	2	21	2	1	2	7	0	0	3	8	8	0
Chandigarh	0830	847	1016·7	975·4	...	10·3	9·3	7·8	10·8	83	...	2·6	...	1·1	0	0	10	0	0	1	5	0	1	0	3	21	0
	1730	„	1014·2	973·9	...	15·8	12·3	9·1	11·3	63	...	2·0	...	1·9	0	0	20	3	1	0	3	1	4	0	8	11	0
Ludhiana	0830	347	1017·8	988·0	−0·6	9·2	8·3	7·4	10·3	89	+10	1·8	−0·9	2·5	0	0	21	0	0	1	1	4	2	3	6	10	1
	1730	„	1016·0	986·5	...	15·3	12·5	10·1	12·2	72	...	3·0	...	3·7	0	0	23	4	4	1	3	2	0	6	3	8	0
Ferozepur	0830	200	1017·5	993·4	...	7·7	7·0	6·0	9·3	91	...	2·6	...	1·3	0	0	11	0	6	0	0	0	2	1	2	20	0
	1730	„	1014·4	990·9	...	15·5	12·2	8·4	11·6	65	...	3·8	...	0·8	0	0	6	0	4	0	0	0	0	0	2	25	0
Amritsar	0530	234	1016·1	987·8	...	7·5	7·2	6·9	9·9	95	...	3·9	...	5·6	0	0	22	0	5	5	0	1	2	2	6	9	1
	0830	„	1017·7	989·4	...	7·7	7·3	6·9	9·7	94	...	4·0	...	6·2	0	1	20	0	4	3	2	1	3	3	5	10	0
	1130	„	1018·4	990·7	...	13·6	11·1	8·5	11·3	78	...	3·8	...	7·2	0	2	22	2	4	3	4	0	0	3	8	7	0
	1730	„	1015·4	987·8	...	14·8	11·6	8·4	9·7	68	...	4·5	...	8·4	0	1	27	3	2	1	1	1	2	5	13	3	0
Pathankot	0830	344	1017·1	976·4	...	9·1	8·1	7·2	10·1	88	...	4·3	...	1·0	0	0	7	0	3	3	1	0	0	0	0	24	0
	1730	„	1015·8	975·6	...	14·9	11·3	8·4	11·1	67	...	5·6	...	1·6	0	0	14	0	2	0	0	0	0	11	1	18	0
Himachal Pradesh																											
Bilaspur	0830	493	1018·5	959·9	...	7·1	6·9	6·7	10·0	97	...	7·4	...	2·4	0	0	27	2	3	1	2	2	1	2	3	4	1
	1730	„	1014·2	957·5	...	15·5	11·8	8·4	11·4	64	...	5·3	...	2·5	0	0	31	1	1	0	7	10	5	2	3	0	0
Mandi	0830	761	1018·9	929·5	...	5·8	5·6	5·3	8·7	96	...	6·4	...	0·9	0	0	0	1	0	0	2	1	1	2	2	22	0
	1730	„	1013·4	926·8	...	13·1	9·8	8·5	9·4	68	...	4·9	...	1·4	0	0	13	1	1	0	3	2	4	2	0	10	0

(a)= Mean of 30 days. (b) mean of 29 days.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in c.p.m. of nearest standard basic level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normals	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Octas): Mean amount	Cloud amount (Octas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Jammu & Kashmir																											
Banihal (R)	0830																										
	1730																										
Srinagar	0830	1587	1532·2	844·4	−0·9	−0·6	−1·2	−1·8	5·3	90	+4	7·8	+1·2	0·8	0	0	7	0	0	0	3	1	0	1	2	24	0
	1130	,,	1544·5	845·3	...	1·3	0·3	−1·2	6·1	84	...	7·7	...	1·2	0	0	12	0	0	1	5	0	0	2	4	19	0
	1730	,,	1517·4	842·9	...	1·8	0·4	−1·7	5·4	78	...	7·0	...	1·3	0	0	12	3	3	0	2	0	1	2	1	19	0
Gulmarg (R)	0830	2655																									
	1730	,,																									
Dras (R)	0830	3066																									
Kargil (R)	0830	2679																									
Leh	0530	3514	(c) 3106·6	(c) 665·5	...	(c) −14·1	(c) −15·7	(c) −22·0	(c) 0·8	(c) 49	...	(c) 5·3	...	(c) 2·5	0	0	14	0	11	0	0	0	0	0	0	17	0
	0830	,,	3110·8	664·9	+0·5	−12·7	−14·1	−13·9	1·1	45	−14	5·9	−0·5	1·0	0	0	5	0	5	0	2	0	0	0	0	26	0
	1730	,,	3089·8	662·3	...	−7·7	−9·9	−16·4	1·5	48	...	6·2	...	3·3	0	0	17	1	2	0	0	7	7	0	0	14	0
Skardu (R)	0830	2288																									
	1730	,,																									
Gilgit (R)	0830	1491																									
	1730	,,																									
Misgar (R)	0830	3106																									
	1730	,,																									
Jammu	0830	...	...	...	...	8·8	7·1	4·9	8·8	77	+9	6·0	+2·8	11·2	0	0	31	0	28	0	0	0	3	0	0	0	0
Rajasthan West																											
Sri Ganganagar	0530	197	1016·3	994·9	...	8·4	7·5	5·6	9·7	89	...	1·2	...	2·5	0	0	65	2	5	1	0	1	0	2	4	16	0
	0830	,,	1017·5	996·0	...	7·8	7·0	5·9	9·3	88	+13	2·4	−0·8	1·2	0	0	12	1	4	2	0	1	0	2	2	19	0
	1130	,,	1019·4	997·4	...	14·5	11·6	8·3	11·0	68	...	3·5	...	4·6	0	0	30	2	3	5	2	1	5	3	9	1	0
	1730	,,	1014·8	994·0	...	16·9	12·4	8·1	10·7	59	...	3·4	...	3·2	0	0	23	4	8	1	1	0	0	3	6	8	0
	2330	,,	1017·0	995·9	...	10·7	9·4	7·9	10·9	83	...	1·0	...	1.2	0	0	7	1	1	2	1	0	1	1	0	24	0
Churu	0830	291	1017·0	992·0	...	9.0	7·6	5·7	9·3	81	...	4·2	...	3·9	0	1	18	1	1	8	4	1	0	4	0	12	0
	1730	,,	1013·7	990·0	...	18·3	11·5	4·6	8·1	44	...	3.2	...	8·0	0	2	27	11	4	5	0	0	1	2	6	4	0
Bikaner	0830	224	1018·2	991·2	−1·4	9·1	7·7	6·1	9·3	82	+17	2·2	0	3·0	0	0	21	2	2	1	9	1	3	0	3	10	0
	1730	,,	1014·6	988·5	...	18·7	12·3	5·5	9·2	45	...	1·7	...	5·9	0	1	25	3	13	0	0	0	2	0	8	5	0
Bikaner (P.B.O.)	0530	,,	1016·0	989·0	...	7·9	7·1	6·1	9·3	87	...	2·3	...	2·6	0	1	8	3	1	0	0	2	1	0	2	22	0
	1130	,,	1017·9	991·6	...	16·4	12·4	8·4	11·3	63	...	2.5	...	6·3	0	1	24	3	9	1	5	3	1	2	1	6	0
	2330	,,	1016·6	990·0	...	10·6	9.2	7·3	10·5	80	...	1·7	...	2.9	0	0	13	4	4	0	1	1	0	1	2	18	0
Jaisalmer	0830	242	1017·1	988·2	...	10·2	7·4	3·2	8·0	65	...	1·6	...	9·3	0	5	19	0	18	0	1	0	2	0	3	7	0
	1730	,,	1014·0	986·1	...	20·4	12·6	3·9	8·4	38	...	1·6	...	13·7	0	5	24	0	21	0	0	0	1	0	7	2	0
Phalodi	0830	234	1018·0	989·8	...	9.4	7·1	5·0	8·4	70	...	2·3	...	6·8	0	0	26	6	6	2	5	4	1	2	0	5	0
	1730	,,	1015·0	987·7	...	20·0	11·8	3·6	7·0	33	...	2·3	...	13·1	0	2	29	8	10	2	1	1	3	1	5	0	0
Jodhpur	230	224	1015·8	989·2	...	12·6	9·1	5·0	8·6	62	...	0·8	...	13·3	0	4	25	9	16	1	0	0	0	3	0	2	0
	530	,,	1015·5	988·7	...	11·2	8·5	4·4	8·8	66	...	0·8	...	14·0	0	2	28	6	18	2	0	1	0	1	2	1	0
	0830	,,	1017·4	990·6	+0.7	11·5	8·4	4·3	8.5	61	+14	2·2	−0·2	13·1	0	3	25	6	19	0	0	0	0	1	2	3	0
	1130	,,	1017·7	991·6	...	18.7	12·1	4·9	8·7	43	...	2·0	...	15·1	0	6	24	1	17	4	3	3	1	2	1	1	0
	1730	,,	1013·6	987·8	...	21·5	12·7	2·3	7·4	31	...	2·2	...	13·1	0	4	26	4	14	1	0	0	3	4	4	1	0
	2330	,,	1016·5	990·0	...	14·5	10·0	4·4	8·7	53	...	0·8	...	12·4	0	2	29	11	13	0	1	0	2	1	3	0	0
Barmer	0530	198	1015·4	992·3	...	11.7	8·2	3·7	7·9	60	...	0·8	...	7·4	0	0	27	0	0	0	0	0	2	1	24	4	0
	0830	,,	1017·1	993·8	−0·6	11·4	7·9	3·1	8·1	59	+8	1·6	−0·5	6·6	0	0	25	0	0	0	0	0	1	0	24	6	0
	1130	,,	1017·8	995·1	...	19·0	11·7	3·1	7·9	37	...	1·0	...	10·2	0	1	27	2	13	3	1	1	3	2	3	3	0
	1730	,,	1013·6	991·3	...	22·4	13·0	2·0	7·2	28	...	1·9	...	9·3	0	0	27	0	14	0	1	1	3	2	6	4	0
	2330	,,	1016·6	993·6	...	15·0	9·3	1·7	7·4	44	...	1·1	...	7·6	0	0	24	0	0	0	0	0	1	1	22	7	0
Rajasthan, East																											
Alwar	0830	271	1017·8	985·5	...	10·7	9·3	7·8	9·7	81	...	2·2	...	1·6	0	0	8	2	3	1	0	0	1	1	0	23	0
	1730	,,	1014·9	983·4	...	18·2	13·3	8·9	11·3	55	...	1·9	...	3·0	0	0	29	8	4	7	0	1	0	7	2	2	0
Sikar	0830	438	1017·5	966·3	...	9.0	7.9	6·2	9·7	84	...	3·0	...	2·6	0	0	26	0	1	14	6	1	0	4	0	5	0
	1730	,,	1013·7	964·1	...	18·0	12·5	7·6	10·1	49	...	2·5	...	4·5	0	0	31	5	0	2	3	1	2	4	14	0	0
Jaipur	0830	436	1017·5	966·2	−1·4	11.3	39·4	7·3	10·1	77	+21	2.5	+0·3	7·1	0	2	20	2	4	7	6	1	0	1	1	9	0
	1130	,,	1017·1	966·9	...	17.6	12·2	6·4	10·0	51	...	2·0	...	9·5	0	1	30	3	7	3	6	1	2	5	4	0	0
	1730	,,	1013·5	963·8	...	18.4	12·5	7·2	9·6	51	...	1·7	...	5·2	0	0	23	7	1	3	2	1	1	4	4	8	0
Jaipur (Sanganer Aerodrome)	0230	390	1015·7	969·7	...	10·9	9·3	7.8	10·5	82	...	1·1	...	8.2	0	2	19	5	2	12	1	0	0	0	1	10	0
	530	,,	1015.4	969.1	...	9·7	8·5	7·2	10·3	86	...	1·2	...	8·2	0	2	21	7	6	9	0	1	0	0	0	8	0
	0830	,,	1016·9	970·8	...	11·2	9·7	8·0	10·8	82	...	2·7	...	5·3	0	3	15	4	3	9	0	0	1	1	4	13	0
	1130	,,	1017·0	971·8	...	16·9	13·0	8·9	11·6	62	...	2·3	...	9·0	0	3	22	2	0	8	6	2	3	3	3	6	0

(R) Register not received.

(c) Means of 28 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan, East—*contd.*	1730	"	1013·4	968·5	...	18·5	13·3	8·3	10·9	54	...	2·1	...	7·6	0	1	26	2	2	4	3	3	1	4	8	4	0
	2330	"	1016·4	970·[illegible]	...	11·7	10·0	8·2	10·9	80	...	1·2	...	7·8	0	1	23	9	1	10	1	0	0	0	3	7	0
Dholpur (R)	0830	176																									
	1730	"																									
Ajmer	0830	486	1017·9	960·5	−1.4	9·2	7·8	6·1	9·6	82	+26	2·9	+1·0	4·2	0	0	23	2	4	2	2	2	0	5	6	8	0
	1730	"	1013·6	958·2	...	18.4	11·5	4·8	8·5	40	...	2·2	...	6·2	0	0	30	4	9	1	2	2	5	5	2	1	0
Kotah	0530	257	1015·4 (c)	984·9 (c)	...	11·5	9·9	8·1	10·9	80	...	0·9	...	1·2	0	0	9	0	1	3	0	1	0	3	1	22	0
	0830	"	1017·4 (c)	986·8 (c)	−1.2	12·1	10·2	8·3	10·8	78	+21	1·4	−0.4	1·3	0	0	10	0	0	1	1	0	2	4	2	21	0
	1130	"	1017·4 (c)	987·6 (c)	...	19·1	13·4	7·9	10·8	51	...	2·5	...	4·1	0	1	19	4	2	3	5	1	0	0	5	11	0
	1730	"	1013·5 (c)	984·1 (c)	...	21·8	14·8	8·2	11·1	43	...	1·4	...	2·5	0	1	11	0	3	0	2	0	1	2	4	19	0
	2330	"	1016·3 (c)	986·0 (c)	...	14·3	11·6	8·9	11·4	71	...	0·7	...	0.8	0	0	5	0	0	1	0	0	1	1	2	26	0
Chambal	0830	351	1017·0	975.6	...	12·1	10·2	8·3	10·9	78	...	1·7	...	1·1	0	0	12	2	1	0	0	1	0	8	0	19	0
	1730	"	1012·6	972.7	...	21·4	14·2	6·9	10·6	41	...	1·5	...	4·9	0	0	22	6	8	0	0	1	1	2	4	9	0
Jhalawar	0830	321	1017·0	979·0	−1.2	11·9	9·5	6·7	9·7	71	+13	1·2	−0.5	1·0	0	0	8	3	1	0	1	0	0	0	3	23	0
	1730	"	1012·3	975·9	...	23·0	14·3	5·2	9·3	34	...	1·6	...	9·3	0	0	25	6	9	0	1	0	2	3	4	6	0
Udaipur	0230	582	1016·3	948·2	..	10·0	8·6	7·2	10·2	83	...	1·1	...	0·5	0	0	5	1	0	0	0	0	1	1	2	26	0
	0530	"	1016·2	948·0	...	9·1	7·9	6·6	9·8	85	...	1·1	...	0·7	0	0	5	2	0	0	0	0	1	2	0	26	0
	0830	"	1017·3	949·7	−0.7	11·9	9·2	6.5	9·5	71	+17	2·2	+0.8	1.2	0	0	6	3	0	0	0	0	1	1	1	25	0
	1130	"	1016·2	950·2	...	19·4	12·3	5·7	9·0	42	...	1·3	...	4·5	0	1	22	4	5	7	0	2	0	2	3	8	0
	1730	"	1012·5	947·1	...	20·9	13·1	5·8	9·7	39	...	1·8	...	4.8	0	0	23	2	4	6	2	1	6	1	1	8	0
	2330	"	1017·0	949·2	...	11·4	9·3	7·3	9·8	77	...	0.7	...	1·2	0	0	7	2	0	0	0	0	1	3	1	24	0
Erinpura (Jawai Dam)	0830	295	1017·1	982·0	...	11·9	9·8	7·5	10·6	77	...	2·4	...	4·2	0	0	17	0	1	1	2	9	2	2	0	14	0
	1730	"	1013·0	979·3	...	21·8	14·7	8.4	10·8	43	...	1·8	...	7·0	0	0	28	10	5	1	0	1	4	3	4	3	0
Madhya Pradesh—West Gwalior (P.B.O.)	0230	210	1015·5	990·5	...	10·6	9·5	8·4	11·0	87	...	1.4	...	1.7	0	0	9	0	2	0	1	2	0	0	4	22	0
	0530	"	1015.6	990.6	...	9·8	8.9	7·8	10·7	88	...	1·5	...	1·5	0	0	9	1	2	0	1	1	0	0	4	22	0
	0830	"	1017.1	992.1	−1.1	12.6	10.8	9.0	11.6	80	+8	2.4	−0.1	2.8	0	0	14	2	0	0	2	3	1	0	6	17	0
	1130	"	1016.8	992.4	...	19.1	13.5	8.0	11.0	51	...	2.1	...	9.5	0	1	29	5	5	2	6	2	2	0	8	1	0
	1730	"	1013·5	989·3	...	19·6	13·7	7·7	11·0	48	...	2·7	...	6·3	0	0	27	10	3	3	2	0	0	0	9	4	0
	2330	"	1016·4	991·5	...	11·9	10·5	8·9	11·5	82	...	1·1	...	1·5	0	0	8	1	2	0	0	0	0	1	4	23	0
Sheopur Kalan	0830	235	1017·1	989·0	...	10·5	9·3	8·4	10·8	85	...	3·4	...	3·8	0	0	21	4	6	1	4	3	1	0	2	10	0
	1730	"	1012·7	985·7	...	21·4	14·2	7·4	10·3	43	...	3·0	...	7·6	0	0	31	13	2	1	1	1	3	6	4	0	0
Guna	0530	475	1015·7	959·1	...	9·2	7·7	6·1	9·5	81	...	1·3	...	2·1	0	0	11	1	2	7	1	0	0	0	0	20	0
	0830	"	1017·2	961·1	−1.4	11·4	9·4	7·5	10·5	77	+15	2·1	+0·7	1·6	0	0	14	2	1	10	1	0	0	0	0	17	0
	1130	"	1016·1	961·6	...	20·3	13·9	7·8	11·3	48	...	1·6	...	6·1	0	0	28	5	3	5	4	2	2	3	4	3	0
	1730	"	1012·2	958·3	...	22·1	15·2	9·4	12·2	47	...	2·1	...	4·6	0	0	25	8	1	2	2	1	1	5	5	6	0
	2330	"	1016·6	960·6	...	12·3	9·8	7.5	10·3	73	...	1·0	...	2·6	0	0	10	3	3	0	1	2	0	1	0	21	0
Rajgarh	0830	382	1017·2	972·0	...	11·6	9·1 (a)	6·3 (a)	9·6	71 (a)	...	1·6	...	3·6	0	1	10	3	1	0	3	1	1	0	2	20	0
	1730	"	1011·9	968·8	...	24·1	15·0 (a)	5·8 (a)	9·8	33 (a)	...	2·1	...	10·5	0	1	27	12	0	0	0	2	4	4	6	3	0
Neemuch	0830	496	1017·8	959·9	−0·6	12·3	9·3	6·2	9·6	68	+13	2·5	+1·0	4·3	0	0	27	1	19	1	2	0	1	2	1	4	0
	1730	"	1012·9	957·2	...	22·4	13·4	4·7	8·9	34	...	1·9	...	7·1	0	0	28	0	20	0	0	0	3	4	1	3	0
Ratlam	0830	486	1016·5	959·9	...	13·3	9·7	5·5	9·5	61	...	1·5	...	9·0	0	1	26	6	13	4	0	2	1	1	0	4	0
	1730	"	1011·5	957·1	...	25·0	14·9	6·5	9·7	33	...	1·6	...	8·9	0	0	30	1	10	4	0	0	7	6	2	1	0
Alirajpur	0830	293	1016·5	981·9	...	13·1	11·3	9·5	12·1	79	...	1·6	...	2·1	0	0	11	0	1	6	0	0	1	3	0	20	0
	1730	"	1011·2	978·3	...	26·3	17·3	9·9	12·4	37	...	1·7	...	8·3	0	1	25	4	1	2	1	2	6	7	3	5	0
Indore	0530	567	1014·8	948·8	...	11·2	8·5	5·5	9·2	69	...	1·2	...	5·7	0	1	22	1	6	6	1	2	5	2	0	8	0
	0830	"	1016·6	951·0	−1·1	13·5	10·0	6·3	9·8	63	+3	2·0	+0·3	6·3	0	2	22	0	9	7	0	4	3	1	0	7	0
	1130	"	1014·9	951·2	...	21·9	13·8	6·3	9·9	39	...	1·4	...	11·0	0	2	28	0	5	11	0	5	7	2	0	1	0
	1730	"	1010·7	947·8	...	24·4	14·6	5·8	9·5	31	...	2·0	...	13·0	0	7	22	6	6	2	0	0	9	6	0	2	0
	2330	"	1015·3	950·1	...	15 1	10·3	5·5	9·1	54	...	0·9	...	7·8	0	0	29	2	9	3	0	1	3	3	8	2	0
Bhopal (Bairagarh)	0230	523	1014·5	953·9	...	13·2	10·1	6·9	10·2	67	...	1·5	...	8·1	0	2	24	7	11	1	2	1	3	1	0	5	0
	0530	"	1014·6	953·8	...	11 8	9·2	6·5	9·7	71	...	1·0	...	6·8	0	0	25	5	10	3	1	3	3	0	0	6	0
	0830	"	1016·5	956·0	−1·6	13·8	10·4	7·0	10·2	65	+14	1·3	−0·5	7·0	0	0	26	3	13	3	1	3	2	0	1	3	0
	1130	"	1015·3	956·3	...	21·0	13·8	7·3	10·5	43	...	1·2	...	11·8	0	3	28	0	9	7	7	2	3	1	2	0	0
	1730	"	1011·3	952·9	...	23·3	14·5	6·6	10·1	36	...	1·3	...	10·9	0	3	27	7	5	3	0	1	4	6	4	1	0
	2330	"	1015·3	955·0	...	14·7	10·9	7·3	10·3	62	...	0·8	...	7·5	0	1	24	7	8	2	1	1	2	0	4	6	0
Khandwa	0830	318	1016·2	979·0	−0·9	15·1	11·4	7·7	10·7	62	+6	1·5	+0·1	3·1	0	0	14	2	8	1	0	1	1	0	1	17	0
	1730	"	1010·6	975·1	...	27·7	17·1	8·0	11·0	30	...	1·8	...	9·1	0	1	26	4	7	1	0	3	1	4	7	4	0

(a) Mean of 30 days. (c) Mean of 28 days. (R) Register not received. (4) Mean of 27 days.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in meters	Mean pressure in millibars: At mean sea level or height in g. p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hoshangabad	0830	302	1016·3	981·0	−1·5	15·8	12·6	9·7	11·8	68	+12	1·4	−0·3	4·0	0	0	26	4	5	12	2	2	0	1	0	5	0
	1730	"	1011·7	977·6	...	24·8	17·7	11·7	14·8	47	...	1·7	...	3·5	0	0	19	1	0	10	0	3	2	3	0	12	0
Betul	830	653	0016·1	941·1	...	15·1	12·7	10·7	13·0	76	...	1·6	...	2·8	0	0	18	1	3	7	3	0	1	1	2	13	0
	1730	"	1010·7	938·5	...	23·7	15·7	3·4	11·9	41	...	1·7	...	6·8	0	0	31	7	7	1	0	1	3	4	8	0	0
Chhindwara	0830	685	1015·9	937·7	...	14.8	12·3	10·3	12·5	75	...	1·5	...	2·3	0	0	18	0	2	2	0	0	3	6	5	13	0
	1730	"	1011·2	935·6	...	23·6	17·6	13·7	15·7	55	...	2·3	...	3·5	0	0	28	1	3	3	2	3	6	5	5	3	0
Seoni	0830	618	1015·3	945·0	−1·5	16·5	13·6	11·5	13·5	72	+11	2·6	+1·0	2·2	0	0	16	4	6	2	1	3	0	0	0	15	0
	1730	"	1010·9	942·1	...	22·7	16·5	12·2	14·3	54	...	3·2	...	4·5	0	0	30	5	8	1	2	9	5	0	0	1	0
Sagar	0830	551	1016·3	952 6	−1·4	14·0	11·1	8·1	11·1	70	+20	2·2	+0·4	5·5	0	0	22	0	6	12	1	0	2	1	0	9	0
	1730	"	1011·9	950·0	...	21·7	14·3	7·7	10·9	43	...	2·0	...	4·6	0	0	23	0	4	4	2	0	2	4	7	8	0
Nowgong	0830	229	1017·4	990·1	−1·0	11·0	10·1	9·0	11·5	87	+11	2·2	0·0	2·2	0	0	21	2	2	1	2	4	6	1	3	10	0
	1730	"	1013·8	987·5	...	22·2	15·4	8·7	12·0	44	...	1.4	...	3·3	0	0	30	3	4	1	1	7	3	6	5	1	0
Madhya Pradesh, East																											
Sutna	0530	317	1015·2	977·6	...	11·6	10·7	9·8	12·2	89	...	2·4	...	2·0	0	0	10	1	1	5	1	0	0	1	1	21	0
	0830	"	1016.9	979·7	+1·0	14·5	12·5	10·7	12·9	76	+8	2·6	+0·6	2·0	0	0	18	0	2	8	3	1	2	2	0	13	0
	1130	"	1011·1	979·6	...	19·7	15·1	11·3	13·3	60	...	2·9	...	6·2	0	0	29	2	2	10	6	2	0	2	5	2	0
	1730	"	1012·4	976·4	...	21·6	15·8	10·8	13·2	52	...	2·3	...	2·5	0	0	21	3	5	1	0	0	1	5	6	10	0
	2330	"	1015·6	978·4	...	14·3	12·4	10·5	12·8	79	...	1·5	...	2·9	0	0	17	2	3	4	0	0	3	4	1	14	0
Umaria	0830	459	1016·5	963·3	...	15·6	13·1	10·9	13·2	75	+7	2·8	+0·3	5·4	0	0	25	2	3	7	6	3	2	0	2	6	0
	1730	"	1012·0	960·2	...	21·7	16·4	13·1	14·8	59	...	1·8	...	1·9	0	0	10	0	5	1	1	0	1	1	1	21	0
Jabalpur	0530	393	1014·6	968·5	...	12·3	11·5	10·7	12·9	90	...	2·0	...	1·8	0	0	15	1	3	1	6	3	0	0	1	16	0
	0830	"	1016·5	970·7	−1·0	14·6	12·8	11.2	13.3	81	+10	2·3	+0·5	2·9	0	0	19	1	5	2	5	4	1	1	0	12	0
	1130	"	1015·7	970·9	...	22·1	16·1	11·9	13·5	54	...	1·9	...	4·5	0	0	28	8	4	1	2	3	5	1	3	3	1
	1730	"	1011·6	967·3	...	23·5	17·1	11.9	14·2	50	...	1·5	...	4·0	0	0	25	6	8	1	1	1	3	3	2	6	0
	2330	"	1015·1	969·4	...	15·3	13·5	11·9	14·1	81	...	1·6	...	2·7	0	0	18	1	4	3	7	1	1	0	1	13	0
Mandla	0830	443	1016·8	965·1	...	13·1	12·5	11·7	14·1	92	...	3·2	...	1·4	0	0	11	5	0	0	0	1	0	0	5	20	0
	1730	"	1011·7	961·9	...	22·4	16·8	12·2	14·7	55	...	2·4	...	4·7	0	0	21	5	1	0	1	7	0	1	5	10	1
Pendra	0530	625	1014·8	943·0	...	13·1	11·6	10·2	12·7	83	...	1·6	...	7·9	0	0	26	9	4	0	1	5	3	1	3	5	0
	0830	"	1016·5	945·1	−1·4	15·5	13·1	11·1	13·3	77	+11	2·8	+1·0	6 9	0	0	26	10	4	0	2	3	4	0	2	5	1
	1130	"	1015·1	945·1	...	20·8	15·4	11·1	13·5	56	...	2·8	...	9·2	0	5	25	7	3	3	2	7	6	2	0	1	0
	1730	"	1012·3	942·3	...	20·4	15·6	11·9	14·3	61	..	2.9	...	8·3	0	0	28	12	2	0	1	8	3	1	1	3	0
	2330	"	1015·3	944·0	...	15.2	13·2	11·3	13·8	79	...	1·3	...	7·4	0	1	28	7	1	0	1	6	4	5	5	2	0
Ambikapur	0830	611	1016·9	946·7	...	14·4	12·8	11.4	13·5	83	..	2·0	...	5·6	0	1	22	7	6	1	1	3	4	1	0	8	0
	1730	"	1012·3	943·9	...	20·9	15·6	11·5	13·8	57	...	1·9	...	9·1	0	0	30	15	7	0	0	1	2	4	1	1	0
Champa	0830	245	1016·3	987·7	...	17·5	15·4	13·7	15·8	78	...	2·2	...	3·5	0	0	20	14	2	3	0	0	0	0	1	11	0
	1730	"	1012·9	984·6	...	25·1	18·3	13·2	16·3	49	...	2·2	...	2·9	0	0	14	7	1	1	0	1	1	2	1	17	0
Raigarh	0830	220	1016·1	990·5	...	18·4	16·0	13·9	16·3	75	...	2·6	...	5·2	0	0	28	1	16	4	4	0	1	0	2	3	0
	1730	"	1011·7	986·8	...	25·5	18·7	13·8	16·0	50	...	2·1	...	3·5	0	0	22	4	11	1	4	0	0	1	1	9	0
Raipur	0530	298	1013·6	979·9	...	16·5	14·6	12.5	15·0	80	...	0·8	...	2·5	0	0	15	8	2	0	1	3	0	1	0	16	0
	0830	"	1015·8	981·4	−1·1	18·9	15·6	12.9	15·0	69	+7	1·2	−0·3	4·3	0	0	22	6	3	5	1	2	1	3	1	9	0
	1130	"	1015·0	981·2	...	24·7	17·8	12·4	14·7	48	...	0·8	...	6·6	0	2	24	4	4	3	3	3	1	4	4	5	0
	1730	"	1011.2	977·8	...	26·3	17·0	11·2	13·8	41	...	1·5	...	4·9	0	0	26	9	2	0	0	1	5	5	4	5	0
	2330	"	1014·1	979·9	...	20·1	15·9	12·5	14·7	63	...	0·8	...	4·2	0	0	23	8	3	1	1	6	1	1	2	8	0
Kanker	0830	402	1016·0	969·7	−1·3	17·7	15·4	13·6	15·8	77	+6	1·4	−0 4	1·3	0	0	6	0	0	0	1	1	3	0	1	25	0
	1730	"	1010·9	966·3	...	26·5	18·9	13·3	15·7	45	...	2·1	...	1·8	0	0	13	3	2	0	0	0	1	2	5	18	0
Jagdalpur (P.B.O.)	0530	553	1014·4	950·9	...	14·5	13·3	12·5	14·5	87	...	0·3	...	0·6	0	0	5	0	0	2	0	1	0	0	2	26	0
	0830	"	1016·0	953·2	−0·9	18·5	15·2	12·7	14·8	70	+8	0·9	−1·0	1·6	0	0	10	0	0	4	2	3	0	0	1	21	0
	1130	"	1013·7	952·6	...	26·1	17·9	11·9	14·6	42	...	0·9	...	5·3	0	1	23	2	5	8	2	2	3	1	1	7	0
	1730	"	1010·5	949·5	...	25·8	17·5	11·3	13·9	43	...	1·7	...	3·7	0	0	21	2	2	0	1	4	9	2	1	10	0
	2330	"	1014·5	951·8	...	18·0	15·3	13·0	15·4	73	..	0·5	...	1·2	0	0	8	1	0	2	2	1	1	0	2	0	0
Gujarat																											
Deesa	0830	136	1015·9	999·7	−1·1	13·3	10·4	7·3	10·3	68	...	2·5	...	7·1	0	1	28	4	15	6	2	0	0	0	1	2	1
	1730	"	1012·5	996·9	...	24·6	15·5	7·6	10·3	34	...	1·9	...	9·0	0	1	28	3	8	0	0	1	5	5	7	2	0
Idar	0830	219	1015·5	989·9	...	16·7	...	...	...	...	...	1·5	...	8·1	0	3	27	0	9	5	7	1	3	4	2	1	0
	1730	"	1012.1	987·3	...	24·7	...	...	...	...	...	1·2	...	4·4	0	0	31	2	3	1	4	2	3	9	7	0	0
Ahemdabad	0230	55	1013·8	1007·3	...	14 8	11·4	8·0	10·7	64	...	0·3	...	7·0	0	0	26	7	4	0	2	0	2	4	7	5	0
	0530	"	1013·5	1007·0	...	13·1	10·4	7·4	10·5	69	...	0·4	...	8·7	0	1	24	6	7	2	1	0	1	2	6	6	0

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations, Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat—*contd.* Ahmedabad—*Contd.*	0830	55	1015·5	1009·0	−1·3	14·8	11·2	7·5	10·3	62	+9	1·5	+0·2	9·6	0	2	24	9	9	2	1	0	1	3	1	5	0
	1130	”	1016·0	1009·6	...	23·6	15·2	7·5	10·9	38	...	1·0	...	15·3	0	7	23	5	11	7	0	2	1	2	2	1	0
	1730	”	1012·1	1005·9	...	26·3	16·0	7·4	9·9	30	...	1·6	...	11·5	0	0	31	4	8	1	1	2	4	5	6	0	0
	2330	”	1014·6	1008·1	...	16·7	12·3	8·0	10·8	57	...	0·7	...	6·6	0	0	23	5	2	1	0	1	0	7	7	8	0
Dohad	0830	333	1016·0	977·1	...	14·6	10·8	6·8	9·9	61	0	0·6	−0·9	7·1	0	1	26	4	9	6	1	2	4	1	0	4	0
	1730	”	1011·9	974·5	...	25·5	16·2	8·6	10·8	35	...	0·6	...	8·8	0	2	27	3	7	0	0	0	7	9	3	2	0
Baroda	0530	35	1013·2	1009·0	...	12·8	11·3	10·0	12·2	83	...	0	...	3·0	0	0	19	1	15	0	1	0	1	1	0	12	0
	0830	”	1015·2	1011·0	...	14·0	11·7	9·3	11·9	74	+16	0·8	−0·2	2·5	0	0	17	0	14	0	0	0	2	1	0	14	0
	1130	”	1015·6	1011·6	...	25·0	16·8	9·9	12·4	40	...	1·1	...	5·5	0	0	29	3	14	4	2	1	3	1	1	2	0
	1730	”	1011·6	1007.6	...	27·2	18·2	11·1	13·5	38	...	0·9	...	6·7	0	0	26	3	9	0	0	0	3	3	8	5	0
	2330	”	1014·4	1010·2	...	16·2	13·4	10·7	13·2	71	..	0·8	...	2·8	0	0	18	0	13	1	0	0	1	0	3	13	0
Baroda (Aerodrome)	0830	38	1015·3	1010·8	...	15·5	12·0	8·5	11·3	64	...	0·9	...	5·3	0	0	22	15	0	1	1	1	1	0	3	9	0
	1130	”	1015·6	1011·3	...	25·0	16·5	9·0	11·9	38	...	1·1	...	8·8	0	0	28	8	6	5	1	2	2	2	2	2	1
	1730	”	1011·7	1007·4	...	27·4	17·2	8·4	11·4	32	...	1·2	...	8·6	0	0	29	5	1	0	0	0	3	8	12	2	0
Broach	0830	17	1014·8	1012·7	...	14·1	11·6	8·6	11·8	71	...	0·7	...	4·5	0	0	29	4	17	0	1	3	2	0	2	2	0
	1730	”	1011·2	1009·2	...	29·1	17·8	9 0	11·4	29	...	1·0	...	12·1	0	0	31	4	5	2	0	0	9	4	7	0	0
Sura	0530	12	1012·8	1011·4	...	16·5	14·4	12·5	14·7	78	...	0·2	...	2·5	0	0	18	6	8	1	1	0	0	1	1	13	0
	0830	”	1014·9	1013·5	−0·7	16·8	14·6	12·8	14·9	78	+19	0·5	−0·7	1·5	0	0	14	1	10	1	0	0	0	0	2	17	0
	1130	”	1015·3	1013·9	...	27·0	19·4	14·6	16·4	47	...	1·1	...	4·2	0	0	24	4	13	4	0	0	1	0	2	7	0
	1730	”	1011·2	1009·8	...	28·9	20·7	15·7	17·8	46	...	0·8	...	3·0	0	0	28	0	7	0	0	0	10	0	11	3	0
	2330	”	1013·9	1012·5	...	20·3	16·8	14·0	16·4	69	...	0·4	...	2·6	0	0	14	4	8	0	0	0	0	0	2	17	0
Saurashtra & Kutch Bhuj	0830	105	1016·6	1004·1	−0·5	12·9	10·1	6·7	10·0	67	+21	1·2	−0·1	1·4	0	0	7	2	1	0	0	2	1	1	0	24	0
	1730	”	1013·2	1001·3	...	24·4	14·4	3·7	8·3	28	...	1·0	...	9·6	0	0	30	9	12	1	0	0	0	5	3	1	0
Bhuj (P. B. O)	0230	106	1014·6	1002·2	...	16·1	13·0	10·3	12·5	69	...	0·7	...	2·0	0	0	9	4	1	1	0	0	1	1	1	22	0
	0530	”	1014·1	1001·8	...	14·5	11·8	9·5	11·8	73	...	0·5	...	0·9	0	0	4	2	0	0	1	0	1	0	0	27	0
	0830	”	1015·8	1003·3	...	14·5	11·7	9·4	11·6	72	...	1·8	...	0·6	0	0	4	0	1	0	0	0	1	2	0	27	0
	1130	”	1016·5	1004·3	...	21·9	15·7	11·0	12·8	52	...	1·2	...	8·4	0	1	29	13	11	1	0	1	2	2	0	1	0
	1730	”	1013·0	1000·9	...	24·1	17·0	12·2	13·7	49	...	1·5	...	9·1	0	0	29	11	11	0	0	0	2	4	1	2	0
	2330	”	1015·3	1002·9	...	17·7	14·2	11·4	13·3	68	...	0·5	...	1·6	0	0	8	0	2	1	0	0	3	1	1	23	0
Bhuj (Aerodrome)	0830	80	1015·7	1006·1	...	13·3	...	...	...	...	...	2·0	...	2·8	0	0	15	4	1	0	0	0	6	1	3	16	0
	1130	”	1016·2	1006·5	...	22·3	...	...	...	...	...	1·3	...	16·5	0	8	23	9	12	3	1	0	2	3	1	0	0
	1730	”	1012·5	1003·2	..	24·8	...	...	...	...	...	(e) 1·4	...	(e) 16·9	0	5	21	4	15	0	0	0	1	4	2	0	0
Kandla	0830	5	1016·2	1015·6	...	15·1	11·8	8·6	11·2	66	...	2·1	...	8·7	0	0	31	10	2	1	2	0	1	1	14	0	0
	1730	”	1013·2	1012·6	...	24·8	16·0	7·6	11·0	36	...	1·6	...	15·7	0	5	26	5	10	1	1	2	7	0	5	0	0
Mandvi	0830	9	1016·0	1014·9	...	15·1	11·8	8·2	11·3	65	...	1·2	...	13·0	0	2	27	12	15	1	0	0	0	0	1	2	0
	1730	”	1013·2	1012·2	...	23·1	16·9	11·7	14·4	51	...	1·0	...	19·8	0	13	18	3	6	1	3	2	6	10	0	0	0
Dwarka	0830	11	1015·8	1014·5	−0·8	18·0	14·4	11·4	13·6	65	−2	1·7	+0·1	11·7	0	2	29	3	17	7	0	0	0	2	2	0	0
	1730	”	1013·1	1011·8	...	24·1	16·1	9·0	11·9	41	...	1·1	...	17·7	0	7	24	7	8	2	0	0	1	4	9	0	0
Porbander (C.W.O.)	0830	7	1015·2	1014·4	...	17·1	14·6	12·5	14·6	76	...	1·3	...	8·2	0	1	30	12	11	5	0	0	0	0	3	0	0
	1730	”	1012·5	1011·7	...	25·7	20·1	16·4	18·9	57	...	1·5	...	15·1	0	2	29	5	1	0	0	0	6	12	7	0	0
Jamnagar	0530	23	1013·8	1011·1	...	14·6	12·8	10·5	13·4	77	...	0·8	...	7·9	0	1	26	6	7	3	4	2	3	0	2	4	0
	0830	”	1015·8	1013·1	−1·1	15·3	12·6	10·0	12·5	72	+12	1·7	+0·7	7·5	0	1	27	2	6	10	4	5	1	0	0	3	0
	1130	”	1016·7	1014·1	...	22·6	16·2	11·0	13·2	50	...	1·3	...	17·0	0	11	20	7	14	4	1	0	2	3	0	0	0
	1730	”	1012·8	1010·2	...	24·3	16·5	9·6	12·5	41	...	1·2	...	21·8	0	16	15	14	7	1	0	0	0	7	2	0	0
Rajkot (Aerodrome)	0830	134	1015·9	1000·1	−0·7	14·5	10·7	6·3	9·9	60	+10	0·6	−0·9	6·5	0	0	26	5	7	5	3	2	2	0	2	5	0
	1130	”	1016·1	1000·7	...	23·3	14·9	6·2	10·2	36	...	0·8	...	17·0	0	9	22	5	14	3	0		3	2	4	0	0
	1730	”	1012·2	997·0	...	26·2	15·5	4·8	9·0	27	...	0·3	...	19·4	0	13	18	11	10	1	0	0	0	7	5	0	0
Surendranagar	0830	74	1015·8	1006·9	...	14·8	10·9	6·8	9·9	59	..	1·5	...	4·6	0	0	29	6	4	0	2	0	3	0	14	2	0
	1730	”	1002·2	1003·7	...	26·5	15·2	4·1	8·1	25	...	1·6	...	7·8	0	0	29	7	7	0	0	0	0	3	12	2	0
Bhavnagar	0830	17	1015·8	1013·8	−0·5	14·0	10·9	7·5	10·6	65	+19	0·3	−1·1	4·0	0	0	27	2	0	0	0	1	4	12	8	4	0
	1730	”	1012·0	1010·1	...	27·0	17·7	10·3	12·7	36	...	0·5	...	3·7	0	0	31	0	15	3	9	0	1	0	3	0	0
Bhavnagar (Aerodrome)	0830	”	1015·2	1013·9	...	15·9	11·8	7·4	10.5	58	...	0·6	...	10·9	0	1	28	9	0	0	0	0	1	7	12	2	0
	1130	”	1016·0	1014·8	...	22·6	15·9	10·0	12·7	46	...	0·9	...	15·3	0	5	26	7	17	2	0	0	1	0	4	0	0
Mahuva	0830	16	1014·8	1012·9	...	16·4	13·6	11·1	13·4	72	...	0·5	...	6·3	0	0	25	5	8	0	0	0	1	0	11	6	0
	1730	”	1011·7	1009·9	...	26·5	21·0	17·5	20·4	60	...	1·0	...	17·0	0	8	23	1	3	10	6	7	3	0	1	8	0
Keshod	0830	51	1015·8	1009·7	...	17·2	12·9	9·7	11·4	59	...	1·2	...	9·4	0	0	29	4	21	2	1	0	1	0	0	2	0
	1130	”	1016·5	1010·6	...	24·1	16·8	11·6	13·3	46	...	1·3	...	14·2	0	2	29	4	19	1	0	0	0	2	5	0	0
	1730	”	1012·1	1006·3	...	27·3	18·0	11·4	19·0	46	...	1·4	...	20·4	0	16	14	7	2	0	0	1	4	12	4	1	0

(e) Mean of 26 days.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms. p.h.): 62 or more	Wind speed (Kms. p.h.): 20 to 61	Wind speed (Kms. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch— *Contd.*																											
Veraval	0280	8	1013·8	1012·8	...	16·7	12·9	9·1	11·9	63	...	0·4	...	14·9	0	3	28	12	12	1	0	0	0	1	5	0	0
	0530	"	1013·3	1012·3	...	16·2	12·4	8·4	11·4	62	...	0·2	...	15·1	0	8	23	12	17	0	0	0	0	1	1	1	0
	0830	"	1015·1	1014·2	—0·8	17·2	13·2	9·1	11·9	61	+11	0·8	—0·3	13·7	0	3	28	8	18	1	0	0	0	2	2	0	0
	1130	"	1115·8	1014·9	...	25·5	17·4	10·7	13·3	42	...	1·1	...	14·7	0	6	23	5	5	2	1	2	3	7	4	2	0
	1730	"	1012·2	1011·3	...	24·9	19·6	15·8	18·5	60	...	1·0	...	19·5	0	13	18	2	0	0	0	2	9	13	5	0	0
	2330	"	1014·7	1013·8	...	18·6	14·8	11·3	13·8	64	...	0·1	...	14·6	0	4	27	10	9	1	0	0	0	1	10	0	0
Konkan																											
Dahanu	0830	5	1014.1	1013.6	—0.1	18.9	15·6	12·5	15·1	69	—8	1·0	—0·8	9·0 (f)	0	1	30	6	2	17	5	1	0	0	0	0	0
	1730	"	1011·3	1010.8	...	24·6	20·6	18·2	21·0	67	...	0·2	...	21·0 (e)	0	13	18	24	0	1	0	0	1	2	3	0	0
Bombay (Colaba)	0830	11	1014·2	1012.9	—0.8	21.1	18.4	16·4	18·9	76	+6	0·9	+0·4	6·1	0	0	29	9	9	8	1	0	0	0	2	2	0
	1130	"	1014·7	1013·5	...	26.7	20·1	15·8	18·1	52	...	0·8	...	6·8	0	0	31	3	7	14	3	1	0	0	3	0	0
	1730	"	1011·3	1010.1	...	25.9	21·0	18·0	20·8	62	...	0·8	...	15·8	0	0	21	1	0	0	0	0	0	3	27	0	0
Bombay (Santacruz Aerodrome)	0230	8	1012·5	1011.6	...	18·6	16·3	14·7	16·6	78	...	0·3	...	1·0	0	0	9	3	2	4	0	1	0	0	0	22	0
	0530	"	1011.3	1012·3	...	17.8	15.5	13·8	15·8	79	...	0·3	...	3·1	0	0	18	2	10	6	0	0	0	0	0	13	0
	0830	"	1014·4	1013.5	—0.5	20.0	16·5	13·2	15·9	69	+4	1·2	—0·1	1·8	0	0	13	2	6	4	0	0	0	0	1	18	0
	1130	"	1014·9	1014·0	...	28·0	19·2	12·8	15·0	41	...	1·2	...	5·7	0	0	25	3	5	5	5	1	1	3	2	6	0
	1730	"	1011·5	1010·6	...	27·1	20·0	14·8	17·7	49	...	0·9	...	15·6	0	10	21	6	1	0	0	0	0	5	19	0	0
	2330	"	1013·8	1012·9	...	20·6	17·3	14·9	17·5	73	...	0·3	...	2·6	0	0	20	10	4	2	0	0	0	0	4	11	0
Alibag	0830	7	1014·1	1013·3	—0·6	20·8	18·6	17·3	19·6	81	+16	0·5	—1·0	5·1	0	0	28	3	11	13	1	0	0	0	0	3	0
Harnai	0830	20	1013·1	1010·8	—0·4	23·5	19·1	16·1	18·4	64	—3	1·1	...	7·4	0	0	27	6	6	8	4	1	0	1	1	4	0
	1730	"	1010·5	1008·2	...	26·3	22·7	20·8	24·7	72	...	0·9	...	23·2	0	15	16	5	0	0	0	1	0	4	21	0	0
Ratnagiri	0830	35	1013·5	1009·4	—0·7	21·3	17·8	15·5	17·7	70	...	1·5	...	...	0	0	31	0	0	31	0	0	0	0	0	0	0
	1730	"	1010·5	1006·5	...	28·0	21·8	18·3	21·2	56	...	1·4	...	...	0	9	22	0	0	0	0	0	0	27	4	0	0
Devgad	0830	36	1013·6	1009·4	—0·2	22·5	19·5	17·6	20·2	74	+3	2·9	+1·5	8·2	0	0	31	2	12	16	1	0	0	0	0	0	0
	1730	"	1010·2	1006·1	...	28·2	22·7	19·8	22·6	61	...	2·2	...	24·0	0	18	13	3	0	0	0	0	1	13	14	0	0
Vengurla	0230	9	1011·8	1010·8	...	21·4	18·9	17·5	19·9	81	...	0·5	...	...	0	0	12	12	0	0	0	0	0	0	0	19	0
	0530	"	1011·7	1010·7	...	19·5	17·9	16·9	19·3	86	...	0·5	...	...	0	0	0	0	0	0	0	0	0	0	0	31	0
	0830	"	1013·7	1012·7	...	21·1	18·3	16·4	18·8	75	...	1·4	...	...	0	0	6	5	0	1	0	0	0	0	0	25	0
	1130	"	1013·9	1012·9	...	29·9	20·3	13·8	15·9	39	...	1·0	...	...	0	0	25	3	3	4	3	1	9	1	1	6	0
	1730	11	1010·3	1009·3	...	28·6	21·9	18·1	21·0	53	...	0·7	...	...	0	0	16	2	0	0	0	0	5	5	4	15	0
	2330	"	1012·9	1011·9	...	22·3	19·7	18·2	21·0	78	...	0·2	...	...	0	0	7	6	1	0	0	0	0	0	0	24	0
Maharashtra																											
Jalgaon	0830	201	1016·2	992·5	...	14·6	11·6	8·6	11·2	68	...	1·3	..	2·6	0	0	11	0	0	6	2	1	0	1	1	20	0
	1730	"	1010·6	988·1	...	29·6	18·1	8·3	11·7	27	...	1·2	...	4·2	0	0	18	3	0	2	0	1	1	4	7	13	0
Malegaon	0830	437	1016·0	965·5	—0·7	16·1	12·1	8·0	10·9	60	+8	1·2	+0·2	2·3	0	0	23	1	0	1	0	1	3	8	9	8	0
	1730	"	1009·7	961·6	...	28·9	17·8	8·3	11·5	29	...	2·0	...	3·6	0	0	24	4	4	2	0	3	4	5	2	7	0
Deolali	0830	571	1016·3	950·8	...	15·4	12·5	9·8	12·3	69	...	1·5	...	3·1	0	0	17	10	1	0	1	0	3	2	0	14	0
	1730	"	1010·5	94 ·8	...	27·4	17·0	9·1	11·8	33	...	1·5	...	11·2	0	4	26	3	2	2	0	1	10	8	4	1	0
Aurangabad	0330	581	1015 7	949·4	—1·2	17·0	12·8	9·1	11·8	61	+14	1·6	0	4·4	0	0	25	0	5	15	1	0	0	3	1	6	0
	1730	"	1009·8	946·3	...	28·6	17·4	9·1	11·8	30	...	1·7	...	4·5	0	2	26	1	1	1	1	1	13	10	0	3	0
Aurangabad (Chikalthana Aerodrome)	0230	579	1013·9	947·4	...	14·4	10·4	7·0	9·7	60	...	0·8	...	2·7	0	0	11	3	0	0	1	0	1	4	2	20	0
	0330	"	1014·2	947·4	...	12·8	9·6	6·3	9·7	65	...	0·7	...	1·8	0	0	8	0	0	0	2	0	0	5	1	23	0
	0830	"	1015·3	949·4	...	18·5	12·8	7·3	10·7	50	...	1·0	...	1·4	0	0	6	1	0	0	2	0	0	2	1	25	0
	1130	"	1013·8	949·8	...	25·6	15·9	8·1	11·1	34	...	0·5	...	7·2	0	0	23	1	2	4	5	1	5	2	5	8	0
	1730	"	1009·4	946 0	...	27·6	16·5	7·6	10·7	28	...	1·4	...	4·2	0	0	15	2	0	0	0	0	4	4	5	16	0
	2330	"	1014·4	948·3	...	16·3	11·1	6·1	9·4	52	...	0·5	...	0·8	0	1	1	0	0		0	0	0	0	2	29	0
Ahmednagar	0830	657	1015·3	940·7	—1·2	16·6	12·6	8·7	11·7	62	+15	1·1	—0·2	1·9	0	0	20	0	0	0	5	0	2	0	13	11	0
	1730	"	1009·0	937·6	...	28·3	16·8	8·7	10·8	30	...	1·2	...	2·4	0	0	24	0	8	0	2	0	8	0	6	7	0
Parbhani	0830	423	1015·6	967·2	...	19·3	13·9	8·7	11·6	51	...	0·9	...	4·0	0	0	23	2	3	3	1	2	5	2	5	8	0
	1730	"	1010·1	963·5	...	28·8	17·6	7·9	11·1	28	...	2·0	...	4·0	0	0	22	4	4	1	1	2	2	6	1	9	0
Poona	0530	559	1013·8	949·5	...	14·1	13·0	12·1	14·2	88	...	0·3	...	0·2	0	0	2	0	0	0	1	0	1	0	0	29	0
	0830	"	1015·7	951·6	—0·8	15·6	13·7	12·3	14·4	81	+15	1·1	—0·3	0·3	0	0	3	0	0	0	0	0	0	2	1	0	28	0
	1130	"	1013·7	951·7	...	25·6	17·3	11·5	13·7	42	...	0·6	...	2·2	0	0	12	0	3	3	2	2	1	0	1	19	0
	1730	"	1009·1	947·9	...	27·9	18·4	12·2	14·2	38	...	0·9	...	3·4	0	0	17	0	3	1	1	2	2	4	4	14	0
	2330	"	1014·2	950·6	...	18·0	15·1	13·0	14·9	73	...	0·1	...	0·0	0	0	0	0	0	0	0	0	0	0	0	31	0
Poona (Lohagaon Aerodrome)	0230	593	1013·5	945·8	...	16·2	12·9	10·0	12 6	68	...	0·9	...	3·1	0	0	17	1	0	0	0	1	0	8	7	14	0
	0530	"	1013·6	945·7	...	14·8	12·4	10·5	12·6	76	...	0·6	...	3·1	0	0	15	2	0	3	0	0	0	6	4	16	0
	0830	"	1015·4	947·7	...	16·8	13·3	10·3	12·7	67	...	1·6	...	3·6	0	0	19	0	0	5	3	0	0	9	2	12	0
	1130	"	1013·6	948·0	...	25.6	16·3	9·0	11·8	36	...	1·0	...	10·4	0	3	26	1	2	9	7	2	0	4	4	2	0

(f) Mean of 25 days.

(e) Mean of 26 days.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. pm. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	cloud mount (Oktas): Mean amount	cloud mount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharastra—*Contd.*																											
Poona (Lohagaon Aerodrome).-*contd.*	1730	"	1009·0	944·2	...	28·1	16·7	7·7	10·7	28	...	1·5	...	13·0	0	0	29	1	3	5	1	0	0	12	7	2	0
	2330	"	1014·0	946·9	...	18·6	13·9	10·0	12·6	59	...	0·6	...	7·9	0	1	27	1	0	1	0	1	0	11	14	3	0
Baramati . . .	0830	551	1015·7	952·7	...	16·9	13·6	11·0	13·2	68	...	0·6	...	3·4	0	0	24	5	3	2	1	1	0	3	9	7	0
	1730	"	1008·9	948·7	...	28·5	18·2	11·5	13·3	55	...	0·7	...	5·6	0	0	30	0	4	4	4	4	4	3	7	1	0
Jeur	0830	521	1015·0	955·5	...	17·4	13·3	9·8	12·4	61	...	1·1	...	1·3	0	0	11	1	1	3	2	0	0	3	1	20	0
	1730	"	1008·9	951·9	...	29·5	18·5	10·7	13·3	32	...	1·0	...	2·7	0	0	22	0	2	5	1	1	3	7	3	9	0
Sholapur . . .	0530	479	1013·1	958·4	...	17·8	13·1	9·0	11·6	57	...	1·1	...	4·3	0	0	22	1	4	2	10	3	1	0	1	9	0
	0830	'	1015·1	960·6	−0·8	19·3	13·9	9·6	12·1	54	+6	1·2	+0·1	6·1	0	0	25	1	6	1	10	3	1	1	2	6	0
	1130	"	1014·0	960·8	...	26·6	17·4	10·6	13·1	38	...	1·1	...	7·6	0	0	28	1	1	1	12	7	4	0	2	3	0
	1730	"	1008·9	956·6	...	29·8	17·7	8·8	11·5	27	...	1·6	...	9·5	0	0	27	2	6	5	8	2	1	2	1	4	0
	2330	"	1013·0	959·0	...	22·0	14·5	8·4	11·1	42	...	1·5	...	7·0	0	1	26	2	5	4	12	2	0	0	2	4	0
Miraj . . .	0830	554	1015·0	952·0	−1·2	17·3	13·4	10·5	12·6	64	+5	1·2	−0·5	3·0	0	0	22	1	7	8	1	0	0	2	3	9	0
	1730	"	1008·3	948·1	...	29·3	17·7	9·5	11·9	29	...	1·9	...	9·3	0	0	31	0	4	10	6	2	1	5	3	0	0
Kolhapur . . .	0530	570	1013·1	948·0	...	16·0	13·1	10·9	12·9	73	...	0·9	..	4·6	0	0	22	0	2	4	1	4	6	5	0	9	0
	0830	"	1014·9	950·2	−0·8	18·5	14·4	11·7	13·4	63	+1	1·3	+0·1	2·2	0	0	14	0	2	9	0	0	0	3	0	17	0
	1130	"	1013·3	950·4	...	26·5	17·4	10·9	13·2	38	...	1·1	...	14·1	0	6	23	1	3	14	6	2	0	2	1	2	0
	1730	"	1008·4	946·3	...	29·1	17·8	9·5	12·3	31	...	1·3	...	14·2	0	7	23	0	5	12	3	0	1	7	2	1	0
Vidarbha																											
Buldhana	0830	650	1015·1	941·4	...	17·2	13·2	9·2	12·3	59	...	0·8	...	2·5	0	0	23	3	2	0	3	1	4	2	8	8	0
	1730	"	1009·9	938·7	...	26·9	17·5	11 2	13·1	38	...	1·4	...	2·5	0	0	24	0	6	0	0	0	6	1	11	7	0
Akola	0830	282	1015·2	982·5	−1·3	17·7	13 3	9·0	11·7	58	+4	1·3	−0·4	4·7	0	0	27	0	4	7	3	6	2	5	0	4	0
	1130	"	1014·1	982·4	...	26·4	17·4	9·7	12·7	36	...	0·7	...	1·0	0	0	25	0	4	6	2	2	2	5	4	6	0
	1730	"	1009·5	978·2	...	29·2	17·9	8·7	11·4	28	...	1·0	...	3·7	0	0	31	0	3	5	1	0	3	9	10	0	0
Akola (Aerodrome)	0530	309	1013·2	977·1	...	14·9	11·7	8·2	11·1	66	...	0·4	..	3·2	0	0	23	0	2	9	2	4	2	4	0	8	0
	2330	"	1013·5	978·0	...	19·7	13·6	7·9	10·7	47	...	0·9	...	3·5	0	0	23	0	1	7	1	8	0	4	2	8	0
Amravati . . .	0830	370	1015·4	972·9	−1·1	18·9	14·4	16·2	12·9	58	+9	1·1	−0·6	7·4	0	1	25	0	11	10	1	0	3	1	0	5	0
	1730	"	1009·9	969·0	...	28·4	17·5	8·2	11·1	27	...	1·6	...	5·0	0	0	24	1	1	0	1	1	2	10	8	7	0
Yeotmal . . .	0830	451	1014·9	963·5	...	19·8	15·2	11·1	13·5	59	...	0·4	...	2·8	0	0	14	0	2	5	1	3	3	0	0	17	0
	1730	"	1009·9	960·1	...	27·8	17·8	9·9	12·3	33	...	1·7	...	2·8	0	1	10	0	0	1	2	2	2	3	1	20	0
Nagpur . . .	0230	310	1013·3	977·3	...	16·5	14·7	13·2	15·3	81	...	0·7	...	5·0	0	0	28	0	8	3	0	1	1	1	4	3	0
	0530	"	1013·7	977·5	...	15·2	13·8	12·5	14·7	85	...	0·8	...	5·4	0	0	27	2	4	1	1	0	0	1	8	4	0
	0830	"	1015·9	979·9	−1·2	17·9	15·3	13·1	15·2	75	+12	1·1	−0·7	7·0	0	0	29	0	8	2	3	0	1	0	5	2	0
	1130	"	1014·9	979·8	...	25·3	17·9	12·1	14·6	45	...	1·2	...	9·2	0	1	28	1	8	7	4	2	5	2	0	2	0
	1730	"	1010·8	976·0	...	26·7	17·6	10·8	12·7	38	...	2·2	...	2·3	0	2	28	1	4	5	7	4	6	1	2	1	0
	2330	"	1014·1	978·2	...	18·5	15·4	12·8	15·1	71	...	1·1	...	5 5	0	0	26	4	7	4	1	1	3	2	4	5	0
Gondia . . .	0830	313	1015·9	979·6	...	17·7	15·4	13·3	15·8	76	...	1·3	...	3·5	0	0	28	6	4	2	4	3	2	0	3	3	4
	1730	"	1011·3	976·2	...	25·8	19·1	14·1	16·7	57	...	1.6	...	4·6	0	0	27	2	1	1	0	0	10	0	1	4	12
Brahampuri . .	0830	229	1015·8	989·4	...	18·7	16·2	14 5	16·4	76	...	0·6	...	4.6	0	0	25	4	4	2	8	4	3	0	0	6	0
	1730	"	1011·3	985·6	...	27·1	18·7	12·4	14 9	41	...	1·2	...	5·7	0	0	28	4	6	1	4	11	1	0	1	3	0
Chanda . . .	0830	193	1015·5	993·0	−1·3	19·1	16·3	14·3	16·3	74	+6	1·2	−0·4	4·0	0	0	27	3	2	8	8	2	0	2	2	4	0
"	1730	"	1010·9	989·1	...	27·1	19·6	14·3	17·5	47	...	1·9	...	3·2	0	0	23	2	7	7	3	1	1	0	2	8	0
Sironcha . . .	0830	123	1015·9	1001·6	...	19·9	17·4	15·6	17·9	77	...	1·5	...	3 8	0	0	24	1	3	7	8	4	0	0	1	7	0
	1730	"	1011·2	997·3	...	29·0	19·9	13.4	15·8	39	...	1·3	...	5·8	0	0	30	3	5	7	6	3	2	2	2	1	0
Coastal Andhra Pradesh																											
Nellore . . .	0530	20	1012·8	1010·4	...	20·6	19·9	19·2	22·6	93	...	1·3	...	3.2	0	0	21	0	0	1	2	2	1	4	11	10	0
	0830	"	1015·3	1013·0	−0·7	23·6	21·4	20·3	23·7	84	0	2.9	−0·5	4·7	0	0	30	7	1	1	2	3	3	3	10	1	0
	1130	"	1014·7	1012·4	...	28·1	22·0	18·4	20·4	56	...	4·0	...	8·3	0	0	31	2	9	10	5	4	1	0	0	0	0
	1730	"	1011·8	1009·4	...	23·8	21·8	18·6	24·8	61	..	1·3	..	10·9	0	0	31	0	3	26	2	0	0	0	0	0	0
	2330	"	1014·0	1011·6	...	22·2	20·8	20·0	23·4	87	...	0·5	...	0·8	0	0	8	0	0	2	4	1	0	0	1	23	0
Ongole . . .	0830	12	1015·4	1014·1	...	23·7	21·1	19·6	23·1	78	...	1·4	...	3·1	0	0	27	16	3	0	0	1	6	5	6	4	0
	1730	"	1011·7	1010·6	...	26·5	21·5	18·4	24·1	61	...	1·1	...	5·5	0	0	31	0	1	6	24	0	0	0	0	0	0
Rentachintala . .	0830	106	1015·3	1003·0	...	22·1	19·3	17 2	20·2	74	+5	1·6	−2·0	1·3	0	0	7	0	0	3	0	4	0	0	0	24	0
	1730	"	1011·6	999·9	...	29·8	21·5	16 5	18·9	46	...	3·4	...	3·3	0	0	28	3	0	17	5	1	0	2	0	3	0
Gannavaram . .	0530	23	1012·6	1009·9	...	19·9	19·2	18·6	21·6	93	...	0·2	...	0·7	0	0	6	0	3	2	0	0	0	0	1	25	0
	0830	"	1015·3	1012·6	...	23·5	20·9	19·4	22·6	78	...	1·6	...	4·8	0	2	22	2	6	14	2	0	0	0	0	7	0
	1130	"	1014·9	1012·2	..	27·8	21·7	18·1	20·9	56	...	3·4	...	8·6	0	0	27	0		3	16	5	2	0	1	4	0
	1730	"	1011·3	1008·7	...	27·5	20·8	16·5	19·2	52	...	0·8	...	7·8	0	5	25	0	2	3	16	9	0	0	0	1	0
	2330	"	1013.7	1011·0	...	21·3	19·4	18·7	21·0	86	...	0	...	1·5	0	0	15	3	1	7	12	2	0	0	0	16	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p. m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas): Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NP	E	SE	S	SW	W	NW	Calm	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Masulipatam	0230	3	1013·0	1012·6	...	21·2	20·4	19·9	23·1	93	...	1·7	...	2·3	0	0	17	2	5	1	5	4	0	0	0	14	0
	0530	,,	1013·2	1012·8	...	20·3	19·9	19·7	22·9	97	...	1·6	...	2·8	0	0	23	14	4	0	1	4	0	0	0	8	0
	0830	,,	1015·3	1015·0	−1·0	22·6	21·4	20 9	24·5	89	+6	2·6	+0·7	6·1	0	0	29	12	12	2	0	3	0	0	0	2	0
	1130	,,	1015·1	1014·8	...	27·2	22·8	20·4	24·1	67	..	3·5	...	7·9	0	0	29	0	2	8	13	5	0	1	0	2	0
	1730	,,	1011·8	1011·5	...	26·0	22·1	20·0	23·3	70	...	0·7	...	8·6	0	0	31	0	0	5	16	9	1	0	0	0	0
	2330	,,	1014·1	1013·8	...	22·3	21·1	20·4	24·1	88	...	1·0	...	2·6	0	0	14	0	0	3	8	3	0	0	0	17	0
Nidadavolu	0830	12	1015·8	1014·3	...	22·0	19·9	18·8	20·6	81	...	0·9	...	7·6	0	0	30	18	9	1	0	1	0	0	1	1	0
	1730	,,	1011·5	1010·1	...	28·1	21·4	17·2	20·6	53	...	1·7	...	9·1	0	0	29	0	1	17	3	8	0	0	0	2	0
Kakinada	0830	8	1016·0	1015·1	−0·4	24·9	21·7	19·9	23·3	74	−1	2·3	−0·4	8·8	0	1	30	3	14	1	2	0	2	0	9	0	0
	1730	,,	1012·3	1011·1	...	26·2	22·1	19·8	23·3	69	...	1·0	...	10·5	0	1	30	0	0	2	28	1	0	0	0	0	0
Visakhapatnam	0230	3	1013·3	1012·9	..	20·2	19·3	18·7	21·6	91	..	1.4	..	1·5	0	0	13	3	0	0	0	0	0	2	8	18	0
	0530	,,	1013·5	1013·1	...	19·4	18·6	18·1	22·4	92	...	1·0	...	1.3	0	0	9	1	0	0	0	0	0	2	6	22	0
	0830	,,	1015·9	1015·5	−0·6	23·5	20·8	19·3	22.3	77	+2	1·4	−1·2	4·2	0	0	22	0	3	1	1	0	0	5	12	9	0
	1130	,,	1015·2	1014·8	...	28·1	22·1	18·6	21·6	57	...	2·7	...	11·4	0	3	28	0	0	5	17	1	5	1	2	0	0
	1730	,,	1012·3	1011·9	...	25·7	21·8	19·5	22·9	70	...	1·1	...	14 5	0	1	30	0	0	10	16	2	3	0	0	0	0
	2330	3	1014·5	1014·1	...	21·6	20·2	19·5	22·5	87	...	1·3	...	1·4	0	0	11	2	1	0	0	0	0	2	6	20	0
Calingapatam	0830	6	1015·0	1014·3	−1·8	20·4	18·7	17·6	20.2	84	+4	3·3	+1·4	6·2	0	0	31	13	1	1	0	0	0	2	14	0	0
	1730	,,	1012·2	1011·5	...	25·8	22·5	20·2	21·4	71	...	3·0	..	9·9	0	0	31	0	1	10	13	5	2	0	0	0	0
Telangana Ramagundam	0830	156	1015·1	997·1	...	22·1	17·9	15·1	17·1	65	...	1·6	...	6·9	0	0	30	4	4	2	9	7	2	0	2	1	0
	1730	,,	1010·8	993·3	...	29·5	19·3	11·9	14·9	34	...	1·3	...	5·1	0	0	24	4	4	4	6	6	0	0	0	7	0
Nizamabad	0830	381	1015·8	971·7	−0·7	20·7	16·5	13·9	15·4	64	+1	1·1	−0·3	2·1	0	0	13	0	1	1	2	2	4	2	1	18	0
	1730	,,	1009·9	964·7	...	29·1	18·5	10·7	12·7	33	...	1·3	...	3·3	0	0	20	4	5	2	1	1	2	0	5	11	0
Mahbubnagar	0830	505	1014·3	957·8	...	21·9	16·8	13·9	15·2	69	...	0·7	...	3·1	0	0	18	0	4	9	1	0	4	0	0	13	0
	1730	,,	1009·6	954·5	...	28·5	17·5	10·6	12·1	34	...	1·6	...	8·5	0	1	29	0	2	14	6	5	1	1	1	1	0
Hyderabad (Begumpet Aerorome).	0230	545	1013·3	951·4	...	17·5	14·9	13·2	15·1	76	...	0·3	...	2·7	0	0	12	0	1	1	8	2	0	0	0	19	0
	0530	,,	1018·9	951·5	...	15·7	14·0	12·6	14·8	83	...	0·7	...	1·9	0	0	9	0	2	1	4	1	0	0	1	22	0
	0830	,,	1015·5	953·8	−0·5	19·3	16·0	13·6	15·8	70	0	2·0	−0·2	7·0	0	2	14	0	0	3	7	4	1	0	1	15	0
	1130	,,	1013·9	953·7	...	26·2	17·6	11·4	13·8	41	...	1·3	...	14·3	0	5	26	1	1	3	14	8	3	1	0	0	0
	1730	,,	1010·1	950·3	...	27·3	17·2	9·7	12·3	34	...	1·7	...	9·9	0	0	26	0	3	5	12	3	2	0	1	5	0
	2330	,,	1014·1	952·6	...	19·7	15·5	12·4	14·6	64	...	0·4	...	3·8	0	0	19	0	1	2	7	1	0	0	0	18	0
Hakimpet	0830	613	1014·5	945·7	...	20·6	16·7	14·0	16·1	67	...	1·7	...	12·4	0	3	27	0	2	3	15	7	1	1	1	1	0
	1730	,,	1009·8	942·6	...	26·7	17·6	11·2	13·5	39	...	1·3	...	12·9	0	3	28	3	5	3	15	2	1	2	0	0	0
Hanamkonda	0830	269	1015·6	984·9	−0·9	21·3	18·5	16·0	19·0	75	+2	1·5	−1·1	9·0	0	1	26	0	1	0	8	16	1	0	1	4	0
	1730	,,	1011·1	981·2	...	28·5	18·8	11·3	13·8	35	...	1·1	...	5·4	0	1	30	4	5	0	12	8	1	0	1	0	0
Bhadrachallam	0830	111	1016·0	1003·2	...	20·9	18·6	16·8	19·3	79	...	1·7	...	2·0	0	0	10	3	2	1	4	0	0	0	0	21	0
	1730	,,	1010·9	998·4	...	29·2	20·0	13·5	15·9	39	...	1·8	...	7·5	0	0	31	0	9	8	8	6	0	0	0	0	0
Khammameth	0830	112	1015·5	1002·5	...	21·5	19·5	18·2	21·0	81	...	2·0	...	1·8	0	0	16	3	0	7	5	1	0	0	0	15	0
	1730	,,	1011·6	998·5	...	30·1	20·1	13·4	15·4	37	...	1·6	...	3·2	0	0	25	5	0	8	9	2	0	1	0	6	0
Rayalaseema Arogyavaram	0830	701	1015·4	936·8	...	19·1	16·4	14·9	16·5	77	...	1·6	..	2·0	0	0	16	0	0	2	5	6	2	0	1	15	0
	1730	,,	1009·9	933·3	...	25·3	17·0	11·1	12·8	41	...	3·2	...	6·4	0	0	29	1	12	12	4	0	0	0	0	2	0
Cuddappah	0830	130	1015·9	1000·7	−0·1	24·9	20·4	17·7	20·3	65	−9	0·8	−1·4	1·6	0	0	7	0	0	7	0	0	0	0	0	24	0
	1730	,,	1011·0	996·4	...	28·9	21·4	16·7	19·4	49	...	1·2	...	8·6	0	0	30	0	0	30	0	0	0	0	0	1	0
Anantapur	0530	350	1012·7	972·4	...	17·8	15·9	14·4	16·5	81	...	0·2	...	4·6	0	0	19	2	1	7	4	1	3	1	0	12	0
	0830	,,	1014·9	974·9	...	20·8	17·6	15·2	17·4	70	...	0·4	..	2·5	0	0	15	0	0	2	8	3	2	0	0	16	0
	1130	,,	1013·7	974·5	...	26·6	19·2	14·1	16·2	47	...	0·5	...	8·3	0	0	30	0	2	15	12	0	0	0	1	1	0
	1730	,,	1009·4	970·7	...	28·5	19·5	13·1	15·4	36	...	0·8	...	10·8	0	2	25	0	3	22	2	0	0	0	0	4	0
	2330	,,	1012·9	973·3	...	22·7	18·2	15·1	16·2	63	...	0.1	...	10·4	0	1	26	0	0	22	4	1	0	0	0	4	0
Kurnool	0830	281	1015·3	982·9	−0·6	19·5	16·8	14·7	16·7	75	+6	0·3	−1·4	0·5	0	0	4	0	0	1	0	3	0	0	0	27	0
	1730	,,	1009·8	978·7	...	30·3	19·4	11·8	13·8	32	...	0·7	...	3·2	0	0	15	0	2	7	5	1	0	0	0	16	0
Madras Palayamcottai	0830	51	1013·9	1008·1	...	24·4	21·5	19·9	23·3	76	...	3·9	...	10·8	0	0	31	18	8	0	0	0	0	0	5	0	0
	1730	,,	1009·4	1003·7	...	29·2	21·8	17·5	20·0	49	...	3·5	...	10·7	0	0	31	2	12	16	1	0	0	0	0	0	0
Tuticorin	0830	4	1014·1	1013·7	...	24·5	21·3	19·5	22·7	74	...	1·3	...	16·1	0	2	29	23	7	0	0	0	0	0	1	0	0
	1730	,,	1010·1	1009·7	...	27·0	22·8	20·9	24·3	68	...	0·6	...	27·0	0	28	3	0	19	12	0	0	0	0	0	0	0
Pamban	0830	11	1013·7	1012·4	−0·3	26·2	22·8	21·0	25·1	73	−10	3·7	+0·4	15·3	0	7	27	13	11	1	0	0	0	0	6	0	0
	1730	,,	1010·3	1009·0	...	26·3	22·8	20·7	24·9	72	...	3·6	...	20·9	0	18	13	4	26	1	0	0	0	0	0	0	0
Mathurai	0830	133	1014·0	998·8	−0·7	24·2	20·9	19·0	22·0	74	−5	2·5	−1·1	3·4	0	0	26	18	3	0	0	0	0	0	3	3	0
	1730	,,	1009·6	994·7	...	28·9	21·6	17·0	20·5	50	...	4·4	...	9·0	0	0	30	2	27	1	0	0	0	0	0	1	0

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.m.p. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapourpressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Nagapattinam	0830	9	1014·4	1013·3	−0·1	25·6	21·9	19·9	23·4	71	−8	2·9	−1·4	16·1	0	9	21	4	17	1	0	0	0	0	8	1	0
	1730	"	1011·4	1010·3	...	26·4	22·5	20·4	24·1	69	...	3·6	...	17·3	0	5	26	4	26	1	0	0	0	0	0	0	0
Tiruchirapalli	0230	88	1012·2	1002·1	...	21·3	20·2	19·5	22·7	86	...	1·9	...	5·2	0	0	20	4	12	4	0	0	0	0	11	0	0
	0530	"	1012·3	1002·1	...	20·7	19·8	19·1	22·5	91	...	2·3	...	3·5	0	0	17	2	12	3	0	0	0	0	14	0	0
	0830	"	1014·3	1004·2	−0·9	23·6	20·9	19·4	22·6	77	−3	2·8	−0·1	2·4	0	0	23	8	15	0	0	0	0	0	8	0	0
	1130	"	1013·8	1003·9	...	27·7	21·3	18·3	20·1	57	...	4·8	...	13·2	0	4	25	2	21	5	0	0	0	0	2	1	1
	1730	"	1010·2	1000·3	...	28·1	21·4	17·2	20·1	53	...	3·2	...	13·1	0	4	26	0	9	21	0	0	0	0	1	0	0
	2330	"	1013·6	1003·4	...	21·9	21·0	19·5	24·3	86	...	0·7	...	4·0	0	0	20	2	8	10	0	0	0	0	11	0	0
Coimbatore	0830	409	1014·6	968·6	−0·1	22·0	18·6	16·3	18·6	71	−9	3·8	+0·4	9·6	0	0	30	0	0	0	0	11	15	4	0	1	0
	1730	"	1009·1	963·9	...	28·7	19·6	13·8	15·2	40	...	2·4	...	10·5	0	0	31	0	1	1	0	1	12	12	4	0	0
Coimbatore (Peelamedu Aerodrome)	0530	398	1012·7	967·2	...	18·8	17·3	16·3	18·5	86	...	2·5	...	7·9	0	0	30	16	9	2	0	0	0	0	3	1	0
	0830	"	1014·7	969·5	...	21·5	18·7	16·8	19·4	75	...	2·9	...	11·2	0	0	31	2	24	4	1	0	0	0	0	0	0
	1130	"	1013·3	968·9	...	25·9	18·9	14·1	16·3	49	...	3·4	...	16·7	0	5	26	0	30	1	0	0	0	0	0	0	0
	1730	398	1009·0	965·5	...	28·6	18·8	11·9	13·9	37	...	2·1	...	15·8	0	6	24	0	16	10	2	1	0	1	0	1	0
	2330	"	1013·0	968·0	...	21·9	18·1	15·4	17·5	67	...	1·6	...	10·9	0	3	28	0	14	11	1	2	1	2	0	0	0
Salem	0530	278	1012·7	980·7	...	19·3	17·5	16·4	18·6	83	...	1·3	...	2·3	0	0	19	2	9	7	0	0	0	0	1	12	0
	0830	"	1014·6	982·8	0·7	21·7	18·4	16·3	20·8	71	−5	1·8	−0·7	4·6	0	0	27	0	16	11	0	0	0	0	0	4	0
	1130	"	1013·6	982·5	...	27·3	20·0	15·3	17·5	48	...	2·8	..	4·3	0	0	23	2	4	12	1	0	0	3	1	8	0
	1730	"	1009·1	978·6	...	29·3	19·9	13·3	15·6	38	...	1·2	...	6·6	0	0	26	0	0	23	1	2	0	0	0	5	0
	2330	"	1013·2	981·6	...	23·0	19·2	16·8	19·0	68	...	0·8	...	6·1	0	0	26	1	4	17	4	0	0	0	0	5	0
Kallakurichi	0830	127	1014·9	1000·3	...	23·2	20·3	18·6	21·5	75	...	2·5	...	2·3	0	0	14	12	0	0	0	0	0	0	2	17	0
	1730	"	1010·4	996·1	...	28·2	20·4	15·3	17·7	46	...	2·2	...	2·9	0	0	25	22	2	0	0	0	0	1	6	0
Cuddalore	0530	12	1012·3	1010·9	...	21·1	20·0	19·5	22·5	91	...	2·6	...	2·6	0	0	25	1	0	0	0	0	0	1	23	6	0
	0830	"	1014·7	1013·3	−0·4	23·4	21·5	20·5	24·1	84	0	3·7	+0·2	3·8	0	0	26	8	5	0	0	0	0	13	5	0
	1130	"	1014·4	1013·0	...	27·2	22·2	19·4	22·7	63	...	4·3	...	11·1	0	0	31	8	19	2	2	0	0	0	0	0	0
	1730	"	1011·3	1009·9	...	26·1	22·6	19·6	24·4	68	...	2·9	...	7·4	0	1	29	3	21	4	2	0	0	0	1	0	0
	2330	"	1013·7	1012·3	...	24·3	21·4	19·8	23·1	76	...	2·5	...	8·2	0	0	30	9	16	2	2	0	0	0	1	1	0
Vellore	0530	214	1013·5	988·4	...	18·6	17·9	17·4	19·9	93	...	1·8	...	0·3	0	0	3	0	0	0	0	1	1	1	0	28	0
	0830	"	1015·4	990·7	−0·3	20·5	18·9	17·9	20·5	85	−1	2·5	−0·3	1·5	0	0	11	2	1	1	0	0	3	1	3	20	0
	1130	"	1014·5	990·3	...	26·2	20·5	17·0	19·5	57	...	3·6	...	7·0	0	0	26	7	13	3	1	1	0	1	0	5	0
	1730	"	1010·7	986.7	...	27·5	19·8	14·9	16·8	46	...	2·5	...	6·5	0	0	30	2	16	9	3	0	0	0	0	1	0
	2330	"	1014·2	989·7	...	22·3	19·5	18·0	20·4	79	...	1·1	...	5·2	0	0	20	0	6	7	4	1	1	0	1	11	0
Madras	0230	16	1012·5	1010·7	...	21·4	20·4	19·8	23·0	91	...	1·8	...	4·4	0	0	28	4	2	0	1	1	0	4	16	3	0
	0530	"	1012·6	1010·8	...	20·9	20·1	19·7	22·8	93	...	1·5	...	5·6	0	0	30	1	1	0	0	0	0	12	16	1	0
	0830	"	1015·2	1013·4	−0·2	23·1	21·5	20·5	24·4	86	+2	2·3	−0·8	8·2	0	0	31	8	0	1	0	0	0	6	16	0	0
	1130	"	1014·7	1012·9	...	27·6	22·0	18·9	21·9	59	...	4·5	...	16·0	0	10	21	5	12	8	2	1	0	0	3	0	0
	1730	"	1011·8	1010·0	...	26·1	21·7	19·1	22·3	66	...	2·4	...	14·4	0	0	31	2	15	13	1	0	0	0	0	0	0
	2330	"	1014·0	1012·2	...	22·4	20·8	19·9	23·4	86	...	1·4	...	3·6	0	0	25	5	4	4	2	0	0	3	7	6	0
Madras(Nungambakkam)	0830	6	1014·6	1013·9	...	24·3	21·7	20·1	23·8	78	...	4·7	...	3·7	0	0	26	6	2	2	0	0	0	3	13	5	0
Coastal Mysore																											
Karwar	0830	4	1013·5	1013·0	−0·4	20·8	18·4	16·8	19·2	79	...	1·2	...	0·5	0	0	5	0	4	1	0	0	0	0	0	26	0
	1730	"	1009·5	1009·1	...	28·9	22·5	19·0	22·1	57	...	0·5	...	3·1	0	0	24	0	1	1	0	0	2	9	11	7	0
Honawar	0830	26	1013·4	1010·5	−0·7	22·1	18·2	15·8	17·7	72	+3	2·1	−0·5	5·1	0	0	29	2	5	21	0	0	0	1	0	2	0
	1730	"	1009·7	1006·9	...	29·0	22·5	18·2	22·0	55	...	2·1	...	9·4	0	0	31	0	1	1	0	0	8	11	10	0	0
Mangalore	0230	22	1010·9	1008·4	...	23·2	21·0	19·8	23·3	81	...	1·0	...	8·8	0	0	30	0	8	20	2	0	0	0	1	0	0
	0530	"	1011·0	1008·5	...	22·1	19·8	18·5	21·3	80	...	0·8	...	10·3	0	0	29	1	2	25	1	0	0	0	2	0	0
	0830	"	1013·1	1010·5	−0·8	24·2	20·0	17·5	20·0	67	−1	1·6	−0·4	10·9	0	1	30	1	2	28	0	0	0	0	0	0	0
	1130	"	1012·7	1010·2	...	29·3	21·1	15·6	18·3	46	...	1·1	...	14·4	0	7	24	2	2	18	3	0	2	3	6	0	0
	1730	"	1009·1	1006·6	...	28·1	22·7	19·8	23·0	61	...	1·2	...	12·7	0	1	30	0	0	0	0	0	2	10	19	0	0
	2330	"	1011·9	1009·4	...	24·7	21·9	20·3	21·8	77	...	1·0	...	6·5	0	0	26	6	10	8	2	0	0	0	0	3	0
Mangalore (Bajpe Aerodrome)	0530	103	1011·8	999·7	...	20·8	18·9	17·8	20·4	83	...	1·5	...	0·8	0	0	25	0	1	23	1	0	0	0	6	0
	0830	"	1013·4	1001·6	...	24·0	20·1	17·6	20·5	69	...	1·5	...	11·8	0	0	30	2	0	23	5	0	0	0	0	1	0
	1730	"	1009·8	998·2	...	27·5	22·4	19·7	23·0	63	...	1·2	...	13·6	0	1	27	1	0	0	0	0	0	16	11	3	0
Mysore North																											
Bidar	0830	664	1014·7	940·3	...	19·9	14·9	10·7	13·3	57	−2	1·3	−0·8	10·8	0	0	31	1	0	5	6	6	12	1	0	0	0
	1730	"	1009·4	936·8	...	27·1	16·3	7·7	10·7	29	...	2·4	...	10·2	0	0	31	1	10	4	2	5	9	0	0	0	0
Gulbarga	0830	458	1015·3	963·3	−0·5	20·6	15·2	11·2	13·3	55	−1	1·3	0	5·6	0	0	31	1	6	13	7	3	1	0	0	0	0
	1730	"	1009·2	959·0	...	29·5	17·3	7·4	10·8	24	...	2·5	...	11·5	0	0	31	1	7	6	7	3	3	2	2	0	0
Bijapur	0830	594	1014·6	947·1	−1·4	20·0	15·1	11·7	13·1	59	−1	1·2	−0·3	7·6	0	0	26	3	1	0	8	10	1	1	2	5	0
	1730	"	1008·7	943·9	...	28·4	17·9	10·0	12·0	32	...	1·7	...	5·2	0	0	29	2	6	6	6	3	4	0	2	2	0

(a) Mean of 30 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore North—*contd.*																											
Belgaum	0830	781	1014.7	927.8	−0·2	18·4	14·2	10·8	13·0	62	0	...	...	2·9	...	...	21	0	0	0	9	6	3	2	2	9	0
	1730	,,	1007·9	926·5	...	26·7	17·1	9·5	12·6	35	...	...	...	2·6	0	0	19	1	3	1	2	5	4	2	1	12	0
Belgaum (C. T. O.)	0830	753	1014·3	930·5	−0·6	19·8	15·3	11·9	14·1	62	−1	0·7	−0·8	1·8	0	0	17	0	1	10	3	1	0	1	1	14	0
	1730	,,	1008·7	927·0	...	27·5	17·6	10·4	12·6	35	...	1·8	...	11·2	0	0	31	0	6	9	3	0	5	7	1	0	0
Belgaum (Sambre Aerodrome)	0530	761	1013·1	927·5	...	16·4	13·1	10·4	12·6	70	...	0·7	...	2·7	0	1	8	0	0	4	4	0	0	0	0	23	0
	0830	,,	1014·2	929·4	...	19·2	15·3	12·0	14·2	63	...	1·0	...	6·4	0	1	15	0	3	5	8	0	0	0	0	15	0
	1130	,,	1012·5	929·6	...	25·5	18·2	12·7	15·5	48	...	0·7	...	18·0	0	10	18	2	2	6	14	1	0	2	1	3	0
	1730	,,	1008·2	926·1	...	27·7	19·1	13·0	15·0	44	...	1·4	...	15·3	0	8	18	0	3	9	8	3	1	2	0	5	0
Gadag	0830	650	1014·3	941·9	−0.5	21·8	16·5	12·8	14·9	57	5	1·9	+0 5	6·7	0	0	27	0	2	14	7	0	0	2	2	4	0
	1730	,,	1008·7	938·2	...	28·3	17·4	8·9	12·1	30	...	2·0	...	6·0	0	0	29	0	6	16	1	1	0	3	2	2	0
Gadag (P. B. O.)	0530	661	1012·7	938·2	...	17·9	15·5	13·9	15·9	79	...	0·5	...	8·8	0	1	21	0	0	11	6	2	2	1	0	9	0
	0830	,,	1014·2	940·4	...	20·9	17·7	15·9	17·9	74	...	0·8	...	9·9	0	2	21	1	1	6	13	0	1	0	1	8	0
	1130	,,	1013·0	940·4	...	25·7	20·0	17·4	19·3	60	...	0·8	...	15·3	0	8	18	1	1	9	15	0	0	0	0	5	0
	1730	,,	1008·8	936·8	...	27·5	20.3	16·7	18·5	53	...	0·7	...	11·1	0	3	20	0	1	9	11	0	2	0	0	8	0
	2330	,,	1013 0	939·3	...	20·9	16·9	14·5	16.3	67	...	0 4	...	7·7	0	0	21	0	0	13	5	0	1	1	1	10	0
Raichur	0830	400	1015.2	970·1	−0·1	21.6	17.1	14·4	15·9	65	+1	0·9	−0·6	17·3	0	0	31	4	8	3	8	5	1	3	4	0	0
	1730	,,	1009·7	965·7	...	29.5	18·4	10·5	12·2	31	...	1·1	...	9·1	0	0	30	3	5	8	9	4	0	0	1	1	0
Mysore South																											
Bellary	0830	449	1014·5	963·6	−0·9	20.7	16.6	13·5	15·3	64	0	1.3	−0·8	3·7	0	0	17	0	1	0	14	0	0	0	2	14	0
	1730	,,	1009·0	959·7	...	29.1	18.0	8.8	11·7	29	...	1·2	...	7·6	0	0	30	0	0	1	28	0	0	0	1	1	0
Chitaldrug	0830	733	1013·7	932.1	−0·9	20·2	16·1	13.4	15.1	66	+4	1.0	−1·2	4.8	0	0	24	0	0	14	8	0	1	1	0	7	0
	1730	,,	1007·7	928.8	...	27·6	17·1	9·5	11.6	32	...	1·3	...	6.5	0	0	26	0	0	21	4	0	0	1	0	5	0
Shimoga	0830	571	1015·0	950.1	...	17·6	15.4	14.1	15.7	80	...	1.9	...	0·1	0	0	1	0	0	1	0	0	0	0	0	30	0
	1730	,,	1007.2	945·7	...	28·6	17·9	10·2	13·0	33	...	1.8	...	4·2	0	0	22	0	4	8	4	1	2	2	1	9	0
Balchonnur	0830	..	..	..	...	17.0	14·9	13.5	15·5	82	+9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hassan	0830	960	1524·3	908·4	...	17.1	14·9	13·3	15·1	79	+7	1.6	−0·9	4.6	0	0	21	0	0	15	5	1	0	0	0	10	0
	1730	,,	1509·8	905.0	...	26.1	16·6	9.1	12·0	36	...	1·6	..	6.2	0	0	25	0	1	15	6	1	0	2	0	6	0
Mysore	0830	767	1014·6	928·9	−0·5	19.0	16.1	14·8	16·2	75	+4	2.0	−0·7	9.3	0	0	31	0	5	2	3	2	11	1	7	0	0
	1730	,,	1008·2	925·2	...	27.1	16.6	8.6	11.0	32	...	2·3	...	14.3	0	6	25	2	7	11	5	2	4	0	0	0	0
Bangalore (Central Observatory)	0230	921	1504·3	910·6	...	16.5	14·8	13.6	15·6	83	...	2·4	...	11·5	0	0	31	0	1	20	10	0	0	0	0	0	0
	0830	,,	1527·1	912·8	−0·3	17.8	15·2	13·3	15.3	77	−1	3.5	+0.5	9.8	0	0	31	0	0	15	15	1	0	0	0	0	0
	1130	,,	1536·8	913.0	...	23.3	16·2	10·9	14.0	47	...	1·7	...	13.4	0	1	30	0	1	15	13	0	0	1	1	0	0
	1730	,,	1509·3	909·5	...	24.4	16.1	9.8	12·3	40	...	1.5	...	12·0	0	1	29	1	3	18	7	1	0	0	0	1	0
Bangalore (Aerodrome)	0530	897	1502·5	913·2	...	15.6	14.6	13.7	15·9	89	...	1·6	...	7.7	0	1	20	0	2	13	5	0	0	1	0	10	0
	0830	,,	1529.7	915·5	...	18.4	15·8	13·9	16.0	77	...	3·0	...	10·5	0	0	28	0	0	23	3	1	0	0	1	3	0
	1130	,,	1540.8	915.3	...	24.6	17·1	11·9	14·0	46	...	1·9	...	15.5	0	0	24	1	2	17	6	3	1	1	0	0	0
	1730	897	1512·9	912·1	...	25.8	17·2	11·0	13·2	40	...	2·0	...	13·9	0	5	23	0	2	20	5	1	0	0	0	3	0
	2330	,,	1521·1	914·6	...	18·3	15·4	13·2	15·6	73	...	0·2	...	9·8	0	2	25	0	0	23	4	0	0	0	0	4	0
Kerala (including Laccadivas)																											
Kozhikode	0530	5	1011·0	1010·5	...	22·6	20·6	19·5	22·7	88	...	2·0	...	6·2	0	0	31	0	8	23	0	0	0	0	0	0	0
	0830	,,	1012·5	1011·9	−1·0	24·1	20·8	18·9	21·8	78	−5	1·7	−0·5	8·0	0	0	31	0	2	28	1	0	0	0	0	0	0
	1130	,,	1012·5	1012·0	...	30.1	23·5	19·9	23·6	55	...	3·2	...	9·3	0	0	31	0	1	1	1	2	14	8	4	0	0
	1730	,,	1009·5	1009·0	...	29·5	24·0	21·3	25.3	61	...	1·5	...	11·5	0	0	31	0	1	0	0	0	5	15	10	0	0
	2330	,,	1011·8	1011·3	...	25·3	22·3	21·3	24·5	78	...	0·7	...	7·7	0	0	29	11	12	2	0	0	0	0	4	2	0
Palghat	0830	97	1013·4	1002·3	...	24·8	20·3	17·6	20·2	65	...	1·8	...	13·9	0	1	30	0	0	31	0	0	0	0	0	0	0
	1730	,,	1008·5	997·7	...	31·4	21·2	14·7	17·0	37	...	1·9	...	11·3	0	1	28	0	1	25	0	0	0	3	0	2	0
Fort-Cochin	0830	3	1012·9	1012·6	−0·3	26·7	21·7	20·2	21·8	63	−7	3·8	+1·9	7·0	0	0	30	0	15	13	2	0	0	0	0	1	0
	1730	,,	1008·6	1008·3	...	28.4	23·3	20·7	24·6	63	...	3·5	...	13·0	0	2	29	0	0	1	0	0	3	17	10	0	0
Cochin (Naval Air Station)	0230	,,	1011·3	1011·0	...	23·7	21·9	21·0	25·0	85	...	1·5	...	0·9	0	0	6	2	1	1	1	1	0	0	0	25	0
	0530	,,	1011·2	1010·9	...	22·2	20·7	19·9	23·1	86	...	2·0	...	1·8	0	0	13	1	4	7	0	0	0	1	0	18	0
	0830	,,	1012·7	1012.4	...	24·2	20·6	18·5	21·3	71	...	2·5	...	2·4	0	0	18	1	4	11	1	1	0	0	0	13	0
	1130	,,	1012·5	1012·2	...	28·9	21·8	17·6	20·3	51	...	2·4	...	4·2	0	0	27	3	3	7	4	2	1	1	6	4	0
	1730	,,	1009·0	1008·7	...	28·8	22·9	19·8	23·2	58	...	2·1	...	4·2	0	3	27	0	0	0	0	0	3	16	11	1	0
	2330	,,	1012·0	1011·7	...	24·9	22·9	21·4	26·4	81	...	1·6	...	1·8	0	0	11	2	3	4	0	1	0	0	1	20	0
Alleppey	0830	4	1012·3	1011·9	...	25·6	22·4	20·1	23·7	72	...	3·5	...	8·2	0	0	31	0	7	18	6	0	0	0	0	0	0
	1730	,,	1008·6	1008·2	...	29·1	24·0	21·4	25·8	64	...	3·3	...	21.4	0	16	15	0	0	0	0	0	0	14	17	0	0
Punalur	0830	34	1012.4	1008.6	..	22.7	19.8	18.0	20.7	76	...	1.8	..	2.6	0	0	25	7	7	4	4	5	0	0	1	6	0
	1730	,,	1008.3	1004.5	...	31.6	21.9	15.9	18.1	40	...	2.3	..	5.9	0	0	30	3	5	4	4	6	7	1	0	1	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in m.bs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (including Laccadivas)—*Contd.*																											
Trivandrum	0230	64	1010·2	1002·8	...	23·8	21·3	20·0	23 3	79	...	2·5	...	4·3	0	0	27	4	11	5	3	1	0	2	1	4	0
	0530	"	1010·2	1002·8	...	22·8	20·7	20·0	22·7	82	...	2·1	...	3·7	0	0	29	4	16	2	3	1	1	0	2	2	0
	0830	"	1012·1	1004·8	−0·7	25·1	21·7	19·9	23.2	74	−3	1·9	−0·7	3·1	0	0	30	6	14	1	5	1	0	0	3	1	0
	1130	"	1011·6	1004·4	...	30·6	22·8	18·0	21·4	48	...	2.7	...	4·0	0	0	30	1	6	0	6	0	13	1	3	1	0
	1730	"	1008·8	1001·6	...	27·9	23·3	20·4	25.0	61	...	3·1	...	5·2	0	0	31	0	2	0	2	0	20	4	3	0	0
	2330	"	1011·7	1004·4	...	25·1	22·3	20·9	24·6	78	...	2·5	...	3·8	0	0	30	6	7	1	5	2	3	0	6	1	0
Trivandrum (Aerodrome)	0830	8	1012·0	1011·1	...	27·3	22·8	20·3	24·2	66	...	1·8	...	3·2	0	0	13	5	3	0	0	0	5	0	0	18	0
Hill Stations excluding Kashmir (R)																											
Walong(R)	0830																										
	(R) 1730																										
Kohima	0830	1406	1541.0	863.9	...	11·5	9·8	8·2	10·9	82	...	3·0	...	(i) 3·4	0	0	30	0	1	1	23	1	2	1	1	1	0
	1730	"	1526·0	86·4	...	11·1	9·9	8·9	11·5	86	...	4·9	...	(i) 3·0	0	0	31	6	1	0	0	1	0	2	21	0	0
Aijal (R)	0830	1097																									
	(R) 1730	"																									
Shillong	0830	1500	1518·5	852·1	−0·5	11.4	7·5	2·8	7·6	58	−12	2·1	−0·6	0·9	0	0	3	0	0	0	1	1	1	0	0	28	0
	1730	"	1487·4	848·9	...	10·8	9·4	8·1	10·8	84	...	5·7	...	0·3	0	0	1	0	0	0	0	0	1	0	0	30	0
Cherrapunji	0830	1313	1518·9	870·6	−0·9	12.4	10·8	9·2	12·0	82	+19	1·8	+0·2	3·8	0	0	31	0	6	7	5	0	11	1	1	0	0
	1730	"	1488·2	868·1	...	10.3	10·2	9·2	12·5	90	...	...	...	3·0	0	0	31	0	4	1	0	0	26	0	0	0	0
Darjiling (Raj Bhawan)	0830	2127	1539·1	791·9	+2·6	5·9	4·5	2·9	7·5	82	+18	4·5	+1·1	0·5	0	0	5	0	0	0	0	0	3	2	0	26	0
	1730	"	1514·7	789·6	...	5·8	5·0	4·1	8·3	89	...	5·8	...	0·8	0	0	8	0	0	0	0	0	3	5	0	23	0
Kalimpong	0830	1209	1480·2	878.0	−5·0	10·1	8·2	6·1	9·4	77	+2	2·7	−0·3	2·9	0	0	30	0	0	0	0	0	0	0	30	1	0
	1730	"	1459·1	876.0	...	10·3	8·3	6·3	9·6	77	...	3·3	...	2·7	0	0	28	0	0	0	28	0	0	0	0	3	0
Katmandu	0830	1337	1520·3	869·3	...	5·7	5·2	4·6	8·6	93	+8	6·3	+1·3	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	"	1498·7	866·3	...	12·3	9·5	6·3	9·8	66	...	3·3	..	1·2	0	0	9	5	0	1	0	0	0	0	3	22	0
Mukteswar (Kumaon)	0830	2311	3095·9	771·7	−1·5	3·3	0·4	−4·8	4·0	64	+1.5	3·1	0	13·4	0	5	26	1	9	8	2	1	2	5	3	0	0
	1730	"	3086·6	770·4	...	4·6	3·3	0·9	7·1	73	...	3·6	...	10·5	0	1	27	0	4	5	0	1	3	11	4	3	0
Nainital	0830	1953	1510·0	805·4	...	3·5	1·2	−2·4	5·2	70	...	3·4	...	4·9	0	0	16	2	0	2	2	0	0	5	5	15	0
	1730	"	1490·3	803·8	...	5·4	3·3	0·5	6·3	74	...	3·8	...	5·3	0	0	25	3	0	3	2	2	3	10	2	6	0
Tapoban	0830	...	...	...	...	5·3	1·8	−2·2	4·7	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Badrinath (R)	0830																										
Lokpal	0830	...	...	...	...	6.7	4·6	2·2	7.2	73	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mussoorie	0830	2042	1491·5	795·4	−2·5	4·4	1·8	−1·7	4·9	69	+13	3·6	..	3·5	0	0	21	6	2	0	3	4	1	0	5	10	0
	1730	"	1479·2	794·1	...	5·0	3·9	2·8	7·2	83	...	5·3	...	3·1	0	0	23	1	1	1	7	8	2	0	3	8	0
Simla	0830	2202	1497·7	780·1	−1·6	2·6	...	−5.0	4·4	68	+25	4·0	+0·2	3·9	0	0	26	3	3	2	7	9	1	0	1	5	0
	1730	"	1483·9	779·1	...	4·0	2·1	−0·7	5·8	76	...	5·2	...	3·6	0	0	30	2	5	1	6	10	6	0	0	1	0
Dalhousie	0830	1959	1457·1	799·4	...	3·4	1·1	−2·3	5·2	72	...	3·9	...	2·0	0	0	8	0	5	2	1	0	0	0	0	23	0
	1730	"	1439·8	798·3	...	4·9	2·7	−0.2	6·1	74	...	4·9	...	0·6	0	0	2	0	1	1	0	0	0	0	0	29	0
Dharamshala	0830	1212	1529·3	883·4	...	7·4	5·2	1·6	7·2	68	...	4·2	...	4·5	0	2	23	4	7	2	1	0	2	3	6	6	0
	1730	"	1530·1	883·1	...	10.9	8·4	5·5	9·4	71	...	5·4	...	3·5	0	0	27	1	2	2	2	1	17	1	1	4	0
Abu	0830	1195	1520·9	883·5	−0·5	10·6	11·1	2·3	7·4	61	+17	2·0	+0·3	2·5	0	0	12	3	1	1	0	1	1	2	3	19	0
	1730	"	1508·4	881·4	...	15·0	9·6	3·3	7·8	48	...	1·2	...	3·5	0	0	16	2	3	1	0	2	3	3	2	15	0
Pachmarhi	0830	1075	1519·1	896·4	−1·3	12·1	10·4	8·8	11·4	82	+20	1·5	−0·4	1·6	0	0	11	1	1	1	0	2	0	4	2	20	0
	1730	"	1508·3	894·0	...	20·1	14·6	10·0	12·5	54	...	1·3	...	3·4	0	0	29	6	5	1	0	0	4	7	6	2	0
Mahabaleshwar	0830	1382	1527·0	864·8	−0·6	16·5	11·5	7·2	9·9	54	+2	1·3	+0·3	9·6	0	0	30	0	2	10	10	0	2	2	4	1	0
	1730	"	1509·0	862·8	...	21·3	14·9	9·9	12·3	49	...	1·0	...	8·6	0	0	31	0	5	2	2	0	6	0	16	0	0
Nandi Hills	0830	...	...	...	...	16·1	13·3	10·9	13·3	72	...	6·5	...	20·9	0	17	14	5	0	0	0	1	1	8	16	0	0
Mercara	0830	1152	1518·6	887·5	−0·3	15·8	13·6	11·9	14·0	78	0	1·8	−1·6	8·8	0	0	30	0	14	14	0	0	0	1	1	1	0
	1730	"	1505·1	885·6	...	23·3	15·5	9·3	12·1	43	...	1·3	...	6·1	0	0	30	0	11	11	0	0	0	4	4	1	0
Kodaikanal	0830	2343	3153·3	772.1	+0·1	11·8	5·8	−3.7	4·8	43	−12	1·8	−1·0	7·1	0	1	25	3	8	4	8	1	0	0	2	5	0
	1130	"	3165.4	772.2	...	15.6	8.7	0·1	6·8	42	...	2·4	...	10.5	0	2	27	1	7	5	8	2	0	0	6	2	0
	1730	"	3137.5	770.4	...	12.6	10·4	8.6	11.1	77	...	4·9	...	5·6	0	1	20	2	4	1	7	1	0	0	6	10	0
Ootacamund	0830	2249	1523.8	780·3	−0.3	10·6	5·4	−0·6	5·6	49	−9	1.6	−0.6	0·6	0	0	4	0	0	2	1	1	0	0	0	27	0
	1730	"	1495.1	778.5	...	15·4	10·9	7·2	10·1	60	...	2·0	...	1·6	0	0	14	3	6	4	0	0	1	0	0	17	0
Coonoor	0830	1747	1527·3	828·6	...	13·5	9·3	5·2	8·9	59	−6	1.9	−1·4	2·4	0	0	18	1	1	1	5	1	0	2	7	13	0
Sikkim Lachen	0830	..	..	..	..	0·8	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(R) Register not received.

(i) means of 22 days

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level of height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C.: Dry bulb	Mean temperature in °C.: Wet bulb	Mean temperature in °C.: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Tibet																											
Yatung (Chumbi)	0830	...	...	...	...	0·7	0	−0·9	5.5	90	+9	0.6	−1·5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lhasa	0830	3685	3100.5	651·4	...	−1·4	−2·4	−3·9	4·4	81	...	2.4	...	2·3	0	0	13	0	4	3	0	4	2	0	0	18	0
Ceylon																											
Colombo	0830	7	1012·2	1011·4	−0·5	24·2	21·7	20·5	23·8	80	−5	4·1	0	15·1	0	0	30	9	19	2	0	0	0	0	0	1	0
	1730	"	1008·5	1007·8	...	27·8	23·4	21.3	25·0	70	...	5·3	...	13·6	0	1	30	8	7	1	0	0	4	2	9	0	0
Trincomalee	0830	3	1012·9	1012·6	−0·4	25·7	22.4	20·7	24·6	74	−9	5·2	+0·9	16·8	0	14	16	10	16	0	0	0	2	0	2	1	0
	1730	"	1010·2	1009·8	...	26·2	22·7	20·9	24·7	73	...	5·0	...	22·6	0	23	8	13	14	1	1	0	0	0	2	0	0
Batticoloa	0830	3	1013.1	1012·8	...	24.4	21·9	20·6	24·3	80	...	5·1	...	14·6	0	0	28	1	10	2	0	0	1	7	7	3	0
	1730	"	1010·3	1009·8	...	26·1	22·5	20·5	24·3	72	...	4.9	...	18·5	0	0	30	9	18	0	1	0	0	0	2	1	0
Hambbntota	0830	15	1012·1	1010·4	+0·3	24·8	22·1	20·8	24·4	79	−6	3·8	+0·4	24·0 (d)	0	18	9	3	28	0	0	0	0	0	0	0	0
	1730	"	1009·0	1007·6	...	27·0	22·9	21·5	24·3	72	...	4.4	...	26·1 (b)	0	23	6	0	15	13	2	1	0	0	0	0	0
Mannar	0830	4	1013·5	1013·1	...	25·5	22·3	20·8	24·3	76	...	3·1	...	14·0	0	4	27	3	24	4	0	0	0	0	0	0	0
	1730	"	1010·1	1009·7	...	27·1	22·4	19·9	23·4	65	...	4·5	...	19·4	0	20	11	5	25	0	1	0	0	0	0	0	0
HYDROMETEORO-LOGICAL OBSER-VATORIES																											
Damodar Catchment																											
Bokaro	0830	239	1017·0	988·9	..	15·7	13·9	12·3	14·4	81	...	2·6	...	3.9	0	0	24	1	0	0	6	1	5	3	8	7	0
	1730	"	1012·7	985·3	...	20·9	16·2	12·3	14.9	60	...	2·4	...	6·6	0	1	29	7	2	3	6	0	2	2	8	1	0
Hazaribagh	0830	615	1015·8	945·5	...	15·6	13·4	11·5	13·6	77	...	1·7	...	4·2	0	0	20	0	1	1	2	4	2	6	4	11	0
	1730	"	1011·5	942·0	...	17·8	14·5	12·0	13·9	69	...	1·0	...	3·7	0	0	21	0	1	3	2	2	3	8	2	10	0
Tilaiya	0830	...	...	...	...	15·9	13·5	11·2	13·6	75	...	2·8	...	5·2	0	0	22	0	1	5	2	1	2	8	3	9	0
	1730	...	...	...	...	19·3	15·1	11·5	13·7	63	...	2·3	...	5·2	0	0	27	5	2	2	2	0	0	5	11	4	0
Ramgarh	0830	...	...	...	...	15·5	13·9	12·5	14·3	84	...	3·3	...	2·4	0	0	23	0	0	3	0	0	3	9	8	8	0
	1730	...	...	...	..	20·5	16·1	12·9	15·3	63	...	2·5	...	2·3	0	1	16	0	3	3	1	0	0	0	10	14	0
Panchet Hills	0830	...	...	...	...	17·4	14·8	12·6	14.7	71	...	3·0	...	3·8	0	0	31	3	2	4	0	1	12	7	2	0	0
	1730	...	...	...	...	21·7	16·4	12.1	14·5	62	...	3·1	...	3·3	0	0	30	10	4	5	0	0	2	1	8	1	0
Durgapur	0830	...	...	...	...	19·9	16·3	13·6	15·6	68	...	4·2	...	7·8	0	0	28	2	1	10	0	1	1	12	1	3	0
	1730	...	...	...	...	22·2	17·3	13·6	15·8	59	...	4·9	...	5·7	0	0	29	0	1	10	0	2	2	13	1	2	0
Mahanadi Catchment																											
Baramul *	0830	64	1016·5	1009·1	...	20·9	18·7	17·4	19·7	81	...	2·5	...	2·8	0	0	22	2	4	0	3	7	6	0	0	4	0
†	1730	"	1012·4	1005·0	...	23·2	20·6	19·2	22·6	78	...	1·6	...	0·1	0	0	1	0	0	0	0	1	0	0	0	24	0
Hirakud	0830	159	1016·2	997·8	...	20·6	17·6	15·3	17·5	72	...	1·4	...	3.8	0	0	26	1	8	7	3	2	3	0	1	5	1
	1730	...	1012·0	994·0	...	25·1	19·1	14·9	16.9	54	...	1·2	...	2·5	0	0	17	2	4	1	0	2	1	5	2	14	0
Khijrawan	0830	...	...	...	...	19·3	15·8	13·3	15·1	68	...	0·8	...	3·6	0	0	25	0	0	14	4	3	1	3	0	6	0
	1730	...	...	...	...	24·7	17·8	12·4	14·8	49	...	1·3	...	4·3	0	0	27	10	1	0	0	2	1	4	9	4	0
Soaepur	0830	...	...	...	...	23·5	17·7	10·0	17·6	43	...	...	...	12·0	0	1	28	6	1	9	0	4	9	0	0	2	0
Ginabahar	0830	...	...	...	...	17·5	15·1	13·2	15·0	77	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Narbada Catchment																											
Punasa	0830	...	...	...	...	17.4	12·8	8·1	11·0	55	...	2·2	...	4·7	0	0	24	5	9	7	1	0	1	1	0	7	0
	1730	...	...	...	...	27·4	17·6	8·8	12·1	33	...	2·2	...	4·2	0	0	24	1	5	2	2	0	3	10	1	7	0
Bagra Tawa	0830	...	...	...	...	15·4	12·7	10·3	12·5	72	...	2·3	...	6·8	0	0	25	1	12	2	1	1	4	1	0	6	0
	1730	...	...	...	...	23·6	16·9	11·6	13·8	49	...	1·0	...	2·5	0	0	12	0	8	1	0	1	1	1	0	19	0
Thikri	0830	...	...	...	...	18·0	13·0	10·1	12·5	61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tapti Catchment																											
Nandurbar	0830	...	...	...	...	20·2	14·6	9·7	12·2	53	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sabarmati Catchment																											
Jhadol	0830	...	...	...	...	11·3	9·0	6·1	9·6	72	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dharoi	0830	...	...	...	...	16.6	12.2	7·6	10·7	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	24·5	15·6	7·3	10·7	34	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Ganga Catchment																											
Mukhim	0830	...	...	...	...	5.7	2.0	−2.3	5.1	60	...	6.0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	6.3	3.7	0.3	6.3	63	...	4.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tehri	0830	...	...	...	...	7.1	6.4	5.8	9.1	91	...	2.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	13.3	9.9	6.8	9.7	66	...	2.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gandak catchment																											
Gorkha	0830	...	...	...	...	10.6	9.2	6.7	9.8	77	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
**	17..	...	...	...	...	13.1	10.9	9.0	11.4	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

(b) Mean of 29 days. †Observation for 25 days. (d) Mean of 27 days. *Observation for 30 days. **Observation for 26 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JANUARY, 1957

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms per hour	Wind speed (Kms. p.h.): 62 or more.	Wind speed (Kms. p.h.): 20 to 61.	Wind speed (Kms. p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories—*Contd.*																											
Pokhara	0830		...	...	...	11·0	9·7	8·3	11·1	84	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730		...	...	...	15·1	12·4	10·3	12·5	72	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nowakot *	0830		...	...	...	12·5	10·9	9·4	11·9	82	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730		...	...	...	14·9	11·5	8·6	11·1	65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gogra Catchement (Trans Himalayan Region).																											
Dailekh	0830	,,	...	...	...	8·3	6·6 (a)	4·9	8·6	79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	,,	...	...	...	10·2	7·5	4·6	8·5	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gogra Catchment																											
Dandeldhura	0830		...	...	...	5·8	2·9	−0·6	5·7	62	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	,,	...	...	...	7·2	4·4	1·1	6·6	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mansiyari	0830		...	...	...	6·0	2·5	2·4	5·1	55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730		...	...	...	6·9	3·7	0·3	5·9	59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sallyana	0830		...	...	...	9·7	6·8	3·4	7·8	65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730		...	...	...	10·2	7·6	4·9	8·6	69	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bagmati Catchment																											
Katmandu	0830	1333	1513·0	870·0	...	6·0	5·6	5·3	8·7	95	...	5·7	...	0·0	...	...	...	...	...	...	...	...	...	...	...	31	...
	1130	,,	1513·0	868·2	...	13·4	10·0	6·6	9·9	64	...	2·4	...	0·6	...	...	4	1	...	...	3	...	...	...	...	27	...
	1730	,,	1486·9	868·9	...	11·9	9·2	6·6	9·6	70	...	2·7	...	1·2	...	...	9	5	...	1	...	...	...	...	3	22	...
Kosi Catchment																											
	0830		...	...	...	8·8	7·1	5·4	9·0	79																	
Chautara	1730		...	...	...	12·7	8·5	4·7	8·4	57			...	1·2	...	...	11	...	...	1	4	2	1	1	2	20	...
Okhaldhunga	0830		...	...	...	7·7	6·2	4·6	8·5	82	...	4·0	...	1·5	...	...	14	1	...	...	...	2	7	2	2	17	...
	1130		...	...	...	11·0	8·6	6·0	9·6	73	...	4·5	...	2·1	...	...	15	...	...	...	2	1	1	9	2	16	...
	1730		...	...	...	8·6	7·2	5·7	9·2	83	...	5·0	...	4·6	...	...	18	...	5	4	1	3	4	...	1	13	...
Barahkshetra	0830	146	1017·3	1000·0	...	13·6	12·5	11·4	13·6	86	...	2·4	...	6·7	...	...	29	3	1	1	...	...	16	4	4	2	...
	1130	,,	1016·1	999·1	...	19·3	15·3	12·1	14·1	63	...	3·6	...	4·4	...	...	26	...	6	8	7	2	3	...	...	5	...
	1730	,,	1013·8	996·5	...	17·2	15·1	13·5	15·4	79	...	4·4	...														
Angbung	0830		...	...	...	11·2	9·4	7·7	10·5	79																	
Taplejung	0830		...	823·7	...	7·5	5·8	4·1	8·1	80	...	4·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1130		...	823·2	...	11·1	7·9	4·7	8·6	68	...	4·5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730		...	821·2	...	9·1	6·8	4·5	8·4	73	...	4·7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tapkethok	0830		...	...	...	8·9	7·1	5·3	8·8	77																	
Wallangchung Gola (R)	0830		...	...	...	1·7	−1·7	−9·6	3·0	43	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730																										
Bhojpur	0830		...	...	...	9·6	7·4	5·3	8·9	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*	1730	,,	...	...	...	8·8	7·9	7·1	10·1	89	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chainpur	0830		...	...	...	11·2	9·3	7·4	10·3	78	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tista Catchment																											
Gangtok	0830	1812	1515·1	820·2	...	5·3	4·8	3·1	8·3	82	...	4·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1130	,,	1506·6	819·7	...	9·6	7·4	5·1	...	76	...	4·7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	,,	1490·8	816·4	...	7·8	6·1	5·2	8·4	86	...	6·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Geyzing	0830	...	...	...	...	9·8	7·8	5·6	9·1	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	9·8	8·6	7·2	10·2	85	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

*Observations for 30 days. (a) Mean for 30 days. (R) Register not received.

MONTHLY MEANS OF UPPER WINDS
JANUARY 1957

During the month, observations of velocity and direction of upper winds were made at 52 stations in India. Out of these, at 42 stations all the observations were taken by means of pilot balloons and at 10 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table below. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a. m. s. l. are given under Table IV and data above 9.0 km. a. m. s. l. under Table V.

In Tables IV and V:

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights:

Surface, 0·15 km. a. g., 0·3, 0·6, 0·9, 1·5, 2·1, 3·0, 4·5, 5·4, 6·0, 7·2, 9·0, 10·5, 12·0, 14·1, 16·2, 18·0, 20·0, 23·0, 26·0, 30·0 and 35·0 km. a. m. s. l. Of these the levels 1·5, 3·0, 5·4, 7·2, 9·0, 12·0, 14·1 and 16·2 km. a. m. s. l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

Particulars of Pilot Balloon and Rawin Stations in India

January 1957

Station	Lat. N	Long. E	Height of Anemometer head a. m. s. l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November 1951	0130	0730	1430	
Ahmedabad	23°04′	72°38′	60	19th May 1928	0130	0730	1430	
Amausi	26°45′	80°53′	132	20th November 1950	0130	0730	1430	
Ambala	30°23′	76°46′	283	1st April 1941	0130	0730	1430	
Anantapur	14°41′	77°37′	364	12th February 1946		0730	1430	
Asansol	23°41′	86°59′	136	29th May 1942	0130	0730	1430	
Baghdogra	26°38′	88°19′	140	7th June 1953	0130	0730	1430	
Bairagarh	23°17′	77°21′	532	26th February 1943	0130	0730	1430	
Bamrauli	25°27′	81°44′	103	28th February 1930	0130	0830*	1430	2030*
Bangalore	12°58′	77°35′	936	19th May 1915	0130	0730	1430	
Bareilly	28°22′	79°24′	180	12th January 1943		0730	1430	
Begumpet	17°27′	78°28′	553	1st September 1929	0130	0730	1430	
Bhagalpur	25°14′	86°57′	61	19th May 1950		0730	1430	
Bhubaneshwar	20°15′	85°50′	55	5th December 1942	0130	0730	1430	
Bhuj	23°15′	69°48′	111	14th September 1937	0130	0730	1430	
Bikaner	28°00′	73°18′	229	18th October 1946	0130	0730	1430	
Chikalthana	19°51′	75°24′	583	7th October 1951	0130	0730	1430	
Cochin†	09°56′	76°14′	3	16th March 1942	0130	0730	1430	
Darjeeling	27°03′	88°16′	2115	21st May 1956		0730	1430	
Dum Dum	22°39′	88°27′	19	14th May 1921	0130	0830*	1430	2030 *
Gadag	15°25′	75°38′	650	3rd May 1943	0130	0730	1430	
Gauhati	26°05′	91°43′	51	12th March 1955	0130	0830*	1430	2030*
Gaya	24°45′	84°57′	119	19th March 1937	0130	0730	1430	
Gopalpur	19°16′	84°53′	24	15th February 1946	0130	0730	1430	
Gorakhpur	26°45′	83°22′	83	5th January 1943		0730	1430	
Gwalior	26°14′	78°15′	219	7th May 1938	0130	0730	1430	
Imphal	24°51′	93°58′	805	8th March 1952		0730	1430	
Jabalpur	23°10′	79°57′	402	30th July 1928	0130	0730	1430	
Jagdalpur	19°05′	82°02′	562	25th March 1948	0130	0730	1430	
Jaipur	26°49′	75°48′	404	6th June 1953		0730	1430	
Jamshedpur	22°49′	86°11′	147	23rd July 1942		0730	1430	
Jharsuguda	21°55′	84°05′	234	1st May 1944	0130	0730	1430	
Jodhpur	26°18′	73°01′	229	15th October 1934	0130	0830*	1430	2030*
Madras	13°00′	80°11′	29	8th April 1926	0130	0830*	14 30	2030*
Mangalore	12°52′	74°51′	40	4th June 1928	0130	0730	1430	
Masulipatnam	16°11′	81°08′	13	8th April 1942	0130	0730	1430	
Minicoy	08°18′	73°00′	16	14th April 1941	0130	0730	1430	
Mohanbari	26°29′	95°01′	110	1st June 1948	0130	0730	1430	
Mussoorie	30°27′	78°05′	2050	3rd November 1955		0730	1430	
Nagpur	21°06′	79°03′	316	23rd April 1943	0130	0830*	1430	2030*
New Delhi	28°35′	77°12′	227	20th October 1936	0130	0830*	1430	2030*
Poona	18°32′	73°51′	593	5th January 1925	0130	0730	1430	
Port Blair	11°40′	92°43′	93	29th October 1945	0130	0730	1430	2030*
Raipur	21°14′	81°39′	308	15th July 1944	0130	0730	1430	
Santacruz	19°07′	72°51′	12	14th May 1933	0130	0830*	1430	2030*
Tezpur	26°37′	92°47′	79	12th August 1932	0130	0730	1430	
Tiruchirapalli	10°46′	78°43′	96	22nd June 1936	0130	0730	1430	
Trivandrum	08°29′	76°57′	73	8th December 1928	0130	0830*	1430	2030*
Udaipur	24°35′	73°42′	587	24th June 1947	0130	0730	1430	
Vengurla	15°52′	73°38′	8	22nd November 1941	0130	0730	1430	
Veraval	20°54′	70°22′	17	13th October 1941	0130	0730	1430	
Visakhapatnam	17°43′	83°14′	10	24th September 1928	0130	0730	1430	

* Radiowind ascents.

† Naval Meteorological Office.

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0130				0730				1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1·5	0·6	035	31	1·2	0·6	074	31	3·8	2·1	284	31	5·2	3·4	360	31	5·1	3·8	028	31	5·7	2·1	339
0·15 a. g.	30	8·0	4·3	357	31	7·0	3·4	043	30	4·6	3·1	305	31	16·0	9·5	023	31	17·4	12·6	050	31	7·4	2·2	334
0·3 a. m. s. l.	30	9·0	5·4	350	31	7·4	2·9	019	30	5·5	3·5	300	31	15·7	8·6	027	31	17·7	12·1	063	31	7·6	2·3	337
0·6 ,,	30	8·0	4·8	333	31	6·8	2·2	345	29	5·6	3·4	301	31	13·5	5·6	021	31	13·0	3·9	035	31	6·8	1·9	324
0·9 ,,	29	7·6	3·8	291	31	6·9	2·7	316	29	6·1	4·4	292	31	11·3	2·3	350	30	9·8	1·8	332	31	7·5	2·9	315
1·5 ,,	28	11·7	7·7	290	31	10·8	8·0	295	29	12·0	9·3	289	30	10·6	4·8	240	30	11·7	7·3	273	31	11·1	7·7	279
2·1 ,,	27	18·8	15·5	290	31	20·1	16·1	294	28	19·9	16·7	291	30	15·9	11·3	257	30	15·9	11·8	265	31	19·3	16·6	265
3·0 ,,	22	26·6	21·3	280	30	28·3	25·3	283	25	24·6	21·1	282	26	22·8	20·4	267	29	23·2	19·3	269	31	26·4	22·9	263
4·5 ,,	1	34 0	34 0	245	15	31·5	28·4	271	14	33·3	30·4	275	2	24·0	24·0	247	24	32·3	28·5	268	29	34·6	32·4	273
5·4 ,,					8	35·4	31 8	269	11	38·2	32·7	276					16	34·6	31·9	263	28	39·6	37·2	271
6·0 ,,					5	33·0	27·7	266	10	45·6	38 8	275					9	33·7	31·2	265	27	46·8	43·1	270
7·2 ,,									3	44·7	38·4	308					1	44·0	44·0	255	22	53·3	49·5	267
9·0 ,,																					9	75·3	71·7	278

Station	AMAUSI												AMBALA											
Time in I. S. T.	0130				0730				1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·7	1·8	316	31	3·1	1·1	325	31	6·8	1·9	321	31	5·6	0·9	019	31	3·4	0·8	341	31	5·3	1·4	289
0·15 a. g.	28	12·3	7·5	335	25	10·6	3·4	357	30	7·7	2·5	298	28	12·2	5·9	349	29	11·6	4·3	010	30	8·7	2·6	309
0·3 a. m. s. l.	28	12·3	7·6	334	25	10·4	3·2	009	30	7·6	2·6	292	28	6·7	3·2	344	29	5·6	2·1	011	30	6·9	2·3	296
0·6 ,,	28	11·9	7·9	326	25	9·8	1·4	320	29	7·9	2·8	298	28	12·5	4·9	345	29	12·7	3·6	010	30	10·1	3·2	326
0·9 ,,	28	11·5	7·8	312	25	9·4	4·0	288	29	9·8	3·7	300	28	11·5	1·6	349	29	11·4	2·4	011	30	10·3	1·6	339
1·5 ,,	27	13·0	11·6	280	25	12·4	10·0	283	87	13·4	9·1	286	27	10·6	0·9	160	28	11·6	0·1	270	27	10·5	0·6	052
2·1 ,,	26	17·5	15·9	275	22	14·9	13·0	278	27	18·6	14·9	273	25	10·1	3·0	230	25	11·7	1·4	205	24	11·6	1·1	170
3·0 ,,	17	18·9	17 1	274	16	17·3	16·7	275	25	23·1	20·6	280	20	9·9	5·0	262	22	11·3	4·1	232	22	9·5	4·1	250
4·5 ,,	2	19·0	16·6	265	8	33·4	31·4	268	18	33·4	31·0	278	3	15·0	14·9	271	15	20·8	18·0	261	18	22·5	18·8	274
5·4 ,,	2	35·5	35·5	285	6	42·7	39·7	270	15	35·6	32·2	275	2	24 5	24·5	277	6	27·2	25 6	277	17	32·1	28·6	276
6·0 ,,					3	40·3	37·4	274	13	39·8	37·6	278	2	31·5	31·5	285	2	31·5	28·1	292	17	36 3	32·2	273
					1	33·0	33·0	305																
7·2 ,,									5	44·0	39·6	278									13	50·8	46·6	273
9 0 ,,									1	43·0	43·0	275									6	63·0	60·4	260

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	ANANTAPUR								ASANSOL												BAGHDOGRA			
Time in I. S. T.	0730				1430				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	1·5	0·8	130	31	5·5	5·2	081	31	2·3	0·1	345	31	2·5	1·5	310	31	3·7	1·9	322	31	3.0	2·2	035
0·15 a. g. .	31	7·6	5·5	130	31	8·5	8·2	084	30	10·7	3·8	006	29	7·6	3·1	343	29	6·9	4·5	308	28	4·6	2·4	053
0·3 a. m. s. l. .									30	10·7	3·7	006	29	8·0	3·0	349	29	7·1	4·7	311	28	4·5	2·3	060
0·6 ,, .	31	8·8	6·9	133	31	8·5	7·9	086	30	11·8	4·5	328	29	9·7	4·2	308	29	7·4	4·9	301	28	5·1	1·0	013
0·9 ,, .	31	11·5	8·9	119	31	8·9	7·7	092	29	12·3	7·8	289	29	10·8	8·1	292	29	8·3	6·5	296	28	6·0	1·7	027
1·5 ,, .	31	12·1	9·5	093	31	9·7	7·9	093	27	16·5	14·3	284	26	15·5	12·2	292	27	15·1	13·2	296	26	7·0	1·8	119
2·1 ,, .	31	10·5	6·8	065	31	10·0	6·7	090	23	20·9	17·7	280	23	22·1	18·6	295	27	22·6	20·1	296	23	10·0	4·5	303
3·0 ,, .	30	10·3	4·8	078	30	10·1	3·7	096	10	22·3	16·7	292	14	24·0	20·9	295	22	27·0	24·9	296	17	20·8	15·0	280
4·5 ,, .	30	10·0	1·8	343	27	11·2	3·0	325					1	29·0	29·0	330	11	34·6	32·7	279	3	23·0	22·2	268
5·4 ,, .	30	11·6	3·2	286	27	11·7	4·2	281					1	23·0	23·0	345	4	35·7	31·5	290				
6.0 .	30	14·1	4·6	297	27	13·6	5·6	303									4	37·5	32·8	288				
7·2 ,, .	29	17·0	12·9	310	26	19.8	14·5	305																
9·0 ,, .	22	22·2	16·7	298	25	27.8	22·7	297																

Station	BAGHDOGRA								BAIRAGARH												BAMRAULI			
Time in I. S. T.	0730				1430				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·6	2·4	034	31	3·8	2·0	200	31	4·5	2·4	030	31	3·8	1·9	054	31	4·6	1·3	265	31	2·9	1·3	357
0·15 a. g. .	27	6·5	5·0	056	30	4·7	2·7	297	31	12·8	6·0	045	31	13·9	7·6	074	31	6·4	2·4	260	31	12·5	5·6	001
0·3 a. m. s. l. .	27	6·9	5·4	078	30	4·7	2·9	201													31	13·0	5·8	002
0·6 ,, .	27	6·9	5·0	088	30	5·3	2.9	201	31	12·5	6·5	047	31	11·4	6·1	071	31	6·2	2·3	270	31	11·5	4·9	328
0·9 ,, .	26	6·9	4·5	088	30	5·7	2·3	196	31	10·1	2·3	016	31	12·0	1·3	050	31	6·6	2·9	255	30	11·4	6 8	279
1·5 ,, .	26	6·1	2·9	081	27	6·3	2·2	268	31	12·6	10·4	254	31	13·6	8·5	267	31	9·4	6·6	260	26	14·3	11 3	258
2·1 ,, .	26	9·5	3·2	278	23	18.0	8·2	281	31	19·1	16·9	252	29	19·0	16·1	260	29	17·9	2·9	255	19	17 3	15·7	264
3·0 ,, .	23	21·1	18·8	281	16	20·6	18·6	280	23	21·9	18·2	268	28	24·0	21·5	266	28	25·1	22·5	266	12	22·5	20·3	264
4·5 ,, .	17	35·1	32·5	281	9	26·8	22·8	290	2	23.0	17·4	284	21	30·5	28·6	276	25	35·1	31·7	279				
5·4 ,, .	9	32·0	28·8	282	8	32·1	24·4	284					13	31·7	29·8	275	23	39·3	36·7	275				
6·0 ,, .	5	36·0	34·0	289	7	38·6	30·6	287					7	23·9	22·3	286	22	43·1	40·6	274				
7·2 ,, .	3	47·0	46·9	290	5	47·2	43·8	284					3	28·6	27·1	304	18	55·0	51·0	281				
9·0 ,, .	1	76·0	76·0	300	2	41·5	41·0	327					1	22·0	22·0	335	9	80·3	76·4	280				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	BAMRAULI												BANGALORE											
Time in I. S. T.	0830*				1430				2030*				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·3	0·9	253	31	5·8	1·9	336	31	2·4	1·0	007	31	7·4	7·1	103	31	7·2	6·9	104	31	8·5	7·7	096
0·15 a. g.	31	6·8	1·1	160	31	8·1	2·5	325	27	7·7	3·6	020	31	16·3	15·6	105	29	14·6	13·3	107	31	10·4	9·0	088
0·3 a. m. s. l.	31	7·3	1·3	151	31	7·8	2·3	312	27	8·3	3·5	021												
0·6 ,,	31	8·6	1·4	225	31	8·3	2·5	267	27	9·6	1·8	312												
0·9 ,,	31	10·0	3·3	263	31	10·0	4·2	267	27	9·9	4·4	259												
1·5 ,,	31	14·5	10·5	280	30	13·9	10·5	274	27	14·3	10·9	259	28	13·5	11·0	085	28	16·1	13·6	094	31	10·0	9·1	086
2·1 ,,	31	19·6	17·3	275	27	19·9	17·5	276	27	18·7	16·3	260	27	10·8	5·5	061	25	13·5	10·3	071	31	10·2	8·7	085
3·0 ,,	30	24·9	22·7	270	24	26·8	24·0	280	27	25·8	23·2	266	26	10·5	5·6	091	25	11·2	7·5	089	28	10·5	5·9	085
4·5 ,,	28	31·9	30·0	267	23	37·4	33·9	278	26	33·6	29·8	269	16	12·0	2·4	160	24	10·5	2·9	103	26	11·1	3·1	082
5·4 ,,	26	42·0	40·3	268	19	44·5	40·8	277	25	39·5	37·0	270	10	11·5	6·0	222	18	10·5	4·1	065	25	10·4	4·0	034
6·0 ,,	24	47·1	45·6	269	17	49·8	45·3	277	23	42·3	40·0	268	6	11·7	2·5	130	18	11·7	3·7	046	25	13·1	5·9	025
7·2 ,,	24	58·3	55·8	267	9	59·7	59·1	273	23	52·9	50·0	270	2	15·0	4·1	310	14	12·5	5·0	341	23	14·7	8·9	340
9·0 ,,	14	70·1	68·1	269	3	73·0	71·0	276	15	77·1	73·7	269					8	15·3	9·7	275	23	20·1	13·3	312

Station	BAREILLY								BEGUMPET												BHAGALPUR			
Time in I. S. T.	0730				1430				0130				0730				1430				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·5	0·3	013	31	3·7	2·6	304	31	3·0	2·3	118	31	2·5	2·0	117	31	5·7	2·7	111	31	2·3	0·4	200
0·15 a. g.	29	11·5	5·0	343	30	6·3	3·9	294	31	12·0	9·1	137	31	10·1	7·8	138	31	7·5	3·4	116	26	7·1	3·8	275
0·3 a. m. s. l.	29	10·6	4·5	344	30	6·2	4·3	294													26	8·3	4·4	297
0·6 ,,	27	12·9	3·4	320	29	9·0	5·1	295	31	7·4	5·1	132	31	6·3	4·9	130	31	7·2	3·1	116	26	8·3	5·4	295
0·9 ,,	27	11·6	1·9	306	29	9·4	5·8	294	31	13·2	10·5	128	31	13·5	10·3	128	30	7·0	3·7	132	26	9·5	6·8	284
1·5 ,,	27	11·2	2·9	267	28	12·3	5·6	284	31	11·0	4·5	098	31	10·2	5·1	104	30	7·6	3·4	110	25	16·9	13·7	289
2·1 ,,	27	12·4	8·1	264	27	13·2	6·5	271	31	10·5	2·6	003	31	10·6	3·5	002	30	8·2	1·3	069	25	22·8	18·1	293
3·0 ,,	23	14·8	11·9	271	24	17·6	14·7	276	30	12·4	4·3	317	31	11·4	4·1	328	28	11·9	4·7	289	19	27·7	24·2	291
4·5 ,,	17	28·3	25·8	273	20	28·7	26·9	275	7	18·0	14·6	294	29	15·1	9·8	272	26	17·2	11·7	280	6	25·5	24·0	289
5·4 ,,	6	37·5	34·9	279	16	36·4	34·6	276	4	23·7	21·1	305	28	17·5	13·5	278	23	19·6	15·4	275	2	22·5	22·5	312
6·0 ,,	3	23·0	20·6	273	15	43·4	41·9	272	3	25·0	22·9	286	27	20·6	15·6	282	22	23·2	18·1	280	2	22·5	22·1	313
7·2 ,,	1	44·0	44·0	260	6	46·3	43·3	275					10	24·7	23·8	285	21	31·5	25·7	286	1	36·0	36·0	340
2·0 ,,					1	56·0	56·0	295					6	43·8	40·2	295	18	42·4	37·3	288	1	35·0	35·0	335

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	BHAGALPUR				BHUBANESHWAR												BHUJ							
Time in I. S. T.	1430				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·3	2·9	283	31	2·7	0·5	250	31	4·1	2·2	002	31	7·9	1·6	215	31	1·0	0·6	003	31	0·5	0·2	017
0·15 a. g.	29	7·5	4·3	297	31	10·0	3·9	178	29	9·8	2·8	007	31	8·3	1·7	188	31	12·9	8·3	003	31	10·8	6·2	004
0·3 a. m. s. l.	29	7·8	6·0	288	31	10·4	5·5	188	29	10·4	1·4	150	31	7·7	1·5	176	31	14·1	8·9	006	31	11·9	7·4	021
0·6 ,,	28	9·3	7·8	284	31	10·3	4·8	212	29	9·7	2·5	197	31	7·0	0·8	240	31	14·2	8·8	009	31	14·6	8.7	014
0·9 ,,	28	11·3	9·8	282	30	8·9	3·3	259	29	8·3	1·7	224	31	7·3	1·6	248	31	10·9	5·2	003	31	13·9	6·6	350
1·5 ,,	26	15·5	12·9	283	27	11·3	7·1	309	29	10·3	6·1	314	30	9·8	5·3	301	30	11·0	7·2	302	31	13·2	7·4	309
2·1 ,,	25	19·9	16·8	286	25	12·8	9·8	318	28	12·0	7·8	306	26	14·2	10·4	317	30	15·6	11·4	284	31	15·4	11·7	281
3·0 ,,	20	30·1	28·9	286	21	17·6	13·5	297	26	14·2	10·4	297	19	16·8	13·9	301	29	22·8	19·6	273	31	23·5	20·6	274
4.5 ,,	9	40·1	38·4	278	4	26·5	20·0	278	20	25·1	22·7	283	13	27·4	23·7	276	3	23·0	22·2	266	23	29·9	25·9	260
5·4 ,,	5	40·0	38·6	275	2	17·0	10·5	316	10	27·8	24·0	277	10	29·2	25 0	273	1	32·0	32·0	255	15	33·7	30·4	253
6·0 ,,	4	42·5	37·6	279	1	20·0	20·0	250	5	28·0	25·1	264	8	32·9	26·3	288					12	34·7	32·4	253
7·2 ,,	3	44.7	40·2	296					3	40·7	40·6	258	8	45·1	38.9	279					6	44·7	41·5	261
9·0 ,,	1	68·0	68·0	325									7	54·6	51·8	281					1	49·0	49·0	280

Station	BHUJ				BIKANER												CHIKALTHANA							
Time in I. S. T.	1430				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·0	2·4	357	31	2·0	1·0	043	31	1·4	0·3	040	31	3·0	1·7	316	31	2·7	1·9	311	31	1·5	0·3	304
0·15 a. g.	31	9·3	4·9	358	26	12·3	8·5	062	23	12·0	5·6	079	26	6·4	4·1	356	31	10·9	5·9	016	31	7·4	3·0	080
0·3 a. m. s. l.	31	9·0	4·5	358	26	9·8	6·5	058	23	9·6	4·7	076	26	6·4	4·2	006								
0·6 ,,	31	9·3	4·1	351	26	11·1	5·5	052	22	11·8	5·0	058	26	7·3	3·6	360								
0·9 ,,	31	9·6	4·3	346	26	8·9	1·1	357	22	11·5	4·2	042	26	7·4	2·6	335	31	11·3	4·6	022	31	9·4	2·1	098
1·5 ,,	30	11·9	8·6	298	25	9·5	4·7	265	21	9·4	3·1	331	26	9·5	4·2	291	31	7·9	2·4	237	31	10·2	3·9	206
2·1 ,,	30	15·4	12·7	288	25	12·2	9·3	273	21	12·1	7·5	284	25	12·5	8·9	274	31	10·5	6·9	215	31	12·2	7·3	219
3·0 ,,	30	24·0	20·8	276	20	15·2	13·0	269	18	17·1	13·2	268	23	18·1	16·3	275	28	15·1	10·4	265	29	16·1	9·6	264
4·5 ,,	30	33·8	30·3	271	5	22·0	21·3	281	11	32·0	30·6	279	21	29·3	28·0	270	6	21·3	18·3	284	26	24·9	18·3	270
5·4 ,,	29	40·1	36·5	270	2	26·0	25·0	279	5	26·0	25·2	275	15	38·2	35·0	273	3	21·0	19·0	283	22	26·1	20·2	272
6·0 ,,	27	44·9	41·3	269	1	32·0	32·0	290	3	26·3	26·0	274	13	40·8	39·0	272					21	29·6	25·4	274
7·2 ,,	9	50·4	46·2	264	1	24·0	24·0	295	1	40·0	40·0	290	5	42·0	39·6	276					9	36·9	33·8	269
9·0 ,,	2	65·5	64·2	246																				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	CHIKALTHANA				COCHIN												DARJEELING							
Time in I.S.T.	1430				0130				0730				1430				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·3	2·6	249	31	0·5	0·2	048	31	1·4	1·1	058	31	8·4	6·7	275	31	1·0	0·2	203	31	0·9	0·7	242
0·15 a. g. .	31	7·4	4·5	241	30	6·0	2·1	065	30	7·6	7·0	076	31	6·5	4·6	283	27	4·8	1·9	161	9	5·2	5·1	232
0·3 a. m. s. l. .					30	7·1	2·7	061	30	7·7	6·4	077	31	6·2	3·4	294								
0·6 ,, .					30	7·6	3·3	071	30	6·5	4·9	089	31	5·2	3·4	038								
0·9 ,, .	31	6·1	4·0	238	30	6·7	4·2	083	30	6·6	4·7	076	31	7·4	6·2	058								
1·5 ,, .	31	7·2	4·0	239	29	7·5	5·3	071	30	7·1	4·7	078	31	10·6	8·7	076								
2·1 ,, .	30	9·8	6·0	254	29	10·7	9·0	078	30	12·2	9·2	087	30	11·1	8·2	071								
3·0 ,, .	29	17·7	12·0	275	25	12·4	10·0	089	28	13·3	10·0	086	29	12·5	9·2	074	24	11·9	9·3	289	9	11·8	10·9	283
4·5 ,, .	27	23·7	19·3	272	12	10·9	9·7	070	25	12·2	10·4	069	28	11·7	8·7	075	15	34·7	30·8	282	7	26·9	24·6	283
5·4 ,, .	26	29·7	23·9	273	6	12·5	10·1	072	22	14·9	12·1	064	24	15·4	11·9	069	7	30·3	26·6	286	5	30·6	27·4	294
6·0 ,, .	24	30·7	27·5	279	2	13·0	13·0	117	20	17·3	14·1	065	20	16·3	12·9	061	6	26·7	24·3	286	5	38·8	35·2	282
7·2 ,, .	10	38·2	35·4	279	2	2·55	25·4	129	15	20·3	15·7	037	18	18·7	14·4	047	4	39·0	37·3	300	4	38·3	26·2	297
9·0 ,, .	2	61·5	60·8	307					7	18·4	7·6	006	16	18·5	8·3	013					2	42·0	41·9	329

Station	DUM DUM												GADAG							
Time in I.S.T.	0130				0830*				1430				2030*				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·5	1·5	045	31	4·3	1·8	022	31	3·1	4	323	31	2·0	0·7	053	31	7·1	4·1	130	31	7·4	5·7	127
0·15 a. g. .	30	9·4	3·0	035	30	8·9	2·3	325	31	7·2	·8	328	31	9·3	2·4	033	31	15·9	9·4	115	31	15·2	8·7	122
0·3 a. m. s. l. .	30	9·2	1·7	009	30	9·0	2·3	301	31	7·3	3·9	324	31	8·5	1·8	016								
0·6 ,, .	30	8·4	1·7	323	30	10·1	4·3	287	31	8·0	4·3	315	31	8·4	2·2	319								
0·9 ,, .	28	9·5	5·5	314	30	10·9	5·9	287	30	9·5	5·8	304	31	9·9	5·2	309	31	16·0	11·0	108	31	16·2	11·5	116
1·5 ,, .	28	16·2	12·8	309	30	15·4	12·4	297	27	15·1	11·1	315	31	15·2	12·2	301	31	11·7	9·4	099	31	14·1	10·1	097
2·1 ,, .	25	18·9	15·9	305	30	21·4	18·5	300	26	21·2	20·5	304	31	20·3	16·8	303	31	9·7	4·9	070	31	11·3	5·8	061
3·0 ,, .	16	22·3	18·1	290	30	26·8	24·1	290	22	26·1	25·2	304	31	28·0	24·1	295	30	11·6	1·3	037	31	10·5	2·1	070
4·5 ,, .					29	35·6	33·4	277	19	36·5	35·1	283	31	38·4	34·5	282	23	11·7	2·6	298	30	12·9	4·3	291
5·4 ,, .					29	43·0	40·5	275	14	41·6	38·9	280	31	47·6	44·2	278	17	15·6	6·7	297	30	14·0	6 3	279
6·0 ,, .					28	49·2	45·7	273	13	46·1	43·2	280	31	51·5	48·5	276	11	18·6	9·8	297	29	16·0	8·7	293
7·2 ,, .					28	64·3	58·7	273	7	53·3	49·8	284	31	58·5	55·3	273	2	11·5	9·9	267	22	22·6	16·3	300
9·0 ,, .					24	76·9	71·5	275	1	47·0	47·0	275	27	76 5	71·8	276					11	28·2	22·0	273

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	GADAG				GAUHATI												GAYA			
Time in I. S. T.	1430				0130				0830*				1430				2030*				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·1	4·8	104	31	1·3	0·4	218	30	2·6	2·3	068	31	4·0	2·5	033	31	2·8	0·3	085	31	2·0	0·2	293
0·15 a. g.	31	8·7	6·6	106	27	4·5	2·0	217	30	5·9	4·5	076	29	5·2	2·8	023	31	6·2	1·5	104	31	10·5	2·1	343
0·3 a. m. s. l.					27	5·1	1·8	242	30	6·4	4·9	087	29	5·0	2·5	025	31	6·1	1·3	090	31	10·5	2·1	338
0·6 ,,					27	6·5	1·9	271	30	7·8	4·8	086	29	4·6	1·3	027	31	7·0	1·1	092	31	11·9	5·4	295
0·9 ,,	31	8·8	6·5	103	27	7·1	2·5	283	30	8·6	4·4	085	28	6·0	1·3	266	31	6·8	0·9	213	30	13·7	9·1	285
1·5 ,,	31	8·9	6·4	099	25	7·6	3·4	267	30	8·8	1·2	144	28	10·0	6·8	244	31	9·1	5·9	253	27	18·1	15·8	275
2·1 ,,	30	8·8	5·1	095	22	12·2	7·5	269	30	11·8	5·0	250	27	14·2	10·8	244	31	13·3	10·2	255	21	21·9	19·5	279
3·0 ,,	28	11·2	2·9	062	15	23·5	21·5	272	29	22·1	17·2	271	24	22·0	19·0	270	31	20·7	16·2	275	12	25·4	24·3	280
4·5 ,,	26	12·1	3·2	291	1	20·0	20·0	335	28	42·2	39·5	271	17	40·0	37·7	275	28	43·1	40·3	269				
5·4 ,,	26	14·3	6·0	284					27	51·0	48·8	266	12	54·5	49·7	275	28	52·0	49·8	270				
6·0 ,,	26	16·4	9·8	310					27	56·6	53·7	265	11	61·7	56·5	275	27	56·4	53·3	268				
7·2 ,,	24	23·1	14·3	306					27	70·8	66·7	265	5	52·4	46·7	282	25	68·5	64·1	271				
9·0 ,,	14	26·6	20·9	287					22	92·0	83·2	267	1	105·0	105·0	275	19	88·7	81·5	272				

Station	GAYA								GOPALPUR												GORAKHPUR			
Time in I. S. T.	0730				1430				0130				0730				1430				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·5	1·4	180	31	5·1	2·9	301	31	4·5	2·6	284	31	5·0	3·2	315	31	7·9	6·0	142	31	2·5	0·8	260
0·15 a. g.	28	8·7	3·5	205	31	7·0	3·6	300	31	7·9	3·4	217	31	8·3	3·7	322	31	11·1	8·5	141	31	9·3	2·8	303
0·3 a. m. s. l.	28	9·1	2·8	213	31	7·1	3·6	300	31	7·6	3·9	199	31	7·9	1·1	189	31	10·8	7·2	142	31	10·0	3·1	303
0·6 ,,	28	8·3	3·5	287	31	7·3	4·5	289	31	7·6	3·4	202	31	8·3	1·8	194	31	8·1	2·8	157	28	10·6	3·8	300
0·9 ,,	27	10·3	7·6	290	30	8·5	6·7	282	28	8·2	1·8	263	31	8·1	1·5	180	31	6·9	2·9	298	28	11·0	5·0	304
1·5 ,,	26	16·3	15·7	298	26	16·1	13·5	286	27	10·1	6·7	324	30	10·1	4·6	330	31	10·2	7·3	316	26	11·1	7·1	290
2·1 ,,	25	22·6	20·0	288	26	22·6	20·0	284	25	11·8	8·7	313	30	11·0	6·9	332	31	13·6	10·1	310	24	16·6	13·3	289
3·0 ,,	23	28·2	26·9	287	23	29·2	26·0	281	21	14·0	9·6	293	29	13·5	9·1	295	31	15·2	10·9	287	14	20·4	18·7	284
4·5 ,,	9	28·8	26·4	280	17	36·7	34·2	289	3	24·3	24·0	259	25	21·4	16·4	276	30	24·0	20·4	279	5	19·0	16·6	285
5.4 ,,	3	42·0	41·6	269	10	44·5	40·4	280	1	13·0	13·0	270	19	26·0	21·9	274	29	28·2	24·6	272	3	27·7	26·7	264
6·0 ,,	2	39·5	37·9	264	7	53·3	45·6	275	1	14·0	14·0	250	17	29·0	26·1	265	29	31·9	28·0	272	1	29·0	29·0	270
7·2 ,,					2	47·0	36·2	303	1	23·0	23·0	270	12	34·2	31·8	259	23	37·3	32·6	275				
9·0 ,,													4	32·7	31·0	272	14	47·8	45·1	272				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	GORAKHPUR				GWALIOR												IMPHAL							
Time in I. S. T.	1430				0130				0730				1430				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·8	2·0	234	31	1·5	0·4	019	31	2·3	0·3	352	31	3·5	1·6	343	31	C A L M			31	6·1	5·0	208
0·15 a. g.	30	6·3	4·0	259	30	9·8	4·9	038	29	9·2	2·3	035	31	6·5	3·5	349	29	1·7	0·3	126	31	5·3	3·7	206
0·3 a. m. s. l.	30	6·9	4·1	262	30	8·2	3·9	039	29	6·9	1·5	028	31	5·8	3·0	352								
0·6 ,,	28	8·4	4·9	279	30	10·4	3·9	014	28	10·5	2·8	044	31	6·6	1·9	347								
0·9 ,,	26	8·3	4·8	282	30	9·4	4·7	306	27	9·7	1·5	334	30	7·3	3·3	302	29	1·9	0·1	103	31	5·5	3·8	202
1·5 ,,	24	12·1	9·3	293	28	11·6	9·7	266	26	12·3	9·1	289	30	13·1	9·4	279	29	4·7	1·1	246	31	7·6	6·0	245
2·1 ,,	24	17·8	14·2	283	27	15·9	14·6	268	26	9·7	1·5	334	29	18·2	16·1	271	29	10·3	5·1	247	30	10·8	8·2	268
3·0 ,,	22	25·6	23·1	281	26	20·9	19·4	276	26	22·2	20·9	272	26	24·8	23·0	271	28	24·3	20·7	282	27	23·1	19·4	272
4·5 ,,	14	30·8	27·9	286					23	35·3	33·3	274	22	37·1	35·3	276	13	27·8	22·1	272	17	35·7	33·2	274
5·4 ,,	9	36·2	32·6	276					20	41·7	39·1	280	20	45·5	43·5	277	7	35·0	22·6	285	11	44·8	41·5	274
6·0 ,,	7	42·7	38·8	271					18	48·3	45·4	275	19	48·6	46·0	278	4	42·2	37·2	282	9	46·7	42·7	279
7·2 ,,	4	47·0	39·9	276					8	50·3	48·5	281	15	56·1	52·5	278	3	39·3	31·8	288	3	38·3	36·5	305
9·0 ,,	1	64·0	64·0	250					3	78·7	78·1	278	6	75·0	72·7	276					1	47·0	47·0	305

Station	JABALPUR												JAGDALPUR											
Time in I. S. T.	0130				0730				1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1·8	0·9	113	31	1·9	0·8	102	31	2·7	1·7	317	24	1·6	0·4	194	23	0·8	0·4	167	23	2·7	1·1	252
0·15 a. g.	31	9·3	3·7	081	31	8·1	3·7	085	31	5·4	3·0	303	24	9·0	0·5	075	23	5·9	1·5	137	23	6·6	2·4	234
0·3 a. m. s. l.																								
0·6 ,,	31	10·2	4·0	079	31	9·6	3·6	087	31	5·4	3·1	306	24	6·6	0·1	358	23	3·3	0·9	157	23	5·0	2·1	232
0·9 ,,	31	11·3	1·5	064	29	11·5	0·3	013	31	6·8	4·1	291	24	9·7	0·4	172	23	8·9	1·9	137	23	7·0	2·6	254
1·5 ,,	30	13·4	9·5	269	28	14·8	8·5	279	30	13·3	9·7	274	24	9·3	0·2	313	22	9·9	1·7	333	23	7·6	3·5	297
2·1 ,,	28	19·5	16·0	270	28	21·5	17·7	272	29	19·1	15·8	268	21	10·9	0·4	313	22	12·4	5·3	315	22	9·0	3·8	306
3·0 ,,	25	22·8	19·1	264	25	24·5	21·1	265	26	23·9	21·2	267	15	12·2	0·7	290	17	13·4	4·8	309	19	11·5	6·4	286
4·5 ,,	4	33·3	28·0	274	16	31·2	26·5	277	21	31·3	27·8	280	3	19·3	6·9	195	10	16·7	14·5	264	16	22·4	14·8	273
5·4 ,,	1	38·0	38·0	280	12	37·2	32·6	280	18	39·7	37·4	282	1	17·0	17·0	240	8	22·7	21·4	250	16	24·7	18·8	275
6·0 ,,					9	38·0	32·7	277	17	43·6	41·2	280	1	18·0	18·0	235	7	25·6	22·8	257	10	37·8	33·4	274
7·2 ,,					2	38·5	37·0	293	7	48·9	46·0	282					2	43·0	38·5	273	6	41·8	40·7	274
9·0 ,,																					1	28·0	28·0	245

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

January 1957

Station	JAIPUR								JAMSHEDPUR								JHARSUGUDA							
Time in I. S. T.	0730				1430				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·0	2·3	076	31	4·5	1·3	231	31	1·9	1·1	011	31	3·7	1·8	310	31	3·5	2·6	042	31	3·9	2·7	033
0·15 a. g. .	30	9·4	5·3	068	30	7·1	1·8	251	31	5·1	1·9	341	31	4·9	2·1	298	29	9·5	4·7	071	30	8·4	5·5	056
0·3 a. m. s. l. .									31	5·2	1·6	321	31	4·5	1·7	287	29	7·7	4·7	057	30	7·1	4·9	055
0·6 ,, .	30	10·2	5·3	077	30	7·3	2·0	256	31	7·5	1·9	293	31	5·7	2·5	310	29	9·2	1·2	100	29	9·5	0·8	171
0·9 ,, .	29	8·9	0·8	049	29	7·0	2·5	277	28	9·0	3·6	268	30	7·0	4·2	279	29	8·2	1·9	275	28	9·2	2·3	247
1·5 ,, .	29	10·3	6·3	268	28	9·9	6·3	283	24	12·7	9·9	272	30	12·1	9·4	285	27	12·4	8·3	285	28	12·4	8·1	285
2·1 ,, .	27	14·6	12·5	270	26	14·6	11·1	271	24	18·8	16·0	290	28	18·5	16·7	290	26	15·8	11·9	288	28	17·4	14·3	290
3·0 ,, .	22	19·5	18·1	267	24	21·5	19·3	269	20	25·1	21·0	293	25	24·1	22·6	294	22	19·9	16·4	297	24	21·7	18·2	297
4·5 ,, .	15	33·0	30·6	278	21	35·6	33·2	269	11	31·6	26·6	271	17	32·9	29·9	286					15	30·8	26·0	291
5·4 ,, .	5	37·2	34·9	264	15	44·2	41·2	267	6	35·7	28·1	271	12	37·2	33·4	289					4	33·7	32·2	291
6·0 ,, .	1	26·0	26·0	290	11	45·0	41·7	272	3	43·6	32·4	267	8	35·9	32·0	290					1	22·0	22·0	260
7·2 ,, .													4	36·8	32·3	316	1	23·0	23·0	300				
9·0 ,, .													1	55·0	55·0	285								

Station	JHARSUGUDA				JODHPUR												MADRAS			
Time in I. S. T.	1430				0130				0830*				1430				2030*				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·6	1·3	295	31	6·6	5·5	024	31	7·7	6·6	029	31	7·0	3·5	017	27	7·2	4·4	010	31	3·3	1·9	347
0·15 a. g. .	31	4·6	1·5	277	30	14·9	10·1	055	31	8·3	5·9	032	31	6·5	2·5	009	27	7·9	4·1	005	31	10·2	8·9	066
0·3 a. m. s. l. .	31	5·1	1·6	264	30	12·9	9·5	052	31	8·1	6·2	033	31	6·0	2·8	010	27	7·6	3·6	013	31	10·9	9·5	069
0·6 ,, .	31	5·0	1·8	272	30	13·2	7·7	055	31	8·8	4·1	029	31	7·1	2·4	009	27	8·8	3·7	005	31	11·3	9·8	073
0·9 ,, .	30	5·5	2·7	267	30	10·8	2·4	054	31	9·3	2·8	001	30	6·8	1·8	352	27	10·1	3·0	360	31	12·2	10·6	102
1·5 ,, .	30	11·4	7·7	293	30	10·5	6·2	270	31	11·8	6·4	288	30	9·5	6·5	263	27	10·6	4·9	286	30	14·5	10·0	070
2·1 ,, .	27	14·9	12·4	302	30	14·0	8·2	263	31	16·5	13·0	267	30	14·7	12·6	267	27	13·4	10·9	272	27	12·2	8·8	071
3·0 ,, .	24	19·0	17·4	295	24	18·4	16·5	271	31	24·4	22·0	266	25	21·1	18·7	270	27	21·6	19·4	270	26	11·6	6·4	072
4·5 ,, .	16	32·4	27·5	287					31	41·7	38·6	269	23	33·2	30·9	270	27	39·0	36·5	270	3	9·3	9·1	292
5·4 ,, .	15	30·8	32·0	283					31	52·3	49·3	272	22	39·7	38·0	270	27	49·2	46·0	270	1	13·0	13·0	290
6·0 ,, .	12	41·5	38·2	280					31	57·0	54·1	268	21	46·1	43·9	271	27	55·5	52·2	270				
7·2 ,, .	5	36·2	31·1	309					25	70·6	65·4	271	17	55·4	52·4	270	22	70·5	67·7	275				
9·0 ,, .									21	87·9	82·6	269	5	67·8	67·2	266	18	93·4	88·3	270				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	MADRAS												MANGALORE											
Time in I. S. T.	0830*				1430				2030*				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·3	3·3	345	31	9·1	8·1	060	30	4·3	3·4	053	31	6·2	5·6	081	31	7·9	7·5	086	31	8·0	5·3	279
0·15 a.g.	31	9·2	7·2	022	30	9·8	9·1	065	30	12·0	10·5	053	31	7·6	5·1	025	30	13·9	11·8	078	31	9·5	4·9	292
0·3 a. m. s. l.	31	9·6	7·6	035	30	10·4	9·4	060	30	12·3	10·8	055	31	7·9	5·1	008	30	14·7	9·6	071	31	8·9	3·1	325
0·6 „	31	10·4	8·6	057	30	9·5	7·9	053	30	12·4	11·0	059	31	8·4	4·1	030	30	12·3	7·5	073	31	7·3	3·8	065
0·9 „	31	12·0	10·3	073	31	9·9	8·4	051	30	13·1	11·4	063	31	8·4	4·9	080	30	10·5	7·3	080	31	7·9	6·4	079
1·5 „	31	15·1	12·5	072	28	12·0	9·2	052	30	14·1	11·1	063	31	10·2	9·4	098	30	9·1	7·2	090	31	11·9	10·7	083
2·1 „	30	14·4	11·8	077	28	12·1	8·4	069	30	12·3	9·1	065	31	9·7	8·1	092	30	9·9	6·4	094	31	11.4	9·3	080
3·0 „	30	11·9	7·6	076	25	9·8	4 6	083	30	12·5	7·9	076	30	10·7	5·7	089	28	12·5	4·9	086	31	10·9	5.7	083
4·5 „	28	12·8	5·4	074	23	9·7	1·1	077	30	12·1	5·2	055	16	13·0	4·4	091	27	12·1	5·7	070	30	10·7	3·5	063
5·4 „	28	13·1	5·2	064	22	10·9	1·8	088	30	11·3	4·0	033	5	13·4	5·0	029	25	11·4	3·9	025	30	12·5	4·8	033
6·0 „	27	14·1	5·1	047	22	13·3	3·0	028	30	12·5	3·7	014	2	19·5	18·9	023	24	13·0	4·6	025	30	13·4	5·3	015
7·2 „	26	19·1	10·6	355	20	16·4	7·2	350	30	17·8	8·9	355					17	16·2	8·6	356	30	17·0	9·8	354
9·0 „	25	26·0	18·4	313	17	21·8	12·8	330	21	24·9	16·3	316					12	23·9	12·0	315	27	19·0	10·5	318

Station	MASULIPATNAM												MINICOY											
Time in I. S. T.	0130				0730				1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·7	1·1	128	31	4·5	3·9	020	31	5·8	5·1	124	31	4·1	3·1	017	31	3·8	3·0	024	31	6·5	5·1	028
0·15 a. g.	31	7.9	6·5	128	31	6·9	4·9	072	31	7·5	6·4	121	31	8·3	6·5	029	31	7·6	6·3	026	31	10·4	8·4	030
0·3 a. m. s. l.	31	8·4	7·1	128	31	6·9	5·4	105	31	7·5	6·2	117	31	8·4	6·8	031	31	8·1	6·8	028	31	10·4	8·7	026
0·6 „	31	8·8	6·8	114	31	8·5	7·0	119	31	7·5	4·6	102	31	8·8	7·0	043	31	9·0	7·3	037	31	10·4	9·1	033
0·9 „	31	9·8	7·3	098	31	9·5	7·1	110	31	8·3	4·5	072	31	10·7	8·8	067	31	10·8	9·4	058	31	11·0	2·6	046
1·5 „	31	11·6	6·8	062	30	12·6	7·8	063	31	11·0	6·0	053	30	13·4	10·6	082	31	14·2	11·6	074	31	11·0	8·7	064
2.1 „	30	11·9	7·2	062	28	11·3	5·2	050	31	11·4	5·6	045	30	16·2	9·8	082	31	12·5	8·6	073	30	13·6	9·0	077
3·0 „	26	9·9	2·7	303	25	9·6	1·6	331	31	10·8	2·7	329	29	16·3	9·0	079	30	15·6	7.4	077	29	15·9	9.0	078
4·5 „	12	18·1	8·7	267	23	13·8	5·9	287	30	14·7	9·6	279	22	15·3	12·9	086	27	14·3	9·9	079	23	14·7	11·4	086
5·4 „	6	20·0	14·4	251	22	17·1	10·7	282	30	15·2	11·2	274	18	15·6	13·9	081	26	16·3	11·4	075	22	15·4	11·5	078
6·0 „	5	23·2	13·8	277	19	21·0	13·0	294	30	18·3	14·3	278	11	15·1	13·4	079	26	17·2	13·7	074	18	15·4	12 6	085
7·2 „					12	24·7	21·5	297	24	25·6	21·0	290	5	18·0	16·0	063	22	17·4	14·3	046	16	19·4	15·7	068
9·0 „					10	33·0	30·2	301	18	37·0	31·6	300	2	19·0	15·9	042	18	18·0	9·3	061	13	15·6	9·9	058

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	MOHANBARI												MUSSOORIE								NAGPUR			
Time in I. S. T.	0130				0730				1430				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	0·5	0·3	094	31	1·3	1·0	055	31	1·2	0·9	047	31	2·2	0·5	078	31	2·1	1·5	195	31	3·4	1·9	029
0·15 a. g.	25	5·8	4·4	075	30	6·6	5·8	059	30	3·8	1·9	039	21	12·4	7·0	025	14	4·9	2·7	201	31	10·8	4·6	077
0·3 a. m. s. l.	25	5·6	3·9	071	30	6·6	5·8	048	30	3·9	2·6	042												
0·6 ,,	25	4·4	2·2	059	30	5·8	4·3	039	30	3·3	2·0	056									31	11·7	4·5	114
0·9 ,,	25	4·9	0·9	068	29	5·0	2·7	0·9	30	3·4	1·4	063									31	10·7	4·3	172
1·5 ,,	22	5·1	0·9	224	27	5·4	1·0	132	29	5·8	3·3	200									31	11·0	7·4	248
2·1 ,,	20	5·0	2·1	240	25	5·7	2·1	169	26	8·7	5·6	205	21	8·6	4·2	024	14	5·1	3·1	205	31	13·7	11·1	257
3·0 ,,	18	7·6	2·7	218	24	8·7	2·2	208	23	11·8	5·9	223	21	10·0	4·8	147	14	10·7	0·7	006	26	19·0	15·6	276
4·5 ,,	1	31·0	31·0	276	16	30·2	25·2	273	14	28·9	24·5	272	19	18·7	12·4	261	8	14·3	12·2	289	3	29·7	28·1	284
5·4 ,,					14	31·3	27·6	276	12	29·7	23·6	282	17	28·5	24·6	282	8	24·4	21·1	282				
6·0 ,,					10	33·1	30·8	275	10	32·4	26·7	295	14	34·0	33·1	280	8	30·3	26·3	278				
7·2 ,,					2	63·0	63·0	276	3	48·3	41·8	3·9	6	40·5	38·7	275	8	41·6	38·1	282				
9·0 ,,					1	97·0	97·0	275									1	68·0	68·0	290				

Station	NAGPUR								NEW DELHI											
Time in I. S. T.	0830*				1430				2030*				0130				0830*				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·0	2·7	047	31	5·5	1·7	233	23	4·4	3·5	107	31	4·4	4·4	346	31	5·7	2·4	336	31	7·6	4·6	311
0.15 a. g.	31	6·0	3·1	061	31	5·9	2.9	2 6	22	5·4	3·2	117	30	11·6	4·3	316	31	6·5	2·6	338	30	8·3	4·5	308
0.3 a. m. s. l.													30	9·2	3·8	333	31	6·3	2·5	337	30	8·6	4·8	307
0.6 ,,	31	7·1	3·2	107	31	6·2	3·1	216	22	6·4	2·7	131	29	11·1	4·4	325	31	8·5	2·4	338	29	9·0	4·0	320
0.9 ,,	31	10·0	4·6	196	31	6·7	4·1	224	22	8·5	2·7	188	29	10·6	4·6	287	31	10·0	3·6	317	29	10·2	4·2	315
1·5 ,,	31	11·8	7·1	245	31	9·7	6·4	230	22	10·6	6·2	246	28	10·9	7·3	282	31	11·7	6·2	291	29	11·9	6·4	306
2·1 ,,	31	13·3	9·1	260	30	13·9	9·8	266	22	14·4	10·2	265	28	12·9	10·3	276	31	12·9	8·4	270	27	15·0	2·5	337
3.0 ,,	30	18·7	14·9	265	29	20·5	15·8	264	22	20·0	17·1	293	24	18·1	16·8	273	31	15·0	13·1	262	22	20·3	16·9	272
4.5 ,,	28	29·1	25·3	275	21	28·4	23·2	280	23	28·7	26·2	275	23	14·5	14·1	279	29	28·1	25·8	267	20	29·9	26·8	281
5.4 ,,	27	32·7	29·8	275	20	32·9	28·4	280	22	33·7	31·0	276					29	35·9	33·1	270	20	37·9	35·5	278
6.0 ,,	27	36·1	33·4	274	20	36·8	32·9	280	21	37·6	34·5	277					27	42·8	40·4	271	19	43·9	41·6	276
7.2 ,,	27	45·6	42·8	274	18	45·8	41·3	280	22	45·7	42·3	278					27	52·7	49·7	265	17	51·8	50·7	280
9.0 ,,	25	54·6	52·0	277	11	57·3	52·7	280	16	59·8	55·6	282					25	67·8	65·3	272	14	66·3	63·8	277

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea-level

January 1957

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I. S. T.	2030*				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·6	2·9	338	31	1·5	1·2	238	31	1·3	1·2	226	31	3·4	0·6	281	31	5·6	5·2	049	31	4·4	4·0	051
0·15 a. g.	28	7·2	2·9	336	31	5·5	3·3	288	31	4·4	1·2	110	31	5·1	1·1	273	31	11·5	10·8	043	31	10·2	9·4	040
0·3 a. m. s. l.	28	7·0	3·0	335													31	12·0	11·3	045	31	11·4	10·8	041
0·6 „	28	8·8	3·6	327	31	3·6	2·2	236	31	2·7	1·9	214	31	4·3	0·7	275	31	13·5	12·8	053	31	13·4	12·8	062
0·9 „	28	10·4	4·5	310	31	7·9	3·2	306	31	7·6	2·4	096	31	5·2	1·5	245	31	12·9	12·1	070	30	13·1	12·2	081
1·5 „	28	11·0	3·9	286	31	11·0	2·4	142	31	11·1	3·7	155	31	6·6	2·3	235	29	13·0	10·8	076	28	13·1	11·2	096
2·1 „	28	11·8	5·8	266	31	12·0	6·0	140	31	12·0	4·5	178	31	10·0	2·8	245	23	12·7	9·0	087	26	12·5	9·2	085
3·0 „	28	16·7	12·9	262	31	12·9	3·6	264	31	14·8	5·9	284	29	13·3	6·4	281	13	9·3	5·7	070	22	11·9	7·9	082
4·5 „	28	30·2	27·1	268	18	18·1	11·8	284	27	21·1	13·0	267	26	19·2	13·3	280					16	9·9	4·2	063
5·4 „	28	36·9	34·8	270	9	22·3	20·1	281	22	22·2	19·2	281	25	25·0	18·8	278					14	11·0	4·7	075
6·0 „	26	42·9	40·4	271	7	22·7	21·4	265	22	25·0	22·3	286	24	29·1	24·9	287					13	13·8	5·9	067
7·2 „	25	56·1	53·2	267	2	19·0	19·0	270	12	31·7	30·1	284	18	36·7	32·4	287					10	14·0	4·7	102
9·0 „	21	76·0	72·5	269					5	46·6	39·8	298	10	50·5	42·7	285					3	21·7	20·3	308

Station	PORT BLAIR								RAIPUR												SANTACRUZ			
Time in I. S. T.	1430				2030*				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·8	6·5	052	27	9·4	8·9	051	31	2·9	0·9	064	31	1·6	0·4	057	31	3·5	2·0	286	31	1·4	1·1	008
0·15 a. g.	31	12·5	11·8	050	27	9·5	9·3	055	31	11·5	4·2	055	30	8·9	3·6	083	31	6·0	3·1	283	31	8·6	6·9	010
0·3 a. m. s. l.	31	12·9	12·3	052	27	9·9	9·4	057													31	9·4	7·6	007
0·6 „	31	12·4	11·6	057	27	10·9	10·4	065	31	11·3	2·2	061	30	10·0	3·2	115	31	6·0	3·6	273	31	9·5	7·0	349
0·9 „	31	11·4	10·0	063	27	11·8	11·3	073	31	8·7	1·8	246	30	9·6	2·1	179	31	6·8	4·1	261	31	8·3	4·4	344
1·5 „	25	10·9	8·9	074	27	11·7	10·5	095	31	11·4	7·1	264	30	12·3	8·3	271	31	11·0	7·3	269	31	9·6	3·4	195
2·1 „	19	11·3	7·1	084	27	12·7	9·4	099	31	14·3	10·1	275	30	15·5	11·7	282	31	14·5	9·9	275	31	12·6	5·9	178
3·0 „	16	10·2	6·5	084	27	10·6	6·6	082	30	19·1	15·2	281	30	20·3	15·2	284	31	18·7	14·9	280	30	16·8	7·5	263
4·5 „	12	9·5	2·7	049	27	10·6	4·9	097	3	27·8	27·0	285	20	24·2	20·0	291	24	28·8	24·8	278	3	23·7	17·2	256
5·4 „	9	10·3	1·3	095	27	12·6	5·2	106					16	31·5	25·3	277	24	33·6	29·9	275				
6·0 „	7	13·6	2·1	122	27	13·7	4·3	105					11	32·7	22·7	280	24	38·3	35·3	275				
7·2 „	6	13·0	8·2	116	27	14·6	3·2	014					4	35·3	35·0	285	17	47·3	43·4	276				
9·0 „	3	10·0	9·0	083	23	16·7	5·9	336									7	57·4	56·2	275				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	SANTACRUZ												TEZPUR											
Time in I. S. T.	0830*				1430				2030*				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·5	3·4	033	31	8·2	7·2	302	31	7·9	7·2	330	31	1·1	0·7	046	31	1·3	1·1	065	31	3·0	1·6	066
0·15 a. g.	31	11·4	5·4	036	31	8·2	6·0	300	31	15·8	14·2	335	26	10·1	7·7	075	26	7·0	5.6	075	29	4·2	2·5	078
0·3 a. m. s. l.	31	10·9	7·7	039	31	6·8	3·4	303	31	14·5	12·7	330	26	9·9	7·3	080	26	7·9	6·7	082	29	4·5	2·9	075
0·6 „	31	10·2	5·2	047	31	5·7	0·9	295	31	11·6	7·0	310	26	6·8	3·8	095	26	7·0	5·8	084	29	4·3	2·5	085
0·9 „	31	9·5	0·7	010	31	5·8	0·5	232	31	8·6	2·8	325	25	6·2	1·5	110	25	6·0	4·1	076	29	4·8	1·4	145
1·5 „	31	9·9	5·0	222	31	8·7	4·2	227	31	10·0	2·0	200	23	6·7	1·8	275	24	6·5	3·0	088	29	7·2	4·1	195
2·1 „	30	14·0	8·4	228	31	11·8	5·0	255	31	12·1	4·0	189	17	7·1	2·1	265	23	7·8	8·2	159	29	10·0	4·6	230
3·0 „	30	17·0	9·9	265	31	17·0	9·0	265	30	15·1	5·7	275	10	10·2	3·0	279	20	12·3	6·4	273	27	14·9	12·3	265
4·5 „	30	23·8	17·3	278	31	23·8	17·6	275	29	22.2	14·9	270					11	30·8	28·8	274	23	37·0	35·2	280
5·4 „	29	28·1	23·0	279	30	26·8	21·6	275	29	26·8	20·8	275					9	34·2	31·5	279	20	43·4	40·1	280
6·0 „	29	31·9	27·5	279	30	30·2	25·3	273	29	30·1	24·8	276					7	37·4	32·4	287	16	50·7	45·7	280
7·2 „	28	44·8	41·4	287	26	42·3	37·0	278	29	40·1	37·2	278					4	49·5	45·2	304	13	55·8	51·7	275
9·0 „	25	53·9	48·4	276	22	54·9	49·5	280	25	55·0	50.8	280					1	51·0	51·0	340	10	75·3	69·8	282

Station	TIRUCHIRAPALLI												TRIVANDRUM											
Time in I. S. T.	0130				0730				1430				0130				0830*				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·8	2·5	033	31	2·4	2·2	019	31	6·5	5·8	062	31	2·9	1·2	046	19	3·7	2·3	008	31	4·5	2·9	245
0·15 a. g.	31	12·9	12·6	050	31	10·9	10·5	026	31	11·1	10·7	062	31	7·6	2·3	335	19	4·9	1·7	030	31	7·5	5·0	241
0·3 a. m. s. l.	31	14·2	13·8	051	31	11·9	11·6	032	11	11·5	11·2	060	31	7·8	2·4	329	19	5·3	2.3	350	31	7·2	5·0	242
0·6 „	31	17·0	16·4	059	31	13·4	13·1	055	31	12·1	11·7	056	31	7·3	2·8	019	19	5·3	1·4	024	31	5·4	2·2	315
0·9 „	30	16·4	15·7	061	29	13·6	13·1	061	31	12·4	11·9	053	31	7·0	4·3	045	19	5·7	3·1	048	29	8·2	6·3	033
1·5 „	29	13·8	11·7	061	29	15·5	12·7	066	31	13·2	12·1	055	30	8·1	6·3	076	19	6·1	2·7	054	29	10·6	9·5	056
2·1	29	15·1	10·8	076	28	15·0	12·4	061	30	13·8	11·9	064	31	10·4	5·7	097	19	10·0	2·5	076	30	12·2	8·2	065
3·0 „	26	12·3	9·8	079	28	12·5	10·7	082	26	12·6	8·0	076	28	12·5	8·6	093	19	12·6	4·7	050	28	13·5	6·3	076
4·5 „	18	10·2	6·9	063	19	11·2	8·9	082	19	11·0	7·3	069	16	10·9	8·4	090	19	13·6	9·6	065	26	14·6	11·4	075
5·4 „	12	11·0	8·7	077	17	11·6	8·2	070	19	10·8	7·5	080	6	9·8	7·9	069	19	15·2	13·1	070	25	16·2	13·2	079
6·0 „	7	13·7	10·2	071	17	13·8	10·8	063	17	14·7	11·8	071	4	18·3	17·7	051	19	16·0	14·0	077	23	17·8	12·3	077
7·2 „	4	24·0	23·7	016	15	16.5	12·5	021	14	18·2	14·6	027					19	17·8	13·2	063	19	21·3	22·1	048
9·0 „					7	19·0	14·7	335	9	19·6	8·7	345					19	19·9	8·5	053	15	23·1	17·2	028

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

January 1957

Station	TRIVANDRUM				UDAIPUR												VENGURLA							
Time in I. S. T.	2030*				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	24	5·5	1·7	334	31	0·2	0·2	339	31	0·9	0·8	308	31	2·1	1·2	258	31	2·2	2.2	360	31	0·9	0·8	011
0·15 a. g.	23	7.3	2·8	326	30	5·4	3·2	005	31	5·7	3·8	315	31	5·4	0·7	241	31	12·0	11·7	005	31	9·1	7·7	045
0·3 a. m. s. l.	23	7·7	3·3	339													31	13·6	12·5	359	31	12·7	5·9	050
0·6 ,,	23	8·7	5·0	021													31	12·2	8·4	360	31	12·2	5·1	075
0.9 ,,	22	10·4	7·8	044	30	6·3	2·8	014	31	7·5	2·0	012	31	5·3	1·2	258	31	11·2	3·9	025	31	11·2	4·8	097
1·5 ,,	22	12·0	10·0	056	29	9·0	6·0	240	30	10·8	5·6	255	31	8·2	5·3	257	31	11·4	7·1	104	31	10·2	5·1	107
2·1 ,,	23	12·2	8·0	051	29	13·5	12·0	261	29	15·3	13·8	266	30	15·7	13·7	264	31	13·2	9·1	103	31	10·4	4·7	118
3·0 ,,	22	14·2	7·1	071	29	21·5	20·1	272	29	23·0	20·7	269	29	26·3	23·6	266	31	12·5	1·9	113	31	11·5	1·1	326
4·5 ,,	20	13·3	10·7	067	5	22·4	21·1	268	21	30·9	28·1	273	29	38·2	35·9	268	8	15·9	11·8	306	30	14·1	5·2	284
5·4 ,,	20	15.3	13·7	072	1	10·0	10·0	305	13	34·2	30·4	270	26	43.2	40·4	270	4	18·5	16·0	340	29	15·7	8·2	284
6·0 ,,	22	17·0	15·1	068	1	17·0	17·0	295	9	38·4	36·0	275	26	45·8	43·1	273	3	21·4	23·3	335	29	19·8	13 6	294
7·2 ,,	21	19·1	15·0	052	1	33·0	33·0	285	5	39·6	35·7	290	18	51·1	47·3	274					17	26·5	22·7	297
9·0 ,,	21	18·8	9·0	057					1	62·0	62·0	280	8	74·3	71·3	289					6	45·0	37·7	310

Station	VENGURLA				VERAVAL												VISAKHAPATNAM							
Time in I. S. T.	1430				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6.5	6·0	255	31	8·4	6·7	011	31	9·1	7·4	035	31	10·4	7·3	260	31	1·4	1·2	319	31	1·2	0·7	334
0·15 a. g.	31	7·0	6·3	270	31	15·9	13·2	013	31	16·1	13·6	032	31	9·7	5·7	275	31	4·5	0·5	277	31	4·0	1·5	355
0·3 a. m. s. l.	31	6·6	4·8	277	31	15·1	11·1	003	31	13·4	9·0	018	31	8·7	4·7	298	31	5·3	0·8	162	31	5·0	0·8	051
0·6 ,,	31	5·0	1·9	010	31	11·6	7·3	007	31	10·0	5·3	358	31	8·2	4·8	339	31	5·7	1·4	151	31	6·3	1·4	109
0·9 ,,	31	6·7	3·8	057	31	9·6	4·4	001	31	8·5	4·7	316	31	9·6	5·5	345	30	6·5	1·1	079	31	7·4	2·1	081
1·5 ,,	31	11·2	7·9	077	30	10·2	1·9	317	31	11·7	7·6	286	31	12·1	6·2	307	28	8·4	4·6	017	30	9·8	4·3	037
2·1 ,,	31	11·6	6·7	078	29	13·7	8·3	290	31	15·6	10·8	275	31	14·8	8·7	277	28	9·2	3·7	330	30	9·5	3·8	360
3·0 ,,	31	13·1	2·1	045	29	17·2	13·0	281	30	17·0	13·3	276	30	19·5	14·2	272	26	12·0	6·2	292	30	10·7	4·6	300
4·5 ,,	31	13·5	6·6	296	13	22·8	16·3	260	27	26·8	21·1	265	30	28·2	23·9	270	12	18·8	17·0	265	25	15·6	10·8	280
5·4 ,,	31	15·3	8·1	276	10	29·9	25·0	262	26	32·2	27·8	273	30	34·8	30·5	272	4	25·5	21·0	292	24	19·3	14·0	280
6·0 ,,	30	20·1	12·0	290	7	34·6	33·4	262	20	36·4	32·9	271	30	38·2	34·4	273	3	23·7	22·4	307	19	21·9	17·3	284
7.2 ,,	25	25·7	18·8	292					11	46·3	44·4	267	25	50·2	46·5	270					10	25·8	22·9	288
9·0 ,,	15	37·7	30·7	297					2	40·0	39·9	273	17	68·4	64·5	271					3	20·7	20·0	303

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

January 1957

Station	VISAKHAPATNAM			
Time in I. S. T.	1430			
Ht. in Km.	n	V	v	D
Surface	31	9·7	8·7	128
0·15 a. g.	31	8·8	6·5	125
0·3 a. m. s. l.	31	7·8	5·1	120
0·6 ,,	31	6·5	1·2	075
0·9 ,,	31	6·0	1·6	002
1·5 ,,	30	8·9	5·1	353
2·1 ,,	29	9·9	5·9	320
3·0 ,,	29	13·2	8·2	290
4·5 ,,	29	20·0	15·0	280
5·4 ,,	28	24·2	20·1	280
6·0 ,,	27	27·6	23·1	279
7·2 ,,	27	32·9	27·8	279
9·0 ,,	25	43·0	37·3	285

TABLE V—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds above 9·0 Km. above mean sea level

January 1957

Ht. in Km.	n	V	v	D
AHMEDABAD				
1430 hrs.				
10·5	4	105·7	97·5	276
12·0	1	50·0	50·0	255
14·1	1	44.0	44·0	250
AMBALA				
1430 hrs.				
10·5	4	86·3	85 3	258
12·0	1	114·0	114·0	275
ANANTAPUR				
0730 hrs.				
10·5	17	23·6	18·7	249
12·0	10	23·4	16·7	224
1430 hrs.				
10·5	18	33·4	26·7	275
12·0	11	35·0	26·5	272
14·1	4	41·3	38·8	274
16·2	2	37·0	35.0	292
18·0	1	56·0	56·0	310
BAGHDOGRA				
1430 hrs.				
10·5	1	89·0	89·0	315
BAIRAGARH				
143) hrs.				
10·5	3	79·7	78·0	285
12·0	1	69·0	69·0	275
BAMRAULI				
0830 hrs.*				
10·5	9	84·4	80·9	271
12·0	5	84·0	74·0	277
14·1	2	76·0	74·3	300
2030 hrs.*				
10·5	11	91·8	87·3	268
12·0	4	86·2	83·9	271

Ht. in Km.	n	V	v	D
BANGALORE				
0730 hrs.				
10·5	7	23·7	18·1	223
12·0	4	27·8	18·2	204
14.30 hrs.				
10·5	18	28·2	15·9	279
12·0	16	29·8	21·1	244
14·1	10	29·1	23·8	213
16·2	8	15·0	1.8	035
18·0	7	12·7	8·6	092
20·0	4	20·3	16·9	056
23·0	2	25·5	24·9	045
26·0	1	24·0	24.0	010
30·0	1	43·0	43·0	015
35·0	1	43·0	43·0	130
BAREILLY				
1430 hrs.				
10·5	1	87·0	87·0	290
12·0	1	99·0	99·0	290
14·1	1	120·0	120·0	275
16·2	1	141·0	141·0	280
BEGUMPET				
073) hrs.				
10·5	1	17·0	17·0	245
1130 hrs.				
10·5	11	52·3	43·6	292
12·0	4	52·7	50·9	282
14·1	3	47·3	46·6	279
14·2	3	40·0	36·1	266
BHUBANESHWAR				
1430 hrs.				
10·5	4	57·3	52·9	291
12·0	2	58·5	58·5	268
14·1	2	55·0	55·0	265
16·2	1	48·0	48·0	235
18·0	1	36·0	36·0	255
21·0	1	59·0	59·0	275

Ht. in Km.	n	V	v	D
COCHIN				
0730 hrs.				
10·5	5	21·6	8·2	335
12·0	2	18·0	17·7	238
14·1	2	17·5	7·9	120
1430 hrs.				
10·5	12	16·6	5·8	267
12·0	6	21·3	9·0	218
14·1	4	12·7	5·9	031
DARJEELING				
1430 hrs.				
10·5	1	73·0	73·0	330
DUMDUM				
0830 hrs.*				
10·5	19	90·7	84·7	275
12·0	14	92·1	86·6	275
14·1	1	81·0	81·0	310
2030 hrs.*				
10·5	13	86·0	80·0	275
12·0	9	91·0	82·9	272
14·2	3	80·7	79·7	257
GADAG				
0730 hrs.				
10·5	6	30·0	27·7	244
1430 hrs.				
10·5	11	32·3	21·1	267
12·0	5	30·0	25·4	219
14·1	3	10·7	8·6	221

Ht. in Km.	n	V	v	D
GAUHATI				
0830 hrs.*				
10·5	14	104·3	91·7	269
12·0	11	117·4	107·7	279
14·1	2	110·0	95·1	261
2030 hrs.*				
10·5	14	111·7	84·4	272
12·0	6	105·3	90·2	278
GOPALPUR				
0730 hrs.				
10·5	3	37·7	37·7	276
12·0	3	35·7	35·6	272
14·1	1	17·0	17·0	260
1430 hrs.				
10.5	6	48·8	46·2	261
12.0	5	60·8	57·1	271
14.1	3	67·7	65·3	272
GWALIOR				
1430 hrs.				
10.5	1	87·0	87·0	295
IMPHAL				
1430 hrs				
10.5	1	94·0	94·0	3.5

Ht. in Km.	n	V	v	D
JODHPUR				
0830 hrs.*				
10·5	13	105.7	99·8	274
12·0	5	105·8	105·6	272
14·1	1	81·0	81·0	260
16·2	1	63·0	63·0	260
1430 hrs.				
10·5	1	85·0	85·0	270
2030 hrs. *				
10·5	14	103·9	98·4	267
12·0	10	108·6	104·2.	273
14·1	1	180·0	180·0	255
MADRAS				
0830 hrs.*				
10·5	22	28·7	17·8	288
12·0	14	27·3	20·7	267
14·1	11	19·2	11·5	233
16·2	5	26·6	8·7	293
18·0	2	21·5	17·8	018
1430 hrs.				
10·5	14	24.9	17·8	297
12·0	12	28·0	22·3	262
14·1	7	19·4	13·5	236
16·2	3	19·7	18·0	318
18·0	2	15·0	13·5	319
21·0	2	33·0	27·5	058
21·0	1	30·0	30·0	010
27·0	1	49·0	49·0	350
2030 hrs.*				
10·5	20	26·5	17·8	294
12·0	13	32·1	21·8	268
14·1	11	31·3	18·9	262
16·2	9	22·3	8·0	246
18·0	3	11·7	7·7	120
MANGALORE				
0730 hrs.				
10·5	5	30·0	21·2	298
12·0	3	34·3	22·0	252
14·1	1	12·0	12·0	260

TABLE V—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds above 9·0 Km. above mean sea level

January 1957

Ht. in Km.	n	V	v	D
		MANGALORE		
16·2	1	10·0	10·0	165
18·0	1	23·0	23·0	065
20·0	1	27·0	27·0	100
23·0	1	38·0	38·0	085
		1430 hrs.		
10·5	24	21·9	10·2	268
12·0	18	26·2	14·3	252
14·1	15	22·6	12·9	255
16·2	11	18·5	6·7	318
18·0	5	17·2	9·3	039
20·0	2	9·0	9·0	062
23·0	1	32·0	32·0	095
		MUSULIPATNAM		
		0730 hrs.		
10·5	6	56·5	52·3	288
12·0	3	86·3	82·2	300
		1430 hrs.		
10·5	12	52·4	45·8	300
12·0	9	56·5	50·1	275
14·1	7	68·7	61·4	278
16·2	4	80·0	75·4	291
		MINICOY		
		0730 hrs.		
10·5	13	19·7	6·7	135
12·0	6	23·3	18·8	168
14·1	1	18·0	18·0	095
16·2	1	22·0	22·0	110
		1430 hrs.		
10·5	12	16·5	9·4	121
12·0	10	20·1	16·7	154
14·1	6	20·3	13·2	158
		NAGPUR		
		0830 hrs.*		
10·5	23	58·2	54·4	272
12·0	12	60·7	58·8	270
14·1	6	77·3	73·7	278
16·2	1	23·0	23·0	320

Ht. in Km.	n	V	v	D
		NAGPUR		
		1430 hrs.		
10·5	6	62·0	58·5	274
12·0	4	54·3	53·8	261
14·1	1	28·0	28·0	295
		2030 hrs.*		
10·5	10	65·5	62·8	293
12·0	6	62·5	59·2	280
14·1	2	40·0	38·8	262
16·2	1	41·0	41·0	265
18·0	1	30·0	30·0	275
21·0	1	13·0	13·0	285
		NEW DELHI		
		0830 hrs. *		
10·5	17	85·3	80·6	272
12·0	12	90·7	87·5	269
14·1	7	84·0	82·9	275
16·2	4	63·2	62·0	271
18·0	2	57·0	57·0	260
21·0	1	59·0	59·0	270
		1430 hrs.		
10·5	10	89·0	85·6	279
12·0	8	118·5	117·0	271
14·1	4	129·5	128·3	273
16·2	1	97·0	97·0	260
18·0	1	93·0	93·0	255
		2030 hrs.*		
10·5	16	86·2	81·9	271
12·0	11	87·1	82·2	267
14·1	7	86·1	83·6	260
16·2	2	77·0	70·7	274
		POONA		
		0730 hrs.		
10·5	3	36·0	35·9	236
12·0	1	29·0	29·0	280
		1430 hrs.		
10·5	5	52·4	45·4	266
12·0	2	49·0	47·7	228

Ht. in Km.	n	V	v	D
		PORT BLAIR		
		1430 hrs.		
10·5	3	16 3	15·3	061
12·0	2	12·5	11·7	093
14·1	1	10·0	10·0	155
16·2	1	33·0	33·0	135
		2030 hrs.*		
10·5	19	17·9	7·0	297
12·0	17	15·5	4·8	261
14·1	6	17·2	10·0	245
16·2	5	22·2	1·7	003
		RAIPUR		
		1430 hrs.		
10·5	3	67·0	65·4	273
12·0	1	75·0	75·0	255
		SANTACRUZ		
		0830 hrs.*		
10·5	22	60·3	54·0	271
12·0	17	59·0	54·9	261
14·1	10	67·4	66·0	263
16·2	4	43·7	43·7	235
		1430 hrs.		
10·5	15	58·7	52·0	268
12·0	8	64·1	52·7	273
14·1	2	74·0	73·0	299
		2030 hrs.*		
10·5	18	59·3	54·3	279
12·0	11	58·4	54·5	277
14·1	5	63·0	60·2	260
		TEZPUR		
		1430 hrs.		
10·5	8	97·1	88·7	275
12·0	1	105·0	105·0	245
14·1	1	61·0	61·0	220
		TIRUCHIRAPALLI		
		0730 hrs.		
10·5	6	24·7	12·9	277
12·0	2	26·5	24·7	266
		1430 hrs.		
10·5	5	24·0	8·6	032

Ht. in Km.	n	V	v	D
		TRIVANDRUM		
		0830 hrs.*		
10·5	17	20·4	7·2	113
12·0	13	22·9	7·9	130
14·1	8	18·6	5·9	126
16·2	3	15·7	11·0	147
18·0	1	46·0	46·0	100
		1430 hrs.		
10·5	15	19·1	6·1	062
12·0	10	18·7	8·7	164
14·1	5	11·2	3·5	192
		2030 hrs.*		
10·5	16	19·9	9·6	133
12·0	13	23·6	15·2	156
14·1	6	20·8	13·1	143
		UDAIPUR		
		1430 hrs.		
10·5	1	92·0	92·0	275
		VENGURLA		
		0730 hrs.		
10·5	1	56·0	56·0	295
		1430 hrs.		
10·5	8	47·0	41·5	295
12·0	5	46·2	45·2	297
		VERAVAL		
		0730 hrs.		
10·5	1	39·0	39·0	245
12·0	1	97·0	97·0	250
		1430 hrs.		
10·5	10	78·5	76·1	260
12·0	4	70·7	70·3	255
		VISAKHAPATNAM		
		0730 hrs.		
10·5	1	20·0	20·0	285
		1430 hrs.		
10·5	21	47·8	44·2	272
12·0	15	47·2	42·2	260
14·1	8	38·4	34·0	276
16·2	3	18·0	12·8	240
18·0	2	26·5	18·1	306

Ht. in Km.	n	V	v	D

RADIOSONDE DATA

January ~~February~~ 1957

During the month, observations of upper air temperature, pressure and humidity were made at 12 stations in India as given in the list below. For a detailed description of the instruments used a reference may be made to the I. M. D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

S. No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1.	Allahabad	Clock type	1st October 1944	03 and 15	
2.	Bombay	Clock type	7th September 1954	03 and 15	
3.	Calcutta	Clock type	13th December 1946	03 and 15	Fan type used from 13th December, 1946 to 30th November 1947.
4.	Gauhati	Clock type	22nd July 1955	03 and 15	
5.	Jodhpur	Clock type	17th April 1946	03 and 15	
6.	Madras	Fan type	29th June 1946	03 and 15	
7.	Nagpur	Fan type	1st October 1946	03 and 15	
8.	New Delhi	Clock type	3rd December 1943	03 and 15	
9.	Port Blair	Fan type	4th December 1949	15	
10.	Trivandrum	Fan type	1st July 1947	03 and 15	
11.	Veraval	Fan type	3rd October 1944	03 and 15	03 hrs. ascent started on 15.12.1956.
12.	Visakhapatnam	Fan type	8th December 1946	03 and 15	

7—10 D. D. G. Obs. Poona/61.

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From ascents at 03 hrs. G. M. T.

January 1957

Standard pressure surface mbs.	ALLAHABAD Surf. Pr. (1005 mb.)						BOMBAY (1013 mb.)						CALCUTTA (1016 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	98	287·6	292	283	284·7	31	9	292·5	296	289	290·6	29	6	292·6	297	289	288·4
1000	30	141	...	...	...	...	31	121	...	...	...	...	29	142	...	...	...	...
900	30	1032	286·3	291	279	276·5	31	1031	292·7	298	287	281·8	29	1038	286·4	290	281	280·0
850	30	1511	284·4	289	281	272·1	31	1524	289·9	296	284	279·2	29	1518	283·6	289	279	277·1
800	30	2016	282·2	287	277	267·9	31	2039	287·0	292	281	276·3	29	2022	281·6	286	277	272·9
700	30	3112	276·8	284	270	261·8	31	3153	281·3	286	276	266·4	29	3116	276·2	282	266	261·2
600	29	4347	269·5	275	261	...	31	4411	274·5	278	270	257·3	27	4355	270·4	276	266	258·3
500	28	5763	261·0	265	254	...	30	5859	266·5	271	261	...	27	5779	261·7	267	256	...
400	27	7438	250·8	259	244	...	28	7571	256·6	264	251	...	27	7459	250·3	258	245	...
300	25	9508	240·1	251	236	...	28	9680	243·0	253	236	...	25	9532	238·9	251	230	...
250	21	10780	233·4	246	226	...	27	10955	234·1	247	226	...	17	10732	231·8	245	222	...
200	19	12292	225·3	236	218	...	20	12443	223·3	237	209	...	12	12303	223·4	238	217	...
175	17	13178	221·8	231	214	...	17	13303	217·5	233	203	...	9	13186	219·8	234	210	...
150	16	14177	218·3	226	209	...	16	14273	212·5	229	193	...	8	14159	215·0	227	205	...
125	10	15342	215·0	223	206	...	9	15465	209·2	221	192	...						
100	5	16856	218·2	225	211	...												
80																		

Standard pressure surface mbs.	GAUHATI (1012 mb.)						JODHPUR (991 mb.)						MADRAS (1013 mb.)					
Surface	27	49	289·7	293	287	289·3	31	218	285·3	289	281	278·4	27	15	298·0	300	296	294·4
1000	27	150	...	...	...	...	31	114	...	...	...	...	27	132	...	...	...	...
900	27	1039	284·9	288	281	281·8	31	1029	285·5	291	279	272·5	27	1045	291·2	295	287	285·1
850	27	1516	282·0	286	277	279·1	31	1505	282·6	289	276	267·6	27	1531	289·1	293	282	278·5
800	27	2016	279·2	285	275	275·7	31	2008	280·5	285	274	264·6	27	2047	287·0	291	281	272·1
700	27	3099	273·9	277	268	269·1	31	3099	275·3	281	267	251·7	27	3169	283·7	289	280	265·3
600	27	4335	269·7	279	262	...	31	4327	268·2	274	263	...	25	4436	276·3	281	272	259·2
500	27	5754	262·6	276	236	...	31	5737	259·1	272	250	...	25	5891	268·0	272	258	...
400	27	7444	252·5	265	244	...	31	7396	248·2	257	233	...	24	7611	258·0	264	245	...
300	27	9521	240·7	258	233	...	30	9432	235·9	245	225	...	23	9728	244·2	255	227	...
250	26	10778	234·2	245	226	...	28	10683	228·7	240	215	...	20	11011	235·5	249	229	...
200	25	12272	227·1	233	219	...	25	12173	220·6	234	203	...	13	12513	225·1	232	217	...
175	17	13251	223·8	232	218	...	22	13024	217·6	230	205	...	12	13374	218·6	225	211	...
150	16	14252	220·2	232	212	...	21	13989	214·2	224	202	...	10	14351	211·7	218	208	...
125	13	15318	216·9	227	206	...	15	15090	210·3	221	203	...	8	15419	204·3	213	197	...
100	12	16719	216·1	225	205	...	11	16526	210·0	217	197	...	5	16818	201·4	206	193	...
80	7	18228	217·6	229	210	...	7	17958	212·3	219	201	...						

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From ascents at 03 hrs. G. M. T.

January 1957

Standard pressure surface mbs.	NAGPUR Surf. Pr. (980 mb.)						NEW DELHI (992 mb.)						TRIVANDRUM (1005 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	30	311	292·0	296	289	286·1	31	210	283·0	286	280	281·3	20	64	299·9	302	298	291·7
1000	30	135	...	...	...	...	30	142	...	...	...	...	20	107	...	...	...	...
900	30	1039	290·7	293	287	279·1	30	1023	283·8	289	277	276·5	20	1026	293·3	297	289	284·4
850	30	1526	287·9	291	283	274·3	30	1498	281·7	289	275	273·5	20	1517	290·9	295	287	278·7
800	30	2035	284·8	291	279	270·9	30	1997	279·5	287	272	269·7	20	2033	289·2	293	286	273·8
700	29	3140	278·9	286	273	261·5	30	3084	273·9	283	265	263·9	20	3157	284·3	287	282	266·7
600	29	4391	273·5	276	268	244·2	29	4306	266·7	275	258	...	20	4424	276·4	280	273	255·6
500	28	5831	264·6	269	257	...	28	5708	257·9	264	247	...	20	5882	268·9	273	265	...
400	28	7526	253·2	259	246	...	27	7361	247·0	251	241	...	20	7610	258·7	263	253	...
300	27	9608	239·7	248	230	...	24	9401	235·5	241	228	...	20	9732	244·3	251	237	...
250	25	10862	231·1	241	221	...	22	10641	229·6	237	224	...	19	11010	234·0	241	219	...
200	17	12350	220·8	230	212	...	20	12144	223·3	231	216	...	15	12506	224·4	231	219	...
175	15	13208	215·7	227	208	...	20	13011	220·0	230	212	...	12	13378	217·9	226	212	...
150	12	14173	210·9	223	204	...	18	13993	217·9	228	212	...	12	14353	211·1	219	205	...
125	9	15312	205·8	214	200	...	16	15155	213·3	222	206	...	9	15183	204·1	212	199	...
100	6	16662	202·3	206	197	...	12	16521	212·7	221	205	...						
80							12	17911	213·1	221	206	...						

	VERAVAL (1014 mb.)						VISAKHAPATNAM (1010 mb.)					
Surface	27	8	293·3	297	289	290·4	27	48	298·3	299	297	294·9
1000	27	130	...	...	...	...	27	135	...	...	...	...
900	27	1039	290·6	296	284	283·1	27	1049	291·4	295	285	287·0
850	27	1526	288·6	293	283	280·1	27	1537	288·9	293	282	283·3
800	27	2039	286·5	290	281	277·4	27	2049	286·2	291	282	279·2
700	27	3152	280·8	287	277	271·6	27	3165	281·4	287	276	271·0
600	27	4408	273·8	279	270	266·1	27	4425	274·7	281	267	266·8
500	27	5851	265·3	273	261	...	27	5871	266·1	271	262	...
400	26	7550	254·0	262	250	...	27	7578	255.3	264	247	...
300	20	9648	241·1	251	235	...	24	9671	240.8	254	234	...
250	19	10913	232·1	245	227	...	21	10948	232.4	246	221	...
200	13	12395	221·6	239	214	...	18	12450	222.6	235	211	...
175	11	13251	216·2	234	209	...	10	13337	218·0	224	203	...
150	9	14256	210·0	229	203	...	9	14355	213·2	218	204	...
125	5	15382	205·6	220	196	...	7	15480	207·1	213	199	...
100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	...	6	16809	201·3	207	191	...
80												

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From ascents at 15 hrs. G. M. T.

January 1957

Standard pressure surface mbs.	ALLAHABAD Surf. Pr. (1003 mb.)						BOMBAY (1012 mb.)						CALCUTTA (1013 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	98	289·1	293	285	285·6	31	9	296·1	299	295	293·7	31	6	292·6	297	290	290·2
1000	30	126	...	...	...	...	31	111	...	...	...	...	31	122	...	...	...	...
900	30	1021	286·4	292	281	276·2	31	1032	294·2	299	289	284·8	31	1026	288·1	292	284	282·9
850	30	1501	283·8	288	279	271·8	31	1524	290·7	295	287	282·0	31	1507	285·9	291	282	278·2
800	30	2007	281·3	287	275	266·6	31	2039	287·0	293	284	278·7	31	2013	282·7	288	277	273·7
700	30	3102	275·3	283	269	255·9	31	3154	280·8	285	275	270·2	31	3113	278·1	283	272	262·6
600	28	4329	268·3	274	262	...	30	4411	273·9	281	269	262·7	31	4355	270·9	277	263	256·0
500	26	5747	259·9	265	255	...	30	5853	265·2	273	256	...	31	5781	262·1	267	251	...
400	25	7419	249·6	256	243	...	29	7556	255·4	265	241	...	31	7466	251·6	261	238	...
300	22	9477	238·6	247	231	...	23	9645	241·9	254	226	...	21	9527	238·8	246	221	...
250	21	10726	231·5	241	223	...	21	10879	232·3	247	213	...	14	10781	229·7	240	208	...
200	19	12224	224·3	232	217	...	17	12449	223·9	237	214	...	10	12289	222·1	233	215	...
175	18	13097	219·9	227	214	...	17	13315	218·1	227	208	...	8	13103	216·4	223	211	...
150	13	14060	216·1	223	211	...	12	14293	213·5	228	203	...	5	14077	212·8	218	207	...
125	6	15198	215·0	220	209	...	6	15485	214·0	227	202	...						
100																		
80																		

	GAUHATI (1010 mb.)						JODHPUR (989 mb.)						MADRAS (1012 mb.)					
Surface	31	49	289·4	293	287	289·2	29	218	289·9	295	285	278·0	29	15	297·9	299	296	294·0
1000	31	130	...	...	...	...	29	128	...	...	...	...	29	119	...	...	...	...
900	31	1027	287·1	289	285	283·5	29	1024	286·8	293	281	273·4	29	1034	291·5	298	289	284·9
850	31	1506	283·7	286	281	280·0	29	1502	283·2	289	276	269·7	29	1522	288·9	294	285	277·4
800	31	2009	280·5	285	277	275·3	29	2003	280·5	286	275	264·8	29	2035	287·1	290	278	270·9
700	31	3100	274·8	280	271	266·9	29	3093	275·0	283	269	263·6	29	3153	283·0	286	276	264·0
600	28	4334	270·5	277	266	...	29	4322	268·2	277	262	...	28	4423	275·9	280	269	259·1
500	28	5758	262·3	268	257	...	28	5732	259·6	269	251	...	28	5870	267·5	275	263	...
400	27	7442	252·1	259	246	...	26	7393	248·8	257	241	...	28	7586	256·7	263	251	...
300	26	9517	239·9	248	232	...	24	9442	237·7	246	227	...	19	9697	242·3	251	238	...
250	22	10798	232·5	239	223	...	22	10694	231·0	242	224	...	17	10972	233·2	245	225	...
200	21	12309	225·7	231	220	...	20	12181	222·7	242	215	...	12	12433	220·7	228	210	...
175	14	13163	220·9	225	217	...	18	13035	219·0	241	210	...	10	13297	216·6	221	209	...
150	9	14108	215·8	219	211	...	15	13991	214·9	239	203	...	10	14264	210·6	219	200	...
125	7	15233	210·4	214	205	...	13	15132	211·1	235	198	...	7	15317	202·6	214	193	...
100							10	16546	210·4	232	196	...	6	16669	201·0	214	187	...
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From ascents at 15 hrs. G. M. T.

January 1957

Standard pressure surface mbs.	NAGPUR Surf. Pr. (977 mb.)						NEW DELHI (991 mb.)						PORT BLAIR (1002 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	23	311	295·3	298	292	285·2	31	210	285·5	290	282	283·2	27	79	298.5	300	297	294·7
1000	23	107	...	...	...	...	29	134	...	...	...	...	27	100	...	...	...	...
900	23	1025	293·6	297	290	280·0	28	1021	284·9	293	278	276·2	27	1015	291·7	295	287	287·7
850	23	1513	289·5	295	285	276·6	28	1496	282·0	287	274	271·7	27	1502	289·1	292	287	283·1
800	23	2026	285·5	290	281	274·7	28	1998	279·3	287	275	267·7	27	2017	286·7	290	283	279·2
700	23	3132	278·8	285	271	260,3	28	3087	274·0	283	266	257·9	27	3134	281·9	285	278	269·7
600	23	4382	273·3	280	264	248·8	28	4306	267·0	277	261	..	27	4394	275·3	279	271	259·7
500	22	5817	264·1	273	259	...	27	5706	257·7	269	251	..	27	5844	266·9	273	263	...
400	21	7511	254·1	264	244	...	25	7347	246·4	256	241	...	27	7558	256·3	263	250	...
300	19	9599	240·7	247	231	...	25	9374	234·5	242	228	...	23	9665	241·9	253	235	...
250	12	10898	232·0	236	225	...	23	10602	228·3	235	220	...	19	10928	232·1	239	226	...
200	8	12406	221·7	228	214	...	19	12064	223·5	229	215	...	17	12414	220·9	231	214	...
175							17	12942	220·0	227	212	...	11	13273	215·5	225	211	...
150							17	13929	216·5	223	209	...	10	14248	210.1	221	203	...
125							14	15109	214·1	220	211	...	6	15364	204.2	212	200	...
100							10	16462	211·6	219	206	...	5	16719	200.2	205	192	...
80																		

Standard pressure surface mbs.	TRIVANDRUM (1003 mb.)						VERAVAL (1012 mb.)						VISAKHAPATNAM (1008 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	24	64	299·8	301	298	293·2	28	8	295·2	297	293	293·4	28	48	298·1	300	297	295·5
1000	24	93	...	...	...	...	28	117	...	...	...	...	28	120	...	...	...	...
900	24	1013	293·1	296	290	286·3	28	1030	291·0	296	285	282·3	28	1035	292·0	298	287	287·5
850	24	1504	289·7	292	284	282·8	28	1517	288·1	293	283	279·2	28	1524	288·5	293	285	283·1
800	24	2020	287·7	291	285	276·7	28	2028	285·8	291	282	275.0	28	2036	286·3	292	282	280·4
700	24	3141	283·7	287	281	265·8	27	3141	280.4	284	277	269·8	28	3150	281·7	286	279	271·4
600	24	4405	275·8	280	273	257.2	26	4399	273·2	279	270	267·0	27	4410	274·9	283	271	263·3
500	23	5857	267·5	272	265	...	26	5839	264·3	271	259	...	27	5858	265·8	274	261	...
400	23	7571	256·7	265	250	...	26	7533	252·8	257	248	...	26	7555	254·8	265	245	...
300	22	9673	241·9	249	235	...	24	9618	240·1	247	228	...	24	9609	240·3	251	233	...
250	17	10944	231·3	237	225	...	16	10834	232·6	239	228	...	18	10912	231·2	242	225	...
200	15	12443	220·8	228	213	...	13	12392	222·5	231	216	...	11	12338	218·7	224	212	...
175	11	13319	215·4	223	209	...	9	13246	2.6·3	224	207	...	9	13194	212·9	218	207	...
150	8	14284	209·1	218	204	...	7	14229	209·7	217	198	...	7	14147	206·4	212	201	...
125	6	15368	202·7	212	194	...												
100																		
80																		

NOTE.— Number of observations refer to those of dynamic height.

Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273° A.

Means are not worked out for less than five observations at standard pressure surfaces.

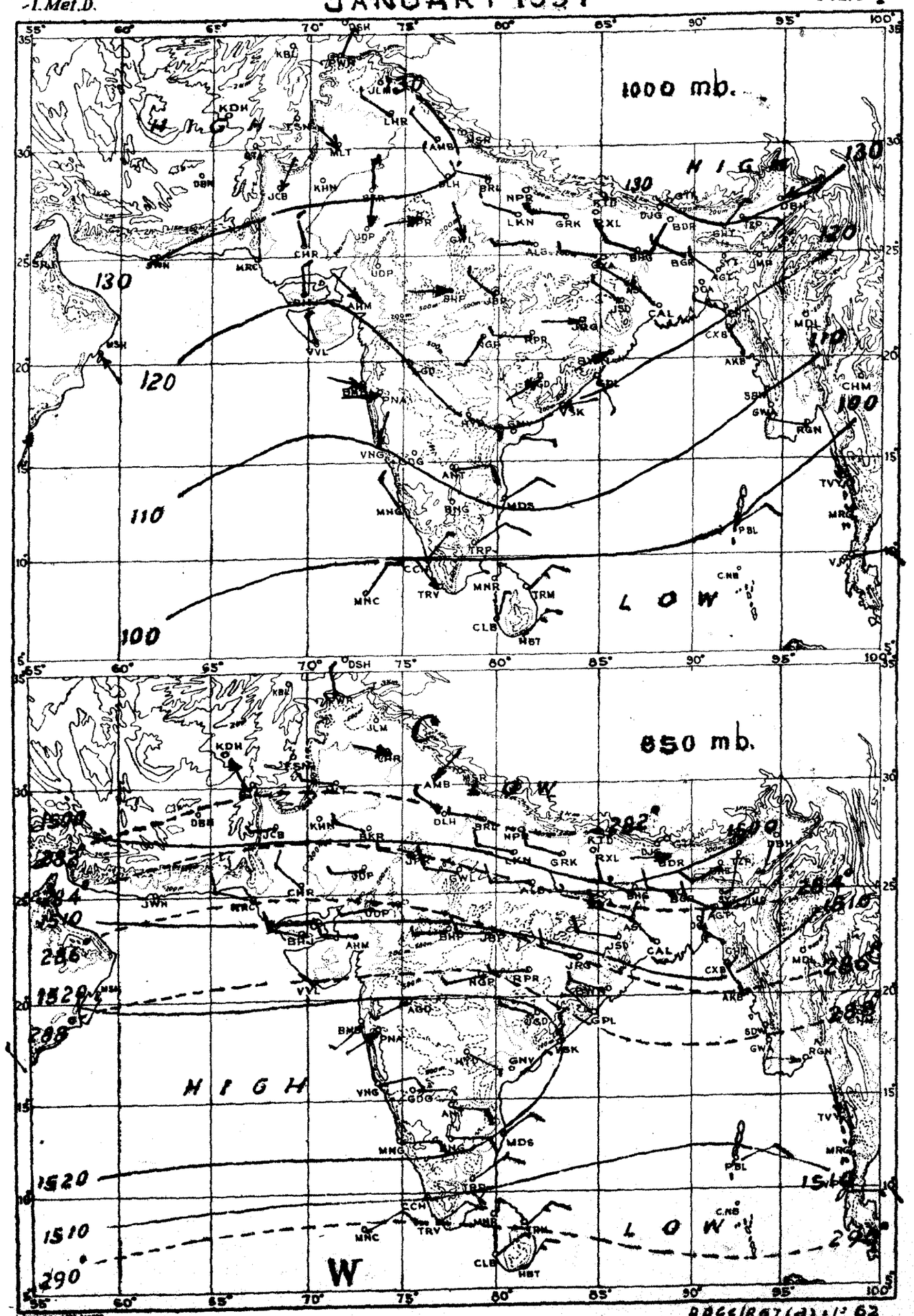
GIPN—84—10 D. D. G. Obs. Poona/61—31-7-62—263.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

-I.Met.D.

JANUARY 1957

Plate I



RESULTANT WIND — 5 Knots, — 10 Knots, — 50 Knots.

---------- Isotherms in degrees absolute. ——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I.Met.D. **JANUARY 1957** *Plate II*

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

-------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

DD 66/867(b) : 1:62

Registered No. B-3097

INDIA WEATHER REVIEW, 1957

Monthly Weather Report

February

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Published by authority of the Government of India

Chief features :—

(1) Subnormal activity of the western disturbances resulting in deficient or scanty precipitation over most parts of northern India, (2) A moderate cold wave over northwest India, Gujarat and Saurashtra and Kutch during the second week of the month.

Seven western disturbances moved across the northern parts of the country during the month. The third one which was fairly active caused good precipitation in Jammu and Kashmir, Himachal Pradesh and the Punjab-Kumaon hills. A diffuse low pressure area induced by this western disturbance over the central parts of the country caused good rainfall in east Madhya Pradesh and northeast India on the 11th. The first, fifth and sixth western disturbances caused local or scattered precipitation in Jammu and Kashmir only. The remaining western disturbances were feeble and did not cause any precipitation. Details of the movement and activity of the western disturbances are given in the following table:—

Statement showing the movement and activity of western disturbances in the month of February 1957

S. no.	Period	Course	Regions affected	Nature of precipitation	Period	Remarks
1	1st—2nd	Northern divisions of West Pakistan-Jammu and Kashmir.	Jammu and Kashmir	Local rain or snow	2nd	
2	2nd—4th	Baluchistan—Punjab-Kumaon hills.	..	..	..	Did not cause any precipitation.
3	5th—9th	Baluchistan-Punjab-Kumaon hills.	Jammu and Kashmir Jammu and Kashmir.	Scattered rain or snow Fairly widespread or local rain or snow.	7th 8th and 9th.	
			Himachal Pradesh and the Punjab-Kumaon hills.	Scattered rain or snow	8th and 9th.	
3(a)	10th—12th	Southeast Madhya Pradesh-Orissa-Gangetic West Bengal-Assam.	Gangetic West Bengal	Fairly widespread thunder showers.	11th	Induced by Western disturbance No. 3
			Chota Nagpur	Local thundershowers	11th	
			Bihar, Orissa, east Madhya Pradesh and Assam	Scattered thundershowers.	11th	
4	12th—14th	Baluchistan-Jammu and Kashmir.	..	..	..	Did not cause any precipitation.
5	16th—20th	Afghanistan-Jammu and Kashmir.	Jammu and Kashmir	Scattered rain or snow	20th and 21st	
5(a)	18th—20th	Sind and adjoining west Rajasthan-northwest Uttar Pradesh.	..	..	..	Did not cause any precipitation.
6	21st—23rd	Baluchistan-Jammu and Kashmir.	Jammu and Kashmir	Scattered rain or snow	24th	
7	24th—26th	Extreme north of the country.	..	..	..	Did not cause any precipitation.

In the wake of the third western disturbance, cold air from the north swept over northwest India, the central parts of the country, Gujarat and Saurashtra and Kutch. A moderate cold wave prevailed over the Punjab(I) and Rajasthan on the 9th. It extended to Gujarat and Saurashtra and Kutch on the 10th and to west Madhya Pradesh on the 11th. Kotah recorded a minimum temperature of 0°C on the 11th which was 13°C below normal.

A shallow trough of low pressure appeared over Vidarbha and the adjoining parts of Madhya Pradesh on the 21st. Moving slowly northeastwards, it lay over Deltaic West Bengal and neighbourhood on the 24th and became unimportant thereafter. Under its influence, scattered thunder showers occurred in east Madhya Pradesh on the 21st and 22nd, in Bihar on the 23rd and in Assam on the 24th. Another shallow trough which appeared over north Mysore and adjoining Telangana on the 25th moved away northeastwards as a low pressure wave across east Madhya Pradesh, Orissa and Gangetic West Bengal. In association with this, fairly widespread or local thundershowers occurred in Vidarbha and east Madhya Pradesh on the 26th and in Chota Nagpur, Orissa and Gangetic West Bengal on the 27th.

1—11 D. D. G. Obs. P./61

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In association with the movement of an easterly wave across the extreme South of the Peninsula, local or scattered showers occurred in Madras State on the 2nd and 3rd. Another easterly wave moving across Ceylon induced a feeble trough of low pressure off the Malabar coast on the 16th which persisted there upto the 19th. Under its influence, scattered showers occurred in the extreme south of Peninsula between the 16th and 18th. The third easterly wave of the month which moved across the Comorin area caused local or scattered showers in Kerala on the 21st and 22nd. A feeble trough of low pressure appeared off the Malabar Kanara coasts on the 27th. The trough moved northwards and lay off the Konkan coast on the 28th. In association with it, scattered showers occurred in Telangana and the States of Madras, Mysore and Kerala on the 28th.

The total rainfall for the month was in large excess in Kerala and in moderate excess in Assam. It was in slight defect in Gangetic West Bengal, Jammu and Kashmir and coastal Andhra Pradesh, in moderate defect in the Bay Islands, Orissa, Chota Nagpur and north Mysore and in large defect elsewhere over the country.

Mean maximum temperature was below normal in Assam, Sub-Himalayan West Bengal and Jammu and Kashmir and normal elsewhere. Mean minimum temperature was below normal in Uttar Pradesh, Northwest India, West Madhya Pradesh, Gujarat, Saurashtra and Kutch and Vidarbha and normal over the rest of the country.

Mean relative humidity was in defect in Gangetic West Bengal, Orissa, Chota Nagpur, East Uttar Pradesh, West Rajasthan, Madhya Pradesh, Gujarat, the Konkan, Vidarbha and North Mysore and normal elsewhere.

Mean cloud amount was in excess in Assam, the Konkan, Maharashtra, Vidarbha, coastal-Andhra Pradesh, North Mysore and Kerala. It was in defect in Gangetic West Bengal, Chota Nagpur, Bihar, Uttar Pradesh, the Punjab (I) and Rajasthan and normal over the rest of the country.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amount for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
Dated the 17th July 1958.

S. S. LAL,
for *Director General of Observatories.*

Errata to Monthly Weather Report for February, 1957

Page No.	Station	Hour	Column	For	Read
Table I - Division					
57	7. Jammu and Kashmir	-	2(2nd Line)	-1.9	-9.1
Sub-Division					
57	8. Uttar Pradesh (East)	-	8(2nd Line)	-9.8	-0.8
57	12. Jammu and Kashmir	-	2(1st Line)	4	74.4
"	12. Jammu and Kashmir	-	2(2nd Line)	-9.4	-9.1
Table II					
58	Silchar	-	18	1.	1.2
60	Mainpuri	-	8	..	4
"	Mandi	-	11	8.9	9.0
"	Srinagar	-	15	Blank	4
"	Srinagar	-	16	2	-2.2
"	Kotah	-	9	11	1
"	Gwalior (P.B.O.)	-	1	Gwailir (P.B.O.)	Gwalior (P.B.O.)
"	Kanker	-	13	6.7	6.8
63	Palayamcottai	-	9	9,22	7,22
"	Bidar	-	20	0	2
"	Bidar	-	21	2	0
"	Belgaum (Sambre Aerodrome)	-	10	Blank	0
"	Hassan	-	16	+.6	+0.6
"	Bangalore (Central Observatory)	-	1	Bangalore (Central Aerodrome)	Bangalore (Central Observatory)
"	Bangalore (Aerodrome)	-	14	3	..
"	Gherrapunji	-	18	10	10.7
"	Kalimpong	-	19	6.2	-6.2
64	Tapoban	-	11	-0.5	0.5
"	Dalhousie	-	13	5.5	5.6
"	Mercara	-	9	9.11(c)	9,11(e)
"	Panchet Hills	-	18	6.7	6.7
65	Tehri	-	13	1.3(e)	2.3(i)
"	Nawakot	-	2	21.4	21.4
"	Sallyana	-	20	..	0
"	Sallyana	-	25	0	..
"	Taplejung	-	1	Tapujung	Taplejung
Table III					
66	Dibrugarh(Mohanbari Aerodrome)	1130	11	7	67
67	Gauhati(Kaikuchi Aerodrome)	0530	7	12.11	12.1
"	Dhubri	0830	16	Blank	0
"	Malda	1730	27	0	3

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Page No.	Station	Hour	Column	For	Read
68	Barrackpore	1130	25	Blank	8
"	Suri	0830	27	Blank	4
"	Cuttack	1730	23	Blank	5
"	Bhubaneshwar	0830	3	Blank	"
69	Sambalpur	0830	7	19.0	19.9
"	Dhanbad	1730	18	28	27
70	Azamgarh	0830	4	0014.3	1014.3
"	Allahabad (Bamrauli)	1130	3	Blank	"
71	Pathankot	0830, 1730	16,17	Blank	0
72	Gilgit	-	1	Gilglt	Gilgit
"	Jaisalmer	1730	11	Blank	35
"	Jodhpur	0830	14	Not clear	-1.3
"	Jodhpur	1730	15	Not clear	10.7
73	Jaipur (Sanganer Aerodrome)	1130	9	3E9	3.9
"	Kotah	1130	5	986.0	986.6
"	Jhalawar	0830	9	3.5	3.4
"	Udaipur	0830	6	+1.1	+0.1
"	Guna	0530	25	1	0
74	Seoni	1730	4	1009.1	1009.2
"	Pendra	0530	8	9.8	9.3
75	Bhuj (Aerodrome)	1130	15	3.0	13.0
76	Bombay (Colaba)	0830	14	+0.6	+0.5
"	Bombay (Santacruz Aerodrome)	0830	6	+0.1	+0.4
"	Ratnagiri	0830	6	..	0
"	Aurangabad	0830	21	Not clear	13
"	Aurangabad	0830	22	Not clear	1
77	Sholapur	0530	27	1	2
"	Sholapur	1130	3	Blank	"
"	Kolhapur	0830	5	949.	949.7
"	Nellore	1130	5	1011.14	1011.4
"	Gannavaram	0530	24	Blank	0
78	Ramagundam	1730	24	2	3
"	Hyderabad (Begumpet Aerodrome)	0830	22	Blank	6
"	Anantapur	1730	5	969.5	969.6
79	Pamban	0830	3	4	11
"	Pamban	1730	7	26.3	27.3
"	Coimbatore	1730	8	30.3	20.3
"	Salem	0530	5	9802	980.2
"	Vellore	0830	5	989.4	989.9
80	Gadag	0830	12	-1.3	-13
"	Raichur	0830	3	440	400
"	Bellary	0830	6	-0.44	-0.4
"	Chitaldrug	0830	6	-0.1	-0.4
"	Shimoga	1730	26	1	2
"	Kozhikode	0830	6	-0.	-0.5
"	Cochin (Naval Air Station)	0830	4	012.6	1012.6
81	Punalur	-	1	Pnalur	Punalur
"	Kohima	1730	4	15.06.4	1506.4
"	Shillong	0830	14	0.5	-0.5
"	Nandi Hills	0830	26	3	12
83	Gangtok	1130	5	8.1	18.1

Page No.	Station	Ht. in Km.	Hour	Column	For	Read
Table IV						
86	Amausi	9.0	1430	n	Blank	2
"	Amausi	9.0	1430	V	.0	91.0
88	Begumpet	6.0	0730	D	Not clear	285
"	Begumpet	0.15	1430	D	Not clear	143
"	Bhagalpur	0.9	0730	V	Not clear	14.5
89	Bhubaneshwar	0.15	0730	v	8.1	3.1
"	Bhuj	Surface	0130	D	35	315
90	Gadag	Surface	0730	V	2.6	2.7
94	Mangalore	7.2	0130	V	230	23.0
97	Tezpur	0.6	0730	D	27	127
"	Trivandrum	4.5	0830*	D	0842	084
98	Vengurla	9.0	0730	D	275	257
"	Veraval	5.4	1430	V	39.9	34.9
Table V						
100	Ambala	18.0	1430	v	13.0	31.0
"	Gopalpur	12.0	1430	v	33.0	33.3
"	Madras	14.1	1430	v	5.4	15.4

Table VI

Page No.	Station	Standard Pressure Surface mb.	Column	For	Read
103	Bombay	900	Max.	Not clear	298
"	Bombay	600	Ht.gpm.	-do-	4405
"	Bombay	250	Mean	-do-	232.4
"	Gauhati	175	Ht.gpm.	-do-	13069
"	Jodhpur	800	Dew Point	-do-	263.8
"	Madras	800	Max.	-do-	293
"	Madras	700	Mean	238.8	283.8
"	Madras	300	Mean	Not clear	238
"	Madras	200	Max.	-do-	231
104	New Delhi	600	Ht.gpm.	-do-	4308
"	New Delhi	150	Ht.gpm.	-do-	13946
"	New Delhi	100	Mean	229.2	209.2
"	Trivandrum	175	Ht.gpm.	Not clear	13343
"	Veraval	150	Ht.gpm.	-do-	14182
"	Visakhapatnam	500	Ht.gpm.	5775	5875
105	Bombay	Surface	Ht.gpm.	9	13
"	Bombay	700	Ht.gpm.	315.2	3152
106	Nagpur	150	Ht.gpm.	15111	14111
"	Nagpur	125	Ht.gpm.	14263	15263
"	New Delhi	700	Ht.gpm.	Not clear	3086
"	New Delhi	175	Max.	Blank	227

Deo./15.3.63.

	Rainfall (millimetres)	Percentage of normal	Mean maximum temprature °C.	Mean minimum temperature °C	Relative humidity. % (830 hrs. IST.)	Relative humidity. % (1730 hrs. IST.)	Cloud. (830 hrs. IST.)	Cloud. (1730 hrs. I.S.T.)
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura).	56.1	140	23.2	13.0	82	66	4.1	3.5
	+16.0	..	−1.5	+0.6	0		+0.8	
2. West Bengal .	21.3	79	26.7	14.8	65	49	1.6	1.5
	−5.6		−0.9	+0.4	−6		−0.5	
3. Orissa . .	19.6	73	29.4	17.7	66	53	1.8	2.0
	−7.1		−0.3	0	−6		−0.2	
4. Bihar . .	9.6	38	26.0	11.7	60	45	1.5	1.5
	−15.6		−0.3	−0.7	−6		−0.5	
5. Uttar Pradesh .	0.6	3	24.1	8.7	63	38	0.9	1.2
	−21.6		−0.8	−1.4	−7		−1.1	
6. Punjab (I) (Including Himachal Pradesh and Delhi)*	0.6	2	22.9	6.9	68	34	0.8	1.0
	−30.0		−0.5	−1.9	−1		−1.7	
7. Jammu and Kashmir.	74.4	89	7.9	−2.4	67	58	4.9	5.3
	−1.9		−1.3	−1.4	−3		+0.1	
8. Rajasthan .	0	0	25.7	8.6	47	19	0.9	0.9
	−7.9		−0.5	−2.0	−8		−1.2	
Sub-Division								
1. Bay Islands .	15.8	56	30.6	21.5	69	75	3.1	2.4
	−12.4		+0.9	+0.1	−2		+0.2	
2. Assam (Including Manipur & Tripura).	56.1	140	23.2	13.0	82	66	4.1	3.5
	+16.0		−1.5	+0.6	0		+0.8	
3. Sub-Himalayan West Bengal.	8.0	41	24.1	12.5	72	43	1.7	1.5
	−11.5		−1.5	+0.3	−3		+0.1	
4. Gangetic West Bengal.	26.3	89	27.4	15.4	63	51	1.6	1.5
	−3.4		−0.8	+0.4	−7		−0.7	
5. Orissa . .	19.6	73	29.4	17.7	66	53	1.8	2.0
	−7.1		−0.3	0	−6		−0.2	
6. Chota Nagpur .	22.5	55	26.7	12.4	55	41	1.7	1.8
	−18.7		−0.1	−1.0	−9		−0.5	
7. Bihar . .	4.4	24	25.5	11.2	64	47	1.3	1.4
	−14.3		−0.5	−0.6	−4		−0.5	
8. Uttar Pradesh (East).	0.1	1	24.7	9.3	62	38	1.0	1.0
	−18.5		−1.0	−1.4	−8		−0.8	
9. Uttar Pradesh (West).	1.0	4	23.5	8.0	64	37	0.8	1.4
	−25.1		−0.6	−1.5	−5		−1.5	
10. Punjab (India) (including Delhi.)	0.6	2	22.9	6.9	68	34	0.8	1.0
	−30.0		−0.5	−1.9	−1		−1.7	
11. Himachal Pradesh.	5.9	..	20.7	4.5	88	39	2.7	2.9
	..		..	..	..		..	
12. Jammu & Kashmir.	4	89	7.9	−2.4	67	58	4.9	5.3
	−9.4		−1.3	−1.4	−3		+0.1	
13. Rajasthan (West)	0	0	25.7	8.6	44	18	0.9	0.9
	−10.7		−0.3	−1.5	−17		−1.6	
14. Rajasthan (East)	0	0	25.7	8.6	49	20	0.9	1.0
	−5.1		−0.7	−2.5	−1		−0.8	
15. Madhya Pradesh (West).	0	0	27.1	9.9	44	22	1.7	1.7
	−8.5		−1.0	−1.9	−7		+0.2	

	Rainfall (millimetres)	Percentage of nor	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity. % 0830 hrs. IST	Relative humidity. % 1730 hrs. IST	Cloud. 0830 hrs. IST	Cloud. 1730 hrs. IST
1	2	3	4	5	6	7	8	9
Division—contd.								
9. Madhya Pradesh	3.5	23	27.6	10.8	48	25	1.7	1.8
	−11.7		−0.5	−1.5	−8		+0.1	
10. Bombay . .	0.6	15	30.0	14.2	52	33	1.5	1.5
	−3.3		−0.6	−1.3	−4		+0.3	
11. Andhra Pradesh	1.4	12	31.7	19.2	67	45	2.4	2.0
	−10.2		−0.2	−0.3	−3		+0.3	
12. Madras . .	7.5	48	30.9	21.3	75	51	2.8	3.0
	−8.1		−0.6	+0.5	−4		+0.1	
13. Mysore . .	1.8	44	31.3	18.5	59	33	2.1	2.6
	−2.3		−0.5	+0.4	−3		+0.5	
14. Kerala . .	65.8	445	31.3	24.2	78	70	3.1	3.9
	+51.0		+0.1	+0.9	+2		+1.1	
Mean of India .	7.1	47	27.8	13.4	59	37	1.7	1.8
(Excluding Jammu & Kashmir and Himachal Pradesh).	−8.1		−0.5	−0.9	−5		−0.2	
Sub-Division—Contd.								
16. Madhya Pradesh (East).	8.4	34	28.3	12.0	54	29	1.7	1.9
	−16.3		+0.1	−0.8	−8		−0.1	
17. Gujarat . .	0	0	30.1	11.6	47	19	1.4	1.1
	−2.6		−1.0	−2.4	−11		+0.2	
18. Saurashtra and Kutch	0	0	28.1	12.0	58	33	1.4	1.0
	−3.0		−0.7	−1.9	+1		0	
19. Konkan . .	0	0	28.3	18.1	62	60	1.6	1.7
	−0.9		−0.2	−0.8	−6		+0.6	
20. Maharashtra .	0	0	31.9	13.8	47	27	1.3	1.7
	−3.1		−0.4	−0.5	−1		+0.4	
21. Vidarbha .	4.8	34	31.5	14.2	43	22	2.1	2.1
	−9.2		−0.8	−1.2	−6		+0.5	
22. Coastal Andhra Pradesh.	1.1	82	30.9	20.0	75	59	2.9	2.3
	−12.3		−0.3	−0.4	−3		+0.5	
23. Telangana .	3.4	25	32.0	17.2	59	27	2.0	1.9
	−10.2		+0.3	−0.3	−4		+0.2	
24. Rayalaseema .	0	0	33.7	19.7	57	30	1.1	1.2
	−5.9		−0.7	−0.2	−4		−0.1	
25. Madras . .	7.5	48	30.9	21.3	75	51	2.8	3.0
	−8.1		−0.6	+0.5	−4		+0.1	
26. Coastal Mysore	0	0	31.0	21.7	75	63	2.3	2.1
	−1.0		−0.1	+0.2	+1		+0.2	
27. Mysore (North)	3.0	59	32.1	18.2	46	26	1.9	2.4
	−2.1		−0.4	+0.2	−7		+0.9	
28. Mysore (South)	1.4	30	30.5	17.7	65	29	2.1	2.9
	−3.2		−0.7	+0.7	0		+0.3	
29. Kerala (including Laccadives)	65.8	445	31.3	24.2	78	70	3.1	3.9
	+51.0		+0.1	+0.9	+2		+1.1	

Note.—The entries in the second line for each division and sub-division indicate departures from normal.
*Data of Himachal Pradesh not included.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—FEBRUARY 1957

Division and station	Air temperature in °C								Rainfall in Millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours.	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																											
Maya Bandar	27·1	..	29·0	2	21·8	..	18·6	6	0	0	..	0	..	0	..	11·5	7·3	..	0	0	0	0	0	0	0	0	0	0
Long Island	29·8	..	30·7	2	21·2	..	18·4	6	46·2	51·8	..	47·5	14	2	..	3·6	1.5	..	2	0	0	1	0	0	0	0	0	0
Port Blair	30·6	+0·9	31·9	24	21·5	+0·1	18·1	6	2·5	15·8	—12·4	15·5	14	1	—1·0	7·5	4·5	—6·9	2	0	0	0	4	0	0	0	0	0
Car Nicobar	30·0	..	30·8	17,28	21·6	..	16·6	7	0·5	7·6	..	5·3	17	1	..	9·9	6·3	..	4	0	0	0	0	0	0	0	0	0
Nancowry	31·0	..	33·0	25	24·1	..	21·5	7	12·2	14·7	..	9·1	4	2	..	0·4	0.2	..	2	0	0	1	0	0	0	0	0	0
Kondul	28·6	..	29·3	27	24·8	..	21·1	8	0	17·3	..	17·3	23	1	..	10·8	9·3	..	1	0	0	0	0	0	0	0	0	0
Assam (Including Manipur & Tripura)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pasighat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	2	0	0	0	0	0	0
Digboi	20·8	..	24·9	20	12·1	..	8·4	13	11·3	68·1	..	13·4	21	8	..	..	..	..	10	0	0	0	0	0	0	0	0	0
Dibrugarh	21·4	—1·4	25·5	20	13·2	+0·6	9·7	6	12·8	76·2	+14·2	14·5	15	10	+3·8	3·4	2·1	+0·5	15	0	0	4	0	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	21·4	..	27·2	26	12·0	..	8·5	6	13·9	90·1	..	17·7	4	12	..	7·1	4·3	..	14	0	0	9	0	2	0	0	1	0
North Lakhimpur	21·1	..	25·6	26	11·4	..	7·6	13	19·7	108·1	..	21·3	11	11	..	..	..	..	14	0	0	2	0	0	0	0	0	0
Sibsagar	21·9	—0·9	26·9	26	13·0	+1·0	9·5	13	11·9	76·9	+25·1	19·8	21	9	+3·8	5·6	4·0	+1·1	13	0	0	7	6	0	0	0	0	0
Jorhat	22·7	..	26·7	25	12·2	..	8·9	13	5·9	56·9	..	12·5	12	9	..	..	..	..	11	0	0	1	0	0	0	0	0	0
Golaghat	23·3	..	28·9	26	..	..	..	..	0·5	38·7	..	10·2	4,28	6	..	..	..	..	7	0	0	0	0	0	0	0	0	0
Gohpur	22·6	..	26·6	26	10·9	..	5·2	6	54·9	57·5	..	19·6	21	4	..	6·9	4·8	..	4	0	0	0	0	0	0	0	0	0
Tezpur	24·0	—0·7	27·8	25, 6	13.9	+0·6	10·6	6	0·8	41·5	+14·1	18·8	11	5	+2·3	..	..	..	6	0	0	1	0	0	0	0	0	0
Tezpur (P.B.O.)	23·5	..	27·5	26	13·2	..	10·0	6	1·0	43·4	..	18·5	11	5	..	5·0	3·3	..	6	0	0	2	0	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	3·8	30·1	..	14·0	11	4	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Chaparmukh (R)																												
Tangla	..	..	..	..	..	..	..	..	0	49·3	..	29·3	11	5	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Gauhati (h)	23·5	—2·1	28·0	26	13·5	+1·4	..	..	4·7	19·3	..	..	..	..	..	4·8	1·8	—0·6	..	0	0	0	0	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	24·6	..	29·3	26	11·4	..	7·9	16	5·1	19·9	..	16·5	28	1	..	7·5	4·9	..	4	0	0	4	2	0	0	0	1	0
Rangiya	24·1	..	27·8	28	12·8	..	9·9	22	4·8	33·1	..	13·2	1	4	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Goalpara	24·9	..	28·6	25,26	11·9	..	7·7	16	0	16·8	..	14·0	28	2	..	4·1	2·1	..	2	0	0	0	0	0	0	0	0	0
Dhubri	24·3	—0·7	28·7	26	14·0	+0·6	11·0	16	24·9	27·9	+9·1	24·9	28	2	+0·5	6·6	6·0	+0·4	2	0	0	1	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome)	24·9	..	28·7	27	10·6	..	6·8	16	11·9	13·5	..	11·2	28	1	..	0·9	4·6	..	2	0	0	3	0	0	0	0	0	0
Tura (R)	26·2	..	31·2	22	13·3	..	8·4	3	24·4	49·8	..	24·6	24	3	..	8·5	5·1	..	5	0	0	1	6	0	0	0	0	0
Agartala	25·0	—2·0	28·8	23	13·1	—0·1	8·8	17	1·5	74·1	+26·1	33·8	21	5	+1·4	2·9	1·	—1·2	5	0	0	4	0	0	0	0	0	0
Silchar	21·2	..	23·8	11,26,27	6·9	..	1·3	17	3·1	51·1	..	14·5	28	5	..	12·5	7·6	..	8	0	0	0	0	0	0	0	0	0
Imphal	20·4	..	23·3	27	11·1	..	8·1	6	0	30·1	..	15·2	28	4	..	..	..	..	8	0	0	1	0	0	0	0	0	0
Haflong	25·5	+0·4	29·9	24	10·1	+0·1	6·7	13	32·8	40·0	+7·0	24·5	28	2	—1·0	4·7	2·6	..	3	0	1	1	0	0	0	0	0	0
Lumding																												
Sub-Himalayan West Bengal																												
Cooch Behar (C.W.O.)	24·4	..	27·7	27	10·7	..	7·1	13	11·7	15·5	—5·1	15·5	28	1	—0·8	6·5	3·6	..	1	0	0	2	1	0	0	0	0	0
Jalpaiguri	22·9	—2·0	26·6	25	12·4	+0·3	9·5	12	1·5	4·5	—12·5	3·5	28	1	—0·4	7·5	4·9	+2·8	2	0	0	2	0	0	0	0	0	0
Bagdogra	24·1	..	27·8	27	9·4	..	5·9	12,13	0·8	2·3	..	1·3	28	0	..	7·4	4·1	..	2	0	0	1	1	0	0	0	0	0
Malda	25·4	—0·9	30·2	22	12·7	+0·4	8·9	13	3·1	4·1	—17·0	2·3	11	0	—1·7	8·5	5·0	+0·3	3	0	0	3	2	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	28·2	..	33·2	21	15·1	..	10·4	13	6·6	30·8	..	17·0	11	3	..	7·2	4·5	..	3	0	0	2	5	0	0	0	0	0
Calcutta	28·2	—0·5	33·3	21	16·3	+1·1	11·0	11	3·4	21·0	—8·7	12·9	11	3	+1·2	7·0	4·2	0	3	0	0	1	15	0	0	0	1	0
Barrackpore	27·7	..	32·4	22	14·9	..	9·4	6	0·3	44·3	..	20.1	11	3	..	..	..	..	4	0	0	2	6	0	0	0	0	0
Saugor Island	26·0	—1·0	28·6	26	19·0	+0·9	14·2	14	2·0	9·6	—19·6	5·6	28	1	—0·8	..	..	..	3	0	0	1	4	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	6·4	33·1	+18·9	12·5	12,28	3	+1·9	..	..	..	5	0	0	1	0	0	0	0	0	0
Contai	28·1	..	32·4	25	17·5	..	12·0	13	0	10·2	..	6·9	27	1	..	9·0	6·8	..	3	0	0	0	0	0	0	0	0	0
Midnapore	28·4	—1·3	32·8	21	15·5	—0·7	10·7	13	0·3	49·3	+15·0	32·0	11	3	+1·0	5·9	4·5	+1·4	3	0	0	0	0	0	0	0	0	0
Purulia	26·8	..	31·7	21	14·2	..	10·4	13	13·7	28·2	..	21·6	11	3	..	6·0	3·0	..	3	0	0	1	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	25·4	—3·6	16·5	11	2	—0·1	..	..	..	2	..	..	..	..	..	..	..	..	..
Burdwan	26·8	—1·7	31·6	21	14·9	+0·2	10·8	13	11·4	19·6	—13·9	18·8	11	1	—1·0	5·4	3·8	+1·4	2	0	0	0	0	0	0	0	0	0
Krishnagar	28·7	+0·5	33·6	22	14·0	+0·8	9·2	13	14·0	35·5	+6·3	28·4	11	2	+0·2	5·0	3·5	+0·8	3	0	0	1	2	0	0	0	0	0
Asansol	27·0	—0·9	31·8	21	14·0	—0·1	10·0	13	12·7	21·5	—10·2	10·0	11	2	—0·5	9·5	5·7	—0·1	4	0	0	3	0	0	0	0	0	0
Suri	26·8	..	31·8	22	14·0	..	10·4	15	17·8	19·6	..	14·2	11	2	..	9.7	6·4	..	3	0	0	1	5	0	0	0	0	0
Berhampore	26·8	—0·7	33·3	21	14·0	+0·4	10·9	2	25·4	28·4	+7·3	27·4	11	1	—0·7	3·0	1·4	—1·0	2	0	0	0	3	0	0	0	0	0
Orissa																												
Baripada	30·3	..	35·5	21	..	..	..	..	11·5	77·8	..	46·3	11	5	..	3·7	2·1	..	5	0	0	3	0	0	0	0	0	0
Balasore	28·8	—0·5	34·6	21	17·0	+0·6	12·6	13,14	0	23·6	—11·2	23·6	27	1	—1·4	10·7	6·4	+2·2	1	0	1	1	0	1	0	0	0	0

(h) Observations for 22 days.

(R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0·30 17·0 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24-hours	Departure from normal	Precipitation (0·mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Gangetic West Bengal—*contd.*																												
Chandbali	26·8	—2·7	34·4	22	17·8	+0·2	13·1	14	0	12·7	—20.6	12.7	27	1	—0·8	12·8	9·0	+1·4	1	0	0	1	1	0	0	0	0	0
Cuttack	31·8	+0·6	36·3	24	18·2	0	13·9	4 days	0	20·4	+0·6	19·1	27	1	—0·5	6·7	4·4	+2·0	2	0	0	2	0	0	0	0	0	0
Bhubaneswar	31·2	..	35·7	25	18·0	..	12·8	7	2·0	22·8	..	19·5	27	1	..	16·2	12·5	..	4	0	0	2	2	0	0	0	1	0
Puri	28·6	+0·3	31·4	6	20·8	+0·2	16·7	13	0	33·8	+10·4	33·8	27	1	—0·2	20·1	18·4	+4·7	1	0	0	1	0	0	0	0	0	0
Gopalpur	29·4	+0·8	32·5	6	19·4	—0·2	15·2	7	0	4·6	—18·3	4.6	28	1	—0·2	20.4	16·0	+3.8	1	0	0	2	0	0	0	0	0	0
Koraput	27·9	..	31·1	23,24,26	13·8	..	9·4	15	0	10·2	..	10·2	28	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Titilagarh	31·9	..	36·1	23	16·1	..	11·0	7	0	22·6	..	22·6	27	1	..	4·4	3·1	..	1	0	0	2	9	0	0	0	0	0
Bolangir	33·0	..	35·6	1	23·0	..	19·4	6	0	4·3	..	2·5	26	1	..	8·3	5·9	..	2	0	0	0	0	0	0	0	0	0
Angul	30·3	—0·1	34·3	23	16·5	+0·2	11·8	13	0	17·5	—11·2	15·0	27	2	—0·1	7·9	7·3	+1·7	2	0	0	2	1	0	0	0	0	0
Sambalpur	29·9	—0·3	34·2	23	14·5	—0·7	10·1	13	5·3	24·3	+0·4	11·1	11	3	+1·0	6·2	3·9	0	3	0	0	0	0	0	0	0	0	0
Jharsuguda	29·6	..	33·8	23	13·0	..	8·9	14	2·0	43·2	..	26·4	27	2	..	8·4	6·9	..	2	0	1	4	0	0	0	0	1	0
Chota Nagpur																												
Jamshedpur	28·2	—0·3	32·4	20	14·2	—0·1	9·4	13	2·0	21·7	—27·8	8·9	26	3	—0·7	6·8	4·1	+0.4	6	0	0	2	2	0	0	0	0	0
Jamshedpur (P.B.O.)	28·3	..	32·3	20,21	13·9	..	9·7	15	1·0	21·8	..	9·9	26	3	..	..	..	..	4	0	0	5	0	0	0	0	1	0
Chaibasa	28·6	—0·2	32·8	21	14·0	—0·1	9·3	13	1·5	25·6	—14·3	11·4	27	3	+0·5	4·1	2·5	—0·1	5	0	0	4	0	0	0	0	0	0
Ranchi	25·7	+0·8	30·1	20, 21	10·5	—2·3	6·5	13,16	32·3	35·9	—9.8	18·0	27	3	—0·4	4·2	4·1	—2·3	4	0	0	0	0	0	0	0	0	0
Ranchi (C.W.)	24·4	..	29·1	20	11·7	..	6·9	13	29·7	36·0	..	16·5	11	3	..	15·0	9·3	..	6	0	0	3	1	0	0	0	0	0
Daltenganj	26·5	—0·1	30·7	21	10·2	—0·9	6·1	18	1·0	2·5	—30·0	1·3	23	0	—2·4	6.1	3·5	—0·4	2	0	0	3	0	0	0	0	0	0
Hazaribagh	24·4	—0·7	28·9	20,21	10·9	—1·4	6·1	16	8·9	8·9	—23·1	4·3	27	2	—0·5	12·4	9·0	+0·1	3	0	0	2	0	0	0	0	0	0
Dhanbad	27·0	..	31·7	21	14·0	..	9·9	13	12·7	15·8	..	9·2	11	2	..	..	..	..	2	0	0	4	4	0	0	0	0	0
Bihar																												
Purnea	25·1	—1·0	28·9	21,22	10·3	—0·6	6·6	16	0	0	—15·7	0	..	0	—1·3	7·1	3·4	0	0	0	0	0	0	0	0	0	0	0
Forbesganj	25·7	..	28·4	4 days	10·0	..	7·2	13	0·3	0·3	..	0·3	11	0	..	9·1	5·4	..	1	0	0	0	5	0	0	0	0	0
Darbhanga	25·0	—0·5	28·7	21	11·8	+0·2	8·6	12	1·8	2·3	—11·2	1·8	11	0	—1·4	2·8	1·1	—2·3	2	0	0	0	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	0	—14·5	0	..	0	—1·7	..	..	..	0	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	1·3	—16·0	1·3	10	0	—1·6	..	..	..	1	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	0	—21·1	0	..	0	—1·6	..	..	..	0	..	..	..	..	..	..	..	..	..
Patna	25·3	—0·1	29·8	21	12·2	—0·5	7·5	12	2·0	4·6	—14·2	2·0	11	0	—1·6	8·4	7·2	+2·7	3	0	0	1	0	0	0	0	0	0
Patna (Aerodrome)	24·6	..	28·9	21	10·5	..	6·7	12	1·8	5·6	..	2·0	23	0	..	8·6	3·9	..	4	0	0	1	1	0	0	0	0	0
Dehri	25·4	..	29·4	20, 21	12·9	..	9·2	12	4·6	7·9	—13·4	4·6	11	2	+0·2	9·0	5·9	..	2	0	0	1	0	0	0	0	0	0
Gaya	25·4	—0·9	30·2	21	10·6	—1·0	5·9	12	4·3	10·9	—10·7	6·6	23	2	+0·2	10·4	6·7	+0·3	2	0	0	4	0	0	0	0	0	0
Jamui	26·1	..	30·7	21	11·7	..	8·3	18	6·9	7·9	..	5·6	24	1	..	8·6	4·5	..	3	0	0	0	0	0	0	0	0	0
Dumka	26·9	0	31·6	22	12·1	—1·1	9·3	13,16	6·6	12·2	—11·7	6·6	11	2	0	..	..	..	2	0	0	0	0	0	0	0	0	0
Bhagalpur	25·4	..	29·8	20	13·4	..	10·6	12	0·6	2·1	..	1·8	27	0	..	10·1	6·4	..	2	0	0	3	0	0	0	0	0	0
Sabour	25·1	—0·6	29·4	21	10·3	—0·5	6·7	14	3·8	5·1	—15·0	2·0	27	0	—1·7	9·9	5·1	—0·5	5	0	0	3	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	24·1	—1·5	29·3	21	8·6	—2·2	6·1	12	0	0	—23·1	0	..	0	—2·3	8·2	4·8	—0·2	0	0	0	0	0	0	0	0	0	0
Nautanwa	25·6	..	30·3	22	8·7	..	5·2	12	0	0	..	0	..	0	..	6·2	2·9	..	0	0	0	0	3	0	0	0	0	0
Gorakhpur	23·0	—2·4	27·8	21	11·0	—0·2	7·9	12	0	0	—16·0	0	..	0	—1·8	5·6	2·7	0	0	0	0	0	0	0	0	0	0	0
Azamgarh	25·5	..	30·4	21	10·2	..	6·8	12	0	0·8	..	0·8	20	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Ballia	26·1	..	31·0	21	8·2	..	5·0	12	1·3	2·3	..	1·0	11, 23	0	..	7·4	4·3	..	3	0	0	0	0	0	0	0	0	0
Varanasi (Banares)*	25·4	—0·9	29	9,15,20	9·9	—1·3	5	6	0	0	—18·0	0	..	0	—1·9	..	..	..	0	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome)	25·4	..	29·9	21	9·6 (f)	..	5·9	12	0	0	..	0	..	0	..	13·7	8·4	..	0	0	0	0	1	0	0	0	0	0
Allahabad (Bamrauli)	26·3	+0·1	31·5	21	9·8	—0·7	5.2	12	0·3	1·3	—14·7	1·0	10	0	—1·7	7·2	3·9	—1·2	2	0	0	2	2	0	0	0	0	0
Banda	26·3	..	31·0	20,21	10·0	..	6·0	11,12	0	0	..	0	..	0	..	3·0	1·3	..	0	0	0	0	0	0	0	0	0	0
Fatehpur	24·1	—2·5	28·8	20	9·1	—2·2	5·1	12	0	0	—18·0	0	..	0	—2·4	7·3	3·2	—1·0	0	0	0	0	0	0	0	0	0	0
Kanpur	25·0	0	29·6	20	9·6	—1·0	6·2	12	0	0	—16·8	0		0	—1·6	16·9	11·3	+4·7	0	0	0	0	1	0	0	0	0	0
Lucknow*	25·4	—0·5	30	21,24	9·9	—0·9	7	16	0	0	—18·3	0	..	0	—1·6	..	..	..	0	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	24·6	—0·8	29·7	21	7·2	—1·8	4·4	11,16	0	0	—18·3	0	..	0	—1·6	13.3	8·7	..	0	0	0	0	0	0	0	0	0	0
Hardoi	24·4	..	29·4	19	8·5	..	5·1	11	0	0	..	0	..	0	..	10·6	6·2	..	0	0	0	0	0	0	0	0	0	0
Lakhimpur kheri	24·5 (d)	..	28·7	20	8·7	..	5·1	18	0	0	..	0	..	0	..	5·8	3·6	..	0	0	0	0	0	0	0	0	0	0
Bahraich*	24·3	—0·7	30	20	8·3	—2·2	5	11	0	0	—23·1	0	..	0	—2·0	..	..	..	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh (West)																												
Orai	25·3	..	30·0	20	7·8	..	3·9	11,12	0	0	..	0	..	0	..	10·6	7.1	..	0	0	0	0	0	0	0	0	0	0
Jhansi	25·8	—1·4	31·4	20	10·2	—1·2	5·6	11,12	0	0	—11·4	0	..	0	—1·1	4·9	3·7	—0·6	0	0	0	0	0	0	0	0	0	0
Agra	24·7	—0·5	29·8	20	7·5	—1·5	3·4	12	0	0	—12·5	0	..	0	—1·1	5·2	3·6	—1·5	0	0	0	0	0	0	0	0	0	0

(d) Mean of 27 days.

*Data extracted from Indian Daily Weather Report.

(f) Mean of 25 days.

(R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours.	Departure	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation 0·3 mm. or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West)—*contd.*																												
Mainpuri*	24·7	—0·7	30	20	8·5 (d)	—1·4	..	11	0	0	—13·7	0	..	0	—1·2	..	..	..	0	0	0	0	0	0	0	0	0	0
Aligarh	23·5	—0·8	28·0	19,20	7·0	—3·3	3·0	10	0	0	—19·3	0	..	0	—2·1	7·9	6·1	+0·5	0	0	0	0	0	0	0	0	0	0
Bareilly	23·7	—0·2	29·6	20	8·8	—1·3	5·6	11	0	0	—24·6	0	..	0	—1·9	6·9	3·6	+0·4	0	0	0	0	0	0	0	0	0	0
Meerut	22·8	—0·7	28·3	20	7·8	—1·1	4·8	10	0	0	—25·9	0	..	0	—2·2	..	8·0	..	0	0	0	0	0	0	0	0	0	0
Najibabad	22·4	..	28·9	20	6·8	..	3·7	11	0	3·1	..	3·1	8	1	..	2·7	1·7	..	1	0	0	0	0	0	0	0	0	0
Roorkee	22·2	—0·3	27·5	20	7·1	—1·2	3·6	11	0	0	—38·6	0	..	0	—2·8	7·6	4·8	+1·3	0	0	0	1	0	0	0	0	0	0
Dehra Dun	20·4	—0·3	24·8	20	7·2	—0·9	3·9	10	0	8·1	—54·6	8·1	8	1	—2·8	4·7	3·0	+0·3	1	0	0	2	0	0	0	0	0	0
Punjab (I) (Including Delhi)																												
New Delhi	23·2	—1·1	28·9	20	8·1	—1·3	4·5	11	0	0	—21·1	0	..	0	—1·7	16·8	12·4	+1·8	0	0	0	0	0	0	0	1	0	0
Hissar	24·3	—0·3	31·0	20	5·8	—2·6	1·2	9	0	0	—13·7	0	..	0	—1·2	7·8	6·6	+0·3	0	0	0	0	0	0	0	0	0	0
Karnal	21·6	..	27·1	20	7·8	..	5·9	11	0	0	..	0	..	0	..	0·4	0·6	..	0	0	0	0	4	1	0	0	0	0
Patiala	22·3	..	27·2	20	7·1	..	3·9	11	0	0	—36·1	0	..	0	—2·7	12·9	10·0	..	0	0	0	0	0	0	0	0	0	0
Ambala	22·2	—0·6	28·6	5	6·9	—1·9	3·0	10	0	0	—47·5	0	..	0	—3·1	10·3	8·6	+3·3	0	0	0	0	0	0	0	0	0	0
Chandigarh	21·6	..	27·0	19,20	7·9	..	4·4	10	1·0	1·0	..	1·0	8	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Ludhiana	21·9	+0·1	27·3	20,21	6·8	—1·8	3·8	5	1·0	2·8	—31·5	2·8	8	1	—1·7	7·5	4·1	+1·4	1	0	0	0	0	0	0	0	0	0
Ferozepur	21·4	..	25·2	19	5·4	..	1·7	9	3·3	3·3	..	3·3	8	1	..	4·8	2·6	..	1	0	0	1	0	0	0	0	0	0
Amritsar	20·7	..	24·8	19	4·9	..	2·8	21	2·5	2·5	..	2·5	8	1	..	8·7	6·3	..	1	0	0	1	3	0	0	0	0	0
Pathankot	20·2	..	25·6	18	7·6	..	4·8	10	8·4	41·1	..	41·1	8	1	..	4·4	3·4	..	1	0	0	1	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur	21·5	..	25·6	20	4·9	..	2·4	10	0	2·8	..	2·5	8	1	..	2·7	2·3	..	2	0	0	3	9	0	0	0	0	0
Mandi	19·8	..	23·3	20	4·0	..	0·2	15	0·6	8·9	..	8·1	8	1	..	3·2	2·4	..	3	0	0	1	6	0	0	0	0	0
Jammu and Kashmir																												
Banihal (R)																												
Srinagar	6·3	—0·4	11·1	23,24	—1·1	+0·3	—2·8	9,10, 12	24·7	54·7	—17·4	28·4	8		2	4·1	3·3	—0·6	7	6	0	0	0	0	0	0	0	0
Gulmarg																												
Sonemarg†											Closed	during	winter		months.													
Dras†																												
Kargil (R)																												
Leh	—3·6	—4·2	3·5	21	—14·5	—2·4	—20·6	15	3·3	11·2	+3·3	5·8	24	1	+0·1	4·3	4·1	+1·8	5	5	0	0	0	0	0	0	0	0
Skardu (R)																												
Gurez	..	..	..	..	..	..	..	..	..	205·8	+13·5	61·0	2	13	+3·1	..	..	..	14	11	..	..	..	..	..	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	20·9	+0·6	25·8	28	8·5	—2·2	6·1	11	..	25·9	—35·8	25·9	8	1	—2·7	..	..	..	1	0	1	0	0	0	0	0	0	0
Gund	..	..	..	..	..	..	..	..	..	95·3	..	30·5	8	8	..	..	..	..	9	9	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	14·4	..	2·0	8	0	..	..	..	..	15	15	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	9·9	..	4·8	22	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Kangral	..	..	..	..	..	..	..	..	..	5·1	..	1·0	6	0	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	3·3	..	2·5	24	1	..	..	..	..	2	2	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	2·5	..	1·5	9	0	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	29·3	..	12·7	9	4	..	..	..	..	7	7	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sriganganagar	22·7	—0·4	27·0	17,18	6·8	—0·8	3·0	9,11	0	0	—28·7	0	..	0	—2·0	5·2	4·4	—2·4	0	0	0	0	0	0	0	0	0	0
Churu	24·3	..	28·6	19	5·8	..	2·1	12	0	0	..	0	..	0	..	8·7	6·0	..	0	0	0	0	0	0	0	0	0	0
Bikaner	24·8	—1·4	29·9	19	6·2	—2·2	0·9	11	0	0	—6·9	0	..	0	—0·7	..	..	..	0	0	0	0	0	0	0	0	0	0
Jaisalmer	26·5	..	30·1	18	7·4	..	—0·9	10	0	0	..	0	..	0	..	10·7	7·5	..	0	0	0	0	0	0	0	0	0	0
Phalodi	25·0	..	29·6	19	8·8	..	3·1	10	0	0	—4·8	0	..	0	—0·5	12·0	8·4	..	0	0	0	0	0	0	0	0	0	0
Jodhpur	27·2	+0·2	30·8	19	9·8	—1·6	3·2	11	0	0	—6·1	0	..	0	—0·6	8·4	7·6	—3·3	0	0	0	0	0	0	0	0	0	0
Barmer	27·9	+0·5	31·7	19	11·6	—1·5	4·0	11	0	0	—7·1	0	..	0	—0·6	7·9	6·9	—1·0	0	0	0	0	0	0	0	0	0	0
Rajasthan (East)																												
Alwar	23·9	..	27·8	7,20	..	..	..	..	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sikar	24·3	..	28·3	19,20	6·8	..	—0·4	11	0	0	..	0	..	0	..	10·6	6·0	..	0	0	0	0	0	0	0	0	0	0
Jaipur	24·4	—0·6	28·5	20	9·3	—1·0	3·7	11	0	0	—8·1	0	..	0	—0·8	8·0	4·9	—1·4	0	0	0	0	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome).	24·1	..	28·3	20	9·1	..	3·5	11	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Dholpur	26·3 (d)	..	27·5	19,23	9·8 (d)	..	4·4	11	0	0	..	0	..	0	..	7·2 (f)	5·1 (h)	..	0	0	0	0	0	0	0	0	0	0
Ajmer	23·8	—1·2	28·0	19	6·7	—3·2	1·0	11	0	0	—6·6	0	..	0	—0·7	8·2	5·5	+2·1	0	0	0	0	0	0	0	0	0	0
Kotah	27·3	—0·5	33·2	25	11·2	—1·8	5·9	11	0	0	—5·3	0	..	0	—0·5	4·3	2·5	—0·2	0	0	0	0	0	0	0	0	0	0
Chambal	26·9	..	31·7	19	6·0	..	—0·5	11	0	0	..	0	..	0	..	7·1	4·0	..	0	0	0	0	0	0	0	0	0	0
Jhalawar	27·0	—0·9	32·3	19	8·7	—2·9	3·7	11	0	0	—2·0	0	..	0	—0·4	6·1	3·4	—0·8	0	0	0	0	0	0	0	0	0	0

*Data extracted from Indian Daily Weather Report.
†Data not reliable.

(R) Register not received.
(h) Mean of 23 days.

(d) Mean of 27 days.
(f) Mean of 25 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, kms. per hours			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (East)— *Contd.*																												
Udaipur	26·1	—0·2	29·6	4	6·9	—3·4	1·1	11	0	0	—3·6	0	..	0	—0·5	4·6	2·7	..	0	0	0	0	0	0	0	0	0	0
Erinpura (Jawai Dam).	26·3	..	30·6	18,19	11·3	..	3·4	10	0	0	..	0	..	0	..	6·4	5·6	..	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	25·3	—1·6	31·0	20	7·9	—2·0	1·6	11	0	0	—8·1	0	.	0	—0·8	9·4	5·9	..	0	0	0	0	0	0	0	0	0	0
Sheopurkalan	26·6	..	31·4	19	7·5	..	1·9	11	0	0	..	0	..	0	..	7·8	6·1	..	0	0	0	0	0	0	0	0	0	0
Guna	26·5	—0·8	32·1	19	7·1	—3·0	0·8	12	0	0	—4·8	0	..	0	—0·6	9·1	4·6	+0·1	0	0	0	0	0	0	0	0	0	0
Rajgarh	28·0	..	34·2	19	7·8	..	2·2	12	0	0	..	0	..	0	..	9·6	6·3	..	0	0	0	0	0	0	0	0	0	0
Neemuch	26·2	—0·9	30·4	18	9·7	—1·4	4·4	11,12	0	0	—3·8	0		0	—0·4	8·3	6·7	—0·7	0	0	0	0	0	0	0	0	0	0
Ratlam	27·6	..	31·9	18	10·8	..	6·5	11	0	0	..	0	..	0	..	10·0	8·8	..	0	0	0	0	0	0	0	0	0	0
Alirajpur	29·1	..	32·9	18	9·6	..	3·7	10	0	0	..	0	..	0	..	8·3	5·0	..	0	0	0	0	0	0	0	0	0	0
Indore	27·3	—1·4	31·3	19	9·4	—1·2	2·9	11	0	0	—3·6	0	..	0	—0·5	13·3	10·6	..	0	0	0	0	0	0	0	0	0	0
Bhopal (Bairagarh)	26·9	—1·3	31·2	19	9·8	—2·8	3·8	11	0	0	—3·8	0	..	0	—0·5	12·8	10·0	+2·3	0	0	0	0	0	0	0	0	0	0
Khandwa	30·5	—1·0	34·1	19	12·2	—1·1	6·0	13	0	0	—4·1	0	..	0	—0·4	9·4	6·0	+0·5	0	0	0	0	0	0	0	0	0	0
Hoshangabad	28·5	—0·9	32·4	19	12·5	—1·7	7·3	14	0	0	—9·7	0	..	0	—0·9	5·2	3·5	0	0	0	0	0	0	0	0	0	0	0
Betul	27·6	..	31·5	23	10·0	..	3·9	12	0	0	..	0	..	0	..	7·4	5·0	..	0	0	0	0	0	0	0	0	0	0
Chhindwara	27·3	..	31·1	23	10·7	..	5·0	13	0	0	..	0	..	0	..	7·2	5·2	..	0	0	0	0	0	0	0	0	0	0
Seoni	27·8	—0·5	31·2	24	12·1	—0·6	7·2	13	0	0	—20·6	0	..	0	—2·0	8·8	6·6	+2·1	0	0	0	0	0	0	0	0	0	0
Sagar	26·1	—1·2	30·6	19	12·1	—1·1	6·7	11	0	0	—11·9	0	..	0	—1·2	7·9	6·3	..	0	0	0	0	0	0	0	0	0	0
Nowgong	26·3	—0·4	31·7	19	6·0	—4·4	1·2	12	0	0	—14·5	0	..	0	—1·3	6·5	3·4	+0·8	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	25·9	—0·4	31·0	20	9·4	—1·8	4·4	12	0·8	1·3	—18·5	1·0	21	0	—1·8	6·8	4·0	—0·2	2	0	0	1	0	0	0	0	0	0
Umaria	26·7	—0·6	31·8	20	8·9	—2·0	3·3	13	0	0	—25·4	0	..	0	—1·9	6·9	3·8	—0·2	0	0	0	1	0	0	0	0	0	0
Jabalpur	27·8	+0·4	32·1	19	9·9	—0·7	4·4	12	0	0·5	—18·8	0·5	23	0	—1·7	5·9	3·4	+0·7	1	0	0	0	0	0	0	0	0	0
Mandla	27·5	..	30·6	23	8·3	..	2·7	13	0	4·6	..	4·3	21	1	..	5·1	2·6	..	2	0	0	0	3	0	0	0	0	0
Pendra	25·6	0	29·5	21	12·0	—0·5	7·0	12	24·1	26·7	—10·6	19·8	27	2	—0·9	10·1	6·8	..	6	0	1	3	0	0	0	0	0	0
Ambikapur	25·2	..	29·8	23	9·2	..	4·1	12	4·6	8·9	..	4·3	27	1	..	10·1	7·5	..	4	0	0	4	1	0	0	0	0	0
Champa	29·6	..	33·4	23	15·1	..	10·1	13	0·5	5·1	..	4·6	26	1	..	8·5	6·4	..	2	0	0	3	0	0	0	0	0	0
Raigarh	30·4	..	34·9	23	15·2	..	11·2	7	3·1	21·1	..	10·9	27	3	..	6·2	5·3	..	4	0	1	1	0	0	0	0	0	0
Raipur	30·2	+0·2	34·7	23	15·3	—0·3	10·5	13	0	19·8	—2·3	18·5	26	1	—0·8	8·6	6·3	+0·5	3	0	1	2	0	0	0	0	0	0
Kanker	29·7	—0·1	33·3	23	14·4	—0·3	8·7	13	0	7·2	—14·6	6·7	26	1	—1·1	4·5	2·7	—1·6	2	0	0	1	0	0	0	0	0	0
Jagdalpur (P.B.O.)	31·5	+1·2	34·2	26	14·2	—0·1	9·7	7	0	3·1	—24·3	3·1	28	1	—0·6	7·4	4·3	..	1	0	0	2	0	0	0	0	0	0
Gujarat																												
Deesa	28·7	..	32·2	4	9·3	..	4·2	11	0	0	..	0	..	0	..	8·5	6·9	..	0	0	0	0	0	0	0	0	0	0
Idar	28·4	..	32·2	18	14·2	..	9·7	8	0	0	..	0	..	0	..	8·9	8·1	..	0	0	0	0	0	0	0	0	0	0
Ahmedabad	29·4	—1·0	32·9	4	10·6	—3·4	3·9	11	0	0	—2·0	0	..	0	—0·2	11·8	6·8	+2·6	0	0	0	0	0	0	0	0	0	0
Dohad	28·2	—2·2	32·1	4	12·0	—1·6	7·2	11	0	0	—1·0	0	..	0	—0·2	10·1	9·7	+4·6	0	0	0	0	0	0	0	0	0	0
Baroda	30·8	—1·1	34·7	4	9·6	—3·1	4·4	10	0	0	—5·3	0	..	0	—0·3	5·7	4·2	+0·5	0	0	0	0	0	0	0	0	0	0
Baroda (Aerodrome)	30·2	..	33·9	4,18	10·9	..	6·0	10	0	0	..	0	..	0	..	10·5	6·8	..	0	0	0	0	1	0	0	0	0	0
Broach	31·7	..	36·5	4	11·7	..	6·1	10,11	0	0	..	0	..	0	..	7·6	6·2	..	0	0	0	0	0	0	0	0	0	0
Surat	32·1	+0·2	37·8	4	14·1	—1·5	8·4	11	0	0	—2·0	0	..	0	—0·2	7·3	6·5	+1·4	0	0	0	0	0	0	0	0	0	0
Saurashtra and Kutch																												
Bhuj	28·2	—0·5	31·7	6	10·8	—2·8	5·1	10	0	0	—4·3	0	..	0	—0·4	7·5	4·6	—2·8	0	0	0	0	0	0	0	0	0	0
Bhuj (P.B.O.)	..	..	..	..	..	..	..	..	0	0	..	0	..	0	..	6·6	3·7	..	0	0	0	0	0	0	0	0	0	0
Bhuj (Aerodrome)	27·9	..	31·1	6	10·3	..	4·3	11	0	0	..	0	..	0	..	11·8	7·9	..	0	0	0	0	1	0	0	0	0	0
Kandla	27·5	..	30·3	4	13·6	..	7·7	10	0	0	..	0	..	0	..	11·9	10·6	..	0	0	0	0	0	0	0	0	0	0
Mandvi	25·4	..	29·6	28	13·2	..	8·9	12	0	0	..	0	..	0	..	17·9	15·6	..	0	0	0	0	3	0	0	0	0	0
Dwarka	25·5	—0·3	30·8	3	16·0	—1·3	11·6	12	0	0	—6·1	0	..	0	—0·5	18·1	15·5	+1·5	0	0	0	0	0	0	0	0	0	0
Porbunder	28·8	..	34·1	28	15·4	..	8·7	11	0	0	..	0	..	0	..	12·8	11·8	..	0	0	0	0	2	0	0	0	0	0
Jamnagar	..	..	..	..	10·7	—1·3	5·1	11	0	0	—2·0	0	..	0	—0·2	..	..	..	0	0	0	0	1	0	0	0	0	0
Rajkot (Aerodrome)	29·1	—1·2	32·8	4	10·3	—2·1	4·7	10	0	0	—2·3	0	..	0	—0·3	18·4	14·0	+6·3	0	0	0	0	3	0	0	0	0	0
Surendranagar	29·1	..	32·6	4	12·7	..	7·4	10	0	0	..	0	..	0	..	11·5	10·1	..	0	0	0	0	0	0	0	0	0	0
Bhavnagar	29·7	—1·0	33·5	7	12·0	—2·2	5·2	11	0	0	—1·5	0	..	0	—0·2	12·2	8·7	+1·9	0	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome)	28·7	..	33·4	7	12·7	..	6·7	11,12	..	0	..	0	..	0	..	..	15·6	..	0	0	0	0	0	0	0	0	0	0
Mahuva*																												
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15·6	12·7	..	..	0	0	0	0	0	0	0	0	0
Veraval	28·5	..	32·4	5	12·9	..	7·8	9	0	0	—1·8	0	..	0	—0·2	20·4	16·5	..	0	0	0	0	0	0	0	0	0	0

*Data not available.

Division and station	Air temperature in °C								Rainfall in Millimetres					No. of rainy days, (2.5 mm. or more)		Wind speed kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan																												
Dahanu	26·7	—1·4	34·4	28	16·0	—1·0	12·1	10	0	0	—0·3	0	..	0	0	19·4	14·2	+2·8	0	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	29·3	+0·9	35·2	28	18·6	—1·1	14·5	11	0	0	—2·0	0	..	0	0·1	13·7	11·3	0	0	0	0	0	0	0	0	0	0	0
Bombay (Santa Cruz Aerodrome)	30·4	+1·0	35·7	28	15·4	—0·3	10·7	11	0	0	—2·0	0	..	0	—0·1	17·0	11·2	..	0	0	0	0	0	0	0	0	0	0
Alibag	27·9	—0·2	31·4	15	17·0	—1·3	13·6	26	0	0	—0·8	0	..	0	—0·2	..	9·4	+0·7	0	0	0	0	0	0	0	0	0	0
Harnai	26·6	—0·9	32·3	3	21·4	+0·3	17·7	10	0	0	—0·3	0	..	0	0	21·3	18·1	+4·6	0	0	0	0	0	0	0	0	0	0
Ratnagiri	29·7	..	33·9	4	18·5	..	15·5	10	0	0	1·0	0	..	0	0·1	..	..	..	0	0	0	0	0	0	0	0	0	0
Devgad	28·7	—0·7	33·9	6	20·5	—1·2	17·6	11	0	0	0	0	..	0	0	20·5	16·6	—3·8	0	0	0	0	0	0	0	0	0	0
Vengurla	31·4	..	34·9	3	18·4	..	15·6	11	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Maharashtra																												
Jalgaon	31·7	..	34·9	18	12·4	..	6·1	11	0	0	—2·8	0	..	0	0·4	7·6	5·5	..	0	0	0	0	0	0	0	0	0	0
Malegaon	31·4	—0·8	34·1	6,18	10·8	—1·8	4·3	11	0	0	—2·3	0	..	0	0·2	7·3	6·1	—0·7	0	0	0	0	0	0	0	0	0	0
Deolali	30·1	..	32·3	7	10·9	..	3·9	11	0	0	..	0	..	0	..	9·2	6·0	..	0	0	0	0	0	0	0	0	0	0
Aurangabad	31·2	—0·2	32·9	7	14·5	—0·8	10·0	15	0	0	—4·3	0	..	0	—0·4	10·2	9·2	+0·5	0	0	0	1	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	30·7	..	32·6	7	11·2	..	5·0	11	2·5	2·5	..	2·5	28	1	..	11·1	8·0	..	1	0	0	1	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	0	—3·1	0	..	0	—0·3	..	..	..	0	..	..	..	..	..	..	..	..	..
Ahmednagar	31·2	—0·2	33·9	7	13·3	0	8·7	12	0	0	—3·3	0	..	0	—0·3	8·2 (d)	6·3	1·4	0	0	0	0	0	0	0	0	0	0
Parbhani	32·2	..	34·9	23	15·3	..	9·7	13	0	0	—7·4	0	..	0	0·7	8·7	6·8	..	0	0	0	1	0	0	0	0	0	0
Poona	32·2	—0·3	34·5	27	12·5	—0·3	7·8	12	0	0	—1·5	0	..	0	—0·2	4·4	2·7	4·1	0	0	0	0	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	31·2	..	33·2	27	13·6	..	9·4	10	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Baramati	32·1	..	34·5	22	13·9	..	8·6	11	0	0	..	0	..	0	..	8·4	7·3	..	0	0	0	0	0	0	0	0	0	0
Jeur	32·7	..	34·6	24,28	13·8	..	8·5	11	0	0	..	0	..	0	..	9·9	6·4	..	0	0	0	0	0	0	0	0	0	0
Sholapur	32·8	—0·8	35·4	26	17·2	+0·1	13·1	11	0	0	—3·3	0	..	0	—0·3	9·0	7·8	—1·1	0	0	0	0	0	0	0	0	0	0
Miraj	32·4	—0·1	34·5	7	14·7	—0·3	11·1	10	0	0	0	0	..	0	0	9·4	8·1	+0·7	0	0	0	0	0	0	0	0	0	0
Kolhapur	32·5	..	34·7	25	15·5	..	12·1	10	0	0	..	0	..	0	..	10·4	8·0	..	0	0	0	0	0	0	0	0	0	0
Vidarbha																												
Buldana	28·6	..	31·4	19	16·2	..	10·4	11	0	0	..	0	..	0	..	11·0	9·1	..	0	0	0	0	0	0	0	0	0	0
Akola	32·1	—0·5	34·6	21	13·6	—0·7	6·5	12	0	0	—7·6	0	..	0	—0·6	8·9	6·6	+1·6	0	0	0	0	0	0	0	0	0	0
Amravati	31·1	—0·7	33·9	23	15·7	—1·0	11·8	12	0	0	—11·2	0	..	0	0·8	9·8	8·4	+2·0	0	0	0	0	0	0	0	0	0	0
Yeotmal	31·3	..	34·2	23	16·0	..	11·5	12	0	0	..	0	..	0	..	5·9	3·8	..	0	0	0	1	0	0	0	0	0	0
Nagpur	30·7	—1·4	34·6	23	13·2	—2·1	7·3	13	0	0	—16·5	0	..	0	—1·4	10·8	9·3	..	0	0	0	0	0	0	0	0	0	0
Gondia	29·5	..	32·9	23	13·8	..	8·5	13	0	2·5	..	2·5	26	1	..	5·7	3·5	..	1	0	0	0	0	0	0	0	0	0
Brahmapuri	30·8	..	34·6	22	13·9	..	7·8	13	0	25·6	..	18·0	27	2	..	7·6	5·3	..	2	0	1	0	0	0	0	0	0	0
Chanda	31·9	—0·5	35·8	23	14·2	—1·1	7·2	13	17·3	19·1	—1·5	17·3	26	1	—0·3	7·7	5·0	+1·6	2	0	0	2	0	0	0	0	0	0
Sironcha	33·2	..	35·7	25	17·1	..	10·6	14	0	0	..	0	..	0	..	6·8	4·7	..	0	0	0	2	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	32·0	+0·1	35·6	9, 10	20·7	—0·3	18·4	20	0	0	—6·1	0	..	0	—0·5	11·0	7·1	+1·8	0	0	0	0	0	0	0	0	0	0
Ongole	30·1	..	34·1	8	20·5	..	18·3	7	0	0	..	0	..	0	..	10·6	6·3	..	0	0	0	0	0	0	0	0	0	0
Rentachintala	34·0	+0·4	35·6	8	19·1	—1·5	14·7	7	0	0	—13·5	0	..	0	—1·3	6·9	5·4	—2·5	0	0	0	0	0	0	0	0	0	0
Gannavaram	32·4	..	35·0	8	19·8	..	16·9	21	0	0	..	0	..	0	..	14·5	9·8	..	0	0	0	0	2	0	0	0	0	0
Masulipatam	29·8	—0·3	33·5	8	20·7	+0·4	17·3	20	0	0	—13·5	0	..	0	—0·6	13·4	8·5	+2·4	0	0	0	0	2	0	0	0	0	0
Nidadavolu	32·0	..	34·9	8	19·3	..	15·7	6	0	0	..	0	..	0	..	8·2	6·1	..	0	0	0	0	0	0	0	0	0	0
Kakinada	29·9	+0·1	34·4	6	20·5	—0·4	17·5	7	0	4·6	—3·5	3·8	13	1	+0·4	13·0	8·7	+1·1	2	0	0	0	0	0	0	0	0	0
Visakhapatnam	30·9	—0·8	34·4	25	19·3	—0·5	15·3	7	0	2·0	—21·9	2·0	12	0	—1·1	15·9	7·8	+2·7	1	0	0	0	1	0	0	0	0	0
Calingapatnam	29·0	—1·2	31·7	22	19·8	—0·1	16·3	7	0	0	—15·5	0	..	0	—1·3	15·2	10·0	+2·0	0	0	0	0	0	0	0	0	0	0
Telangana																												
Ramagundam	33·5	..	36·0	25	18·5	..	12·3	14	0	0·8	..	0·5	27	0	..	8·6	5·8	..	2	0	0	1	0	0	0	0	0	0
Nizamabad	32·2	—0·5	35·7	23,26	17·2	+0·5	12·2	6	0	4·3	—12·7	2·5	28	1	+0·2	6·6	5·1	+1·1	2	0	0	0	0	0	0	0	0	0
Mahabub Nagar	32·1	..	33·6	9	17·7	..	15·0	7	0	0	..	0	..	0	..	10·6	7·8	..	0	0	0	0	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	31·6	+0·9	33·4	24,25	15·9	—0·9	11·9	7	0	0	—9·1	0	..	0	—0·9	12·1	9·5	+1·3	0	0	0	1	1	0	0	0	0	0
Hakimpet	30·3	..	33·2	25	17·2	..	15·6	13	6·6	6·6	..	6·6	27	1	..	..	..	..	1	0	0	2	0	0	0	0	0	0
Hanamkonda	32·3	+0·4	34·4	25	18·4	—0·4	13·8	13	0	5·9	—8·8	4·6	11	1	—0·1	11·5	9·9	+2·0	2	0	0	2	1	0	0	0	0	0
Bhadrachalam	33·6	..	35·2	5	18·2	..	12·0	6	0	0	..	0	..	0	..	9·5	7·5	..	0	0	0	0	8	0	0	0	0	0
Khammameth	33·2	..	35·2	8	19·6	..	14·4	7	0	0	..	0	..	0	..	8·7	6·3	..	0	0	0	0	0	0	0	0	0	0
Rayala Seema																												
Arogyavaram	29·5	..	32·2	9,25	16·5	..	13·7	20	0	0	..	0	..	0	..	8·6	7·2	..	0	0	0	0	0	0	0	0	0	0
Cuddapah	33·4	—1·2	36·1	8	20·1	—0·8	17·3	1	0	0	—3·1	0	..	0	—0·2	10·7	8·5	—4·4	0	0	0	0	0	0	0	0	0	0
Anantapur	32·7	..	34·8	8	18·6	..	15·7	1	0	0	—7·6	0	..	0	—0·4	8·2	8·0	..	0	0	0	0	0	0	0	0	0	0
Kurnool	34·1	—0·1	36·7	25	19·3	+0·4	16·7	20	0	0	—7·1	0	..	0	—0·5	8·3	6·6	+1·0	0	0	0	0	0	0	0	0	0	0

(d) Mean of 27 days.

Division and station	Air temperature in °C								Rainfall in Millimetres					No. of rainy days (2·5 mm or more)		Wind speed kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras																												
Palayamcottai	33·9	..	36·2	8	21·8	..	20·4	9,22	21·4	19·3	−10·4	17·8	3	1	−0·7	12·3	9·4	..	2	0	0	0	0	0	0	0	0	0
Tuticorin	27·9	..	29·4	13	23·2	..	20·0	7	0*	0·8*	..	0·8*	2	0	..	22·5	19·8	..	1	0	0	0	0	0	0	0	0	0
Pamban	28·3	−1·0	30·4	5	23·8	−0·1	20·8	6	0·5	17·0	−4·8	6·3	28	3	+1·6	12·0	11·9	+1·1	5	0	0	0	0	0	0	0	0	0
Mathurai	32·8	+0·4	35·6	8	22·0	+1·2	19·5	6	0·5	2·8	−10·7	1·8	27	0	−0·7	8·5	6·0	−0·1	3	0	0	0	0	0	0	0	0	0
Nagapattinam	28·6	−0·7	29·9	27	23·4	+0·5	19·2	6	6·1	10·4	−10·7	5·8	3	2	+1·0	16·3	17·3	+6·5	2	0	0	0	0	0	0	0	0	0
Tiruchirapalli	32·5	−0·6	34·8	8	21·0	+0·3	17·8	6	0·5	0·8	−11·7	0·8	2	0	−0·6	9·7	6·3	+0·2	1	0	0	0	0	0	0	0	0	0
Coimbatore	31·8	−0·9	34·3	8	20·5	+1·3	18·2	6	0	6·3	−2·8	6·3	3	1	+0·5	8·8	6·8	+2·6	1	0	0	1	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome).	32·2	..	34·7	8	19·7	..	17·3	14	0	3·8	..	3·8	3	1	..	12·6	11·4	..	1	0	0	1	0	0	0	0	0	0
Salem	33·5	−0·4	35·4	8	20·3	+0·9	17·2	6	3·8	4·6	−3·8	3·8	28	1	+0·4	8·0	10·7	+3·5	2	0	0	1	0	0	0	0	0	0
Kallakurichi	32·6	..	35·9	8	20·8	..	18·1	6	3·0	5·0	..	2·5	2	1	..	..	..	..	3	0	0	0	0	0	0	0	0	0
Cuddalore	29·0	−0·5	30·9	27	21·1	0	18·2	6	5·8	11·7	−11·2	6·1	2	2	+0·8	10·2 (b)	8·7 (b)	+2·7	3	0	0	0	0	0	0	0	0	0
Vellore	31·1	−0·5	34·8	8	18·8	−0·2	15·6	21	0·3	1·1	−5·2	0·8	2	0	−0·6	8·7	7·0	+2·7	2	0	0	0	0	0	0	0	0	0
Madras	30·2	−1·1	34·6	8	20·8	+0·6	18·6	21	0	0·5	−9·9	0·5	2	0	−0·7	13·9	9·3	−1·2	1	0	0	0	0	0	0	0	0	0
Madras (Nungambakkam).	29·5	..	34·3	8	20·6	..	17·5	21	..	5·1	..	5·1	2	1	..	..	5·1	..	1	0	0	0	0	0	0	0	0	0
Coastal Mysore																												
Karwar	30·2	..	36·6	3,4	19·2	..	16·2	11	0	0	−1·0	0	..	0	−0·1	..	..	..	0	0	0	0	0	0	0	0	0	0
Honavar	31·0	−0·4	36·3	3	20·2	−0·2	17·6	11	0	0	−0·3	0	..	0	0	8·8	7·7	+2·6	0	0	0	0	0	0	0	0	0	0
Mangalore	31·0	+0·2	34·8	2	23·1	+0·6	21·2	1	0	0	−1·8	0	..	0	−0·1	11·3	9·6	+1·4	0	0	0	0	0	0	0	0	0	0
Mangaalore (Bajpe Aerodrome)	32·3	..	35·3	2	21·8	..	20·1	11	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Mysore (North)																												
Bidar	30·7	−0·5	33·8	26	18·0	−0·6	15·3	12	0	9·1	0	7·1	28	1	+0·3	12·2	10·0	0	0	2	0	0	0	0	0	0	0	0
Gulbarga	33·1	−0·4	35·3	27	18·5	+0·6	15·0	12,15	0	9·1	+2·2	9·1	28	1	+0·5	11·6	9·2	+0·5	1	0	0	0	0	0	0	0	0	0
Bijapur	32·2	−0·6	34·3	26	18·0	+0·3	15·0	12	0	0	−2·3	0	..	0	−0·2	7·1	5·4	−0·1	0	0	0	0	0	1	0	0	0	0
Belgaum	30·7	−0·6	32·8	28	15·1	−0·1	11·1	9	0	0	−1·3	0	..	0	−0·1	6·3	4·9	+0·2	0	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	32·0	−0·4	34·6	25	14·9	−0·3	11·8	10,11	0	0	−1·3	0	..	0	−0·1	9·5	5·9	−0·1	0	0	0	0	12	0	0	0	0	0
Belgaum (Sambre Aerodrome).	31·7	..	36·0	24	16·4	..	11·3	10		0	..	0	..	0	..	13·5	11·1	..	0	0	0	0	7	0	0	0	0	0
Gadag	32·8	+0·2	35·6	27,28	18·7	+0·4	14·9	9	0	0	−4·1	0	..	0	−0·4	8·0	6·4	−0·5	0	0	0	0	0	0	0	0	0	0
Raichur	33·1	−0·3	35·6	24,26	20·3	+0·1	15·6	7	0	0	−7·1	0	..	0	−0·6	8·0	7·6	−0·9	0	0	0	0	0	0	0	0	0	0
Mysore South																												
Bellary	32·8	−1·5	35·6	26,27	19·7	+0·8	17·7	7	0	0	−4·6	0	..	0	−0·3	6·5	4·2	−0·5	0	0	0	0	0	0	0	0	0	0
Chitaldrug	31·2	−0·8	34·3	26	19·3	+0·3	16·4	11	0	0	−2·8	0	..	0	−0·2	6·9	6·0	−0·1	0	0	0	0	0	0	0	0	0	0
Shimoga	32·3	..	35·0	25	16·3	..	13·9	1,5	0	0	..	0	..	0	..	5·6	3·0	..	0	0	0	0	0	0	0	0	0	0
Balehonnur	29·1	0	31·4	25	16·0	+0·4	13·9	11,15	..	0	−1·5	0	..	0	−0·2	..	..	..	0	0	0	0	0	0	0	0	0	0
Hassan	30·3	−0·3	32·9	25	16·5	+1·2	13·7	1	0	8·6	+2·5	8·6	28	1	+ ·6	5·5	4·3	−0·4	1	0	0	1	0	0	0	0	0	0
Mysore	30·5	−1·1	32·8	26	18·5	+0·6	16·9	1	0	0	−6·1	0	..	0	−0·5	10·5	9·1	+1·5	0	0	0	0	2	0	0	0	0	0
Bangalore (Central Aerodrome).	29·4	−0·4	32·1	8	16·4	+0·8	14·3	1	0	0	−6·6	0	..	0	−0·4	10·0	9·6	+2·0	0	0	0	0	0	0	0	0	0	0
Bangalore (Aerodrome).	30·3	..	32·8	25	16·3	..	14·8	1,16	0	0	..	0	3	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Kerala (including Laccadives).																												
Kozhikode	31·7	+0·3	33·7	25	23·5	+0·7	22·2	5 days	0	0	−4·8	0	4,19	0	−0·3	13·3	12·5	+2·7	0	0	0	0	0	0	0	0	0	0
Palghat	35·5	..	37·4	22,23, 25	23·1	..	21·7	28	0	4·1	..	4·1	28	1	..	9·0	7·3	..	1	0	0	1	0	0	0	0	0	0
Fort Cochin	30·5	−0·1	32·1	3	25·7	+1·5	23·0	7	0	123·1	+102·8	51·3	27	5	+3·8	13·0	8·7	+1·0	6	0	0	0	0	0	0	0	0	0
Cochin (Naval Air Station).	31·4	..	32·9	2	23·9	..	21·9	14	0·3	35·6	..	11·4	21	5	..	10·4	6·1	..	8	0	0	6	0	0	0	0	0	0
Alleppey	31·5	..	33·9	4	24·0	..	22·6	14	0	0·8	..	0·5	11	0	..	18·0	12·5	..	2	0	0	1	0	0	0	0	0	0
Punalur	35·7	..	37·6	27	20·7	..	17·4	13	4·1	17·8	..	13·7	28	2	..	8·9	5·0	..	2	0	0	0	0	0	0	0	0	0
Trivandrum	31·7	0	33·4	4	23·4	+0·5	21·3	13	27·4	74·2	+54·9	32·3	21	3	+1·7	9·3	6·3	+0·8	3	0	0	2	0	0	0	0	0	0
Trivandrum (Aerodrome).	31·5	..	32·8	18	23·0	..	21·5	13	..	47·7	..	47·2	21	1	..	..	7·3	..	2	0	0	2	0	0	0	0	0	0
Hill Stations (excluding Kashmir.)																												
Kohima Walong (R)	15·3	..	20·6	22,23	8·1	..	5·4	15	0	24·1	..	9·7	28	4	..	6·1	6·4	..	5	0	0	0	0	0	0	0	0	0
Aijal (R)																												
Shillong	16·2	−0·7	21·1	24,25	5·4	−0·4	−0·6	2	1·3	14·0	−12·9	5·1	1	2	−0·8	5·6	4·3	+0·6	5	0	0	0	0	0	0	0	0	0
Cherrapunji	15·2	−1·6	17·9	25,26	7·6	−1·6	4·7	3	6·6	31·0	−22·6	15·2	11	3	−0·5	12·9	10	+2·7	4	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	...	..	33·0	..	15·2	1	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Darjiling (Rajbhawan)	9·5	−0·6	15·1	27	2·8	−1·0	0·6	12	14·2	33·8	+3·6	16·8	4	4	+1·4	3·4	2·9	−0·5	5	0	0	0	12	0	0	0	0	0
Kalimpong	14·0	−2·3	16·8	1	6·6	−2·5	4·6	5 days	0	22·8	−5·9	20·3	4	2	−1·0	6·2	4·9	6·2	2	0	0	0	0	0	0	0	0	0
Katmandu	20·6	+0·5	25·0	25	2·4	−2·0	−0·2	12,27	0	0·3	−42·1	0·3	6	0	−5·5	1·4	0·5	−1·6	1	0	0	0	6	0	0	0	0	0
Makteswar (Kumaon)	11·8	+1·5	17·0	7	1·9	−0·2	−3·8	11	0	2·0	−62·3	2·0	9	0	−4·7	16·4	15·8	+6·5	1	1	0	1	0	0	0	0	0	0

*Rainfall from 1-2-57 to 17-2-57 relates to the rain gauge at Port Office. (R) Register not received. (b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation 0·3 mm. or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations excluding Kashmir) — contd.																												
Nainital	12·1	..	18·9	7	2·7	..	—2·2	11	0	0	..	0	..	0	..	10·0	7·9	..	0	0	0	0	0	0	0	0	0	0
Tapoban	12·3	..	18·3	23	2·8	..	—1·1	11	0	—0·5	..	0·5	8	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Badrinath										Closed	during	winter	months															
Lokpal	—8·7	..	—6·1	27	—11·9	..	—13·9	4	..	25·1	..	12·9	2	3	..	..	..	..	3	3	0	0	11	0	15	0	0	0
Jamuna Chetty	..	..	..	..	..	..	..	..	..	8·9	..	3·8	8	2	..	..	..	..	3	..		..	..	..	..	..	..	..
Mussooree	12·4	+2·1	19·5	6	3·3	+0·1	—0·9	1	0	4·1	—82·5	3·6	8	1	—4·2	9·7	8·5	+1·3	2	0	1	1	0	0	4	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	19·4	..	7 9	8	3	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	10·4	..	2·5	12	1	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Simla	9·2	—0·1	15·1	7	2·1	—0·2	—2·8	11	0·3	1·3	—72·9	1·3	8	0	—5·7	6·6	5·3	—0·7	1	2	0	3	0	0	4	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	2·3	—81·3	2·3	20	0	—5·5	..	..	..	1	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	43·7	—20·8	18·3	7	5	—0·8	..	..	..	5	..	..	..	..	..	..	..	..	..
Gondla (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	95·4	..	31·7	7	7	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Koksar	..	..	..	..	..	..	..	..	..	137·8	..	77·7	8	5	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Dalhousie	11·0	..	15·1	17,19	2·3	..	—2·8	9	5·6	9·4	—159·5	5·5	8	2	—6·5	3·3	1·9	..	4	0	0	0	0	0	0	0	0	0
Dharamshala	15·5	..	19·5	7	6·8	..	2·2	10	3·8	38·1	..	35·6	8	2	..	0·9	0·1	..	2	0	0	0	0	0	0	0	0	0
Abu	20·1	+0·1	24·0	6	9·3	—2·4	5·0	10,11, 12	0	0	—5·8	0	..	0	—0·6	9·6	6·8	—0·3	0	0	0	0	0	0	6	0	0	0
Pachmarhi	23·2	—0·9	27·3	23	8·7	—1·7	1·7	12	0	0	—17·0	0	..	0	—1·5	7·3	5·0	0	0	0	0	0	0	0	0	0	0	0
Mahabaleshwar	26·2	+1·0	28·4	6,7	13·7	—0·9	7·9	9	0	0	—2·5	0	..	0	—0·1	9·3	9·4	+0·1	0	0	0	0	0	0	0	0	0	0
Nandi Hills	25·9	..	27·3	5 days	14·1	..	11·7	23	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Mercara	26·2	—0·8	27·8	22	15·8	+0·8	14·4	9·11	0	0	—6·1	0	..	0	—0·5	9·6	10·1	+4.8	0	0	0	0	1	0	0	0	0	0
Kodaikanal	18·3	+0·5	20·7	10	8·6	0	6·3	13	7·6	28·9	—10·0	15·5	3	3	+0·6	10·5	11·8	—0·8	5	0	0	1	5	0	1	0	0	0
Ootacamund	21·0	+1·3	23·9	10	6·6	0	2·8	13	0·5	11·0	—1·9	9·4	3	1	—0·1	3·1	2·0	—2·5	2	0	0	0	0	0	10	0	0	0
Coonoor	20 8	—0·2	26·1	8,9	9·8	+0·3	6·7	7	..	88·1	+15·5	53·3	3	4	+1·3	..	5·1	—0·2	6	0	0	0	2	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	16·0	..	4·8	18	3	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	54·2	..	20·3	21	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Lachen	7·1	..	8·9	1,7	—11·0	..	—12·7	1	..	46·8	..	30·5	11	4	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung	9·0	+1·7	11·1	27,28	—6·5	—0·8	—8·8	1	..	12.7	—41·9	5·1	26	3	—0·9	..	..	..	4	0	0	0	0	0	0	0	0	0
Lhasa	7·7	..	17·2	11	—4·5	..	—10·0	3	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ceylon																												
Colombo	30·1	—1·0	32·0	4,14	22·1	—0·2	17·0	7	3·1	102·4	+47·0	55·6	20	4	+0·5	..	..	..	7	0	0	3	0	0	0	0	0	0
Trincomalee	28·4	—1·0	30·0	26,27 28	23·8	—0·1	19·0	7	16·5	98·5	+39·1	56·1	15	5	+2·1	..	..	..	7	0	0	0	0	0	0	0	0	0
Batticoloa	28·0	..	32·0	2	22·9	..	17·0	17	171·2	302·3	..	129·8	17	11	..	..	..	..	12	0	0	0	0	0	0	0	0	0
Hambantota	29·3	—0·6	31·0	17	22·8	+0·4	20·0	10	20·4	59·8	+19·4	47·5	18	3	+0·2	..	..	..	5	0	0	0	0	0	0	0	0	0
Mannar	29·6	..	32·0	28	23·0	..	19·0	7	19.5	39·6	..	11·9	16	5	..	..	..	..	7	0	0	2	0	0	0	0	0	0
Hydrometeorological Observatories																												
Damodar Catchment																												
Bokaro	26·8	..	31·8	21	10·0	..	5·2	13	10·2	13·5	..	4·8	11	2	..	8·0	5·7	..	5	0	0	4	0	0	0	0	0	0
Hazaribagh	23·4	..	28·2	21	10·4	..	6·1	12	10·2	11·8	..	5·1	11,27	2	..	7·8	6·2	..	4	0	0	0	0	0	0	0	0	0
Tilaiya	24·7	..	29·3	21	12·4	..	7·9	16	7·1	9·9	..	7·4	27	1	..	..	..	..	3	0	0	4	0	0	0	0	0	0
Ramgarh	27·1	..	32·1	20	9·1	..	4·8	13,16	24·1	32·3	..	10·9	27	5	..	6·4	2·9	..	6	0	1	4	1	0	0	0	0	0
Panchet Hills	27·5	..	32·7	21	13·0	..	9·6	16	14·2	27·2	..	12·7	27	3	..	(d) 10·2	(c) 6·7	..	4	0	0	4	0	0	0	0	0	0
Durgapur	28·6	..	32·8	21	16·9	..	12·2	4	0	29·0	..	16·5	11	3	..	..	..	..	3	0	0	0	2	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	21·3	..	9·9	11	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	7·6	..	5·6	22	1	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	10·5	..	5·6	11	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	14·3	..	11·2	27	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	13·5	..	8·6	11	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Mahanadi Catchmen.																												
Baramul	31·3	..	35·2	24	13·3	..	7·4	7	0	35·8	..	33·5	27	2	..	3·8	1·8	..	2	0	0	4	3	0	0	0	0	0
Hirakud	26·3	..	34·2	23	16·2	..	11·3	13	16·3	31·5	..	16·3	11	3	..	3·3	3·8	..	3	0	1	2	0	0	0	0	0	0
Khijrawan	30·6	..	34·3	23	12·9	..	7·7	15	0	15·0	..	14·7	26	1	..	10·0	5·2	..	2	0	0	1	0	0	0	0	0	0
Sonepur	31·8	..	36·1	25	14·8	..	11·7	14	..	33·0	..	33·0	27	1	..	..	2·0	..	1	0	0	0	0	0	0	0	0	0
Giriabahar	28·9	..	32·8	23	10·8	..	6·1	7	..	31·2	..	13·7	11	4	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Narbada Catchment																												
Punasa	30·8	..	34·3	19	11·1	..	6·7	15	0	0	..	0	..	0	..	7·9	5·9	..	0	0	0	0	0	0	0	0	0	0
Bagra Tawa	29·0	..	33·0	19	10·2	..	4·2	13	0	0	..	0	..	0	..	7·1	4·0	..	0	0	0	0	0	0	0	0	0	0
Thikri	30·9	..	34·8	18	11·4	..	6·0	12	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0

(R) Register not received (d) Mean of 27 days. (c) mean of 26 days.

Division and station	Air temperature in °C.								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3)mm or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
HYDROMETEOROLOGICAL OBSERVATORIES— *Contd.*																												
Tapti Catchment																												
Sabarmati Catchment																												
Nandurbar	31·1	..	34·1	4	15·7	..	12·3	10	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Jhadol	25·2	..	29·4	18	4·0	..	1·1	14	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sainwara	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dharoi	28·8	..	32·2	18	11·2	..	5·7	10	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Ganga Catchment																												
Mukhim	13·7	..	18·3	6	4·0	..	—0·6	9	0·5	0·5	..	0·5	9	0	..	..	..	..	1	0	0	0	3	0	0	0	0	0
Tehri	22·0	..	25·2	20	5·8	..	3·2	1,11	0	2·3	..	1·3	8	0	..	..	..	..	1	0	0	0	1	0	0	0	0	0
Gandak Catchment																												
Gorkha	19·3	..	22·8	24,25	9·5 (d)	..	6·1	12	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Pokhara	20·9 (e)	..	24·5	24,25	9·1	..	4·3	15	..	6·6	..	4·3	14	1	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Nawakot	21·4	..	25·1	25	10·9	..	7·6	12	..	0	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra catchment (Trans Himalayan Region)																												
Dailekh	17·1	..	19·9	23	..	..	..	..	48·3	93·1	..	30·4	10	8	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	13·4	..	17·9	7	4·9	..	—0·2	11	0·5	10·9	..	10·4	9	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Munsiyari	14·1 (g)	..	17·4	24	4·5	..	—0·3	11	0·5	6·2	..	3·1	9	1	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Sallyana	17·4	..	20·2	21 (e)	..	..	..	..	0	0	..	0	..	0	..	..	..	..	..	..	..	..	..	0	..	..	..	..
Butwal	23·9	..	28·9	25	10·7	..	—0·1	6	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	19·1	..	22·5	25	2·7	..	—0·3	27	0	0	..	0	..	0	1·3	..	0·5	..	0	0	0	1	0	7	0	6	0	0
Kosi Catchment																												
Chautara	18·8 (j)	..	22·3	24	7·6	..	4·6	12	0	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldhunga	14·2	..	17·4	27	4·6	..	1·6	12	0·5	5·1	..	3·6	6	1	..	5·8	4·2	..	3	0	0	0	3	0	0	0	0	0
Barahkshetra	24·4	..	28·2	25	11·5	..	8·5	14	0·5	0·5	..	0·5	5	..	..	9·0	5·4	..	1	0	0	0	0	0	0	0	0	0
Angbung	18·1	..	22·6	23	9·0	..	6·7	13	..	14·5	..	10·9	4	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Tapujung	13·6	..	17·8	26	5·1	..	2·7	13	1·6	13·4	..	1·4	4	2	..	..	..	..	4	0	0	1	7	0	0	0	0	0
Taplethok	19·3	..	21·6	20,25	6·7	..	4·1	16	..	42·5	..	22·9	11	3	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Wallangchung Gola	5·2	..	7·0	14	—5·3	..	—7·3	8	..	16·0	..	5·1	8	3	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Bhojpur	14·1	..	18·7	21	6·5	..	4·6	15	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Chainpur	18·1	..	21·2	24,26, 28	8·7	..	6·2	3	..	3·8	..	3·8	4	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	12·3	..	17·8	23	4·3	..	1·6	12	8·9	73·2	..	17·5	28	9	..	..	..	..	14	0	2	2	9	0	0	0	0	0
Geyzing	16·7	..	21·1	26	6·6	..	3·9	12,14	3·6	9·9	..	5·1	4	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..

(g) Mean of 24 days. (j) Mean of 21 days (d) Mean of 27 days (e) Mean of 26 days (i) Mean of 22 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957

Division and station.	Hours of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed kms per hour	Wind speed (kms. p.h.)			No. of observations										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1014·0	1011·3	..	25·6	22·1	20·0	23·4	72	..	2·4	..	3·0	0	0	20	2	8	0	0	0	0	0	10	8	0
	1730	,,	1011·1	1008·4	..	25·8	22·2	20·1	23·9	72	..	3·2	..	5·1	0	0	21	1	15	1	0	0	0	1	3	7	0
Long Island	0830	32	1015·1	1011·3	..	25·6	23·2	21·6	26·2	79	..	3·4	..	1·1	0	0	16	1	2	0	1	0	3	4	5	12	0
	1730	,,	1012·3	1008·5	..	26·1	23·0	21·4	25·7	75	..	3·9	..	1·5	0	0	14	0	0	2	1	0	5	2	4	14	0
Port Blair	0530	79	1012·0	1002·9	..	21·9	21·0	20·5	24·7	92	..	2·4	..	1·8	0	0	8	1	5	1	0	1	0	0	0	20	0
	0830	,,	1013·9	1004·9	+0·4	27·2	23·2	21·1	25·4	69	—2	3·1	+0·2	4·4	0	0	19	4	12	2	1	0	0	0	0	9	0
	1130	,,	1012·3	1003·5	..	29·4	23·6	20·7	24·3	60	..	2·5	..	7·3	0	0	25	1	13	11	0	0	0	0	0	3	0
	1730	,,	1011·2	1002·3	..	25·7	22·5	21·0	24·4	75	..	2·4	..	4·6	0	0	16	2	9	4	0	0	0	0	1	12	0
	2330	,,	1012·3	1003·2	..	23·3	21·8	21·1	24·6	86	..	1·9	..	2·5	0	0	10	1	9	0	0	0	0	0	0	18	0
Car Nicobar	0830	10	1013·0	1011·8	..	28·2	23·8	20·7	25·7	68	..	2·9	..	5·9	0	0	26	0	15	10	1	0	0	0	0	2	0
	1730	,,	1010·4	1009·2	..	26·7	23·4	21·7	26·6	73	..	3·3	..	2·1	0	0	20	0	15	4	1	0	0	0	0	8	0
Nancowry	0830	26	1012·7	1009·8	..	29·0	25·2	23·4	28·5	72	..	4·3	..	0·1	0	0	1	0	0	0	1	0	0	0	0	27	0
	1730	,,	1010·0	1007·1	..	27·2	24·2	23·1	27·6	78	..	3·8	..	0	0	0	0	0	0	0	0	0	0	0	0	28	0
Kondul	0830	8	1012·6	1011·7	..	27·7	25·2	23·9	29·9	81	..	4·9	..	6·9	0	0	26	0	24	2	0	0	0	0	0	2	0
	1730	,,	1009·9	1009·0	..	27·2	25·5	24·3	31·3	86	..	4·8	..	5·7	0	0	27	1	26	0	0	0	0	0	0	1	0
ASSAM (including Manipur & Tripura)																											
Pasighat	0830	..	..	..	..	..	..	..	..	..	..	5·9	..	18·9	0	12	4	7	1	0	1	0	0	0	7	12	0
	1730	..	..	..	..	..	..	..	..	..	..	6·5	..	9·7	0	5	11	8	0	0	0	1	0	0	7	12	0
Digboi	0830	..	..	..	..	14·5	13·6	13·0	14·7	89	..	6·1	..	3·5	0	0	28	0	20	1	1	0	4	1	1	0	0
	1730	..	..	..	..	19·1	15·7	13·3	15·2	70	..	5·5	..	3·5	0	0	28	4	17	0	1	0	2	1	3	0	0
Dibrugarh	0830	106	1015·5	1003·0	—0·9	16·3	14·9	13·6	15·8	85	0	5·0	+0·6	2·3	0	0	16	3	6	5	0	0	1	0	1	12	0
	1730	,,	1012·4	999·9	..	17·6	15·5	14·0	15·9	80	..	5·4	..	1·9	0	0	13	5	6	2	0	0	0	0	0	15	0
Dibrugarh (Mohanbari Aerodrome).	0230	111	1012·8	999·7	..	13·2	12·8	12·3	14·4	95	..	5·9	..	1·1	0	0	6	1	3	2	0	0	0	0	0	22	0
	0530	,,	1013·6	1000·4	..	12·8	12·4	12·1	14·1	96	..	6·3	..	2·2	0	0	10	1	4	2	2	1	0	0	0	18	0
	0830	,,	1015·7	1002·6	..	16·2	14·5	13·2	15·2	83	..	5·3	..	4·0	0	0	18	4	5	8	0	0	0	1	0	10	0
	1130	,,	1014·1	1001·2	..	19·3	15·5	12·5	14·5	7	..	5·1	..	6·6	0	0	26	0	9	10	2	1	1	2	1	2	0
	1730	,,	1012·6	999·5	..	17·0	14·9	13·2	15·4	79	..	5·9	..	3·9	0	0	16	2	13	1	0	0	0	0	0	12	0
	2330	,,	1013·7	1000·6	..	13·8	13·1	12·5	14·5	92	..	5·2	..	0·8	0	0	6	0	5	1	0	0	0	0	0	22	0
North Lakhimpur	0830	102	1015·6	1003·5	..	15·7	14·3	13·3	15·1	86	..	5·6	..	4·5	0	0	22	13	4	2	0	2	1	0	0	6	0
	1130	,,	1014·2	1002·3	..	19·5	15·8	12·8	15·0	67	..	5·6	..	8·6	0	0	25	7	4	10	2	2	0	0	0	3	0
	1730	,,	1012·4	1000·4	..	17·1	15·3	13·9	16·1	82	..	6·0	..	5·5	0	0	19	10	5	1	0	0	0	0	3	9	0
Sibsagar	0830	97	1015·8	1004·5	—0·3	16·8	15·2	14·0	15·9	84	—4	6·0	+0·2	3·2	0	0	22	4	7	1	1	3	3	0	3	6	0
	1730	,,	1012·3	1001·0	..	18·3	15·9	14·2	16·2	77	..	5·0	..	4·0	0	0	22	8	12	2	0	0	0	0	0	6	0
Jorhat	0530	90	1013·2	1002·6	..	13·0	12·9	12·8	14·9	99	..	5·8	..	2·9	0	0	11	3	0	1	0	2	1	3	1	17	0
	0830	,,	1015·3	1004·7	..	15·8	15·0	14·3	16·4	92	..	6·0	..	6·0	0	0	23	8	6	2	0	0	5	0	2	5	0
	1130	,,	1013·8	1003·4	..	20·1	16·7	13·9	16·4	68	..	4·6	..	10·6	0	1	27	9	7	1	2	1	4	2	2	0	0
	1730	,,	1011·6	1001·1	..	18·2	15·8	13·9	16·1	77	..	4·8	..	7·6	0	1	19	12	6	1	0	0	0	0	1	8	0
Golaghat	0830	..	..	..	..	16·0	14·4	13·0	15·2	83	..	6·5	..	0·9	0	0	8	0	2	0	1	0	0	0	5	20	0
	1730	..	..	..	..	21·2	16·5	12·9	14·9	60	..	5·6	..	1·1	0	0	10	0	0	0	9	0	0	0	1	18	0
Gohpur	0830	..	..	..	..	15·7	14·5	13·5	15·6	88	..	4·4	..	3·3	0	0	27	0	13	4	6	1	2	0	1	1	0
	1730	..	..	..	..	19·7	16·9	15·0	17·1	75	..	3·9	..	4·2	0	0	28	1	15	2	6	0	0	0	4	0	0
Tezpur	0830	79	1015·2	1005·9	—1·5	16·2	14·7	13·5	15·4	84	+3	4·8	+1·8	4·3	0	0	25	0	0	25	0	0	0	0	0	3	0
	1730	,,	1011·9	1002·7	..	19·9	16·2	13·7	15·4	68	..	3·5	..	3·1	0	0	11	0	0	10	0	0	1	0	0	17	0
Tezpur (P.B.O.)	0230	78	1013·1	1003·8	..	14·5	13·8	13·2	15·1	92	..	3·9	..	2·8	0	0	13	3	3	5	0	0	1	1	0	15	0
	0530	,,	1013·7	1004·4	..	13·7	13·2	12·7	14·8	95	..	3·4	..	1·5	0	0	8	1	2	4	0	0	0	1	0	20	0
	0830	,,	1015·7	1006·5	..	17·4	15·2	13·5	15·5	79	..	4·1	..	4·8	0	0	20	3	9	5	1	0	1	1	0	8	0
	1130	,,	1014·3	1005·2	..	21·2	16·5	13·0	14·9	60	..	3·1	..	6·9	0	0	24	1	4	10	2	1	4	2	0	4	0
	1730	,,	1011·9	1002·8	..	19·5	16·1	13·4	15·7	69	..	3·9	..	3·4	0	0	14	4	2	4	3	0	1	0	0	14	0
	2330	,,	1014·0	1004·7	..	16·2	14·9	13·8	15·8	87	..	3·2	..	1·6	0	0	9	0	3	4	1	0	1	0	0	19	0
Majbat	0830	..	..	..	..	..	..	..	..	..	..	4·4	..	2·9	0	0	25	0	0	23	0	0	0	2	0	3	0
	1730	..	..	..	..	..	..	..	..	..	..	4·2	..	0·9	0	0	8	0	0	6	0	0	0	2	0	20	0
Chaparmukh (R)	0830	66																									
(R)	1730	,,																									
Tangla	0830	78	..	..	..	..	..	..	..	..	..	2·5	..	5·6	0	0	27	0	11	15	0	0	0	1	0	1	0
	1730	,,	..	..	..	..	..	..	..	..	..	3·4	..	2·1	0	0	15	4	0	0	0	0	0	11	0	13	0
Gauhati .*	0830	55	1015·0	1008·2	—0·9	16·5	14·7	13·2	15·3	81	+2	3·4	+0·7	1·7	0	0	13	2	0	1	4	4	2	0	0	9	0
**	1730	,,	1011·1	1004·7	..	21·7	16·9	13·8	15·4	62	..	3·3	..	1·5	0	0	10	1	1	2	0	0	4	1	1	13	0

* Observations for 22 days ** Observations for 23 days (R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, kms per hour	Wind speed (km.p.h): 62 or more	Wind speed (km.p.h): 20 to 61	Wind speed (km.p.h): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur and Tripura)—*Contd.*																											
Gauhati (Kaikuchi Aerodrome).	0230	49	1012·8	1006·9	..	13·2	12·5	11·9	13·9	93	..	1·9	..	3·4	0	0	18	2	5	1	2	4	4	0	0	10	0
	0530	,,	1013·2	1007·3	..	12·11	11·6	11·1	13·2	95	..	2·7	..	2·0	0	0	10	0	3	0	0	0	7	0	0	18	0
	0830	,,	1015·0	1009·2	..	17·2	14·7	12·7	14·7	75	..	2·9	..	4·2	0	0	18	1	8	1	0	6	0	1	1	10	0
	1130	,,	1013·7	1008·0	..	22·4	15·9	10·4	13·3	48	..	2·5	..	10·0	0	1	26	10	6	1	0	0	1	4	5	1	0
	1730	,,	1011·4	1005·6	..	20·6	15·8	11·8	14·2	59	..	4·0	..	3·6	0	0	17	3	3	0	0	0	1	3	7	11	0
	2330	,,	1013·7	1007·9	..	14·6	13·4	12·4	14·4	88	..	3·4	..	3·9	0	0	17	0	5	1	0	3	5	3	0	11	0
Rangiya	0830	..	..	..	..	16·5	14·8	13·7	15·4	83	..	..	..	3·7	0	0	18	0	0	15	1	1	0	1	0	10	0
	1730	..	..	..	..	21·5	17·5	14·9	16·8	67	..	..	..	1·3	0	0	7	0	1	3	0	0	0	3	0	21	0
Goalpara	0830	38	1013·9	1009·4	..	15·7	13·6	11·8	13·8	78	..	2·6	..	1·4	0	0	10	1	1	1	2	1	2	2	0	18	0
	1730	,,	1011·1	1006·7	..	22·6	16·8	12·2	14·7	53	..	1·9	..	2·3	0	0	13	1	0	0	1	0	6	4	1	15	0
Dhubri	0830	35	1015·3	1011·2	—0·3	17·7	15·3	13·5	15·5	77	+1	2·1	+0·1	5·9		0	28	0	17	1	2	3	3	0	2	0	0
	1730	,,	1012·0	1007·9	..	20·4	16·7	14·0	16·0	67		1·6	..	4·3	0	0	24	0	3	0	1	2	17	0	1	4	0
Dhubri (Rupsi Aerodrome)	0830	36	..	1010·1	..	17·4	14·6	11·9	14·4	71	..	2·7	..	4·0	0	0	25	0	4	7	7	2	3	2	0	3	0
	1130	,,	..	1009·0	..	22·5	16·9	12·4	14·8	55	..	2·4	..	6·4	0	0	27	2	1	0	7	7	6	4	0	1	0
	1730	,,	..	1006·8	..	18·7	15·4	12·8	14·9	70	..	0·2	..	1·5	0	0	8	0	1	3	1	0	2	1	0	20	0
Tura (R)	0830	370																									
(R)	1730	,,																									
Agartala	0230	16	1012·0	1010·1	..	14·9	14·2	13·5	15·7	91	..	2·1	..	3·3	0	0	15	0	2	1	5	3	3	0	1	13	0
	0530	,,	1012·4	1010·5	..	14·1	13·5	13·0	15·1	93	..	2·9	..	3·7	0	0	19	1	2	2	6	8	0	0	0	9	0
	0830	,,	1014·5	1012·7	..	19·1	17·0	14·9	17·7	78	..	3·3	..	4·3	0	0	20	1	0	2	3	12	0	1	1	8	0
	1130	,,	1013·5	1011·7	..	24·2	17·1	10·8	13·7	47	..	3·0	..	8·6	0	0	25	3	1	0	2	2	3	6	8	3	0
	1730	,,	1011·1	1009·3	..	23·0	17·1	12·4	14·7	54	..	2·3	..	4·7	0	0	21	3	0	0	0	2	5	5	6	7	0
	2330	,,	1013·0	1011·1	..	16·6	15·0	13·8	15·8	85	..	1·9	..	3·1	0	0	16	1	2	0	3	3	2	5	0	12	0
Silchar	0830	29	1015·6	1012·1	—0·5	17·7	15·5	13·8	15·8	78	+1	3·5	+1·2	1·3	0	0	12	0	3	5	2	1	0	0	1	16	0
	1730	,,	1011·7	1008·3	..	22·6	17·2	13·2	15·3	57	..	2·0	..	0·8	0	0	7	1	0	0	2	0	1	1	2	21	0
Imphal	0830	801	1016·2	925·6	..	14·2	11·5	8·9	11·5	71	..	3·4	..	4·5	0	0	24	0	0	0	8	10	5	1	0	4	0
	1130	,,	1012·8	923·9	..	19·4	13·5	8·3	10·7	50	..	3·8	..	14·3	0	6	21	0	0	1	1	8	14	2	1	1	0
	1730	,,	1011·9	922·3	..	17·0	12·3	8·0	10·5	56	..	2·9	..	14·3	0	6	21	1	0	0	1	2	10	11	2	1	0
Haflong	0830	682	1014·7	937·2	..	15·6	12·5	9·6	12·0	68	..	2·9	..	1·2	0	0	28	0	6	0	0	11	11	0	0	0	0
	1730	,,	1011·1	934·2	..	17·5	12·8	8·8	10·9	58	..	3·1	..	1·7	0	0	28	0	0	0	0	11	17	0	0	0	0
Lumding	0830	149	1015·9	998·2	..	15·0	13·5	12·5	14·3	83	—4	4·1	..	1·2	0	0	8	0	1	6	1	0	0	0	0	20	0
	1730	,,	1011·9	994·7	..	22·2	16·6	12·0	13·8	54	..	5·4	..	2·6	0	0	15	2	0	1	2	2	4	1	3	13	0
Sub-Himalayan West Bengal																											
Cooch Behar (C.W.O.)	0830	43	1015·2	1010·1	..	16·8	14·5	13·7	14·6	77	..	2·5	..	7·1	0	0	23	0	4	14	2	0	2	1	0	5	0
	1130	,,	1013·7	1008·9	..	22·2	16·4	12·0	13·8	55	..	2·3	..	8·4	0	0	28	0	2	9	4	1	4	1	0	0	7
	1730	,,	1011·6	1006·5	..	20·2	15·8	12·4	14·2	62	..	2·6	..	1·1	0	0	4	1	1	1	0	0	1	0	0	24	0
Jalpaiguri	0830	83	1015·2	1005·2	—0·3	14·1	12·6	11·4	13·5	84	+4	1·4	—0·3	3·2	0	0	20	5	5	5	0	0	1	1	3	8	0
	1730	,,	1011·3	1001·7	..	22·9	15·7	9·4	11·5	43	..	1·3	..	5·6	0	0	25	1	0	2	3	0	10	7	2	3	0
Bagdogra*	0230	131	1012·5	997·0	..	13·0	12·2	11·4	13·3	91	..	1·2	..	4·2	0	0	19	10	4	1	0	0	0	2	2	2	0
	0530	,,	1012·6	996·9	..	10·7	10·3	10·0	12·1	95	..	2·2	..	3·4	0	0	21	13	3	1	0	0	0	1	3	7	0
	0830	,,	1014·5	999·2	..	16·5	14·2	12·1	14·4	76	..	2·6	..	5·3	0	0	24	2	7	9	1	0	1	1	3	4	0
	1130	,,	1013·3	998·2	..	21·7	15·7	10·6	13·7	51	..	2·9	..	7·9	0	0	27	1	1	10	9	2	1	3	0	1	0
	1730	,,	1010·8	995·6	..	20·0	15·6	12·1	14·1	61	..	4·3	..	4·9	0	0	23	6	3	0	0	2	7	3	2	5	0
	2330	,,	..	..	..	14·0	13·1	12·3	14·0	91	..	2·4	..	3·2	0	0	18	10	3	0	0	0	0	2	3	10	0
Malda	0830	31	1015·0	1011·2	—0·6	18·8	14·5	10·6	13·7	60	—11	1·9	+0·5	8·1	0	0	27	4	1	1	1	3	6	5	6	1	0
	1730	,,	1011·6	1008·0	..	22·8	15·5	9·4	11·9	44	..	1·6	..	6·0	0	0	25	3	0	0	0	1	3	7	11	0	0
Gangetic West Bengal																											
Dum Dum	0230	6	1012·4	1011·6	..	16·9	16·0	15·2	17·9	90	..	1·6	..	2·5	0	0	12	5	2	0	0	2	3	0	0	16	0
	0530	,,	1012·8	1012·0	..	15·8	15·1	14·4	16·1	93	..	2·7	..	1·8	0	0	7	3	1	1	1	1	0	0	0	21	0
	0830	,,	1014·9	1014·1	..	20·1	16·6	13·7	16·4	69	..	2·3	..	5·4	0	0	23	9	6	0	2	3	1	0	2	5	0
	1130	,,	1014·2	1013·5	..	25·4	17·9	11·8	14·5	45	..	2·3	..	8·4	0	0	26	4	1	2	1	4	3	6	5	2	0
	1730	,,	1011·5	1010·7	..	24·8	18·3	13·8	15·6	51	..	2·3	..	2·4	0	0	13	3	1	2	1	3	2	0	1	15	0
	2330	,,	1013·1	1012·3	..	17·8	16·4	15·4	17·5	86	..	1·4	..	2·2	0	0	13	2	2	2	1	4	2	0	0	15	0
Calcutta	0830	6	1015·1	1014·3	—0·1	21·1	17·3	14·3	16·5	67	—12	1·8	—0·5	3·7	0	0	17	4	3	2	1	1	3	1	2	11	0
	1130	,,	1014·1	1013·4	..	26·1	18·4	12·4	14·8	45	..	2·2	..	9·0	0	0	26	6	1	0	2	2	4	1	10	2	0
	1730	,,	1011·7	1011·0	..	25·2	18·4	13·3	15·2	49	..	1·9	..	3·0	0	0	20	2	0	1	0	3	3	3	8	0	0
Barackpore	0530	7	1012·9	1012·1	..	15·2	14·6	14·0	16·1	93	..	2·1	..	1·8	0	0	12	4	1	1	0	1	3	0	2	16	0

(R) Register not received. *Observations for 2 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas.)		Mean wind speed kms. per hour	Wind speed (Kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal—(contd.)																											
Barrackpore (*Contd*)	0830	7	1015·1	1014·3	..	20·5	16·8	13·8	16·3	67	..	2·4	..	4·4	0	0	20	3	5	3	2	0	1	3	3	8	0
	1130	,,	1014·3	1013·5	..	25·3	17·7	11·8	14·1	44	..	2·1	..	9·9	0	0	27	2	3	4	0	1	3		6	1	0
	1730	,,	1011·6	1010·8	..	23·7	17·6	12·8	15·2	52	..	1·9	..	4·5	0	1	20	7	1	0	1	3	1	4	4	7	0
	2330	,,	1013·2	1012·4	..	16·8	15·7	14·7	17·3	88	..	1·3	..	2·2	0	0	10	0	1	1	1	3	4	0	0	18	0
Saugor Island	0830	3	1014·1	1013·7	—0·9	22·3	18·5	16·1	19·6	69	—9	2·1	—0·5	..	0	11	17	8	6	0	1	5	5	1	2	0	0
	1730	,,	1011·2	1010·9	..	24·3	19·6	17·0	18·6	66	..	1·9	..	..	0	9	19	4	3	0	4	10	6	0	1	0	0
Sandheads	0530	10	1012·9	1011·8	..	23·5	19·5	18·0	19·2	73	..	2·9	..	..	0	2	22	3	2	1	0	1	9	6	2	4	0
	0830	,,	1014·8	1013·7	—0·4	24·4	20·7	18·3	21·6	70	0	2·1	+0·3	..	0	1	22	6	5	2	1	1	6	2	0	5	0
	1130	,,	1014·6	1013·5	..	25·5	20·7	17·5	20·7	63	..	1·9	..	..	0	1	24	3	6	1	0	2	8	3	2	3	0
	1730	,,	1011·8	1010·7	..	25·4	20·6	17·3	20·5	63	..	1·5	..	..	0	3	21	2	4	4	2	5	7	0	0	4	0
	2330	,,	1013·1	1012·0	..	24·0	20·5	18·4	21·1	72	..	0·1	..	..	0	2	22	2	2	1	1	6	10	2	0	4	0
Contai	0830	11	1014·7	1013·5	..	22·7	17·9	14·0	16·8	60	..	2·0 (d)	..	3·1 (d)	0	0	19	4	4	0	0	1	7	2	1	9	0
	1730	,,	1011·7	1010·5	..	21·8	17·5	14·5	16·7	56	..	1·6	..	2·5	0	0	16	1	1	0	2	10	2	0	0	11	0
Midnapore	0830	45	1015·1	1009·8	—0·1	22·1	16·4	11·6	13·4	53	—11	1·2	—0·8	5·6	0	1	23	9	7	0	0	4	1	2	1	4	0
	1730	,,	1011·2	1006·1	..	26·6	18·0	11·2	13·4	40	..	1·1	..	2·3	0	0	16	1	9	0	0	0	3	0	3	12	0
Purulia	0830	255	1015·7	986·2	..	18·4	13·2	8·0	10·9	62	..	1·4	..	3·4	0	0	26	2	2	0	0	0	6	9	7	2	0
	1730	,,	1011·3	982·5	..	24·4	15·8	7·7	11·3	38	..	2·3	..	2·1	0	0	14	4	3	0	0	0	0	1	6	14	0
Burdwan	0830	32	1015·0	1011·3	—0·2	20·3	15·8	12·0	14·3	57	—10	1·6	—0·7	1·5	0	0	10	1	2	1	2	0	1	0	3	18	0
	1730	,,	1012·1	1008·4	..	24·7	19·2	15·4	17·7	59	..	1·3	..	0·2	0	0	2	0	2	0	0	0	0	0	0	26	0
Krishnagar	0830	15	1015·6	1013·9	+0·3	19·2	15·8	13·3	15·3	70	—3	1·0	—1·2	2·1	0	0	18	3	2	2	1	4	1	2	3	10	0
	1730	,,	1012·2	1010·5	..	24·4	18·0	13·8	15·5	53	..	1·1	..	0·2	0	0	2	1	0	0	0	0	0	1	0	26	0
Asansol	0230	126	1012·9	998·0	..	15·9	12·8	9·9	13·1	69	..	1·5	..	1·5	0	0	9	1	0	1	0	0	1	2	4	19	0
	0530	,,	1013·3	998·4	..	14·8	12·1	9·9	12·4	74	..	1·6	..	1·4	0	0	6	1	0	0	0	0	0	0	5	22	0
	0830	,,	1015·0	1000·3	—0·1	18·7	13·9	9·4	12·1	55	—8	1·5	—0·6	4·7	0	0	22	3	2	1	0	0	0	5	11	6	0
	1130	,,	1014·0	999·6	..	24·4	15·6	7·7	10·4	37	..	1·9	..	7·9	0	0	26	2	1	1	1	0	0	4	17	2	0
	1730	,,	1011·2	996·8	..	24·4	16·4	9·5	12·1	42	..	1·9	..	3·5	0	0	17	1	0	0	1	0	1	4	10	11	0
	2330	,,	1013·5	998·7	..	17·2	13·5	10·1	12·8	63	..	1·1	..	0·7	0	0	5	0	0	0	0	0	0	1	4	23	0
Suri	0830	77	1015·2	1006·3	..	18·9	14·0	9·8	12·1	58	..	1·8	..	4·4	0	0	24	3	2	2	0	0	5	8	4		0
	1730	,,	1012·1	1003·3	..	23·9	15·9	8·7	11·5	40	..	1·7	..	4·5	0	0	22	1	2	1	1	1	1	9	6	6	0
Berhampore	0830	19	1014·7	1012·4	—0·7	17·4	14·6	12·4	14·4	73	+3	1·9	—0·3	1·5	0	0	10	0	0	0	1	3	2	2	2	18	0
	1730	,,	1011·3	1009·2	..	24·0	17·0	11·5	13·3	47	..	1·4	..	0·7	0	0	5	1	0	1	0	1	1	0	1	23	0
ORISSA																											
Baripada	0830	54	1015·8	1009·4	..	19·7	17·5	16·0	18·2	79	..	1·6	..	2·0	0	0	16	5	4	0	0	0	2	0	5	12	0
	1730	,,	1011·8	1005·7	..	25·7	..	..	..	..	..	1·8	..	1·9	0	0	13	5	3	1	1	0	1	1	1	15	0
Balasore	0830	20	1014·8	1012·5	—0·4	22·0	16·6	12·2	14·8	55	—14	2·4	+0·4	10·2	0	2	25	10	7	0	0	4	5	0	1	1	0
	1730	,,	1011·0	1008·7	..	24·9	19·0	14·8	17·4	55	..	2·6	..	9·4	0	4	20	1	1	2	11	8	1	0	0	4	0
Chandbali	0830	6	1014·9	1014·2	0	22·8	19·1	16·6	19·3	69	—8	1·4	—0·8	5·7	0	0	28	1	3	0	1	0	6	2	15	0	0
	1730	,,	1011·4	1010·7	..	25·8	20·3	17·0	19·3	59	..	1·2	..	7·8	0	0	28	0	6	3	14	0	2	1	2	0	0
Cuttack	0830	27	1014·6	1011·5	—0·6	21·3	18·3	16·3	18·4	73	—3	1·9	—0·4	1·2	0	0	5	0	5	0	0	0	0	0	0	23	0
	1730	,,	1010·7	1007·7	..	29·0	19·8	13·0	15·7	39	..	1·7	..	2·7	0	0	9	0	1	0	1		1	0	1	19	0
Bhubaneswar	0230	46	1012·0	1006·6	..	19·8	18·1	16·9	19·4	84	..	2·4	..	6·2	0	0	21	2	4	1	0	2	8	4	0	7	0
	0530	,,	1012·6	1007·2	..	18·6	17·2	15·9	18·5	85	..	2·7	..	4·2	0	0	22	6	4	0	1	1	5	3	2	6	0
	0830		1014·6	1009·2	..	23·5	19·3	16·4	19·0	66	..	2·2	..	11·6	0	1	27	7	5	0	0	4	5	4	3	0	0
	1130	,,	1013·6	1008·4	..	28·9	19·8	13·3	15·5	40	..	2·7	..	15·8	0	11	16	1	4	1	1	6	11	2	1	1	0
	1730	,,	1010·9	1005·6	..	27·3	19·7	14·2	17·0	47	..	2·6	..	14·1	0	7	20	1	0	4	3	12	2	0	5	1	0
	2330	,,	1013·2	1007·8	..	21·2	19·0	17·6	20·1	80	..	1·9	..	6·2	0	2	20	3	2	1	0	4	6	4	2	6	0
Puri	0830	6	1014·9	1014·2	+0·1	24·3	20·2	17·4	20·2	67	—9	1·7	—0·3	15·0	0	6	22	11	4	1	0	0	9	3	0	0	0
	1730	,,	1011·5	1010·8	..	25·8	21·8	19·8	23·1	69	..	2·6	..	23·1	0	17	11	0	0	1	5	13	8	1	0	0	0
Gopalpur	0530	17	1012·6	1010·6	..	20·3	18·1	16·7	18·9	80	..	1·1	..	5·9	0	0	27	5	0	0	0	0	7	1	14	1	0
	0830	,,	1014·8	1012·8	0	23·6	19·6	16·9	19·7	67	—6	1·8	+0·6	8·0	0	1	24	9	0	0	0	1	8	0	7	3	0
	1130	,,	1014·1	1012·1	..	28·3	22·2	18·5	21·8	58	..	1·6	..	13·4	0	6	22	1	1	6	7	8	4	0	1	0	0
	1730	,,	1011·4	1009·5	..	26·1	22·0	19·7	23·0	68	..	1·8	..	19·6	0	8	20	0	0	2	9	11	6	0	0	0	0
	2330	,,	1013·3	1011·3	..	23·6	20·9	19·4	22·3	78	..	1·0	..	10·3	0	5	19	0	0	0	0	5	13	2	4	4	0
Koraput	0830	913	1525·3	913·3	..	17·6	14·0	11·2	13·3	68	..	0·6	..	..	0	0	28	2	0	1	0	17	6	1	1	0	0
	1730	,,	1515·2	910·7	..	24·6	15·6	8·2	11·3	36	..	1·4	..	..	0	0	28	11	0	2	0	4	0	9	2	0	0
Titilagarh	0830	211	1014·7	990·4	..	20·5	15·3	10·9	13·0	54	..	0·6	..	1·5	0	0	12	2	2	0	3	3	1	1	0	16	0
	1730	,,	1009·4	985·9	..	30·3	20·6	13·3	16·3	37	..	1·3	..	1·6	0	0	14	3	5	0	0	2	4	0	0	14	0
Bolangir	0830	..	..	..	..	28·8	26·2	25·1	32·3	81	..	6·1	..	3·2	0	0	28	0	2	1	1	0	1	10	13	0	0
	1730	..	..	..	..	29·0	26·2	25·0	31·8	79	..	6·1	..	3·3	0	0	28	1	2	3	1	1	0	8	12	0	0

(d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in meters	Mean pressure in millibars: At mean sea level or height in g. p. m. of pearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Departure from normal	Cloud amount (Oktas): Mean amount	Mean wind speed, Km. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—(*Contd.*)																											
Angul	0830	139	1015·1	999·1	+0·3	20·1	16·3	13·4	15·7	66	—1	1·7	—0·7	3·9	0	1	22	1	1	0	1	2	4	8	6	5	0
	1730	,,	1010·7	995·1	..	28·9	18·0	8·8	11·9	30	..	2·2	..	5·8	0	0	25	2	2	2	7	1	2	6	3	3	0
Sambalpur	0830	148	1015·1	997·9	—0·1	19·0	16·1	12·9	15·1	65	0	1·4	—0·3	2·5	0	0	21	3	11	1	1	3	2	0	0	7	0
	1730	,,	1011·1	994·3	..	26·0	18·9	13·9	15·8	49	..	2·0	..	1·1	0	0	9	3	2	1	1	0	0	0	2	19	0
Jharsuguda	0230	230	1012·5	985·7	..	16·1	13·7	11·6	13·6	75	..	1·4	..	5·0	0	0	21	8	8	0	0	1	0	1	3	7	0
	0530	,,	1013·1	986·2	..	14·7	12·7	10·9	13·1	79	..	1·2	..	4·7	0	0	24	11	6	0	1	0	1	0	5	4	0
	0830	,,	1015·0	988·4	..	18·8	14·3	10·4	12·8	59	..	1·8	..	4·9	0	0	25	10	11	1	0	1	1	0	1	3	0
	1130	,,	1013·8	987·8	..	25·5	16·4	8·0	11·1	35	..	1·7	..	6·9	0	0	27	5	5	0	0	4	6	4	3	1	0
	1730	,,	1010·4	984·6	..	26·9	16·7	7·4	10·6	31	..	2·0	..	4·9	0	0	20	3	2	0	0	2	3	8	2	8	0
	2330	,,	1013·1	986·5	..	18·5	14·6	11·1	13·5	63	..	1·4	..	4·9	0	0	24	4	9	0	0	0	2	2	7	4	0
Chota Nagpur																											
Jamshedpur	0830	129	1015·2	1000·1	—0·1	18·1	14·2	10·5	13·0	63	—9	1·1	—1·2	4·0	0	0	22	0	1	0	0	0	2	12	7	6	0
	1730	,,	1010·9	996·3	..	26·2	17·5	10·1	13·1	39	..	2·2	..	5·7	0	0	26	2	2	2	1	0	4	8	7	2	0
Jamshedpur (P.B.O.)	0530	145	1013·3	996·2	..	14·7	12·6	10·6	12·7	77	..	1·7	..	4·5	0	0	19	1	2	1	1	1	1	0	12	9	0
	0830	,,	1015·3	998·3	..	18·4	14·3	10·6	12·9	62	..	1·7	..	4·6	0	0	23	3	2	0	0	0	4	3	11	5	0
	1130	,,	1014·1	997·5	..	24·7	15·8	7·6	10·7	35	..	1·9	..	..	0	1	26	2	4	2	1	0	7	1	10	1	0
	1730	,,	1010·8	994·4	..	26·3	16·6	7·5	11·0	33	..	2·6	..	..	0	0	24	1	3	2	1	1	3	1	12	4	0
	2330	,,	1013·5	996·5	..	17·7	14·5	11·8	14·2	70	..	1·4	..	..	0	0	16	0	4	1	2	0	1	1	7	12	0
Chaibasa	0830	226	1014·9	988·7	—0·3	18·5	14·8	10·9	14·0	60	—11	1·5	—0·6	0·9	0	0	7	0	3	0	0	0	4	0	0	21	0
	1730	,,	1010·9	985·3	..	25·4	17·7	11·5	13·7	44	..	2·1	..	1·5	0	0	14	0	6	0	0	0	6	1	1	14	0
Ranchi	0830	655	1014·2	940·2	—0·5	17·5	11·5	6·0	9·0	50	—4	2·0	—0·1	0·8	0	0	7	2	0	0	1	0	2	1	1	21	0
	1730	,,	1011·7	938·5	..	20·3	13·0	6·7	9·8	43	..	1·1	..	0·1	0	0	1	1	0	0	0	0	0	0	0	27	0
Ranchi (C.W.O.)	0530	652	1014·2	939·2	..	12·2	8·8	5·1	9·0	63	..	1·2	..	2·0	0	0	12	0	0	0	0	0	2	6	4	16	0
	0830	,,	1014·8	941·1	..	17·6	11·4	4·9	9·1	46	..	2·0	..	7·2	0	1	23	4	1	0	0	1	2	8	8	4	0
	1130	,,	1013·2	940·6	..	21·7	12·5	2·5	7·9	31	..	1·7	..	13·9	0	4	24	2	1	3	1	0	3	11	7	0	0
	1730	,,	1010·6	938·2	..	21·9	13·3	3·5	9·1	36	..	2·3	..	9·6	0	2	23	4	1	2	0	0	1	11	6	3	0
Daltonganj	0830	221	1015·9	990·1	+0·1	16·7	12·6	8·5	11·2	60	—13	2·1	+0·5	1·8	0	0	12	2	1	2	2	0	0	5	0	16	0
	1730	,,	1011·7	986·4	..	24·3	14·9	6·8	9·3	34	..	1·9	..	4·7	0	0	22	1	2	1	1	0	0	2	15	6	0
Hazaribagh	0830	611	1015·0	945·5	+0·1	16·7	10·8	4·4	8·8	46	—14	2·3	+0·1	6·7	0	1	21	3	1	0	1	1	2	4	10	6	0
	1730	,,	1011·4	943·0	..	20·6	12·5	4·2	8·7	36	..	1·7	..	7·2	0	0	24	8	2	0	0	0	0	0	14	4	0
Dhanbad	0830	257	1014·6	984·5	..	19·4	13·3	7·2	10·1	47	..	1·6	..	3·6	0	0	28	5	1	1	0	3	1	11	6	0	0
	1730	,,	1011·0	981·8	..	23·4	15·1	7·2	10·3	37	..	2·3	..	3·4	0	0	28	9	0	0	1	3	0	4	10	1	0
Bihar																											
Purnea	0830	38	1014·9	1010·5	—0·3	16·8	13·6	10·8	12·8	68	—8	1·0	—0·7	3·1	0	0	20	2	1	2	0	0	5	10	0	8	0
	1730	,,	1011·1	1007·1	..	20·5	15·5	11·5	12·5	57	..	1·2	..	1·1	0	0	9	0	0	0	0	1	4	4	0	19	0
Ferbesganj	0830	61	1014·5	1007·4	..	14·7	13·0	11·0	13·7	81	..	1·6	..	5·8	0	0	24	0	5	6	1	0	3	6	3	4	0
	1730	,,	1010·5	1003·9	..	23·0	16·0	10·7	12·6	50	..	1·7	..	7·2	0	0	26	0	0	1	0	0	3	21	1	2	0
Darbhanga	0830	49	1014·9	1009·0	—0·3	15·3	12·9	10·6	12·7	75	+2	1·2	—0·5	1·9	0	0	18	0	0	3	1	1	1	12	0	10	0
	1730	,,	1011·4	1005·8	..	22·1	16·3	11·3	13·7	51	..	1·1	..	0·6	0	0	6	0	0	0	0	0	1	4	1	22	0
Motihari (R)	0830	66																									
(R)	1730	,,																									
Patna	0830	53	1015·0	1008·8	—0·4	17·3	12·7	8·2	11·4	56	—7	1·4	—0·5	8·7	0	0	27	2	2	0	0	3	6	12	2	1	0
	1730	,,	1011·8	1005·7	..	22·4	15·0	8·1	10·9	41	..	1·5	..	6·0	0	0	24	1	1	1	0	0	4	15	2	4	0
Patna (Aerodrome)	0530	60	1012·7	1005·5	..	11·4	9·5	8·2	10·3	81	..	0·9	..	3·0	0	0	11	0	0	0	0	0	2	1	7	1	17	0
	0830	,,	1014·4	1007·4	..	16·2	12·5	8·5	11·2	63	..	1·5	..	10·3	0	1	23	0	0	1	2	1	5	12	3	4	0
	1130	,,	1013·7	1006·9	..	22·0	14·7	7·5	11·0	42	..	1·4	..	11·7	0	3	24	2	0	2	1	1	3	12	6	1	0
	1730	,,	1011·2	1004·3	..	22·0	15·7	9·9	12·6	46	..	1·7	..	4·5	0	0	13	1	1	0	0	0	1	5	5	15	0
	2330	52	1013·6	1007·4	..	17·1	13·8	11·2	13·0	69	..	0·2	..	0·4	0	0	1	0	0	0	0	0	0	0	1	27	0
Dehri	0830	107	1015·3	1002·8	..	18·5	13·1	7·1	10·4	49	..	1·9	..	4·4	0	0	26	0	0	2	0	3	16	2	3	2	0
	1730	,,	1011·6	999·3	..	23·9	15·0	6·5	9·9	34	..	1·5	..	4·1	0	0	25	2	1	1	0	0	0	8	13	3	0
Gaya	0230	116	1013·3	999·4	..	12·8	10·9	8·9	11·4	77	..	0·9	..	3·6	0	0	19	0	0	1	4	4	9	0	1	9	0
	0530	,,	1013·4	999·5	..	11·3	9·8	8·0	11·0	81	..	0·7	..	3·4	0	0	18	0	0	0	2	6	7	2	1	10	0
	0830	,,	1015·2	1001·5	—0·2	16·1	12·3	8·6	11·1	62	+2	1·2	—0·6	6·0	0	2	17	0	1	0	0	3	8	6	1	9	0
	1130	,,	1014·8	1001·4	..	23·1	14·6	5·8	9·5	34	..	1·7	..	12·1	0	6	19	3	1	0	1	0	1	7	12	3	0
	1730	,,	1011·9	998·5	..	23·0	14·9	7·2	10·5	38	..	1·5	..	7·1	0	1	23	4	3	0	0	1	0	2	14	4	0
	2330	,,	1014·0	1000·3	..	14·5	11·7	8·9	11·6	69	..	0·4	..	2·5	0	0	12	0	0	0	1	2	5	2	2	16	0
Jamui	0830	82	1015·1	1005·3	..	17·0	13·5	10·1	12·5	65	..	1·4	..	3·8	0	0	23	0	1	8	3	0	0	1	10	5	0
	1730	,,	1011·5	1001·9	..	22·8	16·3	12·2	13·5	58	..	1·5	..	3·6	0	0	25	0	0	0	0	0	0	2	21	5	0

(R) Register not received.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temparature in °C: Dry bulb	Mean temparature in °C: Wet bulb	Mean temparature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed kms. per hour	Wind speed (kms.p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—contd.																											
Dumka	0830	149	1015·1	997·8	—0·2	19·8	14·3	9·4	11·8	52	—7	1·1	—0·5	..	0	0	28	1	0	3	0	0	1	15	8	0	0
	1730	,,	1011·5	994·4	..	23·8	15·4	8·0	10·8	39	..	1·3	..	..	0	0	26	3	0	1	3	0	1	8	10	2	0
Bhagalpur	0530	49	1015·0	1007·3	..	14·1	11·9	9·7	12·1	76	..	1·2	..	3·5	0	0	17	0	1	1	0	5	6	4	0	11	0
	0830	,,	1015·0	1009·2	..	17·3	13·4	9·9	12·2	63	..	1·4	..	4·0	0	0	21	0	2	1	0	1	9	8	0	7	0
	1130	,,	1014·5	1008·9	..	22·0	15·8	10·6	13·1	50	..	1·2	..	7·7	0	1	25	0	1	2	1	0	4	14	4	2	0
	1730	,,	1011·5	1005·9	..	21·7	17·3	13·7	16·1	63	..	1·4	..	4·5	0	0	25	1	0	0	1	1	1	17	4	3	0
	2330	,,	1013·5	1007·7	..	16·7	13·6	10·8	13·1	70	..	0·5	..	3·3	0	0	19	0	0	2	1	1	10	5	0	9	0
Sabour	0830	37	1014·9	1010·4	—0·1	17·1	14·3	11·7	14·0	72	—7	2·1	—0·3	4·9	0	0	26	1	2	1	0	0	11	8	3	2	0
	1730	,,	1011·5	1007·1	..	21·8	16·7	12·6	15·0	58	..	1·6	..	3·8	0	0	21	1	1	0	0	0	0	8	11	7	0
Uttar Pradesh, (East) Gonda	0830	110	1015·4	1002·3	..	13·8	10·9	7·9	11·2	68	—7	0·6	—1·6	2·4	0	0	15	1	0	0	0	0	0	7	7	13	0
	1730	,,	1011·6	999·0	..	21·4	15·1	8·7	13·0	46	..	0·6	..	3·4	0	0	11	0	0	0	0	0	0	5	6	17	0
Nawtanwa	0830	99	1014·7	1002·7	..	13·4	11·5	8·9	11·9	78	..	0·2	..	4·4	0	0	24	1	2	3	4	3	6	1	4	4	0
	1730	,,	1011·2	999·8	..	21·8	15·0	8·3	11·1	45	..	0·3	..	3·3	0	0	17	1	1	0	0	1	11	3	0	11	0
Gorakhpur	0830	77	1014·4	1005·2	—0·5	14·6	11·6	8·3	11·3	68	—3	0·9	—0·6	1·5	0	0	12	0	1	1	0	0	0	10	0	16	0
	1730	,,	1011·9	1002·9	..	22·5	14·6	9·8	11·5	47	..	1·4	..	1·5	0	0	12	1	0	0	0	0	0	11	0	16	0
Gorakhpur (P.B.O)	0230	78	1012·5	1003·2	..	13·5	10·5	7·1	10·1	67	..	0·3	..	5·0	0	0	20	1	0	0	0	0	0	16	3	8	0
	0530	,,	1012·5	1003·1	..	12·1	9·4	6·3	10·1	69	..	0·3	..	5·0	0	1	19	0	1	1	0	0	3	11	4	8	0
	1130	,,	1014·4	1005·8	..	22·1	14·2	6·7	10·2	39	..	1·1	..	6·9	0	0	27	0	1	0	3	4	5	8	6	1	0
	2330	,,	1013·3	1004·0	..	15·3	11·7	7·6	11·1	64	..	0·3	..	5·7	0	0	23	4	0	0	0	1	3	12	3	5	0
Azamgarh	0830	78	0014·3	1005·3	..	14·3	11·6	9·0	11·5	71	..	0·8	..	3·4	0	0	19	0	0	0	0	0	1	18	0	9	0
	1730	,,	1011·3	1002·7	..	22·5	16·5	12·2	14·2	54	..	0·6	..	0·3	0	0	2	0	0	0	0	0	0	2	0	26	0
Ballia	0830	64	1014·3	1006·7	..	14·4	11·3	8·3	11·0	67	..	1·3	..	3·4	0	0	26	0	1	3	1	3	11	7	0	2	0
	1730	,,	1010·9	1003·1	..	24·1	14·8	6·1	9·1	32	..	1·5	..	4·7	0	0	24	0	0	3	1	2	10	8	0	4	0
Varanasi*(Banaras)(e)	0830	76	1015·5	1006·4	0	16·9	12·2	7·5	10·5	56	—13	1·4	—0·5	7·3	0	1	17	0	1	2	1	1	10	2	1	8	0
	1730	,,	1011·9	1003·2	..	23·6	15·0	7·0	10·1	36	..	1·5	..	9·7	0	2	21	3	1	1	0	1	9	4	4	5	0
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	1014·3	1004·0	..	10·7	8·9	6·3	10·1	77	..	0·8	..	5·5	0	0	24	0	0	2	0	4	12	4	2	4	0
	0830	,,	1016·3	1006·2	..	15·5	11·8	8·0	11·1	62	..	1·0	..	9·7	0	2	25	2	1	1	0	2	14	7	0	1	0
	1130	,,	1015·8	1005·8	..	22·7	14·4	6·4	9·7	35	..	0·9	..	14·2	0	6	22	3	2	1	1	0	4	11	6	0	0
	1730	,,	1012·8	1002·9	..	22·8	15·1	7·9	10·8	39	..	1·2	..	8·4	0	1	26	2	1	1	0	1	1	12	9	1	0
	2330	,,	1014·7	1004·5	..	13·7	11·0	8·2	11·0	69	..	0·1	..	4·5	0	0	19	2	0	0	0	2	3	6	6	9	0
Allahabad (Bamrauli)	0230	98	1013·6	1001·9	..	12·3	9·4	6·1	9·2	67	..	0·6	..	5·3	0	0	23	2	0	0	1	2	4	9	5	5	0
	0530	,,	1013·9	1002·1	..	10·7	8·6	6·1	9·2	74	..	0·5	..	4·6	0	0	21	1	1	1	0	1	7	8	2	7	0
	0830	,,	1015·8	1004·2	+0·3	15·0	10·7	6·1	9·7	56	—10	1·3	—0·9	6·2	0	0	24	2	1	2	0	1	6	12	0	4	0
	1130		1015·4	1004·1	..	23·3	13·9	4·2	8·3	29	..	1·4	..	9·3	0	2	24	2	3	2	1	0	1	12	5	2	0
	1730	,,	1012·3	1001·0	..	23·7	14·9	6·5	9·9	33	..	1·2	..	4·4	0	0	23	4	1	0	0	0	0	9	9	5	0
	2330	,,	1014·3	1002·6	..	14·5	10·8	6·9	10·1	60	..	0·4	..	4·1	0	0	15	3	0	0	2	0	2	3	5	13	0
Banda	0830	121	1016·3	1002·0	..	15·3	11·1	7·6	9·9	60	..	1·1	..	0·3	0	0	2	0	0	0	0	0	0	0	2	26	0
	1730	,,	1012·6	998·7	..	23·9	16·3	10·1	11·5	42	..	0·7	..	0·1	0	0	1	0	0	0	0	0	0	0	1	27	0
Fatehpur	0830	114	1015·9	1002·4	..	15·0	10·7	6·1	9·2	55	—16	1·4	—0·4	1·7	0	0	10	0	0	1	0	0	0	9	0	18	0
	1730	,,	1011·8	999·2	..	23·5	14·0	5·5	8·5	31	..	1·1	..	1·0	0	0	5	0	0	0	0	0	0	5	0	23	0
Kanpur	0830	126	1016·2	1001·1	+0·7	13·5	9·9	5·8	9·2	60	—8	1·0	—0·3	7·8	0	0	24	1	2	1	1	1	7	8	3	4	0
	1730	,,	1012·8	998·3	..	23·5	14·3	4·7	8·8	30	..	1·0	..	12·2	0	3	25	4	1	2	0	0	1	12	8	0	0
Lucknow*	0830	113	1015·7 (j)	1002·5 (j)	+0·6	14·4	10·7	6·7	9·9	60 (d)	—8	0·7	—1·3	2·5	0	0	17	1	0	0	2	0	2	9	3	11	0
	1730	,,	1013·1 (l)	1000·3 (l)	..	22·9	15·4	9·0	10·1	45	..	0·4	..	4·8	0	1	20	1	1	0	1	0	1	12	5	7	0
Lucknow (Amausi Aerodrome).	0230	128	1013·6	998·3	..	10·2	8·4	6·6	9·6	78	..	0·4	..	4·9	0	0	22	5	2	1	0	0	1	7	6	6	0
	0530	,,	1013·5	998·1	..	8·8	7·4	5·7	9·3	81	..	0·4	..	4·4	0	0	21	3	2	1	0	0	2	8	5	7	0
	0830	,,	1015·3	1000·1	—0·2	13·2	10·2	6·9	10·1	65	—3	1·1	—0·9	6·0	0	0	23	1	0	1	1	0	1	11	8	5	0
	1130	,,	1015·0	1000·2	..	21·8	13·7	5·4	9·1	35	..	1·1	..	12·4	0	2	26	2	1	1	2	0	1	7	14	0	0
	1730	,,	1012·1	997·3	..	22·1	13·8	5·3	9·2	34	..	1·0	..	8·9	0	1	27	2	2	2	0	0	0	6	16	0	0
	2330	,,	1014·5	999·0	..	11·9	9·8	7·6	10·1	75	..	0·4	..	4·5	0	0	21	3	0	1	0	0	0	9	8	7	0
Hardoi	0830	142	1015·1	998·1	..	11·8	9·6	7·8	10·1	74	..	0·5	..	5·3	0	1	24	2	1	0	1	0	1	9	11	3	0
	1730	,,	1012·6	995·6	..	22·3	14·8	8·2	10·7	40	..	0·8	..	6·4	0	0	24	1	0	0	1	0	0	5	17	4	0
Lakhimpur Kheri	0830	147	1014·6	996·3	..	10·9	9·2	7·2	10·5	79	..	0·0	..	2·0	0	0	19	2	0	2	0	0	0	15	0	9	0
	1730	,,	1011·9	995·0	..	21·8	14·7	8·8	10·6	48	..	0·9	..	1·5	0	0	14	0	0	0	0	0	0	14	0	14	0
Bahraich*	0830	124	1014·3 (d)	990·6 (d)	—0·3	13·7 (d)	10·6 (d)	7·4 (e)	10·3	68 (d)	—6	0·9 (d)	—0·7	3·5 (e)	0	0	20	0	0	1	2	0	9	0	8	6	0
	1730	,,	1011·7 (d)	997·4 (d)	..	22·0 (d)	14·7 (d)	8·1 (d)	10·9 (d)	48 (d)	..	1·2 (d)	..	2·1 (d)	0	0	13	0	0	0	0	0	9	0	4	14	0

*Data extracted from Indian daily weather reports (j) Mean of 21 days (l) Mean of 19 days. (e) Mean of 26 days. (d) Mean of 27 days.

Station and Division	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed Kms per hour	Wind speed (Kms.p.h.).			No. of observations									
			At mean sea level or height in g. p.m. of nearest standard isobaric level	As station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh, (West)																											
Orai	0830	141	1017·5	1000·9	..	15·8	11·2	6·6	9·5	54	..	0·5	..	3·5	0	0	27	2	2	0	2	0	3	2	16	1	0
	1730	,,	1013·4	997·2	..	24·1	15·0	6·3	9·7	32	..	0·2	..	3·4	0	0	27	9	0	0	1	0	1	3	13	1	0
Jhansi	0830	251	1016·3	986·6	—0·1	13·4	9·7	5·3	9·2	59	+5	0·8	—0·6	2·0	0	0	15	2	1	2	0	1	0	4	5	13	0
	1730	,,	1012·1	983·6	..	24·8	15·0	6·6	9·2	31	..	0·8	..	3·0	0	0	22	5	2	0	0	1	2	4	8	6	0
Agra	0830	169	1016·2	996·2	+0·4	11·6	8·0	3·1	7·9	57	—6	0·1	—2·0	1·6	0	0	15	0	0	0	0	0	1	13	1	13	0
	1730	,,	1013·1 (d)	994·1 (d)	..	23·1 (d)	13·6 (d)	2·2 (d)	8·0 (e)	29 (e)	..	0·6 (d)	..	2·6 (d)	0	0	18	1	0	0	0	0	2	11	4	10	0
Mainpuri*	0830	157	1016·4	997·6	+0·8	12·5	9·2	5·3	8·9	61	—5	0·4	—1·8	3·8	0	0	20	1	1	0	0	0	3	12	3	7	0
	1730	,,	1013·3	995·2	..	22·1	14·8	8·6	10·9	47	..	1·1	..	0·6	0	0	3	0	0	0	0	0	0	2	1	25	0
Aligarh	0830	187	1015·6	993·5	..	10·8	8·0	4·4	8·5	64	—4	0·7	—1·3	0·8	0	0	16	1	0	1	0	0	0	14	0	12	0
	1730	,,	1012·8	991·4	..	21·2	13·3	5·1	9·1	36	..	1·1	..	0·7	0	0	17	0	0	0	0	0	0	12	5	11	0
Bareilly	0830	173	1015·0	994·4	—0·2	12·4	9·4	6·1	9·4	65	—10	0·6	—1·7	3·7	0	0	14	1	0	0	1	0	1	8	3	14	0
	1730	,,	1011·8	991·9	..	21·4	13·6	5·6	9·3	36	..	1·2	..	2·6	0	0	16	1	0	0	0	0	2	10	3	12	0
Bareilly (P.B.O)	0230	172	1013·5	993·1	..	12·1	9·9	7·9	10·5	76	..	0·3	..	6·0	0	1	20	0	1	1	0	0	0	11	8	7	0
	0530	,,	1013·4	992·8	..	10·4	8·7	7·0	10·1	80	..	0·1	..	4·6	0	1	22	1	1	1	0	0	0	14	6	5	0
	1130	,,	1014·8	994·9	..	20·2	13·9	7·8	10·4	46	..	0·9	..	10·0	0	2	26	1	0	2	1	1	0	16	7	0	0
	2330	,,	1014·1	993·8	..	14·0	11·2	8·7	11·0	71	..	0·3	..	6·4	0	1	22	0	1	1	0	0	0	17	4	5	0
Meerut	0830	222	1016·2	989·8	+0·5	12·8	9·2	5·1	8·7	60	—10	0·2	—2·1	3·4	0	0	23	0	0	1	0	0	0	18	4	5	0
Najibabad	0830	270	1016·2	984·0	..	9·6	7·7	6·5	8·8	76	..	0·8	..	2·3	0	0	12	4	3	0	1	0	0	0	4	16	0
	1730	,,	1013·9	982·6	..	21·0	13·2	5·2	9·1	37	..	1·1	..	3·2	0	0	14	5	1	0	0	1	0	0	7	14	0
Roorkee	0830	274	1015·8	983·1	+0·1	9·9	8·4	6·5	6·5	79	0	2·2	—0·4	1·1	0	0	10	0	1	0	0	0	0	0	9	18	0
	1730	,,	1012·9	981·3	..	19·8	12·3	4·7	8·5	38	..	3·2	..	1·9	0	0	18	0	0	0	2	0	0	0	16	10	0
Dehra Dun	0530	682	1014·5	934·8	..	8·3	6·2	3·7	7·7	74	..	0·5	..	2·8	0	0	17	8	7	0	0	0	0	0	2	11	0
	0830	,,	1015·5	936·5	—0·3	11·0	7·9	4·3	8·3	64	—9	1·3	—2·0	1·1	0	0	9	4	2	1	0	0	0	2	0	19	0
	1130	,,	1014·2	937·1	..	17·6	10·6	2·4	7·4	39	..	1·4	..	2·6	0	0	21	0	0	0	1	3	8	7	2	7	0
	1730	,,	1012·2	934·9	..	18·4	11·6	4·6	6·5	42	..	1·5	..	3·4	0	0	24	0	0	1	1	5	7	9	1	4	0
	2330	,,	1014·9	936·1	..	11·3	8·4	5·3	8·8	69	..	1·3	..	2·8	0	0	20	9	11	0	0	0	0	0	0	8	0
Punjab (I) (Including Delhi)																											
New Delhi	0230	216	1014·9	989·1	..	11·2	7·8	3·4	7·9	60	..	0·1	..	8·8	0	1	22	3	1	1	1	0	1	3	13	5	0
	0530	,,	1014·7	988·7	..	9·4	6·6	2·6	7·6	64	..	0·1	..	8·5	0	2	21	4	1	1	0	1	0	9	7	5	0
	0830	,,	1016·3	990·4	+0·4	11·0	7·4	2·6	8·3	57	—6	1·1	—1·3	10·2	0	2	22	0	0	0	0	2	2	12	8	4	0
	1130	,,	1016·2	991·0	..	19·7	11·3	1·2	6·5	30	..	1·0	..	16·6	0	6	22	1	0	1	2	0	3	6	15	0	0
	1730	,,	1013·0	988·1	..	21·6	12·0	0·5	6·2	24	..	1·4	..	15·1	0	5	23	0	0	2	2	1	1	3	19	0	0
	2330	,,	1015·2	989·6	..	13·5	9·1	3·6	7·9	52	..	0·3	..	8·6	0	2	20	6	0	0	0	0	1	2	13	6	0
Hissar	0530	221	1015·5	988·7	..	7·0	4·9	3·1	7·4	77	..	0·3	..	3·4	0	0	19	4	1	2	3	1	1	3	4	9	0
	0830	,,	1016·8	990·2	+0·7	9·0	6·1	3·2	7·2	68	+3	0·6	—1·6	4·3	0	0	25	2	0	2	2	3	6	7	3	3	0
	1130	,,	1016·4	990·9	..	20·9	12·4	3·1	7·6	32	..	1·3	..	6·3	0	0	21	5	0	0	2	3	2	2	7	7	0
	1730	,,	1013·3	988·7	..	22·0	12·8	3·1	7·2	27	..	0·7	..	8·1	0	0	27	9	3	0	0	1	1	2	11	1	0
	2330	,,	1015·4	989·3	..	11·6	8·1	4·0	7·9	59	..	0·3	..	3·9	0	0	18	3	3	1	3	0	0	2	6	10	0
Karnal	0830	249	1015·4	986·0	..	9·8	7·5	4·6	8·6	74	..	1·5	..	0·3	0	0	3	0	0	0	0	0	0	1	2	25	0
	1730	,,	1012·5	984·3	..	21·0	12·5	3·5	7·6	30	..	2·0	..	1·1	0	0	8	0	0	0	0	0	0	3	5	20	0
Patiala	0830	251	1015·9	986·0	..	10·3	7·7	4·5	8·6	66	..	1·4	..	6·0	0	0	24	9	0	1	3	0	0	1	10	4	0
	1730	,,	1013·5	984·6	..	19·4	12·0	3·8	7·9	36	..	1·7	..	9·4	0	1	25	5	0	1	3	0	0	0	17	2	0
Ambala	0830	272	1014·7	982·5	—0·6	9·8	7·3	5·7	9·2	74	+1	0·6	—2·3	2·0	0	0	11	0	0	0	3	0	0	0	8	17	0
	1730	,,	1012·9	981·4	..	19·9	12·9	5·7	9·5	43	..	0·8	..	2·9	0	0	18	0	0	0	1	0	0	0	17	10	0
Ambala (P.B.O.)	0230	278	1014·1	981·3	..	10·7	8·3	5·9	9·0	72	..	0·4	..	10·9	0	2	26	7	3	0	2	0	1	1	14	0	0
	0530	,,	1013·7	980·8	..	9·5	7·7	5·9	9·0	78	..	0·7	..	10·6	0	2	24	5	1	1	2	1	1	2	13	2	0
	1130	,,	1015·2	983·1	..	17·8	12·4	7·5	9·6	52	..	1·8	..	14·1	0	4	24	3	1	0	3	2	1	5	13	0	0
	2330	,,	1014·6	982·0	..	12·7	9·8	6·8	10·1	69	..	0·8	..	9·2	0	2	24	5	4	0	2	1	1	4	9	2	0
Chandigarh	0830	347	1015·2	974·2	..	11·6	8·5	4·9	9·2	66	..	0·6	..	1·6	0	0	13	1	0	0	4	0	0	0	8	15	0
	1730	,,	1012·6	972·8	..	19·5	12·1	2·9	8·7	36	..	0·1	..	3·6	0	0	27	4	2	0	5	3	4	0	9	1	0
Ludhiana	0830	247	1016·2	986·6	+0·2	9·9	7·7	5·1	8·8	72	—4	1·0	—1·6	2·9	0	0	17	0	1	0	3	0	0	7	6	11	0
	1730	,,	1013·4	984·8	..	19·9	12·4	4·1	8·5	41	..	1·0	..	5·7	0	0	27	1	2	2	0	3	0	5	14	1	0
Ferozepur	0830	200	1015·8	991·4	..	8·4	7·0	5·1	8·9	75	..	0·9	..	0·6	0	0	5	0	1	0	1	0	1	0	2	23	0
	1730	,,	1012·5	989·7	..	20·7	13·4	6·9	9·5	43	..	1·0	..	1·6	0	0	13	0	3	0	0	0	1	0	9	15	0
Amritsar	0530	234	1015·2	986·9	..	6·6	5·9	5·0	8·6	90	..	1·4	..	3·8	0	0	18	0	2	3	0	2	2	2	7	10	0
	0830	,,	1016·5	988·2	..	8·2	7·2	5·9	9·1	87	..	2·0	..	3·1	0	0	14	1	2	1	1	0	2	4	8	14	0
	1130	,,	1016·5	989·1	..	16·7	11·2	6·0	8·8	51	..	2·0	..	7·2	0	1	22	1	2	3	1	1	2	3	10	5	0
	1730	,,	1013·6	986·4	..	19·0	12·2	4·8	9·4	41	..	1·9	..	9·4	0	1	26	0	2	2	1	2	1	9	10	1	0
Pathankot	0830	344	1016·2	975·2	..	9·3	7·6	5·5	9·2	78	..	2·4	..	1·1			14	0	4	5	4	1	0	0	0	14	0
	1730	,,	1013·9	974·4	..	18·9	12·3	5·1	8·9	41	..	2·9	..	3·1		(	27	0	1	0	1	2	5	17	1	1	0

(d) Mean of 27 days, (e) Mean of 26 days.

*Data extracted from Indian Daily Weather Reports.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957

Division and station	Hour of observation I. S. T	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in gpm of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (Kms. p.h.): Mean wind speed, kms per hour	Wind speed (Kms. p.h.): 62 or more	Wind speed (Kms. p.h.): 20 to 61	Wind speed (Kms. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Himachal Pradesh																											
Bilaspur	0830	493	1017·4	958·7	..	7·3	6·4	5·4	8·8	88	..	3·5	..	1·8	0	0	14	2	2	1	0	0	2	1	4	14	2
	1730	,,	1011·5	955·9	..	20·3	11·8	2·9	7·0	33	..	2·9	..	6·6	0	2	26	1	0	0	0	5	6	8	6	0	2
Mandi	0830	761	1017·8	928·7	..	6·4	5·6	4·8	8·0	88	..	1·9	..	0·5	0	0	5	0	0	0	0	0	2	2	1	23	0
	1730	,,	1010·7	925·4	..	17·9	11·3	5·2	8·6	44	..	3·0	..	2·3	0	0	19	1	1	0	3	3	1	4	6	9	0
Jammu and Kashmir																											
Banihal (R)	0830																										
(R)	1730																										
Srinagar	0830	1587	1526·1	843·8	0	0·2	—0·5	—1·5	5·4	88	0	6·5	+0·3	0·5	0	0	3	0	0	0	2	0	0	0	1	25	0
	1130	,,	1529·2	844·0	..	3·6	1·8	—0·7	5·8	75	..	6·3	..	2·3	0	1	11	1	1	0	4	0	1	4	1	16	0
	1730	,,	1507·4	842·0	..	5·1	2·5	—1·0	5·7	67	..	5·6	..	4·1	0	0	21	1	3	1	1	0	1	4	10	7	0
Gulmarg	0830	2655																									
	1730	,,										Closed during winter months.															
Dras (R)	0830	3066																									
Kargil (R)	0830	2679																									
Leh	0530	3514	(d) 3087·8	(d) 662·4	..	(d) —13·8	(d) —15·2	(d) —21·7	0·9	(d) 50	..	(d) 4·7	..	(d) 3·4	0	0	13	0	13	0	0	0	0	0	0	14	0
	0830	,,	3085·7	662·5	—1·1	—11·2	—13·1	—20·3	1·1	47	—8	5·6	+0·3	0·8	0	0	3	0	0	0	0	1	2	0	0	25	0
	1730	,,	3057·8	660·9	..	—5·7	—8·2	—14·3	1·8	49	..	4·9	..	4·7	0	0	18	0	1	1	0	4	12	0	0	10	0
Skardu (R)	0830	2288																									
(R)	1730	,,																									
Gilgit (R)	0830	1491																									
(R)	1730	,,																									
Misgar (R)	0830	3106																									
(R)	1730	,,																									
Jammu	0830	..	..	..	..	10·7	8·1	4·4	8·3	65	—1	2·7	—0·4	11·1	0	0	28	0	27	0	0	0	1	0	0	0	0
Rajasthan (west)																											
Sriganganagar	0530	177	1015·0	993·6	..	8·2	6·3	3·7	8·1	73		1·0	..	1·5	0	0	10	1	1	1	3	0	1	0	3	18	0
	0830	,,	1016·5	995·1	..	8·7	6·4	3·3	8·0	69	—11	1·3	—2·0	2·0	0	0	13	0	3	2	3	1	3	1	0	15	0
	1130	,,	1016·4	995·8	..	19·3	11·8	3·9	7·9	36	..	1·5	..	5·0	0	0	27	2	1	4	6	1	5	3	5	1	0
	1730	,,	1013·2	992·8	..	22·0	12·5	2·2	7·4	26	..	0·8	..	4·9	0	0	27	8	2	3	1	0	1	2	10	1	0
	2330	,,	1016·0	994·5	..	11·9	8·6	4·7	8·5	62	..	1·0	..	1·4	0	0	10	1	2	2	3	0	1	1	0	18	0
Churu	0830	291	1016·5	981·6	..	9·4	5·7	0·3	6·4	54	..	0·8	..	2·4	0	0	11	0	0	4	1	3	1	1	1	17	0
	1730	,,	1012·5	979·4	..	23·4	12·8	—0·2	6·3	22	..	1·6	..	10·3	0	3	22	8	1	2	2	0	1	4	7	3	0
Bikaner	0830	224	1016·7	990·2	+1·1	10·8	6·4	2·2	5·9	45	—14	0·5	—1·7	3·9	0	0	22	0	2	1	15	1	1	1	1	6	0
	1730	,,	1013·2	987·5	..	24·0	12·4	—1·4	4·9	19	..	0·7	..	6·9	0	2	24	1	6	0	0	0	8	0	11	2	0
Bikaner (P. B.O)	0530	224	1015·4	988·3	..	7·6	4·6	—0·6	6·1	58	..	0·3	..	1·5	0	0	6	0	2	1	0	0	3	0	0	22	0
	1130	,,	1016·2	990·4	..	21·7	11·7	—0·1	5·7	23	..	0·8	..	5·6	0	0	23	0	6	3	4	3	3	2	2	5	0
	2330	,,	1015·5	988·6	..	13·4	7·9	1·7	6·1	40	..	0·4	..	3·0	0	0	12	2	5	2	0	1	1	0	1	16	0
Jaisalmer	0830	242	1015·9	987·1	..	11·5	7·2	0·8	7·0	50	..	0·4	..	5·9	0	2	12	0	5	0	3	0	3	1	2	14	0
	1730	,,	1012·5	985·1	..	25·1	15·9	5·7	10·6		..	0·7	..	11·9	0	5	21	0	5	0	0	0	6	0	15	2	0
Phalodi	0830	234	1017·3	989·2	..	10·3	5·1	—4·6	4·7	38	..	0·8	..	5·0	0	0	20	0	0	2	4	7	5	1	1	8	0
	1730	,,	1013·8	987·2	..	24·7	11·8	—8·6	10·4	11	..	1·0	..	10·7	0	3	23	3	3	0	0	2	2	5	11	2	0
Jodhpur	0230	224	1014·9	988·3	..	14·7	7·7	—4·7	5·0	30	..	0·2	..	11·9	0	2	26	9	14	0	0	1	3	0	1	0	0
	0530	,,	1014·8	988·0	..	12·2	6·3	—4·1	5·1	36	..	0·3	..	10·8	0	1	25	8	14	0	0	0	1	3	0	2	0
	0830	,,	1016·7	990·0	+2·1	13·1	6·8	—3·6	4·7	33	—14	0·9	— 3	9·0	0	0	24	4	18	0	0	0	1	1	0	4	0
	1130	,,	1016·6	990·8	..	22·8	11·8	—3·7	4·8	18	..	1·0	..	10·6	0	3	21	1	7	6	3	2	3	2	0	4	0
	1730	,,	1012·8	987·3	..	25·9	12·9	—5·7	4·3	13	..	1·0	..	10	0	1	27	4	7	3	3	0	2	6	3	0	0
	2330	,,	1015·2	988·9	..	16·6	8·8	—2·8	5·2	28	..	0·4	..	11·6	0	2	26	8	11	1	0	1	2	1	4	0	0
Barmer	0530	194	1014·5	991·5	..	13·9	7·3	—3·7	4·9	31	..	0·3	..	7·1	0	0	21	0	0	1	0	0	1	1	18	7	0
	0830	,,	1016·5	993·4	+1·7	14·0	7·3	—4·2	4·9	30	—28	0·7	—1·4	7·2	0	0	22	0	0	0	0	0	1	1	20	6	0
	1130	,,	1016·7	994·4	..	23·1	11·9	—4·3	5·0	17	..	0·7	..	6·3	0	1	16	0	2	4	3	0	1	2	5	11	0
	1730	,,	1012·8	990·8	..	26·6	13·5	—4·4	5·1	14	..	0·9	..	7·9	0	0	22	1	5	1	3	0	0	5	7	6	0
	2330	,,	1015·1	992·5	..	18·6	9·6	—4·5	4·9	22	..	0·5	..	8·7	0	1	22	0	0	0	0	1	3	2	17	5	0
Rajasthan (East)																											
Alwar	0830	271	1017·1	984·9	..	11·9	8·8	4·7	8·9	64	..	0·4	..	0·9	0	0	6	1	0	0	1	0	1	1	1	22	1
	1730	,,	1013·1	982·2	..	22·9	13·8	4·7	8·2	32	..	0·9	..	3·8	0	0	24	5	0	8	0	0	0	7	4	4	0
Sikar	0830	433	1017·0	965·8	..	10·9	8·3	5·1	9·0	69	..	0·9	..	2·7	0	0	21	0	0	9	10	2	0	0	0	7	0
	1730	,,	1012·5	963·7	..	22·7	16·2	10·9	13·2	48	..	0·9	..	3·0	0	0	27	3	2	3	2	1	1	8	7	1	0

(R) Register not received (d) Means of 27 days.

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mb.s.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East)*Contd.*																											
Jaipur	0830	436	1016·6	965·8	+0·2	14·2	8.9	2·2	7·0	46	—2	0·7	—1·4	3·9	0	0	15	2	3	7	0	0	0	0	3	13	0
	1130	,,	1015·8	966·3	..	21·6	11·7	—1·1	6·2	22	..	0·7	..	9·3	0	1	26	1	2	4	2	6	2	5	5	1	0
	1730	,,	1012·6	963·4	..	23·2	12·9	—0·3	6·8	22	..	1·2	..	7·3	0	0	25	2	0	3	0	1	3	8	8	3	0
Jaipur (Sanganer) Aerodrome	0230	390	1014·8	968·7	..	11·8	7·6	1·6	7·1	52	..	0·2	..	7·8	0	1	19	6	6	6	1	0	0	0	1	8	0
	0530	,,	1015·0	968·7	..	10·3	6·7	2·4	6·9	57	..	0·1	..	3·9	0	0	21	3	8	7	2	0	0	0	1	7	0
	0830	,,	1016·3	970·5	..	13·5	8·7	2·9	7·4	50	..	1·0	..	4·1	0	0	16	2	1	7	2	0	0	1	3	12	0
	1130	,,	1015·8	971·1	..	19·6	12·4	3E9	8·4	33	..	1·0	..	9·9	0	3	22	1	3	2	9	2	2	3	3	3	0
	1730	,,	1012·5	968·2	..	22·7	13·4	2·5	7·7	28	..	1·5	..	9·0	0	1	25	2	1	1	2	0	4	9	7	2	0
	2330	,,	1015·2	969·5	..	13·0	8·5	3·4	7·6	50	..	0·3	..	4·9	0	0	17	5	4	5	0	0	0	2	1	11	0
Dholpur (e)	0830	176	1016·1	995·2	..	14·4	9·8	2·6	8·3	53	..	0·8	..	8·2	0	0	19	2	1	0	3	0	0	2	11	7	0
(d)	1730	,,	1012·8	992·5	..	21·7	14·5	7·4	10·6	41	..	1·0	..	5·8	0	0	24	8	5	0	1	0	1	1	8	3	0
Ajmer (d)	0830	486	1017·4	960·3	+0·3	10·5	6·7	1·6	6·7	55	+3	1·1	—0·6	3·3	0	0	23	4	8	0	1	1	2	4	3	5	0
	1730	,,	1012·7	958·0	..	22·7	11·0	—5·5	3·9	16	..	0·9	..	7·4	0	1	25	2	3	0	2	1	4	7	7	2	0
Kotah	0530	257	1014·9	984·5	..	12·2	8·5	3·8	8·3	57	..	0·5	..	0·7	0	0	4	0	0	0	0	1	0	1	2	24	0
	0830	,,	1016·7	986·3	+0·3	13·2	8·8	3·2	7·9	53	+5	1·0	—0·8	1·4	0	0	9	0	1	0	1	0	1	4	2	19	0
	1130	,,	1016·0	986·0	..	23·0	13·0	1·0	6·7	24	..	0·8	..	2·7	0	0	17	2	3	3	4	0	0	2	3	11	0
	1730	,,	1012·3	983·2	..	25·4	14·2	1·8	7·5	22	..	0·8	..	3·7	0	0	16	4	1	1	0	0	0	2	8	12	0
	2330	,,	1014·8	984·8	..	16·2	10·9	4·8	8·7	47	..	0·5	..	0·9	0	0	8	0	0	0	1	0	4	1	2	20	0
Chambal	0830	351	1016·6	975·5	..	12·6	8·4	2·8	7·6	51	..	0·8	..	0·5	0	0	5	1	1	0	0	0	0	0	3	23	0
	1730	,,	1011·7	972·2	..	25·5	14·3	1·7	7·5	23	..	1·2	..	4·5	0	0	28	6	4	0	1	0	1	3	13	0	0
Jhalawar	0830	321	1016·6	978·8	+0·9	13·2	8·3	3·5	7·4	45	—7	0·7	—0·8	0·8	0	0	5	1	1	0	0	0	1	1	1	23	0
	1730	,,	1011·6	975·6	..	26·4	14·1	—0·7	7·0	18	..	0·8	..	6·1	0	0	25	6	5	0	1	0	0	5	8	3	0
Udaipur	0230	582	1016·0	948·1	..	9·7	6·6	2·8	7·4	64	..	0·2	..	2·1	0	0	11	2	0	0	0	0	1	2	6	17	0
	0530	,,	1016·5	948·0	..	8·0	5·7	2·5	7·6	69	..	0·3	..	0·8	0	0	4	1	1	0	0	0	0	1	1	24	0
	0830	,,	1017·2	949·7	+1·1	12·9	7·9	1·7	6·6	48	—2	0·8	—0·6	1·3	0	0	9	2	0	1	0	0	1	3	2	19	0
	1130	,,	1015·3	950·1	..	22·6	11·9	—0·3	6·6	23	..	0·5	..	5·2	0	0	24	0	8	8	2	0	4	1	1	4	0
	1730	,,	1011·8	947·0	..	24·0	12·7	1·2	5·8	23	..	1·3	..	5·3	0	0	23	0	7	4	1	0	5	1	5	5	0
	2330	,,	1016·6	948·9	..	11·7	8·0	3·5	8·2	59	..	0·8	..	1·0	0	0	7	0	1	0	0	1	0	4	1	21	0
Erinpura	0830	295	1016·4	981·6	..	13·4	9·3	4·4	8·3	56	..	0·9	..	4·2	0	0	15	0	0	0	5	8	1	1	0	13	0
(Jawai Dam)	1730	,,	1012·5	979·2	..	25·4	14·7	4·6	8·0	26	..	0·9	..	6·2	0	0	23	7	5	0	0	0	2	4	5	5	0
Madhya Pradesh, (West) Gwalior (P.B.O.)	0230	210	1014·5	989·6	..	11·0	8·1	4·5	8·5	67	..	0·3	..	1·9	0	0	9	3	0	0	0	0	3	0	3	19	0
	0530	,,	1014·9	989·9	..	9·8	6·9	3·2	7·8	67	..	0·3	..	2·3	0	0	9	2	0	0	0	0	0	3	4	19	0
	0830	,,	1016·1	991·5	+0·2	14·9	9·5	3·0	7·5	45	—11	1·0	—0·7	4·8	0	1	14	2	0	0	1	3	1	1	7	13	0
	1130	,,	1015·9	991·8	..	22·0	12·3	0·4	6·5	25	..	1·0	..	9·6	0	0	28	6	5	2	2	1	1	1	10	0	0
	1730	,,	1012·5	988·6	..	23·6	13·1	0·6	6·5	22	..	0·9	..	7·9	0	0	28	9	6	0	0	0	0	1	12	0	0
	2330	,,	1014·9	990·2	..	13·5	9·7	5·1	9·0	59	..	0·4	..	3·1	0	0	12	0	0	0	0	1	2	2	7	16	0
Sheopurkalan	0830	235	1016·9	988·7	..	11·2	7·9	3·9	8·0	61	..	1·7	..	2·8	0	0	19	2	2	2	5	6	1	0	1	9	0
	1730	,,	1010·7	984·2	..	25·2	14·2	3·0	7·3	22	..	1·0	..	9·4	0	0	27	6	1	1	0	1	1	11	6	1	0
Guna	0530	479	1015·7	959·1	..	8·9	5·8	1·8	7·1	62	..	0·3	..	0·6	0	0	2	0	0	2	0	0	0	1	0	26	0
	0830	,,	1016·7	960·7	+0·4	12·1	7·2	0·9	6·7	49	—8	1·2	0	1·3	0	0	11	2	0	9	0	0	0	0	0	17	0
	1130	,,	1015·3	961·4	..	23·0	11·9	—1·1	5·9	21	..	1·1	..	5·8	0	0	25	6	2	5	3	0	3	4	2	3	0
	1730	,,	1011·4	958·1	..	25·1	13·1	—0·1	6·5	20	..	1·3	..	4·6	0	0	24	3	3	2	0	0	0	7	9	4	0
	2330	,,	1015·4	959·8	..	13·4	8·2	2·0	7·1	47	..	0·4	..	0·7	0	0	3	0	0	2	0	0	1	0	0	25	0
Rajgarh	0830	382	1016·8	971·7	..	11·8	6·8	—1·3	5·9	42	..	1·4	..	2·3	0	0	13	3	1	0	5	1	0	2	1	15	0
	1730	,,	1011·2	968·5	..	26·6	13·0	—6·2	4·1	12	..	1·5	..	9·2	0	0	28	6	2	1	2	0	4	3	10	0	0
Neemuch	0830	496	1017·4	959·8	+0·9	13·8	8·3	1·5	7·1	44	—3	1·0	—0·4	3·7	0	0	20	4	11	1	0	0	2	1	1	8	0
	1730	,,	1012·1	956·9	..	25·0	15·3	6·8	10·3	33	..	1·4	..	8·4	0	0	24	2	11	0	0	0	0	6	5	4	0
Ratlam	0830	486	1016·3	959·9	..	14·5	8·2	—0·1	6·3	39	..	1·3	..	8·1	0	0	23	3	13	4	0	1	2	0	0	5	0
	1730	,,	1011·1	957·1	..	26·3	14·0	1·2	7·1	21	..	1·6	..	9·1	0	0	26	1	8	2	0	0	3	6	6	2	0
Alirajpur	0830	293	1016·7	981·6	..	12·4	9·0	5·3	8·7	62	..	1·4	..	1·9	0	0	11	1	0	3	2	1	1	3	0	17	0
	1730	,,	1010·9	978·6	..	27·7	15·9	5·2	8·5	23	..	1·6	..	11·0	0	2	26	4	7	1	1	1	5	2	7	0	0
Indore	0530	567	1014·9	948·9	..	11·1	6·0	—1·1	5·7	43	..	1·1	..	5·8	0	0	27	4	5	5	2	3	3	3	2	1	0
	0830	,,	1016·3	950·8	+0·1	14·3	7·9	—1·1	6·1	36	—10	1·9	+0·6	5·9	0	0	22	4	3	4	2	3	3	2	1	6	0
	1130	567	1014·4	951·0	..	23·4	12·3	—1·0	6·3	21	..	1·6	..	15·0	0	8	18	4	4	6	3	2	2	2	3	2	0
	1730	,,	1010·3	947·8	..	26·3	13·3	—1·7	5·9	17	..	2·9	..	14·0	0	5	22	2	6	1	0	3	3	7	5	1	0
	2330	,,	1014·5	949.5	..	16·6	8·7	—0·5	5·6	34	..	1·2	..	7·7	0	0	28	2	4	3	1	2	1	8	7	0	0
Bhopal (Bairagarh)	0230	523	1014·0	953·5	..	13·6	7·7	—0·1	6·3	40	..	0·5	..	7·7	0	0	24	9	8	1	2	0	1	1	2	4	0
	0530	,,	1014·5	953·7	..	12·1	6·9	0·3	6·2	44	..	0·9	..	8·6	0	10	15	6	12	1	2	0	3	0	1	3	0

(d) Observations for 27 days. (e) Observations for 26 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Wind speed (Kms.p.h.)			No. of observations									
			At mean sea level or height in g. p. m. of the nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal	Mean wind speed, Kms. per hour	62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh, (West) *Contd.*																											
Bhopal (Bairagarh)— *Contd.*	0830	523	1016·1	955·8	+0·3	15·1	8·5	0·4	6·4	37	—11	1·9	+0·4	6·1	0	0	22	2	9	3	2	3	3	0	0	6	0
	1130	,,	1014·5	955·9	..	23·3	12·2	—0·5	6·2	21	..	1·3	..	12·9	0	3	25	1	8	3	6	1	2	4	3	0	0
	1730	,,	1010·6	952·7	..	25·6	13·2	—0·4	6·2	18	..	1·7	..	12·6	0	3	25	7	4	0	1	2	2	6	6	0	0
	2330	,,	1014·3	954·4	..	16·2	9·1	0·4	6·5	35	..	0·6	..	7·5	0	1	23	7	8	1	2	0	2	2	2	4	0
Khandwa	0830	318	1016·1	979·0	+0·7	15·9	9·5	1·1	6·7	37	—8	2·0	+0·9	3·8	0	1	14	2	3	3	0	0	0	3	4	13	0
	1730	,,	1010·3	975·0		29·4	17·2	5·0	9·8	23	..	2·1	..	8·6	0	0	25	3	4	0	0	2	2	2	12	3	0
Hoshangabad	0830	302	1016·1	980·9	+0·4	16·2	10·1	2·8	7·5	42	—9	2·3	+0·9	2·3	0	0	14	3	3	5	1	1	0	1	0	14	0
	1730	,,	1010·8	977·0	..	27·7	14·9	0·6	6·6	18	..	2·1	..	2·9	0	0	19	5	1	4	0	3	1	4	1	9	0
Betul	0830	653	1015·7	941·3	..	15·8	10·1	4·2	8·2	47	..	2·1	..	2·2	0	0	15	1	4	3	4	1	2	0	0	13	0
	1730	,,	1009·7	938·0	..	25·6	13·8	2·0	7·3	22	..	2·5	..	8·6	0	0	28	9	6	1	0	0	3	3	6	0	0
Chhindwara	0830	685	1015·3	937·3	..	15·7	10·5	5·9	9·0	51	..	1·1	..	4·1	0	1	16	0	5	5	0	0	0	3	4	11	0
	1730	,,	1009·2	934·3	..	26·1	16·0	9·1	10·8	34	..	1·8	..	4·8	0	0	23	4	3	0	0	1	3	2	10	5	0
Seoni	0830	618	1014·6	944·6	—0·9	17·5	11·2	5·2	8·7	47	—6	2·4	+0·8	3·3	0	0	23	6	9	1	2	2	2	0	1	5	0
	1730	,,	1009·1	941·7	..	25·4	15·2	6·4	9·8	31	..	2·5	..	4·3	0	0	27	7	4	2	4	7	2	0	1	1	0
Sagar	0830	551	1015·5	952·2	—0·1	15·0	9·3	2·2	6·9	39	—7	1·8	+0·2	5·3	0	0	24	0	3	13	3	0	2	2	1	4	0
	1730	,,	1010·4	949·2	..	24·7	13·0	0·9	6·5	21	..	1·7	..	5·3	0	0	26	1	2	4	0	1	1	6	11	2	0
Nowgong	0830	229	1016·8	989·5	+0·6	11·2	8·3	4·8	8·7	66	0	1·1	—1·0	2·3	0	0	21	2	2	3	0	5	4	4	1	7	0
	1730	,,	1012·4	986·5	..	25·4	13·7	1·1	6·3	19	..	0·9	..	4·6	0	0	27	8	5	1	0	1	2	1	9	1	0
Madhya-Pradesh, (East)— Sutna	0530	317	1014·5	976·9	..	10·7	8·3	5·6	9·1	71	..	1·1	..	0·7	0	0	7	2	0	0	1	0	2	1	1	21	0
	0830	,,	1016·0	979·0	+0·4	15·6	10·9	5·9	9·3	54	—5	1·5	—0·4	2·3	0	0	19	0	1	4	1	2	7	3	1	9	0
	1130	,,	1014·9	978·7	..	22·6	13·7	3·9	8·5	31	..	1·6	..	5·9	0	1	23	4	1	6	2	1	1	4	5	4	0
	1730	,,	1011·6	975·8	..	24·4	14·7	4·9	8·9	29	..	1·5	..	3·3	0	0	25	3	1	4	1	0	0	6	10	3	0
	2330	,,	1014·6	976·1	..	14·7	10·7	6·7	9·7	59	..	1·0	..	1·9	0	0	10	2	1	2	0	0	1	3	1	18	0
Umaria	0830	459	1015·6	963 3	..	15·9	10·9	6·1	9·4	53	—9	1·4	—0·7	3·7	0	0	16	0	3	5	3	2	2	0	1	12	0
	1730	,,	1010·8	959·7	..	24·8	14·8	6·2	9·6	30	..	1·9	..	3·0	0	0	13	3	2	0	0	0	1	6	1	15	0
Jabalpur	0530	393	1014·4	968·1	..	10·7	8·7	6·5	9·3	76	..	1·5	..	1·3	0	0	9	2	1	0	5	1	0	0	0	19	0
	0830	,,	1016·0	970·3	+0·5	15·1	10·7	5·7	9·3	54	—6	1·7	+0·1	2·9	0	0	19	0	6	0	9	3	1	0	0	9	0
	1130	,,	1014·3	970·1	..	24·2	14·3	4·1	8·3	28	..	1·6	..	4·7	0	0	21	5	7	0	1	1	2	2	2	7	1
	1730	,,	1010·7	966·9	..	26·0	15·6	5·6	9·5	28	..	1·6	..	4·4	0	0	21	6	5	0	0	1	1	5	3	7	0
	2330	,,	1014·3	968 7	..	15·0	11·3	7·5	10·4	62	..	1·0	..	1·9	0	0	14	1	2	5	4	1	1	0	0	14	0
Mandla	0830	443	1016·5	964·8	..	12·7	10·8	8·6	11·3	76	..	1·7	..	2·1	0	0	9	4	0	0	1	0	1	0	3	19	0
	1730	,,	1010·5	961·2	..	25·6	15·7	6·1	9·8	30	..	2·0	..	5·0	0	0	18	7	0	0	0	3	2	0	6	10	0
Pendra	0530	625	1014·3	942·5	..	13·2	9·8	5·0	8·9	59	..	1·4	..	5·3	0	0	22	10	1	1	0	1	2	0	7	6	0
	0830	,,	1015·5	944·5	—0·2	16·6	11·1	5·3	9·1	49	—10	2·1	+0·2	5·0	0	0	22	9	3	1	0	3	3	1	2	6	0
	1130	,,	1013·9	944·3		22·5	13·4	4·8	8·7	33	..	1·7	..	10·4	0	4	23	9	10	0	1	2	2	1	1	1	1
	1730	,,	1010·8	941·5	..	23·1	14·0	5·3	9·4	34	..	2·4	..	9·0	0	1	27	17	2	0	0	3	3	0	3	0	0
	2330	,,	1014·6	943·3	..	15·8	11·0	6·1	9·7	54	..	1·1	..	5·5	0	0	26	11	2	1	0	1	3	3	5	2	0
Ambikapur	0830	611	1016·0	945·9	..	14·6	11·5	8·7	11·5	69	..	1·8	..	4·1	0	0	16	3	5	1	2	1	4	0	0	12	0
	1730	,,	1010·8	943·1	..	23·4	14·0	5·2	9·1	33	..	1·6	..	9·4	0	0	28	15	4	0	0	0	2	3	4	0	0
Champa	0830	245	1015·3	986·8	..	17·6	13·7	9·5	12·5	59	..	1·7	..	3·9	0	0	22	17	0	1	0	1	0	0	3	6	0
	1730	,,	1010·6	983·1	..	27·9	17·0	7·2	10·5	29	..	2·3	..	7·6	0	0	26	14	0	0	0	0	4	6	2	2	0
Raigarh	0830	220	1014·9	989·4	..	19·0	14·5	10·6	12·9	59	..	1·4	..	5·5	0	0	25	0	21	0	2	2	0	0	0	3	0
	1730	,,	1010·3	985·6	..	28·3	17·7	9·2	11·7	32	..	1·7	..	3·9	0	0	23	4	5	2	3	0	3	2	4	5	0
Raipur	0530	298	1012·9	978·3	..	16·3	12·1	7·7	10·7	58	..	1·3	..	3·2	0	0	17	8	1	1	1	2	2	1	1	11	0
	0830	,,	1014·8	980·5	—0·1	19·8	13·6	7·5	10·6	45	—11	1·5	—0·1	4·0	0	0	22	9	3	1	1	3	3	1	1	6	0
	1130	,,	1013·7	980·2	..	26·4	15·8	5·0	9·5	28	..	1·5	..	7·7	0	0	24	6	5	1	2	0	2	5	3	4	0
	1730	,,	1010·0	976·8	..	28·5	16·2	3·6	8·4	22	..	1·9	..	6·0	0	0	25	7	1	0	0	0	6	3	8	3	0
	2330	,,	1012·8	978·7	..	21·1	14·0	6·7	10·9	41	..	0·8	..	3·5	0	0	18	5	2	0	0	4	3	1	3	10	0
Kanker	0830	402	1014·9	968·8	+0·1	18·4	14·8	11·8	13·9	67	—1	2·1	+0·3	0·1	0	0	1	0	0	0	1	0	0	0	0	27	0
	1730	,,	1009·3	965·4	..	28·4	18·4	10·3	13·1	34	..	2·0	..	1·0	0	0	8	0	1	0	0	0	2	0	5	20	0
Jagdalpur (P.B.O.)	0530	553	1013·6	950·3	..	15·0	12·6	10·6	12·6	75	..	1·0	..	0·1	0	0	1	0	0	0	0	0	0	0	1	27	0
	0830	,,	1014·8	952·4	+0·1	19·6	14·8	10·9	13·4	58	—13	1·8	+0·2	0·9	0	0	5	0	0	2	2	0	1	0	0	23	0
	1130	,,	1012·3	951·6	..	28·0	16·9	8·0	10·2	30	..	1·6	..	3·1	0	0	16	1	4	1	1	4	3	0	1	12	1
	1730	,,	1009·1	948·7	..	28·4	17·1	8·5	11·1	29	..	2·1	..	3·3	0	0	19	2	4	0	0	3	5	2	3	9	0
	2330	,,	1013·5	951·0	..	19·1	14·6	11·0	13·4	60	..	1·0	..	1·3	0	0	10	1	2	1	1	3	1	0	1	18	0
Gujarat Deesa	0830	136	1016·0	999·8	+0·7	13·6	8·7	1·6	7·4	46	..	1·6	..	4·4	0	0	24	6	13	2	0	0	0	0	1	4	2
	1730	,,	1012·3	996·8	..	27·2	15·1	2·0	7·3	20	..	1·1	..	8·5	0	0	25	4	7	1	0	0	4	3	6	3	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed Kms. per hour: Mean wind speed per hour	Wind spe (Kms.p.h·: 62 or more	Wind spe (Kms.p.h·: 20 to 61	Wind spe (Kms.p.h·: 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat—*Contd.*																											
Idar	0830	219	1015·4	989·9	..	18·0	..	..	..	..	..	1·3	..	6·4	0	0	22	6	9	3	2	0	0	1	1	6	0
	1730	,,	1011·7	987·1	..	27·4	..	..	..	..	..	1·0	..	4·9	0	0	25	1	8	0	4	1	2	5	4	3	0
Ahmedabad	0230	55	1013·7	1007·2	..	14·5	9·0	1·0	7·1	42	..	0·0	..	8·6	0	0	26	7	1	0	0	0	3	6	9	2	0
	0530	,,	1013·6	1007·1	..	12·5	7·8	0·7	6·8	47	..	0·2	..	9·3	0	0	26	8	3	0	0	1	3	4	7	2	0
	0830	,,	1015·6	1009·1	+0·5	15·3	9·0	—0·3	6·5	38	—18	1·2	0	9·3	0	2	20	6	7	1	0	1	0	3	4	6	0
	1130	,,	1015·7	1009·4	..	25·3	13·5	—1·6	6·0	19	..	1·0	..	13·8	0	7	19	2	11	6	0	0	0	2	5	2	0
	1730	,,	1012·0	1005·8	..	28·3	14·2	—4·3	4·7	13	..	1·0	..	13·1	0	1	27	1	6	0	1	0	3	7	10	0	0
	2330	,,	1014·0	1007·6	..	16·9	10·1	0·9	6·8	35	..	0·1	..	8·4	0	0	26	7	1	0	2	0	1	10	5	2	0
Dohad	0830	333	1015·9	977·0	..	14·7	8·7	0	6·5	39	—17	0·9	—0·6	6·4	0	1	23	1	5	7	1	1	4	5	0	4	0
	1730	,,	1011·5	974·4	..	27·3	14·2	—2·2	5·6	16	..	0·7	..	8·1	0	0	28	4	6	2	0	0	4	7	5	0	0
Baroda	0530	35	1013·5	1009·3	..	11·0	8·4	5·1	8·9	69	..	0·4	..	2·6	0	0	17	0	15	1	0	0	0	0	1	11	0
	0830	,,	1015·5	1011·3	..	13·8	9·5	4·0	8·5	53	—5	1·5	+0·4	2·5	0	0	15	0	11	0	1	1	0	0	2	13	0
	1130	,,	1015·6	1011·6	..	26·0	14·7	2·0	7·7	23	..	1·4	..	5·6	0	0	21	1	10	0	5	1	1	2	1	7	0
	1730	,,	1011·5	1007·6	..	29·4	16·4	3·3	8·1	20	..	1·3	..	7·4	0	0	26	4	8	2	2	0	1	2	7	2	0
	2330	,,	1013·6	1009·5	..	16·0	11·2	5·9	9·4	53	..	0·3	..	4·2	0	0	24	2	9	0	2	0	1	2	8	4	0
Baroda (Aerodrome)	0830	38	1015·5	1011·0	..	15·2	9·6	2·9	7·5	43	..	1·4	..	4·9	0	0	19	10	4	3	1	1	0	0	0	9	0
	1130	,,	1015·6	1011·3	..	26·2	14·7	1·6	7·6	22	..	1·4	..	11·0	0	5	16	5	6	4	1	0	1	2	1	7	1
	1730	,,	1011·8	1007·5	..	29·0	15·6	0·6	7·0	17	..	1·4	..	8·2	0	0	28	6	3	0	0	0	3	7	8	0	1
Broach	0830	17	1015·1	1013·0	..	14·6	9·6	2·1	7·9	47	..	1·1	..	4·2	0	0	25	2	7	3	0	0	5	0	8	3	0
	1730	,,	1011·2	1009·2	..	30·5	16·3	1·4	7·0	17	..	1·1	..	9·7	0	0	28	2	10	1	0	0	4	4	7	0	0
Surat	0530	12	1013·2	1011·8	..	15·5	12·0	7·7	11·3	63	..	1·2	..	6·0	0	0	27	9	8	1	5	0	0	1	3	1	0
	0830	,,	1015·1	1013·7	+0·7	16·2	12·0	7·2	10·7	57	—3	2·1	+1·1	2·9	0	0	17	1	13	0	0	0	0	0	3	11	0
	1130	,,	1015·3	1013·9	..	27·1	16·6	6·7	10·4	30	..	2·1	..	9·6	0	1	26	6	11	3	0	0	1	2	4	1	0
	1730	,,	1011·2	1009·8	..	29·9	18·2	8·3	11·4	29	..	1·4	..	5·1	0	0	27	0	5	0	0	0	6	1	15	1	0
	2330	,,	1013·8	1012·4	..	19·8	14·7	10·4	12·6	58	..	0·3	..	5·4	0	0	26	9	6	0	0	1	6	3	1	2	0
Saurashtra & Kutch																											
Bhuj	0830	105	1016·5	1004·0	+1·1	14·0	10·1	4·8	9·2	58	+1	0·8	—0·4	0·9	0	0	2	0	0	0	1	0	0	1	0	26	0
	1730	,,	1012·9	1001·1	..	27·3	14·2	—3·6	5·6	16	..	0·7	..	7·5	0	0	28	10	7	1	0	0	2	2	6	0	0
Bhuj (P.B.O.)	0230	106	1014·6	1002·2	..	16·7	12·6	9·1	11·2	62	..	0·3	..	1·2	0	0	3	0	1	0	0	0	2	0	0	25	0
	0530	,,	1014·4	1002·0	..	15·6	11·9	8·5	11·0	65	..	0·5	..	0·3	0	0	2	0	0	0	0	0	0	1	1	26	0
	0830	,,	1016·0	1003·6	..	15·8	12·4	9·4	11·7	68	..	0·8	..	1·1	0	1	2	0	0	1	0	1	0	1	0	25	0
	1130	,,	1016·3	1004·1	..	23·6	16·3	10·9	12·6	47	..	0·7	..	7·7	0	0	27	9	9	2	0	0	0	1	6	1	0
	1730	,,	1012·9	1001·0	..	27·1	17·8	11·9	13·0	41	..	1·0	..	6·2	0	0	27	9	6	0	1	1	1	2	7	1	0
	2330	,,	1015·0	1002·7	..	18·7	13·9	10·3	12·1	59	..	0·3	..	1·5	0	0	6	0	1	0	0	0	3	1	1	22	0
Bhuj (Aerodrome)	0830	80	1016·3	1006·7	..	14·0	..	..	..	..	..	1·0	..	3·9	0	0	16	1	0	0	0	2	11	1	1	12	0
	1130	,,	1016·5	1007·1	..	23·5	..	..	..	..	..	0·9	..	3·0	0	3	25	7	11	1	2	0	0	1	6	0	0
	1730	,,	1012·8	1003·7	..	27·0	..	..	..	..	..	1·2 (g)	..	(g) 10·4	0	1	21	6	9	2	0	0	0	2	3	2	0
Kandla	0830	5	1016·1	1015·5	..	15·1	11·4	7·2	10·6	61	..	1·1	..	7·7	0	0	28	4	3	1	0	0	3	2	15	0	0
	1730	,,	1013·2	1012·6	..	26·6	15·3	2·2	8·1	25	..	1·2	..	14·6	0	5	23	3	7	0	4	2	6	1	5	0	0
Mandvi	0830	9	1016·1	1015·0	..	15·3	12·1	8·5	11·6	66	..	1·5	..	11·9	0	1	27	12	8	1	1	0	0	0	4	0	2
	1730	,,	1013·4	1012·4	..	23·2	18·2	14·2	16·8	57	..	0·9	..	21·6	0	13	15	1	1	1	2	1	7	14	0	0	1
Dwarka	0830	11	1016·1	1014·8	+0·8	17·9	15·0	12·2	14·7	71	0	1·8	0	11·1	0	2	26	12	9	3	0	0	0	1	3	0	0
	1730	,,	1013·6	1012·3	..	23·5	16·8	9·9	13·8	49	..	1·2	..	18·0	0	3	25	5	2	0	0	0	0	2	19	0	0
Porbander	0830	7	1015·5	1014·7	..	17·2	14·4	12·1	14·1	72	..	1·9	..	9·3	0	1	26	10	8	1	0	0	0	0	8	1	0
	1730	,,	1012·6	1011·8	..	25·7	20·3	16·5	19·4	60	..	1·4	..	19·2	0	10	18	2	1	1	0	0	2	11	11	0	0
Jamnagar	0530	23	1014·1	1011·4	..	12·7	10·5	7·7	10·9	74	..	0·5	..	6·6	0	1	25	0	3	4	1	6	3	5	4	2	0
	0830	,,	1015·9	1013·2	+0·5	14·8	11·7	8·3	11·3	67	+11	1·5	+0·3	7·4	0	1	24	0	3	3	4	8	3	3	1	3	0
	1130	,,	1016·6	1013·9	..	24·1	15·8	7·8	11·3	38	..	1·2	..	17·5	0	8	19	4	14	3	0	0	0	3	3	1	0
	1730	,,	1012·8	1010·2	..	26·2	16·1	6·2	10·2	31	..	1·1	..	21·0	0	14	14	12	7	0	0	0	0	4	5	0	0
Rajkot (Aerodrome)	0830	134	1016·0	1000·2	+0·9	14·7	9·8	2·0	8·2	49	—8	1·0	—0·6	6·3	0	0	22	1	5	4	3	2	3	3	1	6	0
	1130	,,	1015·9	1000·6	..	24·9	13·5	—2·6	6·3	20	..	0·7	..	19·5	0	8	20	6	13	4	0	0	0	4	1	0	0
	1730	,,	1012·1	997·0	..	28·0	14·2	—5·0	5·0	14	..	1·0	..	17·0	0	10	18	5	12	1	0	0	0	5	5	0	0
Surendranagar	0830	74	1015·8	1006·9	..	15·4	10·6	3·6	9·0	50	..	1·1	..	5·0	0	0	27	3	8	1	1	0	0	2	12	1	0
	1730	,,	1012·1	1003·6	..	28·2	15·5	0·1	7·5	19	..	1·1	..	6·0	0	0	28	6	7	0	0	0	1	2	12	0	0
Bhavnagar	0830	17	1016·0	1014·0	+1·1	13·6	8·6	1·4	7·2	45	—1	0·9	—0·4	4·7	0	0	25	0	1	0	0	0	5	13	6	3	0
	1730	,,	1012·2	1010·3	..	28·6	16·1	3·0	8·2	21	..	0·6	..	6·5	0	0	28	1	12	8	4	0	2	0	1	0	0
Bhavnagar (Aerodrome)	0830	11	1015·5	1014·1	..	16·5	10·5	2·6	7·9	42	..	1·0	..	11·7	0	2	23	5	0	2	0	0	1	9	8	3	0
	1130	,,	1015·9	1014·6	..	24·3	14·3	3·4	8·2	27	..	1·1	..	17·7	0	7	21	8	11	4	0	0	0	1	4	0	0

(g)—Mean of 24 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in 8 p.m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity%	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from Normal	Mean wind speed Kms. per hour	Wind speed (Kms. p.h.): 62 or more	Wind speed (Kms. p.h.): 20 to 61	Wind speed (Kms. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch— *Contd.*																											
Mahuva *	0830	16																									
*	1730	,,																									
Keshod	0830	51	1016·0	1009·9	..	16·4	10·9	5·6	8·8	51	..	2·0	..	12·3	0	1	26	3	22	1	0	0	0	0	1	1	0
	1130	,,	1016·3	1010·4	..	24·8	15·4	7·3	10·0	36	..	1·9	..	19·7	0	10	18	12	12	0	0	0	0	1	3	0	0
	1730	,,	1012·1	1006·4	..	29·1	17·4	8·4	10·4	30	..	1·3	..	23·5	0	19	9	7	5	0	0	0	2	13	1	0	0
Veraval	0230	8	1013·8	1012·9	..	15·6	11·9	7·3	11·1	63	..	0·6	..	14·2	0	4	24	15	8	1	0	0	0	1	3	0	0
	0530	,,	1013·6	1012·6	..	14·1	10·6	6·0	10·0	62	..	1·0	..	12·5	0	2	26	20	7	0	0	0	0	0	1	0	0
	0830	,,	1015·3	1014·4	+0·6	16·1	11·7	6·5	10·2	56	0	2·3	+1·2	11·7	0	1	27	10	13	0	0	0	0	0	5	0	0
	1130	,,	1015·8	1014·9	..	26·4	16·6	6·8	11·0	34	..	1·8	..	17·1	0	7	21	6	4	3	1	1	0	8	5	0	0
	1730	,,	1012·4	1011·5	..	24·4	19·9	16·8	19·7	64	..	1·3	..	21·9	0	14	14	0	1	0	0	3	5	15	4	0	0
	2330	,,	1014·5	1013·6	..	18·2	15·0	11·8	14·5	69	..	0·3	..	11·5	0	3	23	13	4	0	0	0	1	0	8	2	0
Konkan																											
Dahanu	0830	5	1014·1	1013·7	+0·9	18·7	15·9	9·3	12·1	57	—16	0·6	—0·4	9·6	0	0	28	6	2	16	4	0	0	0	0	0	0
	1730	,,	1011·4	1010·9	..	24·1	19·9	16·8	19·9	64	..	0·6	..	19·8	0	11	17	23	1	0	0	0	0	1	3	0	0
Bombay (Colaba)	0830	11	1014·2	1012·9	+0·1	20·8	16·9	13·7	16·1	66	—5	1·5	+0·6	10·0	0	0	28	9	14	4	1	0	0	0	0	0	0
	1130	,,	1014·3	1013·1	..	26·7	18·9	12·9	15·6	45	..	1·0	..	9·8	0	0	27	6	8	2	1	0	0	1	9	1	0
	1730	,,	1011·4	1010·2	..	25·6	20·4	17·0	19·7	60	..	1·3	..	19·2	0	10	18	2	0	0	0	0	0	5	21	0	0
Bombay (Santacruz) (Aerodrome)	0230	8	1012·4	1011·5	..	18·2	14·8	11·5	14·2	68	..	0·8	..	2·8	0	0	15	8	3	2	0	0	0	0	2	13	0
	0530	,,	1012·4	1011·5	..	17·3	13·9	10·6	13·3	68	..	0·8	..	2·8	0	0	16	5	7	2	0	0	0	0	2	12	0
	0830	,,	1014·4	1013·5	+0·1	20·1	14·8	9·5	12·7	55	—7	1·8	+0·8	3·9	0	1	15	4	6	5	0	0	0	0	1	12	0
	1130	,,	1014·4	1013·5	..	28·3	17·4	6·8	11·1	30	..	1·5	..	9·7	0	1	25	5	7	3	2	0	0	2	7	2	0
	1730	,,	1011·5	1010·6	..	27·3	19·0	12·9	15·3	43	..	1·8	..	21·2	0	15	13	5	0	0	0	0	0	0	23	0	0
	2330	,,	1013·5	1012·6	..	20·6	16·3	12·6	15·0	62	..	1·0	..	2·6	0	0	18	6	5	0	0	1	0	0	6	10	0
Alibag	0830	7	1014·0	1013·2	+0·4	20·4	17·1	14·5	16·8	70	+3	1·3	+0·3	5·1	0	0	25	9	12	3	1	0	0	0	0	3	0
Harnai	0830	20	1012·9	1010·5	+0·3	22·8	16·9	12·2	14·5	55	—8	1·5	..	11·2	0	5	19	7	6	4	1	0	0	0	6	4	0
	1730	,,	1010·5	1008·2	..	25·3	21·9	20·1	23·7	73	..	1·3	..	30·2	0	20	8	6	0	0	0	0	0	2	20	0	0
Ratnagiri	0830	35	1013·2	1009·2	..	21·2	17·0	14·0	16·0	64	..	2·2	..	..	0	0	28	0	1	27	0	0	0	0	0	0	0
	1730	,,	1010·7	1006·7	..	27·4	21·2	17·3	20·1	55	..	2·1	..	..	0	12	16	0	0	0	0	0	0	22	6	0	0
Devgad	0830	36	1013·3	1009·2	+0·3	22·5	18·6	15·9	18·3	67	—3	3·0	+1·9	8·3	0	0	28	5	7	15	1	0	0	0	0	0	0
	1730	,,	1010·2	1006·2	..	27·7	22·4	19·5	22·9	61	..	3·0	..	2·6	0	19	9	5	0	0	0	0	0	9	14	0	0
Vengurla	0230	9	1011·1	1010·1	..	21·1	18·2	16·2	18·4	74	..	0·3	..	..	0	0	11	10	0	0	0	0	0	0	1	17	0
	0530	,,	1011·2	1010·2	..	19·4	17·3	15·9	18·0	81	..	0·6	..	..	0	0	4	3	0	1	0	0	0	0	0	24	0
	0830	,,	1013·3	1012·3	..	21·8	18·0	15·4	17·5	67	..	1·4	..	..	0	0	5	5	0	0	0	0	0	0	0	23	0
	1130	,,	1013·4	1012·4	..	29·9	20·4	14·1	16·1	39	..	1·0	..	..	0	0	23	4	0	1	0	2	9	5	2	5	0
	1730	,,	1010·3	1009·3	..	28·9	21·7	17·5	20·1	51	..	1·3	..	..	0	2	21	0	0	0	0	0	4	14	5	5	0
	2330	,,	1012·5	1011·5	..	22·7	19·3	17·1	19·6	72	..	0·8	..	..	0	0	8	7	0	0	0	0	0	1	0	20	0
Maharashtra																											
Jalgaon	0830	201	1016·1	992·4	..	15·3	9·1	2·4	6·5	39	..	1·7	..	3·7	0	1	12	0	0	4	3	0	2	4	0	15	0
	1730	,,	1010·1	987·8	..	31·4	16·5	2·4	6·7	15	..	1·3	..	6·8	0	1	19	0	2	2	0	0	1	10	5	8	0
Malegaon	0830	437	1015·8	965·3	+0·3	15·9	9·7	1·5	7·1	39	—6	1·4	+0·3	2·4	0	0	20	1	0	1	0	0	1	10	7	8	0
	1730	,,	1009·3	961·5	..	30·1	16·1	0·6	7·1	16	..	1·4	..	4·1	0	0	26	5	5	2	0	1	2	7	4	2	0
Deolali	0830	571	1016·3	950·9	..	15·6	10·2	4·1	8·5	48	..	2·2	..	3·2	0	0	19	3	5	2	0	5	1	3	0	9	0
	1730	,,	1010·0	947·5	..	28·7	15·5	2·9	8·0	21	..	2·1	..	11·8	0	2	24	5	2	2	0	1	5	7	4	2	0
Aurangabad	0830	581	1015·5	949·5	0	18·5	11·1	3·3	7·9	40	0	1·6	+0·5	6·0	0	1	19	0	3	16	1	0	0	2	1	8	0
	1730	,,	1009·3	946·2	..	29·7	16·4	4·7	8·9	21	..	2·0	..	11·4	0	4	22	0	2	2	0	1	7	10	4	2	0
Aurangabad	0230	579	1013·3	947·0	..	15·1	9·6	3·5	8·1	47	..	0·7	..	3·2	0	0	9	2	0	1	0	0	0	2	4	19	0
Chikalthana (Aerodrome)	0530	,,	1013·5	947·0	..	13·3	8·2	2·1	7·2	48	..	0·3	..	2·9	0	0	10	1	0	1	0	0	0	6	2	18	0
	0830	,,	1014·7	949·2	..	19·1	11·9	4·7	8·9	41	..	1·0	..	5·2	0	1	14	5	0	4	2	0	1	1	2	13	0
	1130	,,	1013·1	949·2	..	26·3	16·4	8·5	11·4	33	..	1·2	..	7·6	0	0	19	4	3	4	4	2	0	2	0	9	0
	1730	,,	1008·7	945·7	..	29·2	17·4	8·4	11·3	28	..	1·9	..	6·9	0	0	21	4	0	2	1	1	2	5	6	7	0
	2330	,,	1013·5	947·6	..	17·1	10·9	4·7	8·6	44	..	0·8	..	3·7	0	0	9	0	3	1	0	0	0	3	2	19	0
Ahmednagar	0830	657	1014·8	940·5	—0·2	17·5	..	..	..	..	..	0·7	—0·1	3·2	0	0	2s	0	2	0	4	0	1	0	16	5	0
	1730	,,	1008·3	937·4	..	29·9	..	..	..	..	..	1·1	..	2·7	0	0	25	0	3	0	2	0	7	0	13	3	0
Parbhani	0830	423	1015·2	966·9	..	19·9	12·5	5·5	8·5	37	..	1·5	..	7·2	0	0	27	3	3	2	1	0	3	8	7	1	0
	1730	,,	1009·3	962·9	..	30·6	17·6	6·4	9·6	22	...	2·3	..	(d) 7·6	0	0	25	4	2	1	0	2	2	9	5	2	0
Poona	0530	559	1013·8	949·3	..	13·6	11·1	8·9	11·3	73	..	0·3	..	0·7	0	0	6	0	0	0	0	2	3	1	0	22	0
	0830	,,	1015·4	951·4	+0·1	16·1	12·2	8·9	11·3	63	+2	1·0	+0·2	0·3	0	0	2	1	0	0	0	0	0	1	0	26	0
	1130	,,	1013·0	951·3	..	26·5	15·2	4·7	9·0	26	..	0·7	..	2·5	0	0	12	4	4	1	2	0	0	0	1	16	0
	1730	,,	1008·4	947·6	..	30·1	16·7	5·6	9·4	22	..	1·2	..	4·0	0	0	16	2	1	0	2	1	1	4	5	12	0
	2330	,,	1013·4	950·8	..	18·6	13·5	9·1	11·8	55	..	0·3	..	0·3	0	0	3	1	0	0	0	2	0	0	0	25	0

(*)—Data not available.

(d) Mean of 28 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957.

Division and station	Hour of observation I.S.T.	Height barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of the nearest standard (1000 mb) level	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed kms. per hour.	Wind speed (Kms p.h.): 62 or more.	Wind speed (Kms p.h.): 20 to 61.	Wind speed (Kms p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra—*Contd.*																											
Poona (Lohagaon Aerodrome)	0230	593	1013·0	945·5	..	16·6	11·2	5·2	9·4	49	..	0·9	..	4·5	0	0	16	0	2	0	0	0	1	2	11	12	0
	0530	,,	1013·7	945·7	..	14·8	10·5	5·7	9·6	56	..	0·8	..	4·2	0	0	16	0	0	0	0	0	0	6	10	12	0
	0830	,,	1015·1	947·6	..	17·5	11·9	6·4	10·0	50	..	1·7	..	4·9	0	1	19	1	0	3	1	0	0	10	5	8	0
	1130	,,	1012·9	947·5	..	26·2	14·4	2·7	7·7	23	..	1·2	..	9·5	0	0	27	2	1	9	5	0	0	2	5	1	3
	1730	,,	1008·5	944·1	..	29·5	15·7	2·5	7·9	19	..	1·6	..	16·7	0	8	18	0	1	2	3	0	0	9	11	2	0
	2330	,,	1013·4	946·4	..	19·2	12·2	5·4	9·3	42	..	1·0	..	7·1	0	0	26	1	1	0	0	0	0	7	17	2	0
Baramati	0830	551	1015·2	952·3	..	17·5	12·4	7·5	10·7	53	..	0·8	..	4·9	0	0	23	4	1	2	1	0	1	3	11	5	0
	1730	,,	1007·8	948·0	..	30·7	18·3	9·8	11·9	28	..	1·4	..	5·9	0	0	27	3	3	3	2	2	5	6	3	1	0
	0830	521	1014·4	955·1	..	18·3	11·9	5·7	9·4	43	..	1·1	..	3·8	0	0	24	3	3	2	1	3	1	5	6	4	0
Jeur	1730	,,	1007·5	951·2	..	31·4	17·6	6·7	9·9	22	..	1·7	..	4·6	0	0	26	1	2	1	1	2	5	9	5	2	0
	0530	479	1012·3	957·9	..	18·9	11·6	3·7	8·5	38	..	1·0	..	7·0	0	0	26	8	9	0	4	0	2	2	1	1	0
Sholapur	0830	,,	1014·3	960·0	0	20·7	12·9	4·9	9·3	37	—3	1·3	+0·4	7·4	0	0	26	6	8	1	4	2	1	0	4	2	0
	1130		1012·8	960·0	..	28·2	16·8	6·9	10·8	28	..	1·1	..	9·7	0	1	24	3	2	1	11	1	3	2	3	3	0
	1730	,,	1007·9	956·0	..	32·0	17·7	6·2	9·9	21	..	1·7	..	6·7	0	0	23	3	2	0	5	4	3	4	2	5	0
	2330	,,	1011·6	958·2	..	24·3	14·3	5·2	9·0	30	..	1·5	..	8·7	0	2	26	4	10	2	6	0	2	1	3	0	0
	0830	554	1014·3	951·6	—0·2	19·0	13·8	9·6	12·0	55	—3	1·8	+0·9	3·1	0	0	20	1	5	6	2	1	0	2	3	8	0
Miraj	1730	,,	1007·2	947·5	..	31·5	19·7	11·9	14·6	31	..	2·5	..	9·3	0	0	28	2	3	3	2	2	6	7	3	0	0
	0530	570	1012·1	947·4	..	17·1	12·9	9·2	11·9	62	..	0·4	..	1·5	0	0	11	0	2	0	1	0	3	5	0	17	0
Kolhapur	0836	,,	1014·0	949·	..	19·8	13·8	8·6	10·5	50	..	1·3	..	3·0	0	0	17	0	5	6	1	0	2	1	2	11	0
	1130	,,	1012·0	949·6	..	28·0	16·9	8·0	11·3	30	..	1·1	..	10·6	0	2	26	1	6	8	5	1	4	3	0	0	0
	1730	,	1007·5	945·9	..	30·9	18·2	8·7	11·5	26	..	1·6	..	11·4	0	1	26	0	4	5	1	0	5	10	2	1	0
Vidarbha																											
Buldhana	0830	650	1014·6	941·3	..	18·6	10·9	2·1	7·5	36	..	1·1	..	3·1	0	0	27	1	3	0	4	2	3	0	14	1	0
	1730	,,	1008·9	938·2	..	27·7	15·5	3·8	8·7	24	..	0·7	..	2·2	0	0	21	0	5	0	0	0	0	0	16	7	0
Akola	0830	282	1014·9	982·2	+0·2	18·1	11·0	1·1	7·5	35	—9	2·2	+0·8	5·8	0	0	23	1	2	4	1	1	4	9	1	5	0
	1130	,,	1013·4	981·7	..	27·3	15·1	1·9	7·3	20	..	1·5	..	5·0	0	0	25	0	4	5	2	1	3	3	7	3	0
	1730	,,	1008·9	977·8	..	30·7	16·5	1·2	7·3	16	..	1·8	..	3·7	0	0	28	0	5	5	1	0	1	6	10	0	0
	0530	309	1012·8	976·8	..	15·1	9·1	1·0	6·7	39	..	0·7	..	3·3	0	0	21	0	1	10	0	2	3	5	0	7	0
Akola (Aerodrome)	2330	,,	1012·8	977·4	..	20·1	11·9	1·6	7·5	31	..	0·9	..	3·2	0	0	19	0	1	6	3	2	2	4	1	9	0
	0830	370	1015·1	972·6	+0·3	19·0	11·5	2·3	7·6	34	—9	2·0	+0·6	5·2	0	1	21	0	13	3	0	1	4	1	0	6	0
Amravati	1730	,,	1009·3	968·6	..	29·9	16·4	2·1	7·8	18	..	2·1	..	7·5	0	0	28	1	4	0	0	0	9	4	10	0	0
	0830	451	1014·3	963·1	..	20·4	13·2	5·9	9·3	40	..	2·0	..	3·3	0	0	15	1	5	4	2	0	0	2	1	13	0
Yeotmal	1730	,,	1009·1	959·6	..	29·6	17·7	7·4	10·5	26	..	2·1	..	3·9	0	0	18	3	3	0	0	1	3	4	4	10	0
	0230	310	1012·5	976·5	..	16·4	11·6	6·5	9·9	52	..	0·6	..	5·7	0	0	26	9	3	2	1	0	2	0	9	2	0
Nagpur	0530	,,	1013·2	976·9	..	14·8	10·6	6·1	9·5	57	..	1·0	..	6·5	0	0	24	9	2	3	1	0	0	1	8	4	0
	0830	,,	1015·2	979·3	+0·1	18·7	12·7	6·7	9·8	46	—6	2·2	+0·4	7·7	0	1	23	11	4	0	1	0	0	2	6	4	0
	1130	,,	1013·8	979·0	..	26·8	16·5	7·1	10·4	29	..	1·9	..	10·6	0	1	27	4	7	6	3	3	1	1	3	0	0
	1730	,,	1009·8	975·3	..	29·2	17·0	5·8	9·5	24	..	1·9	..	9·7	0	1	26	3	6	4	3	0	4	5	2	1	0
	2330	,,	1013·3	977·5	..	19·1	12·8	6·6	9·9	45	..	0·9	..	7·6	0	1	25	9	4	2	1	2	1	0	7	2	0
	0830	313	1015·4	979·2	..	17·6	12·7	7·9	10·7	54	..	2·0	..	3·2	0	0	24	8	1	1	1	3	1	0	3	4	6
Gondia	1730	,,	1010·6	975·8	..	28·1	16·3	4·8	9·1	24	..	1·9	..	3·4	0	0	24	4	1	0	0	0	3	2	4	4	10
	0830	229	1015·3	988·8	..	18·9	14·2	10·0	12·3	57	..	1·4	..	6·1	0	0	25	7	5	1	2	5	2	0	3	3	0
Brahmapuri	1730	,,	1010·2	984·7	..	29·5	17·9	6·9	11·1	27	..	1·6	..	5·5	0	0	24	4	8	0	2	5	4	0	1	4	0
	0830	193	1014·8	992·4	+0·1	19·1	14·3	10·1	12·4	57	0	1·8	+0·4	4·0	0	0	21	4	2	4	4	2	1	0	4	7	0
Chanda	1730	,,	1010·1	988·2	..	29·6	18·5	8·9	12·4	31	..	2·4	..	5·2	0	0	25	5	3	6	3	1	1	1	5	3	0
	0830	123	1015·0	1000·7	..	20·5	16·8	13·9	16·1	66	..	2·2	..	4·7	0	0	22	2	2	4	6	4	1	1	2	6	0
Sironcha	1730	,,	1009·7	996·0	..	32·0	19·5	9·9	12·5	27	..	1·6	..	5·6	0	0	28	4	3	1	4	7	4	2	3	0	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1012·0	1009·6	..	21·2	20·3	19·7	23·1	91	..	0·6	..	2·1	0	0	17	1	0	0	2	6	3	1	4	11	0
	0830	,,	1014·2	1012·0	+0·1	24·8	21·8	20·1	23·6	76	—5	3·4	+1·0	5·0	0	0	26	2	0	0	6	8	5	2	3	2	0
	1130	,,	1013·7	1011·14	..	29·8	22·5	18·4	21·3	51	..	3·3	..	10·3	0	0	28	0	3	7	13	2	3	0	0	0	0
	1730	,	1011·0	1008·7	..	28·5	22·3	18·9	21·8	57	..	2·0	..	12·5	0	0	28	0	0	21	7	0	0	0	0	0	0
	2330	,,	1013·1	1010·7	..	23·4	21·6	20·6	24·3	84	..	0·2	..	2·2	0	0	15	0	0	2	7	3	3	0	0	13	0
Ongole	0830	12	1014·1	1012·8	..	24·6	22·0	20·6	24·4	79	..	(e) 2·2	..	(e) 4·1	0	0	24	3	2	0	3	6	9	1	0	2	0
	1730	,,	1010·9	1009·6	..	27·9	23·8	21·7	26·1	70	..	(f) 1·3	..	(f) 7·7	0	0	25	0	1	4	20	0	0	0	0	0	0
Rentachintala	0830	106	1014·1	1002·0	..	24·0	19·6	16·6	19·2	64	—6	2·7	—0·2	2·5	0	0	15	0	0	2	3	9	0	1	0	18	0
	1730	,,	1009·4	997·7	..	32·8	20·9	12·7	14·8	30	..	3·6	..	4·5	0	0	27	8	0	11	2	6	0	0	0	1	0
Gannavaram	0530	23	1012·0	1009·3	..	20·6	19·5	18·9	21·6	90	..	1·2	..	2·1	0	0	11	0	1	7	2	1		0	0	17	0
	0830	,,	1014·2	1011·5	..	24·3	21·3	19·6	22·8	75	..	2·0	..	5·7	0	0	24	0	4	13	6	1	0	0	1	4	0

(e) Mean of 26 days.

(f) Mean of 25 days

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957

Division and station	Hours of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity%	Departure from normal	Cloud amount (Oktas)		Mean wind speed Kms. per hour	Wind speed (Kms p.h.)			No. of observations									
			At mean sea level or height in g. p. m. nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh—*Contd.* **Gannavaram***Contd.*	1130	23	1013·8	1011·2	..	29·5	21·6	16·8	19·3	47	..	2·8	..	8·6	0	0	28	0	3	4	14	3	3	1	0	0	0
	1730	,,	1010·4	1007·8	..	29·8	21·1	15·3	18·1	43	..	1·5	..	8·1	0	0	28	0	1	2	18	6	1	0	0	0	0
	2330	,,	1012·9	1010·3	..	22·3	20·2	19·0	21·9	82	..	0·3	..	2·3	0	0	14	1	0	5	6	1	0	1	0	14	0
Masulipatam	0230	3	1012·0	1011·6	..	21·8	21·0	20·6	24·2	93	..	1·7	..	3·0	0	0	19	6	1	1	4	5	0	0	2	9	0
	0530	,,	1012·4	1012·0	..	20·9	20·5	20·3	24·5	97	..	2·4	..	2·4	0	0	14	6	4	0	2	0	0	1	1	14	0
	0830	,,	1014·1	1013·8	—0·5	24·2	22·4	21·5	25·7	85	+4	2·4	+0·3	3·9	0	0	23	5	7	1	3	5	0	1	1	5	0
	1130	,,	1014·3	1014·0	..	28·6	23·9	21·5	25·8	65	..	3·2	..	10·1	0	0	28	2	1	4	12	8	0	0	1	0	0
	1730	,,	1011·2	1010·9	..	27·1	23·1	21·0	24·9	69	..	1·7	..	9·2	0	0	28	0	0	1	11	15	1	0	0	0	0
	2330	,,	1013·2	1012·9	..	22·9	21·7	21·1	24·9	90	..	1·0	..	3·7	0	0	20	1	0	2	7	9	0	1	0	8	0
Nidadavolu	0830	12	1014·8	1013·3	..	22·9	20·6	19·4	22·3	80	..	1·8	..	6·4	0	0	26	15	6	3	0	0	0	0	2	2	0
	1730	,,	1010·5	1009·1	..	30·1	22·1	17·6	20·0	49	..	1·9	..	11·4	0	0	27	0	0	7	1	16	0	3	0	1	0
Kakinada	0830	8	1015·2	1014·3	+0·5	26·0	22·0	20·0	23·2	70	—5	2·9	+0·3	7·0	0	0	27	0	6	0	8	1	3	3	6	1	0
	1730	,,	1011·5	1010·5	..	27·5	22·9	20·5	24·2	66	..	1·1	..	10·4	0	0	28	0	0	0	26	1	1	0	0	0	0
Visakhapatnam	0230	3	1012·3	1011·9	..	21·4	19·9	19·1	22·0	87	..	2·0	..	1·1	0	0	9	1	0	0	1	0	0	1	6	19	0
	0530	,,	1012·6	1012·2	..	19·9	18·9	18·3	21·4	90	..	1·6	..	1·6	0	0	11	1	0	1	0	0	1	3	5	17	0
	0830	,,	1014·8	1014·4	+0·1	24·7	21·2	19·1	22·3	71	—6	2·5	0	3·2	0	0	16	1	1	0	1	0	4	3	6	12	0
	1130	,,	1014·1	1013·7	..	29·4	22·0	17·7	19·5	51	..	2·9	..	11·1	0	0	27	0	0	1	12	4	8	1	1	1	0
	1730	,,	1011·6	1011·2	..	26·9	22·0	19·0	23·0	62	..	1·9	..	14·0	0	2	26	0	0	2	9	11	6	0	0	0	0
	2330	,,	1013·6	1013·2	..	22·9	20·9	19·9	23·2	83	..	1·5	..	1·0	0	0	8	2	1	0	0	0	2	0	3	20	0
Calingapatam	0830	6	1014·1	1013·4	—0·7	21·6	19·6	18·3	21·3	82	+3	3·7	+1·9	6·1	0	0	28	9	0	1	1	0	0	10	13	0	0
	1730	,,	1011·2	1010·5	..	27·1	22·6	20·4	24·0	67	..	3·5	..	8·1	0	0	28	0	0	8	7	6	7	0	0	0	0
Telangana Ramagundam	0830	156	1014·4	996·5	..	22·6	16·9	12·2	14·7	52	..	2·4	..	5·5	0	1	20	1	3	1	5	6	2	1	2	7	0
	1730	,,	1009·6	992·2	..	32·0	19·4	9·2	11·8	26	..	1·9	..	4·4	0	0	22	1	6	3	3	5	2	0	1	6	0
Nizamabad	0830	381	1014·2	970·9	0	21·6	15·2	10·6	12·1	51	—3	1·8	+0·6	3·5	0	0	20	2	2	3	1	5	3	2	2	8	0
	1730	,,	1008·9	967·1	..	31·0	18·6	8·5	11·3	26	..	2·3	..	4·3	0	0	22	3	5	3	1	4	1	3	2	6	0
Mahbub Nagar	0830	505	1013·4	956·9	..	23·2	16·6	11·1	14·1	48	..	2·1	..	5·8	0	0	21	0	3	6	6	1	2	1	2	7	0
	1730	,,	1008·5	953·5	..	30·3	18·2	9·6	12·8	28	..	1·7	..	7·8	0	1	24	0	3	10	4	6	2	0	0	3	0
Hyderabad (Begumpet Aerodrome)	0230	545	1011·8	950·4	..	19·5	14·8	10·7	13·4	58	..	0·9	..	5·2	0	0	15	0	1	2	10	2	0	0	0	13	0
	0530	,,	1012·6	950·7	..	17·7	14·4	11·0	14·1	67	..	1·6	..	4·3	0	0	14	0	2	4	8	0	0	0	0	14	0
	0830	,,	1014·3	953·1	+0·4	21·1	15·8	11·2	14·1	57	—9	2·2	+0·4	4·8	0	0	15	1	2	1		0	2	1	2	13	0
	1130	,,	1012·7	952·8	..	27·6	17·3	8·1	12·2	31	..	2·1	..	12·1	0	3	20	0	2	4	9	4	3	0	1	5	0
	1730	,,	1009·0	949·6	..	29·4	17·3	6·3	10·6	26	..	2·2	..	7·4	0	1	20	3	1	5	6	3	2	0	1	7	0
	2330	,,	1012·6	951·6	..	21·7	15·6	10·3	13·2	49	..	0·8	..	5·8	0	0	15	0	2	2	9	2	0	0	0	13	0
Hakimpet	0830	613	1013·6	945·1	..	21·9	16·2	11·6	14·1	55	..	2·7	..	10·1	0	2	23	2	3	1	10	4	2	1	2	3	0
	1730	,,	1008·9	942·2	..	28·2	17·4	9·1	12·0	32	..	1·8	..	9·8	0	2	26	4	5	5	8	0	3	0	3	0	0
Hanamkonda	0830	269	1014·6	983·9	—0·1	21·9	18·4	15·8	18·4	70	0	2·1	—0·4	12·3	0	4	21	2	1	0	6	12	1	1	2	3	0
	1730	,,	1010·0	980·4	..	30·6	18·9	9·6	12·4	28	..	1·3	..	6·7	0	0	28	5	3	2	8	5	1	0	4	0	0
Bhadrachallam	0830	111	1014·9	1002·1	..	22·4	19·1	16·9	19·3	72	..	2·0	..	8·7	0	0	19	2	2	5	8	2	0	0	0	9	0
	1730	,,	1009·9	997·2	..	32·1	19·8	10·6	14·8	27	..	2·4	..	8·3	0	0	28	3	7	6	10	2	0	0	0	0	0
Khammameth	0830	112	1014·4	1001·5	..	22·9	19·7	17·5	20·4	72	..	2·3	..	3·2	0	0	22	1	0	7	14	0	0	0	0	6	0
	1730	,,	1010·1	997·6	..	32·3	20·2	11·3	14·6	28	..	2·0	..	4·0	0	0	24	5	0	2	15	0	0	2	0	4	0
Rayala Seema Arogyavaram	0830	701	1014·0	936·0	..	21·0	16·4	13·1	15·3	61	..	2·3	..	2·7	0	0	22	1	0	0	9	11	1	0	0	6	0
	1730	,,	1008·4	932·6	..	28·2	17·7	11·2	12·1	33	..	2·7	..	5·4	0	0	28	1	8	8	10	0	0	0	1	0	0
Cuddapah	0830	130	1014·3	999·6	+0·5	27·1	21·4	18·0	21·0	58	—6	0·5	—0·9	3·2	0	0	13	0	0	13	0	0	0	0	0	15	0
	1730	,,	1009·6	995·1	..	32·3	22·1	15·9	18·2	38	..	0·8	..	8·9	0	0	24	0	0	24	0	0	0	0	0	4	0
Anantapur	0530	350	1011·3	971·4	..	19·8	16·2	13·6	15·4	68	..	0·5	..	3·1	0	0	15	0	2	5	3	2	1	2	0	13	0
	0830	,,	1013·4	973·7	..	22·8	17·7	14·0	16·0	58	..	0·8	..	3·7	0	0	18	0	1	4	3	5	2	1	2	10	0
	1130	,,	1012·2	973·5	..	29·0	19·2	12·0	14·3	37	..	0·5	..	8·7	0	0	28	0	8	16	2	1	0	1	0	0	0
	1730	,,	1007·9	969·5	..	31·2	19·9	11·7	14·1	31	..	1·4	..	7·5	0	0	26	1	8	15	1	0	0	1	0	2	0
	2330	,,	1011·5	972·2	..	24·7	18·3	13·7	15·8	51	..	0·5	..	10·9	0	5	21	1	1	19	3	1	0	0	1	2	0
Kurnool	0830	281	1013·7	981·6	—0·2	21·9	16·8	12·7	15·0	57	—2	1·7	+0·6	2·8	0	0	13	1	0	4	4	0	3	1	0	15	0
	1730	,,	1008·4	977·8	..	33·2	19·4	8·4	11·3	22	..	1·6	..	4·1	0	0	15	0	1	7	2	3	2	0	0	13	0
Madras Pallayamcottai	0830	51	1013·5	1007·7	..	25·3	22·1	20·4	24·0	74	..	3·9	..	7·7	0	0	28	18	4	0	0	0	0	2	4	0	0
	1730	,,	1009·0	1003·3	..	30·4	22·8	18·7	21·6	50	..	3·7	..	13·4	0	2	26	0	6	17	4	1	0	0	0	0	0
Tuticorin	0830	4	1013·8	1013·4	..	25·6	22·4	20·8	24·5	75	..	2·0	..	12·6	0	0	28	18	5	1	0	0	0	0	4	0	0
	1730	,,	1009·7	1009·3	..	27·5	23·9	22·2	26·7	75	..	1·8	..	26·7	0	25	3	0	7	14	6	1	0	0	0	0	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957.

Division and station	Hours of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms p.h.): 62 or more	Wind speed (Kms p.h.): 20 to 61	Wind speed (Kms p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Pamban	0830	4	1013·5	1012·2	+0·1	26·7	23·6	22·1	26·6	76	—3	4·0	+1·4	10·7	0	2	23	6	11	5	1	1	0	1	0	3	0
	1730	,,	1010·0	1008·7	..	26·3	23·5	21·6	25·9	71	..	3·3	..	15·0	0	7	20	4	20	1	2	0	0	0	0	1	0
Mathurai	0830	133	1013·6	988·5	—0·3	25·2	21·4	19·4	22·4	70	—6	2·7	—0·6	3·1	0	0	20	9	6	0	0	0	0	0	5	8	0
	1730	,,	1009·0	994·2	..	31·1	22·0	16·3	18·9	43	..	3·8	..	3·7	0	0	28	1	16	10	0	0	1	0	0	0	0
Nagapatinam	0830	9	1014·0	1012·9	+0·2	25·5	22·1	20·1	23·7	74	—3	3·5	—0·2	10·9	0	4	21	3	8	1	2	0	0	4	7	3	0
	1730	,,	1010·9	1009·8	..	27·1	22·8	20·6	24·4	68	..	2·4	..	15·3	0	3	25	0	17	8	3	0	0	0	0	0	0
Tiruchirapalli	0230	88	1011·5	1001·4	..	22·2	20·5	19·4	23·2	85	..	1·2	..	5·8	0	2	15	2	6	9	0	0	0	0	0	11	0
	0530	,,	1011·9	1001·7	..	21·6	20·1	19·3	22·1	87	..	1·4	..	4.5	0	1	12	1	5	6	1	0	0	0	0	15	0
	0830	,,	1013·9	1003·9	—0·4	24·6	21·5	19·8	23·2	75	—6	2·5	+0·2	7·1	0	1	16	2	11	1	0	0	0	1	0	11	2
	1130	,,	1013·2	1003·3	..	29·3	22·3	18·2	21·2	52	..	3·4	..	9·6	0	1	24	1	13	6	1	0	0	0	1	3	3
	0730	,,	1009·5	999·6	..	30·6	22·0	16·8	19·4	45	..	2·7	..	11·3	0	3	23	0	5	17	3	0	0	0	0	2	1
	2330	,,	1012·8	1002·7	..	23·2	21·1	19·9	22·3	82	..	1·3	..	7·0	0	0	20	1	6	13	0	0	0	0	0	8	0
Coimbatore	0830	409	1014·1	968·1	+0·1	23·2	19·2	17·2	19·0	71	—7	3·8	+0·8	9·7	0	0	28	1	1	1	0	3	12	6	4	0	0
	1730	,,	1007·9	963·3	..	31·5	30·3	12·9	14·7	34	..	3·3	..	9·6	0	1	27	1	1	1	0	1	8	9	7	0	0
Coimbatore (Peelamedu Aerodrome)	0530	398	1012·0	966·8	..	20·8	18·6	17·2	19·7	80	..	2·2	..	6·9	0	0	25	5	8	7	0	1	2	1	1	3	0
	0830	,,	1014·0	969·1	..	22·8	19·6	17·6	20·1	73	..	3·1	..	10·1	0	0	27	0	16	6	1	2	1	1	0	1	0
	1130	,,	1012·5	968·3	..	27·7	20·2	15·3	17·5	48	..	2·6	..	12·7	0	2	26	0	17	9	0	1	1	0	0	0	0
	1730	,,	1007·9	964·4	..	31·2	19·3	10·2	12·8	29	..	2·6	..	13·6	0	3	25	0	11	14	2	0	1	0	0	0	0
	2330	,,	1011·9	967·3	..	24·1	19·9	17·1	19·8	67	..	2·0	..	16·6	0	8	20	0	3	11	0	8	4	1	1	0	0
Salem	0530	278	1012·0	980·2	..	21·1	18·5	16·7	19·4	77	..	0·9	..	3·2	0	0	21	1	10	6	3	1	0	0	0	7	0
	0830	,,	1013·8	982·3	—0·3	23·5	19·5	17·1	19·4	67	—7	1·7	0	7·4	0	0	28	0	19	9	0	0	0	0	0	0	0
	1130	,,	1012·6	981·7	..	29·1	20·6	15·1	17·3	43	..	2·3	..	3·8	0	0	21	2	4	7	3	2	1	1	1	7	0
	1730	,,	1008·1	977·6	..	31·7	21·0	13·9	16·3	35	..	2·4	..	5·1	0	0	24	1	2	18	0	1	1	1	0	4	0
	2330	,,	1012·1	980·7	..	24·6	19·8	16·8	18·5	63	..	1·8	..	7·3	0	0	26	0	5	17	3	0	1	0	0	2	0
Kalla Kurichi	0830	127	1014·2	999·7	..	24·2	20·5	18·3	19·9	70	..	2·2	..	1·5	0	0	9	5	0	1	0	0	0	0	3	19	0
	1730	,,	1009·5	995·3	..	30·4	21·6	14·9	18·5	41	..	2·5	..	3·1	0	0	15	7	3	2	2	0	0	1	0	13	0
Cuddalore	0530	12	1011·8	1010·4	..	21·4	20·1	19·3	22·3	87	..	2·3	..	3·5	0	0	26	2	2	2	2	0	0	1	17	2	0
	0830	,,	1014·1	1012·7	—0·1	24·3	21·8	20·5	24·1	80	—4	2·2	—0·8	3·3	0	0	18	4	6	1	2	0	0	1	4	10	0
	1130	,,	1013·8	1012·4	..	27·8	22·6	19·6	22·7	61	..	3·7	..	10·2	0	0	26	4	11	5	6	0	0	0	0	2	0
	1730	,,	1010·8	1009·5	..	27·0	22·3	19·7	23·0	65	..	3·9	..	8·5	0	0	28	1	10	5	12	0	0	0	0	0	0
	2330	,,	1012·9	1011·5	..	24·8	21·7	20·0	23·4	75	..	2·5	..	8·7	0	1	26	2	13	2	9	1	0	0	0	1	0
Vellore	0530	214	1012·5	987·8	..	19·3	18·3	17·7	20·8	91	..	1·5	..	1·8	0	0	4	0	0	0	0	1	1	1	1	24	0
	0830	,,	1014·5	989·4	+0·2	21·8	19·4	18·3	20·8	79	—3	2·6	+0·2	1·0	0	0	7	0	1	0	1	0	1	2	2	21	0
	1130	,,	1013·3	989·3	..	27·9	20·7	16·3	18·5	50	..	2·7	..	5·2	0	0	25	4	6	3	5	2	1	3	1	3	0
	1730	,,	1009·7	985·8	..	29·7	20·3	13·9	16·2	39	..	2·4	..	8·4	0	1	26	0	6	13	8	0	0	0	0	1	0
	2330	,,	1013·3	988·8	..	23·2	19·5	17·8	19·8	72	..	1·5	..	6·3	0	1	16	0	3	5	8	1	0	0	0	11	0
Madras	0230	16	1011·7	1009·9	..	22·1	20·7	20·1	23·3	88	..	1·4	..	5·0	0	0	22	3	1	4	2	1	0	7	4	6	0
	0530	,,	1012·1	1010·3	..	21·4	20·4	19·9	23·1	90	..	2·0	..	3·7	0	0	21	1	1	0	1	1	2	9	6	7	0
	0830	,,	1014·4	1012·6	+0·2	24·1	21·7	20·3	24·0	80	0	2·3	+0·1	6·2	0	0	25	3	1	2	1	0	5	6	7	3	0
	1130	,,	1013·9	1012·1	..	29·1	22·3	18·4	21·4	53	..	3·0	..	11·3	0	3	25	1	5	9	5	5	1	2	0	0	0
	1730	,,	1011·1	1009·4	..	27·3	22·2	19·3	22·9	62	..	2·7	..	16·6	0	4	24	0	7	11	9	1	0	0	0	0	0
	2330	,,	1013·2	1011·4	..	23·4	21·2	19·9	23·3	81	..	1·6	..	5·0	0	0	22	0	5	8	3	1	2	2	1	6	0
Madras (Nungambakkam.)	0830	6	1013·7	1013·0	..	25·3	21·9	20·0	23·5	73	..	6·1	..	3·8	0	0	21	5	2	2	0	2	6	2	2	7	0
Coastal Mysore																											
Karwar	0830	4	1013·1	1012·6	—0·3	21·3	19·2	17·9	20·5	81	..	1·2	..	0·5	0	0	5	0	2	0	3	0	0	0	0	29	0
	1730	,,	1009·7	1009·2	..	28·0	23·1	20·7	24·0	64	..	0·4	..	5·0	0	0	27	0	0	0	0	0	1	16	10	1	0
Honavar	0830	26	1013·1	1010·1	—0·4	22·1	19·4	17·8	20·4	77	+3	2·5	+0·1	5·2	0	0	25	1	3	21	0	0	0	0	0	3	0
	1730	,,	1009·9	1006·9	..	28·9	23·7	20·4	25·0	60	..	2·6	..	10·4	0	0	28	0	2	0	0	1	7	9	9	0	0
Mangalore	0230	22	1010·3	1007·8	..	24·8	22·3	21·2	24·8	81	..	1·0	..	6·3	0	0	26	10	6	10	0	0	0	0	0	2	0
	0530	,,	1010·7	1008·2	..	23·7	21·8	20·8	24·5	84	..	1·1	..	7·1	0	0	25	0	10	15	0	0	0	0	0	3	0
	0830	,,	1012·8	1010·3	—0·4	25·6	22·2	20·3	24·1	73	0	2·1	+0·3	7·3	0	0	27	1	7	17	2	0	0	0	0	1	0
	1130	,,	1012·6	1010·1	..	29·6	23·0	19·7	22·8	56	..	1·6	..	9·4	0	1	26	1	1	3	2	0	2	7	11	1	0
	1730	,,	1009·4	1006·9	..	28·4	23·7	21·3	25·4	65	..	1·7	..	13·0	0	3	25	0	0	0	0	0	4	7	17	0	0
	2330	,,	1011·7	1009·2	..	25·9	23·1	21·7	25·9	77	..	1·5	..	5·5	0	0	21	11	6	2	0	0	0	0	2	7	0
Mangalore (Bajpe Aerodrome.)	0530	108	1011·4	999·5	..	22·3	20·9	20·1	24·9	88	..	2·4	..	6·6	0	0	24	0	1	20	3	0	0	0	0	4	0
	0830	,,	1013·1	1001·4	..	25·6	22·0	20·0	23·5	72	..	2·1	..	7·7	0	0	21	1	2	13	5	0	0	0	0	7	0
	1730	,,	1009·7	998·1	..	27·9	22·8	20·1	23·6	63	..	1·7	..	15·3	0	3	25	2	0	0	0	0	0	14	12	0	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—FEBRUARY, 1957.

Division and station	Hours of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour.	Wind speed (kms. p.h.): 62 or more	Wind speed (kms. p.h.): 20 to 61	Wind speed (kms. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore North																											
Bidar	0830	664	1013·6	939·4	..	20·9	13·8	7·3	10·7	42	—11	2·7	+1·3	10·2	0	0	28	5	4	1	4	4	5	1	4	0	0
	1730	,,	1008·1	936·3	..	29·3	16·4	5·5	9·5	24	..	2·9	..	9·4	0	0	28	6	4	4	2	1	6	3	2	0	0
Gulbarga	0830	458	1013·8	962·3	—0·1	23·0	14·7	7·3	10·6	39	—9	2·3	+1·6	8·9	0	0	28	4	9	5	4	1	3	0	2	0	0
	1730	,,	1007·8	958·1	..	32·0	17·7	6·1	9·7	21	..	2·5	..	12·5	0	0	27	3	3	6	2	7	3	0	3	1	0
Bijapur	0830	594	1013·7	947·2	—0·1	21·5	14·1	7·7	10·0	42	—10	1·6	+0·6	7·1	0	0	25	7	4	0	1	6	1	1	5	3	0
	1730	,,	1007·6	943·4	..	30·9	17·9	8·3	9·9	25	..	2·3	..	4·1	0	0	24	5	4	3	3	2	1	3	3	4	0
Belgaum	0830	781	1014·4	927·4	+0·4	19·0	13·6	9·2	11·6	55	—1	..	..	1·3	0	0	11	0	1	0	3	6	1	0	0	17	0
	1730	,,	1009·0	925·1	..	28·7	17·0	8·4	10·1	29	..	..	..	4·9	0	0	23	2	2	1	2	0	9	5	2	5	0
Belgaum (C.T.O.)	0830	753	1013·6	930·0	—0·1	20·9	14·7	9·6	12·2	50	—9	1·1	0	1·6	0	0	12	1	2	4	2	0	0	0	1	16	2
	1730	,,	1007·7	926·8	..	29·0	17·7	9·2	12·0	31	..	2·4	..	10·4	0	0	28	0	4	4	2	3	5	10	0	0	0
Belgaum (Sambre Aerodrome)	0530	761	1012·3	927·1	..	17·6	12·9	8·7	11·3	58	..	0·8	..	3·2	0	1	9	0	1	4	2	0	2	0	1	18	0
	0830	,,	1013·4	929·1	..	21·4	14·3	8·4	11·1	46	..	1·2	..	6·5	0	2	14	0	2	4	8	0	0	1	1	12	0
	1130	,,	1011·5	929·2	..	27·7	16·7	8·0	11·3	30	..	1·0	..	10·6	0	5	17	2	5	3	7	2	1	1	1	6	0
	1730	,,	1007·4	925·9	..	29·6	17·8	9·7	11·9	29	..	1·7	..	10·6	0	9	13	2	2	3	3	0	3	9	0	6	0
Gadag	0830	650	1013·3	941·3	+0·2	23·3	15·8	10·0	12·5	44	—1·3	1·4	+0·5	7·0	0	0	27	2	2	10	3	0	0	5	5	1	0
	1730	,,	1007·4	937·7	..	31·1	18·1	8·5	11·2	25	..	2·4	..	4·3	0	0	25	1	4	9	2	0	0	5	4	3	0
Gadag (P. & B.O.)	0530	661	1011·6	937·7	..	19·8	15·6	12·8	14·7	64	..	0·3	..	6·3	0	2	13	0	0	3	6	1	1	4	0	13	0
	0830	,,	1013·1	939·7	..	22·4	17·5	13·9	16·4	60	..	1·0	..	10·7	0	2	20	1	1	5	9	1	0	2	3	6	0
	1130	,,	1011·9	939·8	..	27·4	18·6	12·8	14·9	42	..	1·1	..	13·7	0	6	17	0	3	9	7	0	0	0	4	5	0
	1730	,,	1007·8	936·5	..	30·0	19·7	13·9	15·4	36	..	1·6	..	7·0	0	1	17	1	0	8	3	1	2	2	1	10	0
	2330	,,	1011·6	936·6	..	23·2	16·9	12·8	14·1	51	..	0·3	..	6·8	0	0	17	0	0	5	3	0	1	2	6	11	0
Raichur	0830	440	1013·6	968·7	0	23·5	17·8	13·5	15·7	55	+1	1·5	+0·5	6·3	0	0	25	2	3	5	4	4	3	2	2	3	0
	1730	,,	1008·6	965·1	..	31·8	20·8	13·3	15·6	34	..	2·0	..	6·7	0	0	27	2	7	8	5	3	1	1	0	1	0
Mysore South																											
Bellary	0830	449	1013·2	962·7	—0·44	22·9	16·6	11·3	13·7	50	—4	2·1	+0·7	4·3	0	0	19	0	0	1	11	0	3	0	4	9	0
	1730	,,	1007·5	958·8	..	31·7	18·9	9·1	11·5	25	..	3·1	..	3·3	0	0	18	0	0	2	13	0	2	0	1	10	0
Chitaldrug	0830	733	1012·7	931·6	—0·1	21·9	16·5	12·6	13·3	57	+3	1·7	+0·1	3·3	0	0	22	0	0	4	8	1	5	4	0	6	0
	1730	,,	1006·9	928·3	..	30·0	17·7	8·5	11·3	25	..	2·4	..	2·6	0	0	16	0	0	10	3	0	0	2	1	12	0
Shimoga	0830	571	1013·8	949·4	..	19·8	17·2	15·6	17·8	76	..	2·5	..	0·4	0	0	3	0	0	1	0	1	1	0	0	25	0
	1730	,,	1006·7	945·1	..	31·1	18·7	10·6	12·4	29	..	3·3	..	3·9	0	0	18	2	5	5	1	0	2	1	1	10	0
Balehonnur	0830	..	..	..	..	18·7	16·5	14·8	17·0	78	—2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1526·3	908·1	..	19·5	16·3	14·1	15·9	72	+4	2·3	+0·1	4·3	0	0	17	1	0	7	5	0	0	3	1	11	0
	1730	,,	1510·9	904·7	..	28·6	17·9	10·2	11·9	33	..	3·2	..	3·4	0	0	16	0	0	6	3	2	2	2	1	12	0
Mysore	0830	767	1013·5	928·5	—0·1	21·0	17·9	16·4	18·3	73	+7	2·4	+0·2	7·8	0	1	26	0	0	0	8	8	9	1	1	1	0
	1730	,,	1006·9	924·8	..	29·9	17·6	7·8	11·2	27	..	3·3	..	10·4	0	0	28	2	15	11	0	0	0	0	0	0	0
Bangalore (Central Observatory).	0230	921	1503·9	910·1	..	18·6	15·3	12·9	14·6	71	..	0·9	..	11·1	0	4	24	0	0	22	5	1	0	0	0	0	0
	0830	,,	1529·2	912·4	0	20·5	16·0	12·5	15·0	63	—7	2·0	+0·2	9·8	0	0	28	0	1	9	11	2	3	2	0	0	0
	1130	,,	1537·6	912·1	..	26·2	17·1	10·0	12·9	38	..	2·4	..	10·9	0	1	26	2	2	11	7	2	2	1	0	1	0
	1730	,,	1510·6	909·0	..	27·5	17·1	9·0	11·5	33	..	2·5	..	9·0	0	1	26	2	2	13	10	0	0	0	0	1	0
Bangalore (Aerodrome)	0530	897	1503·7	913·0	..	17·1	15·4	14·1	16·3	83	..	0·5	..	4·6	0	0	16	1	0	8	5	0	1	0	1	12	0
	0830	,,	1530·3	915·0	..	21·1	16·7	13·6	15·7	63	..	2·4	..	9·7	0	1	20	0	1	8	7	2	2	1	0	7	0
	1130	,,	1540·6	914·7	..	27·1	17·7	11·1	13·2	39	..	2·5	..	12·3	0	4	20	1	1	10	4	0	4	1	3	4	0
	1730	,,	1514·7	911·6	..	28·7	17·8	9·9	12·4	32	..	2·9	..	10·9	0	0	24	1	3	13	4	0	0	1	2	4	0
	2330	,,	1522·3	914·1	..	21·1	16·3	12·9	15·0	61	..	1·0	..	12·1	0	3	22	0	0	15	8	0	0	0	2	3	0
Kerala (including Laccadives																											
Kozhikode	0530	5	1011·0	1010·5	..	24·1	22·6	22·0	26·2	88	..	1·4	..	6·9	0	0	27	0	8	18	1	0	0	0	0	1	0
	0830	,,	1012·4	1011·9	—0·	26·6	23·7	22·0	26·9	79	0	1·9	—0·2	6·4	0	0	28	1	4	23	0	0	0	0	0	0	0
	1130	,,	1012·5	1012·0	..	30·8	25·1	22·3	27·1	61	..	3·5	..	12·0	0	1	27	0	0	0	1	1	7	14	5	0	0
	1730	,,	1010·1	1009·6	..	30·0	24·6	23·6	26·4	69	..	2·4	..	13·5	0	3	25	0	0	0	0	0	2	15	11	0	0
	2330	,,	1011·4	1010·9	..	27·0	24·1	22·9	27·6	78	..	1·9	..	9·9	0	0	27	12	5	0	0	0	0	0	10	1	0
Palghat	0830	97	1013·3	1002·3	..	26·0	21·6	19·1	22·1	66	..	3·6	..	7·6	0	0	22	0	0	20	2	0	0	0	0	6	0
	1730	,,	1007·9	997·2	..	33·8	22·7	15·6	18·5	35	..	3·1	..	9·4	0	0	28	1	2	14	2	0	2	6	1	0	0
Fort Cochin	0830	3	1013·0	1012·7	+0·1	27·7	24·4	22·8	28·0	75	+2	5·5	+3·7	6·0	0	0	24	1	12	8	2	0	0	0	1	4	0
	1730	,,	1008·9	1008·6	..	28·8	25·3	23·7	29·5	74	..	4·7	..	15·3	0	5	22	0	0	0	0	0	3	14	10	1	0
Cochin (Naval Air station)	0230	3	1010·9	1010·6	..	25·5	24·3	23·7	29·3	90	..	3·9	..	1·9	0	0	12	5	1	3	0	1	1	0	1	16	0
	0530	,,	1010·9	1010·6	..	24·5	23·6	23·2	28·3	93	..	3·2	..	1·7	0	0	13	2	3	6	1	0	1	0	0	15	0
	0830	,,	012·6	1012·3	..	25·8	23·9	23·0	28·3	84	..	3·4	..	3·1	0	0	23	3	6	13	1	0	0	0	0	5	0
	1130	,,	1012·4	1012·1	..	29·6	24·5	22·2	26·7	64	..	3·7	..	8·5	0	0	25	5	0	1	0	2	2	5	10	3	0
	1730	,,	1009·2	1008·9	..	29·0	25·2	23·5	28·8	72	..	2·8	..	15·2	0	4	24	1	0	0	0	0	4	14	9	0	0
	2330	,,	1011·8	1011·5	..	26·6	24·7	23·9	29·3	85	..	3·3	..	2·2	0	0	14	4	2	2	0	0	2	1	2	14	1

Division and station	Hour of observation I.S.T.	Station level above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Kms. p.h.): 62 or more	Wind speed (Kms. p.h.): 20 to 61	Wind speed (Kms. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (including Laccadives)—(*Contd.*)																											
Alleppey	0830	4	1012·4	1012·0	..	27·7	24·5	23·9	28·2	77	..	4·5	..	8·0	0	0	28	1	6	12	9	0	0	0	0	0	0
	1730	,,	1008·8	1008·4	:	29·7	25·9	24·3	30·4	73	..	3·5	..	22·1	0	13	15	2	0	0	0	0	3	12	11	0	0
Pnalur	0830	34	1012·8	1008·9	..	24·6	21·5	19·9	23·2	76	..	2·0	..	3·3	0	0	28	7	4	0	4	10	1	0	2	0	0
	1730	,,	1008·4	1004·6	..	32·0	23·5	19·0	22·0	44	..	3·9	..	6·6	0	0	28	1	1	1	4	11	8	1	1	0	0
Trivandrum	0230	64	1010·1	1002·8	..	24·6	23·4	22·6	28·0	87	..	3·5	..	2·0	0	0	18	3	6	1	2	1	1	0	4	10	0
	0530	,,	1010·5	1003·1	..	24·0	22·7	22·4	26·4	89	..	2·3	..	3·0	0	0	23	3	9	4	1	1	1	0	4	5	0
	0830	,,	1012·4	1005·2	—0·2	25·8	23·3	22·1	26·6	81	+3	2·0	—0·1	3·0	0	0	27	5	14	2	4	0	1	0	1	1	0
	1130	,,	1011·7	1004·5	..	30·6	24·2	20·8	24·9	56	..	3·6	..	4·5	0	0	27	1	2	0	3	0	12	3	6	1	0
	1730	,,	1009·3	1002·0	..	29·3	24·4	22·1	26·6	66	..	4·5	..	5·7	0	0	28	0	0	0	0	2	17	6	3	0	0
	2330	,,	1011·6	1004·3	..	26·0	23·9	22·9	28·0	83	..	2·8	..	3·0	0	0	23	3	6	1	2	0	0	1	10	5	0
Trivandrum(Aerodrome)	0830	8	1012·3	1011·5	..	27·1	24·0	22·4	27·4	76	..	2·5	..	4·5	0	0	14	0	1	0	0	1	7	4	1	14	0
Hill Stations (excluding Kashmir).																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1533·7	863·0	..	12·3	9·4	6·6	9·7	70	..	4·1	..	5·2	0	0	28	0	0	1	17	2	2	3	3	0	0
	1730	,,	15·06·4	861·8	..	12·3	9·6	7·0	9·8	71	..	6·0	..	3·5	0	0	28	6	1	0	0	1	2	5	13	0	0
Aijal (R)	0830	1097	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shillong	0830	1500	1499·4	850·1	—1·1	12·0	7·2	1·6	6·4	51	—10	1·6	0·5	3·2	0	0	9	0	0	o	1	0	8	0	0	19	0
	1730	,,	1477·7	847·9	..	11·7	8·4	4·5	8·4	64	..	4·9	..	1·9	0	0	5	0	0	0	0	0	5	0	0	23	0
Cherapunji	0830	1313	1501·7	869·4	—1·0	12·3	10·8	9·2	11·7	83	+23	2·2	—0·3	4·8	0	0	28	0	0	8	0	0	19	0	1	0	0
	1730	,,	1482·5	867·4	..	11·3	10·4	8·9	11·6	85	..	0·5	..	4·0	0	0	28	0	0	0	0	0	28	0	0	0	0
Darjiling (Rajbhawan)	0830	2127	1522·7	790·4	+2·2	5·9	4·5	2·9	7·5	82	+11	4·7	+0·9	1·3	0	0	9	2	0	0	2	0	4	1	0	19	0
	1730	,,	1499·2	788·2	..	6·2	5·2	4·1	8·2	88	..	6·1	..	1·6	0	0	9	0	0	0	0	1	2	6	0	19	0
Kalimpong	0830	1209	1470·1	877·2	—4·0	11·0	8·7	6·3	9·7	74	+1	1·9	—0·9	2·8	0	0	26	0	0	0	1	0	0	0	25	2	0
	1730	,,	1457·1	875·6	..	10·7	8·5	6·2	9·5	74	..	3·0	..	3·0	0	0	28	0	0	0	28	0	0	0	0	0	0
Katmandu	0830	1337	1508·9	868·1	..	6·1	5·1	3·8	7·9	85	0	3·7	—0·6	0	0	0	0	0	0	0	0	0		0	0	28	0
	1730	,,	1485·0	865·1	..	14·5	9·9	5·2	8·7	55	..	2·4	..	0·7	0	0	6	3	0	0	0	2	0	0	1	22	0
Mukteswar (Kumaon)	0830	2311	3094·5	771·1	—1·0	5·0	0·6	—7·1	3·6	45	—9	1·3	—1·8	13·6	0	4	22	0	5	6	2	0	0	6	7	2	0
	1730	,,	3094·8	770·1	..	8·1	3·7	—2·4	5·1	50	..	1·7	..	20·5	0	12	16	0	0	1	1	0	6	14	6	0	0
Nainital	0830	1953	1486·8	803·6	..	6·8	1·8	—7·2	3·7	39	..	1·4	..	3·5	0	0	13	2	4	0	1	0	0	3	3	15	0
	1730	,,	1474·4	802·8	..	9·6	4·4	—1·5	5·7	53	..	1·4	..	5·9	0	2	19	5	1	3	1	2	2	5	2	7	0
Tapoban	0830	..	..	..	..	7·2	3·4	—1·7	5·3	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath	0830	Closed during Winter months																									
Lokpal	0830	..	..	..	..	—11·2	—12·7	—15·6	1·3	68	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mussoree	0830	2042	1486·6	795·1	—1·7	6·5	2·3	—2·9	4·7	52	—13	1·9	—1·9	3·1	0	0	23	7	1	0	3	5	1	0	6	5	0
	1730	,,	1472·3	794·1	..	8·5	5·9	3·7	7·7	70	..	2·8	..	4·3	0	0	26	3	1	0	4	10	6	0	2	2	0
Simla	0830	2202	1486·6	779·6	—0·9	4·7	—0·2	—11·4	2·9	38	—8	2·1	—1·5	3·8	0	0	27	5	6	2	4	6	1	0	2	1	1
	1730	,,	1477·7	779·3	..	6·7	2·0	—5·7	4·1	45	..	2·6	..	5·4	0	1	27	3	4	o	3	12	4	0	2	0	0
Dalhousie	0830	1959	1433·2	797·6	..	5·0	1·2	—4·6	4·2	53	..	1·9	..	1·9	0	0	7	0	3	4	0	0	0	0	0	21	0
	1730	,,	1405·6	797·2	..	9·1	5·0	0·9	6·1	63	..	3·5	..	0·8	0	0	3	0	1	2	0	0	0	0	0	25	0
Dharamsala	0830	1212	1524·7	882·7	..	8·9	5·5	1·6	6·7	59	..	2·4	..	2·0	0	0	14	6	3	2	0	0	0	0	3	14	0
	1730	,,	1530·6	882·8	..	13·6	9·0	4·3	7·8	54	..	3·2	..	5·7	0	0	28	0	0	0	1	1	22	4	0	0	0
Abu	0830	1195	1521·1	883·9	+0·9	12·3	5·5	—6·4	4·1	33	—10	0·8	—0·9	2·4	0	o	11	4	3	1	0	0	1	1	1	17	0
	1730	,,	1517·3	882·0	..	17·5	8·9	—4·2	5·2	25	..	0·9	..	3·4	0	0	14	5	1	1	0	0	2	2	3	14	0
Pachmarhi	0830	1075	1520·8	896·3	0	13·9	9·2	4·1	8·2	54	+2	1·6	—0·1	2·9	0	0	14	1	4	2	0	2	0	2	3	14	0
	1730	,,	1513·9	894·3	..	21·9	12·6	2·1	7·7	29	..	1·8	..	5·1	0	0	27	6	3	2	0	0	3	8	5	1	0
Mahabaleshwar	0830	1382	1526·2	864·7	+0·2	17·9	10·0	0·3	6·6	33	—14	1·5	+0·9	8·6	0	0	27	3	6	9	0	0	3	4	2	1	0
	1730	,,	1511·6	862·9	..	23·0	14·0	5·6	9·4	34	..	0·9	..	10·0	0	0	28	0	2	0	1	0	17	1	7	0	0
Nandi Hills	0830	..	..	..	..	16·9	14·1	11·9	14·1	73	..	6·9	..	24·2	0	23	5	9	4	0	0	0	0	3	3	0	0
Mercara	0830	1152	1520·7	887·7	+0·2	17·5	15·4	13·7	16·1	80	+6	2·9	0	6·3	0	0	28	0	13	14	0	0	0	0	1	0	0
	1730	,,	1508·4	885·2	..	25·3	19·1	15·4	18·2	58	..	2·8	..	7·9	0	0	28	0	6	6	0	0	0	8	8	0	0
Kodaikanal	0830	2343	3157·8	772·5	+0·4	11·7	8·4	4·5	9·0	67	+15	2·1	+0·3	3·1	0	0	15	4	6	2	0	0	0	0	3	13	0
	1130	,,	3173·4	772·7	..	16·3	11·3	7·0	10·1	57	..	2·7	..	3·9	0	0	21	4	10	0	0	0	0	0	7	7	0
	1730	,,	3150·9	771·2	..	14·3	11·7	9·5	12·1	75	..	5·2	..	2·6	0	0	13	1	4	0	2	1	0	1	4	15	0
Ootacamand	0830	2249	1526·1	780·9	+0·1	12·3	8·5	5·7	8·8	64	—2	1·1	—0·7	0·3	0	0	2	0	0	2	0	0	0	0	0	26	0
	1730	,,	1496·6	779·2	..	16·5	12·4	9·8	11·7	65	..	3·9	..	1·1	0	0	10	1	3	5	0	1	0	0	0	18	0
Coonoor	0830	1747	1528·8	828·9	..	14·9	11·9	9·5	11·9	72	+10	2·6	+0·4	0·6	0	0	6	1	1	0	2	2	0	0	0	28	0
Sikkim																											
Lachen	0830	..				1·1																					

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed. Kms. per hour.	Wind speed (Kms. p. h.)			No. of observations									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Tibet																											
Yatung	0830					0·7	0	—0·8	5·6	90	+8																
Lhasa	0830	3685	3055·5	647·8	..	—1·4	—2·6	—3·9	4·4	81	..	1·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ceylon																											
Colombo	0830	7	1012·6	1011·8	0·0	24·5	23·1	22·3	27·0	87	+2	3·9	+0·3	7·0	0	0	27	3	15	7	1	1	0	0	0	1	0
	1730	,,	1009·3	1008·5	..	27·5	24·2	22·4	27·4	74	..	5·3	..	13·0	0	1	27	5	1	1	2	1	2	9	7	0	0
Trincomalee	0830	3	1012·8	1012·4	—0·2	25·7	23·6	22·6	27·4	79	—2	4·2	+0·8	12·3	0	7	15	5	7	1	1	3	4	0	1	6	0
	1730	,,	1010·3	1010·0	..	27·0	23·7	21·8	25·9	74	..	4·0	..	17·1	0	7	21	12	13	3	0	0	0	0	0	0	0
Batticoloa	0830	3	1013·9	1012·7	..	25·0	21·8	20·3	23·5	75	..	4·1	..	12·6	0	10	15	0	9	2	0	1	1	5	7	3	0
	1730	,,	1010·2	1009·9	..	26·6	22·2	20·0	23·1	67	..	4·5	..	18·3	0	11	17	2	17	7	1	0	0	0	1	0	0
Hambantota	0830	15	1012·6	1010·8	+0·7	25·2	23·1	22·0	27·3	83	—1	3·5	+0·7	19·3	0	11	17	5	21	2	0	0	0	0	0	0	0
	1730	,,	1009·6	1007·8	..	27·4	24·3	22·8	28·0	77	..	4·9	..	27·8	0	20	7	0	6	15	4	2	0	0	0	1	0
Mannar	0830	4	1013·4	1013·0	..	25·2	23·2	21·3	25·5	80	..	2·9	..	13·2	0	1	27	3	14	5	6	0	0	0	0	0	0
	1730	,,	1009·9	1009·5	..	28·2	23·3	20·8	24·9	65	..	3·7	..	17·0	0	12	16	12	12	2	0	0	0	2	0	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																											
Damodar Catchment																											
Bokaro	0830	239	1015·5	987·6	..	16·3	12·3	8·2	11·0	61	..	2·1	..	3·9	0	0	20	0	0	0	1	2	5	4	8	8	0
	1730	,,	1011·1	984·1	..	23·5	14·7	6·3	9·9	34	..	2·1	..	5·8	0	0	27	11	2	0	0	0	1	4	9	1	0
Hazaribagh	0830	615	1014·3	944·3	..	16·8	11·6	6·5	9·8	53	..	2·2	..	6·7	0	0	24	1	0	2	0	1	1	12	7	4	0
	1730	,,	1011·5	942·1	..	17·9	12·3	6·4	10·3	48	..	1·2	..	7·6	0	1	22	1	2	1	0	0	3	13	3	5	0
Tilaiya	0830	..	..	..	..	17·2	11·6	5·2	9·2	47	..	1·9	..	9·7	0	3	17	1	0	1	0	1	5	12	0	8	0
	1730	..	..	..	..	21·9	13·1	3·0	8·0	31	..	1·8	..	8·4	0	1	25	5	0	0	1	0	0	10	10	2	0
Ramgarh	0830	..	..	..	..	16·4	12·2	7·9	10·9	59	..	2·5	..	4·2	0	0	27	0	0	0	1	0	8	12	5	1	1
	1730	..	..	..	..	22·4	14·4	6·5	10·1	37	..	2·2	..	2·3	0	0	16	0	0	3	0	0	0	2	11	12	0
Panchet Hills	0830	..	..	..	..	18·2	13·7	9·6	11·9	59	..	2·0	..	3·8	0	0	28	3	1	1	0	2	12	7	2	0	0
	1730	..	..	..	..	24·3	15·3	6·5	10·4	35	..	2·3	..	3·1	0	0	28	7	3	3	2	0	2	4	7	0	0
Durgapur	0830	..	..	..	..	21·1	15·1	9·5	12·1	49	..	2·7	..	8·7	0	0	23	0	0	4	0	0	2	17	0	5	0
	1730	..	..	..	..	25·3	17·5	11·5	13·8	42	..	2·5	..	7·0	0	0	25	0	0	6	1	0	1	17	0	3	0
Mahanadi Catchment																											
Baramul	0830	64	1015·2	1007·7	..	21·1	17·4	14·7	16·9	68	..	1·5	..	3·4	0	0	25	1	13	0	5	2	4	0	0	3	0
	1730	,,	1011·0	1003·7	..	24·3	18·4	14·0	16·4	54	..	1·7	..	0	0	0	0	0	0	0	0	0	0	0	0	28	0
Hirakud	0830	159	1014·9	996·6	..	21·4	16·4	12·4	14·6	57	..	1·2	..	2·3	0	0	17	1	8	3	0	0	3	1	1	11	0
	1730	,,	1010·7	992·8	..	27·3	18·2	10·9	13·5	37	..	2·0	..	2·0	0	1	10	0	4	1	0	0	0	4	2	17	0
Khijrawan	0830	..	..	..	..	20·2	15·0	10·3	12·9	54	..	1·8	..	4·1	0	0	24	4	3	11	3	2	0	0	1	4	0
	1730	..	..	..	..	27·2	17·0	7·9	11·1	31	..	1·7	..	7·4	0	1	26	7	0	0	2	1	1	11	5	1	0
Sonepur	0830	..	..	..	..	25·2	18·4	13·4	15·7	49	..	..	..	5·4	0	2	16	2	2	4	3	1	4	2	0	10	0
Ginabahar	0830	..	..	..	..	19·1	13·8	9·8	11·5	53	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Narbada Catchment																											
Pumasa	0830	..	..	..	..	17·9	10·5	1·1	7·5	33	..	2·1 (i)	..	6·2	0	0	25	4	5	5	0	0	5	3	1	5	0
	1730	..	..	..	..	29·3	15·8	1·4	7·0	17	..	4·7 (j)	..	6·5	0	0	28	4	6	1	0	0	7	9	1	0	0
Bagra Tawa	0830	..	..	..	..	16·3	10·9	5·1	8·7	48	..	1·2	..	6·2	0	0	19	2	10	1	0	1	5	0	0	9	0
	1730	..	..	..	..	24·9	14·8	4·8	8·7	28	..	1·2	..	2·5	0	0	10	2	4	1	0	0	3	0	0	18	0
Thikri	0830	..	..	..	..	17·6	11·5	5·1	8·7	45	..	2·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapti Catchment Nandurbar	0830	..	..	..	..	20·6	12·3	0·9	7·6	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	13·1	8·8	2·4	8·3	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dharoi	0830	..	..	..	..	16·2	10·8	4·4	8·7	47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	27·2	17·5	8·7	12·1	34	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim	0830	..	..	..	..	7·3	2·9	—3·3	4·7	46	..	2·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	10·5	5·2	—1·2	5·5	44	..	1·4															
Tehri	0830	..	..	..	..	8·8	6·9	4·7	8·6	76	..	0·7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·5	11·8	3·7	9·0	36	..	0·6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha	0830	..	..	..	..	11·8	8·8	5·7	9·1	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·4	10·5	5·6	9·1	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(i) Mean of 22 days. (j)—Mean of 21 days.

Division and station	Hour of observation I.S.T.	Hight of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in millibars °C: Dry bulb	Mean temperature in millibars °C: Wet bulb	Mean temperature in millibars °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Kms. p.h.): 62 or more	Wind speed (Kms. p.h.): 20 to 61	Wind speed (Kms. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES — (*Contd.*)																											
Pokhara	0830	..	..	..	..	13·4	10·5	7·8	10·6	69	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	17·3	10·9	8·9	11·7	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	13·8	11·0	8·3	11·1	70	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·6	10·9	5·3	9·0	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jomosom (R)	0830	..	..	..	..																						
(R)	1730	..	..	..	..																						
Timure (R)	0830	..	..	..	..																						
(R)	1730	..	..	..	..																						
Gogra Catchment (Trans Himalayan Region)																											
Dailekh	0830	..	..	..	..	10·5	7·1	3·1	7·6	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	12·2	7·6	2·1	7·1	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura	0830	..	..	..	..	7·5	3·4	—2·1	5·2	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	10·4	5·2	0·5	6·3	50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari	0830	..	..	..	..	8·8	4·3	—1·2	5·5	49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	10·8	5·5	—0·9	5·7	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sallyana	0830	..	..	..	..	11·4	7·1	1·8	7·0	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	12·3	7·8	2·9	7·4	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal *	0830	..	..	..	..	14·8	(e) 11·6	(e) 8·3	11·0	(e) 66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·9	15·5	11·2	13·3	54	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1497·8	868·3	..	6·5	5·5	4·2	8·3	86	..	3·3	..	0·0	..	..	..	..	..	..	..	..	..	..	..	28	..
	1130	,,	1497·3	867·7	..	15·6	10·0	3·7	8·3	46	..	1·9	..	0·9	..	..	8	1	2	..	3	1	1	..	..	20	..
	1730	,,	1473·3	865·3	..	14·0	9·5	4·5	8·6	55	..	2·2	..	1·1	..	..	7	2	..	..	..	3	..	..	2	21	..
Kosi Catchment																											
Chautara	0830	..	..	..	..	9·7	7·1	4·5	8·4	70	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·4	9·1	2·9	7·5	43	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldhunga	0830	..	..	..	..	8·4	5·9	3·2	7·8	71	..	3·5	..	0·9	..	..	6	..	..	..	..	3	2	..	1	22	..
	1130	..	..	..	..	12·1	8·0	4·1	8·1	59	..	3·7	..	2·9	..	..	20	1	..	..	1	4	5	8	1	8	..
	1730	..	..	..	..	9·5	6·5	2·9	7·8	67	..	4·1	..	4·1	..	..	20	..	..	..	..	1	7	8	4	8	..
Barahkshetra	0830	146	1015·2	997·9	..	14·0	12·4	10·8	13·1	79	..	1·7	..	2·3	..	..	13	1	1	2	2	..	2	3	2	15	..
	1130	,,	1013·6	996·5	..	21·4	15·5	10·7	12·9	51	..	2·2	..	12·9	..	..	27	..	..	..	..	..	14	13	..	1	..
	1730	,,	1011·4	994·3	..	19·2	14·9	11·3	14·0	61	..	3·7	..	4·3	..	..	22	..	4	8	8	2	..	..	..	6	..
Angbung	0830	..	..	..	..	12·1	9·7	7·3	10·4	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung	0830	..	..	..	..	8·6	6·1	3·6	7·8	73	..	4·6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	11·7	7·9	4·3	8·3	62	..	5·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	10·3	6·8	3·1	7·7	63	..	5·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok	0830	..	..	..	..	10·5	7·7	4·9	9·6	67	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallangchung Gola	0830	..	..	..	..	1·7	—1·2	—10·0	2·9	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730																										
Bhojpur	0830	..	..	..	..	10·4	(d) 8·8	7·2	10·3	(d) 82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	9·6	(d) 8·4	(d) 7·3	10·3	(d) 86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur	0830	..	..	..	..	11·2	9·3	7·4	10·3	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730																										
Tista Catchment																											
Gangtok	0830	1812	1498·5	818·5	..	6·7	5·5	4·3	8·3	84	..	4·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	,,	1488·8	8·1	..	10·5	7·6	4·6	..	70	..	5·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	,,	1475·0	816·5	..	8·0	6·8	5·6	9·1	85	..	6·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Geyzing	0830	..	..	..	..	9·7	7·9	6·4	9·3	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	10·4	8·6	6·7	9·8	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

*Observation for 27 days.

(d) Mean of 27 days.

(e) Mean of 26 days.

(R) Register not received.

MONTHLY MEANS OF UPPER WINDS

February 1957

During the month, observations of velocity and direction of upper winds were made at 52 stations in India. Out of these, at 42 stations all the observations were taken by means of pilot balloons and at 10 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a.m.s.l. are given under Table IV and data above 9.0 km. a.m.s.l. under Table V.

In Tables IV and V:

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights:

Surface, 0.15 km. a.g., 0.3, 0.6., 0.9, 1.5, 2.1, 3.0, 4.5, 5.4, 6.0, 7.2, 9.0. 10.5, 12.0, 14.1, 16.2, 18.0, 20.0 23.0, 26.0, 30.0 and 35.0 km. a.m.s.l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA
February 1957

Station	Lat. N	Long. E	Height of anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November, 1951	0130	0730	1430	
Ahmedabad	23°04′	72°38′	60	19th May, 1928	0130	0730	1430	
Amausi	26°45′	80°53′	132	20th November, 1950	0130	0730	1430	
Ambala	30°23′	76°46′	283	1st April, 1941	0130	0730	1430	
Anantapur	14°41′	77°37′	364	12th February, 1946	0730	1430		
Asansol	23°41′	86°59′	136	29th May, 1942	0130	0730	1430	
Baghdogra	26°38′	88°19′	140	7th June, 1953	0130	0730	1430	
Bairagarh	23°17′	77°21′	532	26th February, 1943	0130	0730	1430	
Bamrauli	25°27′	81°44′	103	28th February, 1930	0130	0830*	1430	2030 *
Bangalore	12°58′	77°35′	936	19th May, 1915	0130	0730	1430	
Bareilly	28°22′	79°24′	180	12th January, 1943	0730	1430		
Begumpet	17°27′	78°28′	553	1st September, 1929	0130	0730	1430	
Bhagalpur	25°14′	86°57′	61	19th May, 1950	0730	1430		
Bhubaneshwar	20°15′	85°50′	55	5th December, 1942	0130	0730	1430	
Bhuj	23°15′	69°48′	111	14th September, 1937	0130	0730	1430	
Bikaner	28°00′	73°18′	229	18th October, 1946	0130	0730	1430	
Chikalthana	19°51′	75°24′	583	7th October, 1951	0130	0730	1430	
Cochin†	09°56′	76°14′	3	16th March, 1942	0130	0730	1430	
Darjeeling	27°03′	88°16′	2115	21st May, 1956	0730	1430		
Dum Dum	22°39′	88°27′	19	14th May, 1921	0130	0830*	1430	2030*
Gadag	15°25′	75°38′	650	3rd May, 1943	0130	0730	1430	
Gauhati	26°05′	91°43′	51	12th March, 1955	0130	0830*	1430	2030*
Gaya	24°45′	84°57′	119	19th March, 1937	0130	0730	1430	
Gopalpur	19°16′	84°53′	24	15th February, 1946	0130	0730	1430	
Gorakhpur	26°45′	83°22′	83	5th January, 1943	0730	1430		
Gwalior	26°14′	78°15′	219	7th May, 1938	0130	0730	1430	
Imphal	24°51′	93°58′	805	8th March, 1952	0130	0730	1430	
Jabalpur	23°10′	79°57′	402	30th July, 1928	0130	0730	1430	
Jagdalpur	19°05′	82°02′	562	25th March, 1948	0130	0730	1430	
Jaipur	26°49′	75°48′	404	6th June, 1953	0730	1430		
Jamshedpur	22°49′	86°11′	147	23rd July, 1942	0730	1430		
Jharsuguda	21°55′	84°05′	234	1st May, 1944	0130	0730	1430	
Jodhpur	26°18′	73°01′	229	15th October, 1934	0130	0830*	1430	2030*
Madras	13°00′	80°11′	29	8th April, 1926	0130	0830*	1430	2030*
Mangalore	12°52′	74°51′	40	4th June, 1928	0130	0730	1430	
Masulipatnam	16°11′	81°08′	13	8th April, 1942	0130	0730	1430	
Minicoy	08°18′	73°00′	16	14th April, 1941	0130	0730	1430	
Mohanbari	26°29′	95°01′	110	1st June, 1948	0130	0730	1430	
Mussoorie	30°27′	78°05′	2050	3rd November, 1955	0730	1430		
Nagpur	21°06′	79°03′	316	23rd April, 1943	0130	0830*	1430	2030*
New Delhi	28°35′	77°12′	227	20th October, 1936	0130	0830*	1430	2030*
Poona	18°32′	73°51′	593	5th January, 1925	0130	0730	1430	
Port Blair	11°40′	92°43′	93	29th October, 1935	0130	0730	1430	2030*
Raipur	21°14′	81°39′	308	15th July, 1944	0130	0730	1430	
Santacruz	19°07′	72°51′	12	14th May, 1933	0130	0830*	1430	2030*
Tezpur	26°37′	92°47′	79	12th August, 1932	0130	0730	1430	
Tiruchirapalli	10°46′	78°43′	96	22nd June, 1936	0130	0730	1430	
Trivandrum	08°29′	76°57′	73	8th December, 1928	0130	0830*	1430	2030*
Udaipur	24°35′	73°42′	587	24th June, 1947	0130	0730	1430	
Vengurla	15°52′	73°38′	8	22nd November, 1941	0130	0730	1430	
Veraval	20°54′	70°22′	17	13th October, 1941	0130	0730	1430	
Visakhapatnam	17°43′	83°14′	10	24th September 1928	0130	0730	1430	

*Radiowind ascents.

†Naval Meteorological Office.

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station.	AGARTALA									AHMEDABAD								
Time in I. S. T.	0130				0730				1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	1.5	0.1	183	28	2.5	1.6	180	28	3.9	3.0	251	28	4.7	2.5	348	28	4.9	3.3	007	28	6.4	3.5	020
0.15 a.g.	24	8.3	2.8	286	28	6.5	2.4	177	28	5.6	4.1	254	28	17.3	11.1	359	28	16.6	11.7	036	28	7.1	3.0	010
0.3 a.m.s.l.	24	8.6	3.8	292	28	6.7	1.5	260	28	5.7	4.2	253	28	16.6	10.3	360	28	17.5	12.6	038	28	7.6	2.9	013
0.6 ,,	24	8.5	5.4	289	27	7.1	3.0	285	28	6.1	4.0	250	28	13.8	9.4	358	28	15.6	10.8	033	28	6.2	2.5	345
0.9 ,,	24	8.5	7.0	280	25	6.8	4.5	294	28	7.6	6.4	254	28	11.0	6.2	354	28	11.6	6.5	023	28	6.7	2.8	323
1.5 ,,	24	12.5	11.2	279	25	12.7	11.1	283	27	11.7	11.3	258	28	10.4	3.4	278	28	11.8	4.6	306	28	11.4	5.7	279
2.1 ,,	23	19.6	18.7	287	23	22.2	19.0	284	27	22.4	21.3	275	28	13.5	8.3	254	28	14.9	8.7	262	28	15.2	9.0	267
3.0 ,,	17	30.9	28.8	287	16	29.4	27.7	288	26	31.2	30.8	280	25	15.6	12.0	262	28	20.3	15.5	262	28	20.4	17.2	266
4.5 ,,					4	27.5	26.3	282	15	44.9	44.0	277	1	34.0	34.0	285	23	29.7	27.8	275	28	35.3	33.2	272
5.4 ,,					2	27.5	25.7	306	3	41.7	41.0	280	1	41.0	41.0	300	19	38.7	37.4	274	27	44.0	41.9	268
6.0 ,,					2	41.5	40.5	304	1	31.0	31.0	295					11	37.7	36.4	280	25	50.6	48.2	271
7.2 ,,					1	45.0	45.0	290	1	53.0	53.0	295					2	58.5	58.5	279	20	61.3	58.5	272
9.0 ,,																					9	75.7	73.3	287

Station	AMAUSI									AMBALA								
Time in I. S. T.	0130				0730				1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.8	3.0	313	28	3.4	2.6	290	28	9.2	8.2	298	28	6.5	4.3	325	28	4.7	3.2	308	28	6.7	4.3	292
0.15 a.g.	28	15.5	13.7	323	28	12.9	9.5	313	28	14.0	10.5	300	28	17.4	10.4	320	28	15.4	10.1	332	28	11.1	5.4	309
0.3 a.m.s.l.	28	16.4	15.4	321	28	13.8	10.4	320	28	14.1	12.2	295	28	9.0	6.3	331	28	7.8	5.0	328	28	8.3	5.7	294
0.6 ,,	28	16.6	15.5	319	28	17.5	14.4	315	28	12.1	10.4	296	28	16.7	13.2	323	28	16.4	11.8	326	28	12.2	8.7	305
0.9 ,,	28	16.1	15.3	310	28	17.3	16.7	304	28	13.1	12.0	298	28	14.8	12.8	316	28	15.6	11.5	325	28	13.6	9.7	306
1.5 ,,	28	16.3	14.9	292	28	20.0	19.7	300	27	17.1	14.5	284	28	12.9	10.8	303	28	14.4	8.7	314	28	15.1	9.7	307
2.1 ,,	23	18.0	15.9	276	25	22.7	20.6	287	26	20.0	18.3	290	28	11.9	7.8	299	26	14.3	6.2	298	27	15.6	7.8	307
3.0 ,,	15	21.3	18.2	275	19	24.3	21.7	275	26	23.3	21.2	283	26	13.6	6.8	273	23	13.0	6.4	281	27	16.3	6.6	294
4.5 ,,					8	32.1	30.9	267	24	37.4	35.1	280	3	23.0	8.7	026	14	24.1	21.1	262	26	22.8	18.9	277
5.4 ,,					1	35.0	35.0	285	20	43.3	39.4	275					11	32.5	29.3	254	23	30.0	24.9	277
6.0 ,,					1	42.0	42.0	280	15	51.6	48.4	275					8	33.6	31.5	264	23	38.1	32.8	277
7.2 ,,									7	64.9	58.1	273					2	23.0	23.0	252	18	55.7	48.8	281
9.0 ,,										.0	79.1	291									12	62·9	60.0	267

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station.	ANANTAPUR								ASANSOL										BAGHDOGRA			
Time in I. S. T	0730				1430				0130				0730				1430			0130		
Ht. in Km	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	1.4	0.3	182	28	7.6	3.4	073	28	1.6	1.0	293	28	2.3	1.7	302	28	4.2	3.7	303	28	2.8	2.1	026
0.15 a.g.	28	7.5	3.3	135	28	7.6	6.7	081	28	8.5	4.5	311	28	9.4	6.5	320	26	7.7	6.7	309	28	6.3	4.7	047
0.3 a.m.s.l.									28	8.8	5.0	314	28	9.7	6.5	327	26	7.8	6.7	309	28	6.3	3.5	054
0.6 ,,	28	9.2	5.1	138	28	7.3	6.3	084	28	12.0	8.0	307	28	12.9	9.7	327	26	7.9	7.0	304	28	7.2	2.2	041
0.9 ,,	28	11.3	7.7	121	28	6.8	5.4	089	28	12.7	10.1	290	28	14.4	12.5	307	26	9.0	8.1	300	27	6.1	1.0	358
1.5 ,,	28	11.6	7.3	096	28	7.8	5.4	090	27	17.3	15.8	281	28	18.6	16.0	285	26	13.5	12.8	289	27	8.5	4.3	265
2.1 ,,	28	7.4	3.2	044	28	7.3	3.8	077	23	21.7	19.6	279	26	25.8	22.6	286	24	25.3	23.8	294	24	13.3	9.5	274
3.0 ,,	27	7.7	2.2	018	27	7.6	1.9	271	18	10.9	10.6	286	16	29.1	27.4	287	23	36.9	35.9	293	17	21.4	20.6	283
4.5 ,,	27	13.6	5.0	301	25	12.7	6.7	288					2	41.5	40.5	272	12	41.3	40.2	282				
5.4 ,,	27	15.4	7.4	294	25	15.3	8.2	288									5	52.5	51.0	277				
6.0 ,,	27	17.9	10.9	291	24	17.5	10.3	285									1	62.0	62.0	295				
7.2 ,,	26	18.5	10.7	265	23	21.4	13.9	278																
9.0 ,,	23	17.9	13.0	270	20	21.7	16.9	254																

Station.	BAGHDOGRA								BAIRAGARH										BAMRAULI			
Time in I. S. T.	0730				1430				0130				0730				1430			0130		
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	2.5	2.0	049	28	4.9	2.4	208	28	4.0	2.1	006	28	3.8	2.1	047	28	5.6	3.1	311	28	3.3	2.1	297
0.15 a.g.	27	8.1	6.1	069	28	5.5	2.7	202	28	15.1	8.6	035	28	15.0	8.7	061	28	6.0	3.3	297	27	14.6	11.3	322
0.3 a.m.s.l.	27	8.1	6.7	071	28	5.5	2.7	203													27	14.9	10.0	322
0.6 ,,	27	9.0	7.4	073	27	5.7	3.3	213	28	14.4	8.5	033	28	12.5	7.0	056	28	5.8	3.1	302	27	13.9	11.8	309
0.9 ,,	26	7.8	5.3	072	27	6.0	4.1	214	28	13.0	5.8	021	28	15.9	6.4	039	28	7.4	4.0	287	26	13.3	9.7	295
1.5 ,,	25	5.2	0.7	266	25	8.6	6.0	266	28	9.4	5.9	273	28	12.1	4.6	304	28	8.5	5.7	275	25	16.3	14.9	271
2.1 ,,	25	11.6	7.3	276	23	13.3	10.9	280	28	14.0	11.7	254	28	14.7	11.5	271	28	12.9	10.6	270	18	18.7	16.2	260
3.0 ,,	24	22.0	21.0	283	19	23.0	21.2	281	28	22.1	19.5	262	28	22.2	19.8	259	28	23.3	21.1	269	13	27.6	25.9	252
4.5 ,,	16	38.2	36.3	284	16	41.4	40.9	282	1	29.0	29.0	250	20	34.9	32.6	275	26	38.3	35.0	273				
5.4 ,,	11	39.5	38.0	287	11	46.5	45.3	283					12	39.4	38.3	286	24	45.5	43.0	277				
6.0 ,,	7	40.7	38.9	296	6	55.5	51.7	283					5	40.4	39.1	281	22	51.6	49.0	277				
7.2 ,,					3	58.3	54.7	274									17	63.6	60.8	278				
9.0 ,,																	6	71.8	71.0	271				

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	BAMRAULI												BANGALORE											
Time in I. S. T.	0830*				1430				2030*				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.8	2.9	271	28	6.9	5.8	297	28	3.1	2.2	304	28	8.6	8.2	103	28	5.7	4.1	107	28	6.0	4.7	080
0.15 a.g.	28	7.1	4.8	285	28	8.7	7.6	300	28	8.3	6.6	306	28	17.7	16.7	107	28	14.0	9.8	124	28	7.0	5.7	081
0.3 a.m.s.l.	28	8.1	5.9	288	28	8.9	7.7	299	28	9.3	7.7	308												
0.6 ,,	28	11.8	10.0	300	28	9.6	8.1	298	28	11.8	10.9	302												
0.9 ,,	28	13.6	11.8	299	28	11.4	10.3	296	28	13.4	12.6	294												
1.5 ,,	27	17.1	14.9	292	28	15.3	14.3	295	28	15.4	14.0	285	28	14.1	10.3	092	28	12.6	7.5	086	28	7.3	6.3	078
2.1 ,,	27	21.0	18.9	283	28	20.9	19.5	288	28	20.6	18.6	276	28	7.0	2.9	024	28	9.0	6.8	045	27	6.5	5.2	075
3.0 ,,	26	26.7	24.2	274	28	32.3	30.0	280	28	28.3	25.9	276	26	7.1	4.0	040	28	8.0	2.9	072	25	6.8	2.6	104
4.5 ,,	22	40.0	37.2	272	24	42.9	40.0	276	26	40.8	39.2	273	20	11.1	5.7	067	26	11.1	2.3	035	21	11.2	3.5	055
5.4 ,,	19	42.8	40.8	268	20	50.6	48.9	273	24	47.8	46.3	273	13	14.0	4.0	040	21	14.0	3.5	316	20	11.9	1.2	004
6.0 ,,	18	50.4	48.8	267	12	60.0	58.7	273	22	53.2	50.8	272	8	14.9	5.1	288	21	14.1	3.0	317	20	13.6	2.7	320
7.2 ,,	17	65.6	63.7	266	7	77.3	74.2	270	20	68.2	66.5	268	5	19.2	10.8	212	16	14.4	4.0	277	18	16.0	4.9	202
9.0 ,,	9	86.1	81.9	260	2	100.5	100.5	263	14	86.6	82.9	265					9	19.0	8.6	260	18	16.8	8.4	215

Station	BAREILLY								BEGUMPET												BHAGALPUR			
Time in I. S. T.	0730				1430				0130				0730				1430				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	4.0	2.7	290	28	7.0	5.6	299	28	4.3	3.1	115	28	2.9	1.2	072	28	5.3	2.1	147	28	3.2	2.4	2.3
0.15 a.g.	28	13.6	10.6	311	28	12.1	9.7	293	28	11.6	8.1	127	28	10.8	4.0	119	28	7.1	2.8	1.3	27	10.0	7.7	264
0.3 a.m.s.l.	28	12.6	9.5	308	28	10.8	9.2	274													27	10.5	8.2	287
0.6 ,,	28	17.7	15.0	309	28	12.4	11.0	295	28	8.0	6.0	115	28	7.3	2.7	113	28	6.9	3.0	139	27	12.7	11.6	300
0.9 ,,	28	18.5	17.1	309	28	14.3	12.8	297	28	13.2	8.1	128	28	12.7	7.3	142	28	7.0	2.6	137	27	14.5	12.5	295
1.5 ,,	28	19.6	18.9	302	26	14.3	9.7	304	28	11.4	3.2	150	28	10.5	4.5	153	28	6.5	1.3	130	25	19.2	16.9	286
2.1 ,,	27	19.5	18.0	296	26	16.1	13.5	287	28	10.0	4.4	280	28	10.4	2.9	275	28	6.6	1.6	185	28	26.2	23.6	280
3.0 ,,	21	18.2	15.9	279	26	16.3	14.2	278	28	11.3	8.2	292	27	11.9	7.3	331	26	10.5	6.3	281	15	29.6	28.0	280
4.5 ,,	13	28.4	25.8	268	23	30.0	27.0	276	1	14.0	14.0	260	26	17.4	13.2	289	22	18.1	15.1	296	4	39.3	36.3	274
5.4 ,,	6	32.3	30.6	272	22	38.5	36.1	271					24	20.2	15.0	284	20	22.1	17.7	280				
6.0 ,,	2	33.0	32.7	251	20	42.9	40.7	271					21	19.7	12.9	28,	20	24.7	20.4	279				
7.2 ,,	1	41.0	41.0	255	8	56.1	51.3	271					6	21.3	18.2	292	20	30.3	26.0	277				
9.0 ,,													3	37.7	36.9	267	19	28.9	26.8	262				

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	BHAGALPUR				BHUBANESHWAR								BHUJ			
Time in I. S. T.	1430				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	5.5	5.2	279	28	4.5	1.6	247	28	4.3	1.2	327	28	8 2	3 4	216
0.15 a.g.	27	9.0	8.3	289	26	11.1	6.7	210	27	9.9	8.1	271	28	9 2	4 3	205
0 3 a.m.s.l.	27	10.2	9.5	285	26	12.1	9.1	215	27	10.3	4.9	240	28	10.3	4.6	213
0 6 ,,	27	12.2	11 5	282	25	13.1	10.4	231	27	9 8	6.2	239	28	9.1	3.8	245
0 9 ,,	27	14.6	13.4	281	25	12.2	8.7	247	27	9 2	6.7	255	28	8.1	4.8	240
1.5 ,,	27	19.4	18 2	286	25	11.1	9.5	287	27	11.7	8.2	283	28	10.1	7.9	280
2.1 ,,	25	27.4	26 0	291	23	16.0	14.0	304	27	16.1	12.1	304	24	14 8	12.6	298
3.0 ,,	22	38.0	37.3	290	20	20.5	19 5	296	20	20.8	18 8	299	19	23.8	21.8	304
4.5 ,,	13	51.0	50.1	283	2	14.5	13.9	283	9	28.4	26 9	283	9	33.4	32 8	291
5.4 ,,	7	53.4	51.2	282					3	27.7	27.4	271	4	36 2	35 5	288
6.0 ,,	3	66.0	65.3	277					3	33.6	33.6	271	3	41.7	40.8	281
7.2 ,,	1	70.0	70.0	270									2	47.0	47.0	270
9.0 ,,													1	51.0	51.0	275

Station	BH JJ								CHIKALTHANA							
Time in I. S. T.	0130				0730				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	0.6	0.4	3 5	28	0.6	0.1	023	28	4.1	2.0	344	28	1.9	0.9	040
0.15 a.g.	28	11.7	8.3	333	28	9.5	6.0	331	28	12.3	8.3	005	28	8.5	4.0	041
0 3 a.m.s.l.	28	12.6	9.3	339	28	11.5	7.7	002								
0 6 ,,	28	12.6	9.2	347	28	12.9	8.9	009								
0 9 ,,	28	9.7	5.1	002	28	11.3	6 2	007	28	13.4	7.9	010	28	11.3	5.1	067
1.5 ,,	28	10.9	2.6	334	28	11.7	4.0	339	28	9.0	2.6	239	28	9.6	2.9	206
2.1 ,,	28	11.4	5.2	284	28	13.5	6.6	303	28	11.5	10.0	223	28	12.4	10.9	228
3.0 ,,	27	15.1	12.2	280	27	14.1	11.5	284	27	17.0	13.9	242	28	17.3	13.1	243
4.5 ,,	6	26.7	25.5	268	24	28.7	26.7	275	2	34.5	34.2	270	24	24.6	22.5	277
5.4 ,,					22	40.5	38.5	270					19	25.7	24.7	277
6.0 ,,					17	46.5	43.4	269					17	29.3	28.0	285
7.2 ,,					4	54.3	51.8	274					6	30.3	28.2	069
9.0 ,,													1	30.0	30.0	280

Station	BIKANER															
Time in I.S.T.	0130				0730				1430							
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D				
Surface	28	2.6	0.6	010	28	2.1	1.3	210	28	3.6	1.7	259				
0.15 a.g.	28	13 2	4.9	046	28	13.3	5.5	150	27	6.1	2.4	291				
0.3 a.m.s.l.	28	10.3	4.0	073	28	10.3	5.3	154	28	5.9	2.3	289				
0.6 ,,	28	11.8	3.1	010	28	12.7	0.3	124	27	6.8	2.5	281				
0.9 ,,	27	9.5	2.7	295	28	12.0	3.5	229	27	6.4	3.2	286				
1.5 ,,	27	11.1	7.5	274	27	12.1	7.7	309	28	8.4	5.4	284				
2.1 ,,	27	18.0	11.1	271	26	13.9	10.7	292	27	12.3	9.4	277				
3.0 ,,	24	18.6	15.4	278	24	17 2	13.7	285	27	21.3	18.5	277				
4.5 ,,					14	27.4	24.4	266	23	31.6	29.6	278				
5.4 ,,					8	30.5	29.3	259	17	37.0	31.6	275				
6.0 ,,					3	32.3	31.9	258	13	41.5	39.8	278				
7.2 ,,					2	45.5	45.3	260	5	47.8	44.6	271				
9.0 ,,																

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	CHIKALTHANA				COCHIN										DARJEELING							
Time in I. S. T.	1430				0130				0730				1430		0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	4 4	3.1	249	28	1.7	0.7	335	28	1.5	1.3	034	28	10.5	9.7	273	28	0.7	0.4	218	28	2.0	1.9	227
0.15 a.g.	28	8.3	5.0	255	25	5.4	3.8	351	27	6 4	4.6	048	28	8.7	7.7	276	23	5.1	2 9	227	12	6.1	5.5	235
0.3 a.m.s..					25	5.7	3.9	341	27	6.2	3.2	031	28	7.6	6.8	280								
0.6 ,,					25	5.9	4.1	344	27	5.0	1.7	010	28	5.6	3.5	333								
0 9 ,,	28	7.2	4.6	255	25	5.9	2.7	050	27	4.5	1.7	069	28	6.1	4.2	035								
1 5 ,,	28	6.5	4.4	251	22	7.5	5.7	088	26	6.5	5.6	048	28	8.5	7.9	063								
2.1 ,,	28	10.0	7.3	247	18	9.3	7.4	063	23	7.2	5.7	054	27	9.0	8.1	075								
3.0 ,,	25	17.3	14.4	260	12	10.0	8.3	072	23	7.8	5.1	098	26	8.4	6.7	084	23	12.9	10.9	281	11	13.3	12.6	276
4.5 ,,	22	26.4	24.5	277	4	11.5	9.0	097	22	12.7	11.0	086	23	14.7	12.5	077	11	29.4	17.0	282	6	29.5	26.0	281
5.4 ,,	19	31.8	28.9	276	1	13.0	13.0	180	18	11.3	7.9	077	23	13.9	9.8	067	6	31.3	27.8	270	3	29.0	25.8	302
6 0 ,,	19	33.9	30.0	277	1	9.0	9.0	150	14	13.5	8.1	082	21	15.0	8.5	068	4	29.7	28.1	271	2	28.0	23.9	320
7.2 ,,	8	41.3	40.0	271					10	15.6	9.3	085	12	12.2	4.6	153	1	41.0	41.0	295	2	56.0	55.4	305
9.0 ,,	1	74.0	74.0	245					4	7.3	2.9	233	6	10.7	4.2	233	1	62.0	62.0	285	1	113.0	113.0	300

Station	DUMDUM												GADAG							
Time in I. S. T.	0130				0830*				1430*				2030*				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	1.7	0.6	235	28	3.9	0.3	300	28	3.0	1 2	268	28	1 9	0.5	125	28	6.1	2.3	173	28	6.5	2.6	128
0.15 a.g.	27	10.0	3.2	218	28	8.3	3.6	319	28	6.9	3 5	285	27	10 8	2.0	230	28	13.2	3 2	030	28	12.7	5.2	100
0.3 a.m.s.l.	27	10.3	3.3	250	28	8.4	4.5	307	28	7.1	3.8	287	27	9 6	2.4	267								
0.6 ,,	26	10.2	4.7	284	28	10.1	6.6	242	28	7.3	4.3	288	27	9 4	5.4	277								
0.9 ,,	26	11.6	8.4	291	28	12.2	9.3	250	26	8.8	6.1	282	27	10.1	8.2	283	28	13 3	4.7	083	28	14.7	6.4	092
1.5 ,,	25	16.8	15.6	295	28	16.9	14.9	282	28	15.6	14.2	280	27	17.1	16 3	295	28	10.4	6 8	091	28	9.9	5.8	078
2.1 ,,	23	22.8	20.8	295	28	24.3	22.4	288	25	24.1	22 3	291	27	24.7	23 3	298	28	7.0	2.9	102	28	7.7	1.1	082
3.0 ,,	10	22.3	20.3	298	27	32.3	30.6	288	27	33.7	31.5	290	27	35.4	33 3	297	27	8.9	2.2	249	28	10.2	3.4	249
4.5 ,,					26	45.1	42.7	284	20	42.7	40.5	294	25	45 2	41.2	290	19	16 6	11.5	280	28	15.4	9.1	289
5.4 ,,					25	52.4	48.3	289	16	51.6	50.7	292	25	51.1	49.2	285	14	18.4	14.2	285	28	17.3	8.8	290
6.0 ,,					24	60.6	58.6	278	14	62.5	60.8	288	24	57.5	45.8	279	10	17.7	13.5	287	28	18.6	10.0	277
7.2 ,,					24	68.3	65.5	275	1	46.0	46.0	270	23	70.1	68.3	277	2	13.0	7.9	276	26	22.1	14.8	275
9.0 ,,					18	79.2	75.5	271	1	69.0	69.0	280	12	90.0	86.3	268					13	17.5	12.1	257

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	GADAG				GAUHATI												GAYA			
Time in I. S. T.	1430				0130				0830*				1430				2030*				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.0	1.3	082	28	2.5	0.5	164	28	2.4	1.1	054	28	5.6	3.3	300	28	3.3	0.6	122	28	2.0	1.5	224
0.15 a.g.	28	5.8	2.8	085	28	6.5	3.2	207	28	5.7	1.2	058	27	7.7	4.9	299	24	7.9	1.2	224	28	9.3	5.8	286
0.3 a.m.s.l.					28	7.1	4.2	241	28	6.2	0.9	016	27	7.8	5.0	286	24	8.4	1.8	240	28	9.6	5.7	294
0.6 ,,					28	9.9	6.6	253	28	7.9	3.0	262	27	8.3	5.4	273	24	9.5	4.6	253	28	13.0	10.9	309
0.9 ,,	28	6.6	3.1	097	27	10.9	9.0	262	28	10.0	6.7	253	27	9.5	7.5	259	24	10.8	8.0	260	28	15.1	13.3	300
1.5 ,,	28	7.2	2.7	101	24	12.9	10.3	257	28	14.2	10.5	250	25	41.8	13.9	250	24	13.5	10.8	253	27	17.5	16.1	281
2.1 ,,	26	8.4	2.5	084	21	13.8	9.7	261	28	18.4	14.6	258	24	19.5	18.1	248	24	17.0	14.5	254	26	22.5	19.9	281
3.0 ,,	24	7.7	0.3	048	12	17.0	16.1	290	27	26.6	23.8	271	21	30.3	29.0	264	25	23.4	21.7	267	5	30.8	29.4	265
4.5 ,,	22	13.7	5.9	289					25	48.5	47.6	274	11	47.2	46.8	276	23	52.3	50.1	270				
5.4 ,,	20	15.6	8.1	289					24	58.3	56.2	276	6	54.3	53.9	280	23	64.3	62.5	271				
6.0 ,,	20	19.1	10.1	289					16	65.5	63.1	275	5	56.8	56.0	282	21	68.4	66.5	273				
7.2 ,,	17	20.0	13.8	273					17	83.4	80.6	276	1	31.0	31.0	315	18	76.8	74.3	277				
9.0 ,,	14	19.6	16.2	262					6	103.0	97.3	271					9	116.0	112.1	285				

Station	GAYA								GOPALPUR								GORAKHPUR			
Time in I. S. T.	0730				1430				0130				0730				1430				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.6	2.5	235	28	7.1	6.4	280	28	5.7	4.2	250	28	4.8	2.7	287	28	11.3	9.6	164	28	2.4	1.6	265
0.15 a.g.	28	11.0	7.5	263	27	9.8	8.4	290	28	11.1	8.9	220	28	10.6	5.3	264	28	13.8	11.6	167	28	12.7	9.7	297
0.3 a.m.s.l.	28	11.6	7.8	279	27	9.9	8.6	288	28	11.5	9.8	215	28	11.3	7.2	223	28	13.5	10.2	166	28	13.7	11.1	298
0.6 ,,	28	13.9	10.1	303	28	11.0	9.6	288	28	11.3	9.3	218	28	9.7	6.6	222	28	8.5	5.0	183	27	13.5	11.8	295
0.9 ,,	28	14.9	12.2	299	28	11.6	9.9	287	27	10.5	7.4	227	28	8.3	4.9	235	28	7.1	3.3	244	27	14.3	13.1	295
1.5 ,,	28	21.2	18.5	290	27	16.5	15.5	284	27	9.7	5.3	273	27	8.8	5.4	291	28	10.4	7.1	289	24	17.3	16.5	291
2.1 ,,	26	23.7	20.9	284	27	24.3	23.2	286	26	12.5	10.1	301	27	12.9	8.9	319	28	13.6	10.9	300	22	21.9	20.7	286
3.0 ,,	20	31.9	29.9	283	26	33.8	32.1	284	20	19.9	17.7	305	26	18.5	15.5	307	28	18.0	15.7	304	15	24.1	21.2	281
4.5 ,,	5	37.0	36.4	276	18	43.5	42.4	277	1	12.0	12.0	245	20	27.1	22.9	289	28	28.1	25.1	283	3	25.3	24.2	280
5.4 ,,					10	49.2	48.3	276	1	19.0	19.0	270	14	27.3	24.6	282	28	33.1	29.9	285	2	33.5	32.5	287
6.0 ,,					5	51.6	51.4	287	1	18.0	18.0	275	9	28.1	26.6	270	27	35.4	32.4	283				
7.2 ,,					2	81.0	81.0	275					5	32.2	27.6	276	18	40.2	36.7	282				
9.0 ,,													1	23.0	23.0	315	9	43.6	40.6	273				

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	GORAKHPUR				GWALIOR												IMPHAL							
Time in I.S.T.	1430				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	4.4	3.7	264	28	1.8	1.1	316	28	2.4	1.5	298	28	3.6	2.8	314	7	4.0	2.6	228	28	1.7	1.4	177
0.15 a.g.	28	8.4	7.6	273	28	10.4	6.5	358	28	10.7	6.1	358	28	7.1	4.9	321	6	8.5	6.7	243	28	3.8	1.6	197
0.3 a.m.s.l.	28	8.7	8.0	267	28	8.4	4.8	356	28	8.0	3.2	338	28	6.7	4.6	327								
0.6 ,,	28	10.6	10.1	275	28	10.5	6.5	344	28	12.1	7.2	348	28	7.5	5.1	319								
0.9 ,,	28	13.1	12.5	282	28	10.0	6.7	313	28	11.2	7.3	331	28	8.0	5.9	305	6	8.8	5.8	224	28	3.1	1.6	178
1.5 ,,	28	19.6	18.8	285	28	13.6	11.3	291	28	12.7	9.8	298	28	11.9	10.4	285	6	14.8	14.3	257	28	9.3	7.2	264
2.1 ,,	27	27.5	26.3	287	28	18.7	15.9	280	28	15.6	13.2	285	28	17.1	14.2	274	6	19.2	18.0	275	25	15.6	13.4	275
3.0 ,,	23	29.3	27.7	285	26	24.6	22.2	272	28	24.2	22.2	273	28	26.0	23.3	273	4	21.0	17.7	280	20	27.2	25.9	275
4.5 ,,	14	38.6	36.6	274	1	54.0	54.0	260	22	36.5	33.7	269	27	43.7	40.8	273	1	20.0	20.0	295	6	40.5	39.7	282
5.4 ,,	8	44.9	42.6	270					15	45.7	44.0	262	27	55.0	51.6	274					1	23.0	23.0	275
6.0 ,,	5	46.0	44.2	270					9	49.9	48.7	268	25	60.5	57.1	273					1	27.0	27.0	265
7.2 ,,	2	42.0	40.1	289									17	75.4	72.9	265								
9.0 ,,													3	104.0	102.1	277								

Station	IMPHAL				JABALPUR												JAGDALPUR							
Time in I.S.T.	1430				0130				0730				1430				~~1030~~ 0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	8.4	7.7	229	28	1.3	0.7	099	28	1.2	0.4	121	28	2.7	1.6	310	28	1.5	0.3	235	28	0.7	0.3	159
0.15 a.g.	28	9.8	8.8	236	28	10.7	5.6	062	28	9.6	5.1	061	28	6.4	3.7	326	28	11.6	2.3	239	28	6.8	1.4	161
0.3 a.m.s.l.																								
0.6 ,,					28	11.4	6.3	055	28	11.9	7.1	057	28	6.6	3.9	326	28	7.9	1.6	237	28	3.2	1.0	155
0.9 ,,	28	8.7	7.5	233	28	11.4	5.2	030	28	15.2	7.6	032	28	6.8	4.2	322	28	12.1	2.3	249	28	8.7	1.8	175
1.5 ,,	28	13.1	12.3	258	28	11.4	7.1	287	28	13.6	5.9	318	28	10.1	7.1	287	26	8.7	4.2	300	28	9.0	3.5	306
2.1 ,,	28	18.4	17.3	265	28	16.7	13.5	273	28	16.5	13.9	281	28	16.4	14.2	272	24	10.0	7.6	300	26	11.2	7.9	313
3.0 ,,	21	29.8	27.8	272	28	26.2	23.1	270	28	25.2	23.0	271	28	25.3	22.9	271	22	14.4	12.9	301	24	14.9	12.9	317
4.5 ,,	9	50.7	50.1	276	7	31.6	30.3	269	20	37.2	34.7	276	25	37.1	34.4	280	3	20.3	17.4	285	20	22.3	18.7	295
5.4 ,,	4	50.7	49.2	275	1	35.0	35.0	280	17	43.5	41.4	280	21	47.3	44.8	280	1	15.0	15.0	260	16	24.7	22.0	293
6.0 ,,	1	42.0	42.0	240	1	47.0	47.0	275	12	47.0	45.4	287	17	50.6	48.5	277					10	27.1	24.9	286
7.2 ,,									6	68.3	66.4	293	6	63.3	62.7	284					1	23.0	23.0	255
9.0 ,,																								

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	JAGDALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I.S.T.	1430				0730				1430				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.1	1.7	248	28	2.9	2.1	056	28	5.3	2.7	284	28	2.7	2.3	294	28	4.5	3.2	293	28	3.1	2.5	015
0.15 a.g.	28	7.0	2.7	255	28	11.6	5.3	056	28	7.9	3.8	286	28	4.9	3.6	280	28	5.2	3.5	300	28	9.7	4.4	035
0.3 a.m.s.l.													28	4.9	2.8	280	28	5.3	3.5	302	28	8.0	5.4	032
0.6 ,,	28	5.1	2.2	255	28	10.7	4.3	055	28	8.1	4.0	285	28	8.1	4.6	298	28	5.8	3.8	299	28	10.8	1.8	350
0.9 ,,	28	7.7	3.3	250	28	11.1	4.2	356	28	7.9	3.9	285	28	10.1	6.8	290	28	6.6	4.7	284	28	10.6	4.9	242
1.5 ,,	28	7.1	3.3	277	28	15.7	11.4	276	28	10.4	7.0	297	28	15.3	12.4	282	27	12.4	10.8	286	28	12.5	9.9	275
2.1 ,,	28	7.9	4.9	313	28	16.1	11.7	272	28	15.4	11.7	287	27	22.4	18.8	282	27	20.2	18.2	289	26	19.0	16.2	285
3.0 ,,	27	15.2	11.1	300	26	22.6	19.4	268	28	23.7	20.0	275	22	27.6	24.5	281	27	31.8	29.6	287	20	22.9	20.7	282
4.5 ,,	26	27.6	23.5	286	18	32.5	31.4	272	22	40.9	36.0	276	5	37.0	24.0	250	19	41.3	39.5	284				
5.4 ,,	21	31.1	27.2	284	6	37.0	36.0	268	9	45.5	44.0	272					14	45.0	43.6	278				
6.0 ,,	19	32.8	29.4	286	2	33.5	32.8	272	3	56.3	56.2	262					9	49.8	49.4	273				
7.2 ,,	13	35.1	30.4	286	1	47.0	47.0	270																
9.0 ,,	3	38.7	20.6	293																				

Station	JHARSUGUDA								JODHPUR															
Time in I.S.T.	0730				1430				0130				*0830				1430				2030*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.6	3.1	027	28	3.9	2.5	270	28	6.3	3.9	023	28	5.3	4.2	036	28	7.0	2.6	295	26	4.9	2.6	339
0.15 a.g.	27	8.9	6.5	043	28	5.7	4.1	274	28	13.9	6.5	026	28	6.4	4.1	032	28	6.0	2.6	281	26	6.1	3.0	336
0.3 a.ms.l.	27	7.8	5.8	044	28	5.5	4.1	271	28	11.6	7.0	028	28	6.3	4.3	033	28	6.8	3.0	291	26	5.6	2.8	339
0.6 ,,	27	8.9	1.3	337	28	6.1	4.7	284	28	14.3	6.0	010	28	7.7	3.3	021	27	6.6	3.2	289	26	7.3	3.6	325
0.9 ,,	27	9.8	3.9	282	28	7.1	5.7	282	28	11.5	3.8	032	28	9.2	2.2	340	27	7.4	3.2	281	26	9.3	4.8	322
1.5 ,,	27	13.4	10.9	284	28	11.8	9.2	289	26	11.4	7.1	280	28	11.2	5.1	296	27	10.1	5.6	270	26	9.4	4.4	299
2.1 ,,	26	19.9	16.9	293	28	20.4	16.8	285	25	12.4	8.6	265	28	14.9	8.4	277	28	13.3	9.4	270	26	12.3	6.9	275
3.0 ,,	25	24.9	22.0	290	27	28.0	26.0	270	22	19.7	15.0	101	28	21.5	17.3	270	28	2.1	18.3	271	26	19.0	15.6	268
4.5 ,,	10	32.9	33.0	282	20	38.3	34.5	289	1	45.0	45.0	210	26	35.9	33.3	267	26	35.1	33.0	277	26	34.5	31.9	273
5.4 ,,	2	27.5	26.5	274	16	41.9	39.4	285					26	47.7	45.4	273	23	44.6	42.5	274	26	44.8	42.7	271
6.0 ,,					10	41.4	40.0	279					25	55.0	52.6	270	19	50.9	48.5	268	26	53.1	50.7	271
7.2 ,,					2	50.0	49.6	278					22	70.6	68.4	267	11	66.7	63.6	266	26	72.0	69.4	271
9.0 ,,													17	96.9	94.3	261	3	85.3	83.7	272	17	92.0	87.9	271

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	MADRAS																MANGALORE							
Time in I.S.T.	0130				0830*				1430				2030*				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	2.8	1.0	076	28	3.9	1.5	330	28	8.4	7.3	087	28	6.0	4.3	095	28	4.5	3.6	035	28	4.8	4.1	071
0.15 a.g.	28	9.0	7.0	099	28	8.8	2.1	088	27	9.5	7.8	094	26	12.1	9.9	089	28	8.0	7.3	350	28	8.0	5.8	048
0.3 a.m.s.l.	28	9.5	7.8	101	28	8.6	3.7	92	27	9.6	7.4	092	26	11.9	10.3	084	28	8.0	7.2	345	28	8.3	4.6	021
0.6 ,,	28	10.0	8.5	093	28	8.8	5.6	085	28	8.8	6.9	065	26	11.2	9.9	076	28	7.9	6.2	350	28	9.4	4.6	022
0.9 ,,	28	9.8	8.2	073	28	9.6	7.6	074	28	8.3	6.7	056	26	11.3	10.0	069	28	7.7	4.4	003	28	9.3	5.4	047
1.5 ,,	28	11.5	8.6	038	28	12.6	9.4	057	27	10.0	7.5	051	26	10.7	8.9	052	28	8.5	5.4	060	28	7.9	4.8	076
2.1 ,,	28	10.4	6.8	036	28	10.9	8.3	050	27	9.9	7.4	050	26	10.4	7.8	046	28	9.9	8.2	092	27	7.3	4.6	090
3.0 ,,	27	8.1	4.3	036	28	9.0	4.7	055	25	8.3	4.9	035	26	8.6	4.1	036	27	7.7	3.3	113	26	7.6	0.9	043
4.5 ,,	18	9.4	4.6	035	26	11.4	3.7	020	24	11.3	4.0	018	26	10.3	4.9	002	14	10.3	2.1	019	26	11.4	3.3	086
5.4 ,,	6	14.8	8.3	021	26	14.8	5.1	340	25	14.4	6.8	350	26	13.5	6.1	350	6	16.2	10.7	265	26	13.9	2.1	060
6.0 ,,	5	16.0	10.2	337	25	16.9	6.5	332	24	15.1	6.6	341	26	15.3	6.4	333	2	20.5	20.5	262	24	16.0	3.0	348
7.2 ,,					25	18.4	4.8	272	23	16.3	4.2	273	26	16.8	6.0	275	2	230.	23.0	241	21	16.9	5.5	281
9.0 ,,					24	20.4	8.5	250	17	15.3	7.6	245	25	19.6	9.0	245					14	16.6	4.5	261

Station	MANGALORE				MASULIPATNAM												MINICOY							
Time in I.S.T.	1430				0130				0730				1430				~~1030~~ 0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	8.8	6.8	275	28	3.0	2.4	147	28	2.2	1.2	045	28	6.7	6.4	136	28	3.4	3.3	347	28	3.6	3.1	344
0.15 a.g.	27	9.0	7.4	279	28	9.7	7.7	158	27	7.1	4.3	132	28	7.0	6.4	135	28	7.3	6.6	349	28	7.6	5.9	353
0.3 a. m.s.l.	27	9.1	7.2	281	28	10.0	8.0	157	27	8.3	6.1	142	28	7.0	5.9	132	28	6.7	6.1	352	28	7.1	6.0	356
0.6 ,,	27	6.1	1.9	345	28	9.4	7.1	142	27	9.1	6.6	138	28	7.5	4.3	119	28	6.5	4.8	006	28	5.9	4.7	003
0.9 ,,	27	5.0	3.4	062	27	9.1	5.9	113	26	9.0	5.8	119	28	8.0	3.5	088	28	6.7	4.3	056	28	6.9	3.9	052
1.5 ,,	27	7.4	6.7	083	27	10.2	5.2	031	25	9.5	6.0	051	28	9.1	5.1	032	28	10.5	8.8	079	28	9.8	8.6	084
2.1 ,,	27	7.9	5.3	088	26	10.0	6.0	020	23	9.6	5.9	033	28	8.9	5.1	346	27	12.6	11.8	083	26	9.7	8.6	086
3.0 ,,	26	7.1	3.4	101	24	9.9	6.5	314	24	10.3	5.7	309	28	10.3	7.0	309	27	9.6	8.3	083	25	8.5	6.8	103
4.5 ,,	26	11.1	2.3	050	17	16.6	10.7	293	23	17.0	13.2	293	27	17.9	13.2	299	22	15.5	13.9	092	21	16.2	13.7	083
5.4 ,,	26	14.8	3.6	010	12	20.7	19.9	261	21	19.4	14.8	298	26	20.7	16.8	292	20	16.8	13.2	081	17	17.8	15.3	079
6.0 ,,	26	16.7	3.5	323	5	20.2	20.0	257	20	20.5	15.4	299	27	22.2	17.7	287	15	12.8	5.7	098	16	19.6	14.8	077
7.2 ,,	23	16.5	5.9	271	2	16.0	16.0	241	16	22.1	17.5	277	25	24.8	21.5	274	8	17.6	4.5	091	12	16.9	6.7	101
9.0 ,,	19	19.8	9.7	241					8	21.9	17.5	258	24	25.8	22.7	264	1	7.0	7.0	165	7	18.1	6.0	223

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	MINICOY				MOHANBARI												MUSSOORIE							
Time in I.S.T.	1430				0130				0730				1430				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	4.9	4.4	351	28	1.2	1.1	054	28	1.8	1.3	043	28	2.0	1.4	051	28	3.9	1.7	022	28	4.5	3.5	197
0.15 a.g.	28	8.6	8.0	357	21	7.6	6.0	048	25	7.8	5.6	052	26	5.5	2.6	053	28	14.6	7.0	001	27	7.6	6.0	208
0. a.m.s.l.	28	8.5	7.9	002	21	7.3	5.3	048	25	8.3	6.0	052	26	5.5	2.7	062								
0.6 ,,	28	8.1	7.1	008	21	6.1	4.4	051	25	6.7	4.3	058	26	5.7	2.4	088								
0.9 ,,	27	7.5	5.6	037	21	6.6	1.8	094	25	6.8	0.3	080	26	5.4	1.6	157								
1.5 ,,	27	9.2	7.5	078	21	7.2	4.5	234	23	7.6	5.9	216	24	9.1	8.5	224								
2.1 ,,	26	9.0	6.8	086	16	11.1	8.0	247	19	9.5	7.9	226	22	14.2	13.3	218	28	11.4	5.7	357	27	7.8	6.8	207
3.0 ,,	23	9.3	7.7	094	10	10.8	9.0	233	17	11.8	10.3	233	17	10.2	9.2	219	28	12.3	1.1	207	26	13.7	2.8	271
4.5 ,,	19	15.9	14.5	091					8	24.4	22.0	282	6	15.2	11.2	256	24	21.5	17.2	286	23	21.7	11.3	285
5.4 ,,	19	17.1	15.4	082					3	33.3	33.3	277	6	30.8	29.7	263	16	28.3	23.8	282	21	31.0	22.1	270
6.0 ,,	19	15.3	12.7	085					3	45.0	44.6	278	4	38.5	37.5	264	14	32.0	29.2	277	19	36.2	31.6	277
7.2 ,,	15	14.5	10.7	093					1	78.0	78.0	325	3	55.0	54.6	267	8	43.9	42.5	267	13	44.8	41.3	273
9.0 ,,	14	19.3	10.2	096													2	67.0	59.3	289	6	53.8	53.5	267

Station	NAGPUR																NEW DELHI							
Time in I.S.T.	0130				0830*				1430				2030*				0130				0830*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	3.6	2.1	351	28	4.5	3.7	015	28	4.7	2.1	282	25	4.6	2.0	73	28	5.1	4.4	321	28	6.5	5.2	312
0.15 a.g.	28	12.1	7.5	050	28	6.4	4.1	033	28	6.2	3.8	285	25	5.2	1.4	87	28	14.7	12.0	335	28	8.2	6.6	314
0.3 a.m.s.l.																	28	12.4	9.8	334	28	7.5	5.9	313
0.6 ,,	28	12.7	5.6	054	28	7.5	3.9	038	28	6.6	2.9	271	25	6.0	0.9	141	28	14.7	12.3	322	28	11.1	8.8	310
0.9 ,,	28	10.8	2.4	053	28	9.2	1.1	003	28	6.3	2.3	260	25	7.4	3.0	231	28	14.4	12.4	311	28	14.4	11.7	308
1.5 ,,	28	9.0	5.6	259	28	10.1	6.6	253	28	9.0	5.3	256	25	9.9	7.6	259	28	15.4	13.7	292	28	15.6	14.1	306
2.1 ,,	28	14.0	11.2	267	27	14.5	10.4	257	28	12.6	9.9	264	25	13.7	12.0	264	27	16.1	14.0	282	28	16.8	14.6	292
3.0 ,,	25	19.2	16.8	272	27	20.0	17.7	270	27	21.2	19.0	274	25	19.7	17.6	273	20	19.4	17.5	261	28	18.8	14.5	279
4.5 ,,	4	29.7	25.9	281	23	28.6	26.0	275	26	30.4	27.6	277	24	29.4	26.5	274	1	2.0	2.0	085	26	31.7	27.7	274
5.4 ,,					22	34.3	31.4	274	21	35.6	33.5	281	23	35.6	33.5	274					26	39.3	36.3	278
6.0 ,,					21	38.0	36.0	277	21	40.0	37.9	281	22	39.8	37.5	276					23	42.2	39.6	274
7.2 ,,					21	47.5	45.7	271	20	46.1	44.1	281	22	46.6	43.9	270					22	52.5	50.2	271
9.0 ,,					18	52.3	50.5	263	12	52.8	50.0	279	17	53.4	51.2	263					19	73.6	71.3	268

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	NEW DELHI								POONA												PORT BLAIR			
Time in I.S.T.	1430				2030*				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	9.6	8.0	315	28	6.1	5.2	311	28	2.4	1.7	244	28	1.1	0.7	232	28	2.6	1.9	263	28	2.7	2.7	042
0.15 a.g.	28	11.3	9.1	306	27	7.7	6.3	310	28	5.4	3.5	288	28	3.6	0.5	222	28	4.9	2.7	283	28	8.5	7.7	037
0.3 a.m.s.l.	28	11.7	9.5	314	27	7.1	5.8	311													28	8.6	7.8	039
0.6 ,,	28	10.9	9.1	299	27	10.3	8.3	308	28	3.7	2.8	240	28	2.1	1.2	218	28	3.9	2.2	282	28	8.2	7.2	051
0.9 ,,	28	11.2	10.2	300	27	13.4	10.6	302	28	8.6	4.3	315	28	7.5	3.0	046	28	5.4	3.0	275	28	6.7	5.4	070
1.5 ,,	28	14.5	11.9	298	27	13.9	11.9	297	28	11.0	3.4	264	28	9.9	1.6	154	28	6.9	4.4	240	25	6.5	3.5	101
2.1 ,,	28	16.2	12.9	286	27	15.1	12.2	288	28	11.3	7.5	193	28	10.6	8.8	210	28	9.6	7.7	230	21	8.2	2.6	101
3.0 ,,	28	21.5	17.9	279	27	20.0	17.1	287	28	12.8	8.2	220	27	14.6	9.8	242	26	15.3	11.4	256	13	8.8	3.7	040
4.5 ,,	28	37.1	33.5	278	27	30.2	28.1	283	18	18.1	16.0	275	26	20.3	17.7	272	26	21.6	19.2	270				
5.4 ,,	28	45.9	42.1	275	27	38.0	36.0	281	5	27.2	22.4	268	21	23.7	19.0	280	24	26.8	24.0	280				
6.0 ,,	28	54.0	50.0	277	25	42.1	39.6	276	3	26.3	25.0	283	21	28.3	23.0	280	23	29.6	26.9	281				
7.2 ,,	25	61.6	57.4	273	25	52.7	50.6	272					12	28.8	25.2	267	17	28.5	25.3	273				
9.0 ,,	22	81.1	77.0	275	18	74.0	71.6	270					5	23.4	21.4	281	10	37.8	35.8	253				

Station	PORTBLAIR												RAIPUR											
Time in I.S.T.	0730				1430				2030*				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	1.6	1.5	053	28	4.5	3.7	047	28	5.5	5.4	047	28	3.7	0.6	168	28	1.5	0.4	037	28	4.5	2.8	270
0.15 a.g.	28	8.2	7.0	037	28	8.3	7.7	059	27	6.1	6.0	052	27	12.4	1.5	001	28	8.3	3.9	040	28	8.3	5.4	271
0.3 a.m.s.l.	28	8.6	7.5	041	28	8.3	7.7	056	27	6.4	6.2	052												
0.6 ,,	28	8.0	6.2	060	28	7.2	5.7	046	27	7.3	6.8	055	27	12.4	1.6	326	28	10.3	3.6	060	28	8.9	6.2	271
0.9 ,,	28	7.8	4.7	085	28	5.2	3.0	040	27	8.0	7.0	063	27	10.4	4.5	275	28	10.2	0.9	321	28	9.0	7.1	270
1.5 ,,	25	8.8	4.7	121	28	6.7	2.2	092	27	7.5	4.7	090	27	11.8	9.7	265	28	12.9	7.9	267	28	10.6	8.4	270
2.1 ,,	23	7.0	3.6	131	25	7.6	1.9	125	27	7.9	2.8	105	27	15.4	13.3	276	28	16.9	13.9	279	27	16.9	14.0	276
3.0 ,,	18	8.2	1.7	022	23	8.7	2.4	060	27	9.4	4.2	051	27	18.7	17.0	287	28	21.0	17.9	282	27	21.7	19.1	279
4.5 ,,	15	12.6	7.8	007	18	9.8	5.3	358	24	13.5	6.8	018	2	20.5	20.1	284	22	31.8	29.6	281	23	34.4	31.2	285
5.4 ,,	15	12.6	8.3	029	13	11.3	2.6	331	24	13.3	7.6	022	1	27.0	27.0	270	17	35.6	33.6	283	22	39.0	36.4	284
6.0 ,,	14	11.8	8.4	036	13	12.0	2.0	016	24	13.2	6.9	026					14	41.2	39.0	279	20	44.0	20.0	284
7.2 ,,	9	13.1	8.0	053	11	12.4	3.2	121	23	14.3	3.1	007					4	52.3	49.6	271	13	51.9	50.0	279
9.0 ,,					5	12.0	6.1	149	17	14.5	0.7	160					1	51.0	51.0	255	8	65.0	62.3	271

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	SANTACRUZ												TEZPUR							
Time in I.S.T.	0130				0830*				1430				2030*				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	1.6	1.3	360	28	5.1	4.3	027	28	9.4	8.9	307	28	8.3	7.6	340	28	1.8	1.5	071	28	2.1	1.4	062
0.15 a.g.	28	9.1	7.1	358	28	13.3	10.6	032	28	9.8	8.3	319	28	18.7	17.2	343	26	10.0	7.9	092	28	7.9	5.0	080
0.3 a.m.s.l.	28	10.6	8.9	356	28	12.7	8.9	026	28	8.3	6.9	335	28	16.8	15.0	338	26	10.3	7.5	096	28	8.9	5.5	091
0.6 ,,	28	10.9	8.9	350	28	11.5	7.3	023	28	6.4	4.0	354	28	12.7	8.9	325	26	8.8	3.8	254	28	9.0	3.2	27
0.9 ,,	28	9.1	6.2	329	28	10.5	4.7	012	28	6.0	3.1	344	28	9.1	4.9	303	25	9.3	4.7	231	27	8.2	3.2	228
1.5 ,,	27	7.7	4.2	225	28	10.1	4.7	257	28	9.4	6.4	240	28	8.1	2.6	324	20	11.1	8.8	262	23	10.6	7.2	252
2.1 ,,	27	12.3	8.5	200	28	12.7	10.6	235	28	12.8	9.8	235	28	11.5	3.7	252	20	14.2	12.4	255	23	14.1	11.0	253
3.0 ,,	27	13.4	9.4	241	28	15.5	11.8	250	28	16.6	12.2	255	27	14.3	9.6	250	8	9.9	2.3	246	12	16.8	10.2	267
4.5 ,,	6	19.3	16.7	259	28	22.5	20.1	270	27	22.9	20.9	265	26	21.3	18.0	276					4	28.7	28.1	284
5.4 ,,					28	29.1	26.0	266	27	28.6	25.9	274	26	27.5	24.8	274					4	38.7	38.5	282
6.0 ,,					28	33.4	29.5	265	27	33.5	30.0	275	26	31.7	28.8	273					3	36.0	36.0	272
7.2 ,,					28	41.5	39.2	272	27	40.3	37.4	269	25	39.4	35.4	271					2	59.0	58.6	265
9.0 ,,					26	47.2	44.9	266	19	50.9	48.9	262	21	47.9	44.7	263								

Station	TEZPUR				TIRUCHIRAPALLI												TRIVANDRUM							
Time in I.S.T.	1430				0130				0730				1430				0130				0830*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	4.6	0.1	122	28	4.0	3.5	047	28	3.2	2.8	022	28	5.6	4.8	071	28	1.9	0.6	357	27	2.4	1.8	009
0.15 a.g.	27	7.2	0.2	097	28	12.1	9.8	064	27	9.6	8.1	037	27	7.8	6.6	067	28	6.0	2.3	325	27	4.0	2.3	002
0.3 a.m.s.l.	27	7.4	0.4	167	28	13.4	10.9	066	27	10.1	8.2	048	27	8.0	6.9	069	28	6.0	2.4	326	27	4.3	2.2	359
0.6 ,,	27	8.0	2.9	230	28	14.5	12.6	071	27	10.8	8.9	071	27	8.9	8.3	066	28	6.6	3.4	335	27	4.9	2.3	013
0.9 ,,	27	8.0	4.6	239	27	13.1	11.8	062	27	9.9	7.7	058	27	9.2	8.6	061	28	5.7	3.7	022	27	5.5	3.3	020
1.5 ,,	26	12.6	10.5	244	27	10.6	8.5	032	26	9.9	8.4	034	27	11.8	10.4	048	28	8.8	6.5	055	27	5.5	3.9	020
2.1 ,,	25	17.2	15.3	247	27	11.4	8.7	029	26	10.0	8.5	030	25	11.8	10.7	041	27	9.8	7.5	049	26	8.4	5.5	049
3.0 ,,	23	19.9	17.3	256	25	9.6	7.1	062	26	10.1	8.5	083	21	10.0	7.0	063	24	10.5	8.5	083	26	9.8	8.7	078
4.5 ,,	15	34.7	34.4	272	21	10.4	8.2	063	23	12.2	9.0	067	20	12.5	10.3	061	12	15.1	13.5	083	26	15.4	13.4	0842
5.4 ,,	10	44.1	42.7	275	17	12.3	5.4	043	23	12.5	5.4	058	19	14.4	10.8	052	6	10.0	9.6	054	24	15.5	10.9	077
6.0 ,,	8	44.7	43.1	282	9	11.2	3.2	066	23	11.8	4.8	072	19	15.7	9.7	047	5	11.4	9.9	051	22	16.9	10.8	078
7.2 ,,	4	62.5	61.7	285	3	10.0	6.4	171	22	13.7	4.7	098	17	15.5	5.3	087	2	13.0	12.9	072	17	18.8	16.8	082
9.0 ,,	3	87.3	86.2	286	1	6.0	6.0	100	20	14.4	3.3	180	12	17.1	3.2	207					16	17.5	15.6	197

TABLE IV— MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Station	TRIVANDRUM								UDAIPUR												VENGURLA			
Time in I.S.T.	1430				2030*				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	5.5	4.6	247	17	4.9	4.2	286	28	1.0	0.9	300	28	0.9	0.7	309	28	2.2	1.1	239	28	1.7	1.6	337
0.15 a.g.	28	8.4	7.6	245	17	5.5	3.9	289	28	7.0	4.6	350	28	6.0	4.3	345	28	4.7	0.2	050	28	13.2	12.9	259
0.3 a.m.s.l.	28	7.9	7.0	240	17	5.7	3.5	295													28	15.2	15.5	355
0.6 ,,	28	6.2	3.8	247	17	6.3	2.7	338													28	14.7	13.5	345
0.9 ,,	28	6.8	3.5	022	17	6.8	4.2	027	28	8.5	4.3	357	28	7.7	3.2	018	28	4.8	0.3	330	28	12.5	9.7	328
1.5 ,,	27	10.6	10.0	041	17	9.6	8.4	051	28	8.3	2.4	272	28	10.0	1.9	286	28	7.2	3.3	267	28	10.3	1.7	217
2.1 ,,	25	12.1	11.7	051	17	12.5	11.4	052	28	11.7	7.0	247	28	13.8	8.7	272	28	11.5	8.5	269	28	10.7	6.9	137
3.0 ,,	23	10.8	9.3	079	17	12.4	11.3	080	28	17.5	14.7	267	27	18.0	14.7	267	28	20.1	17.5	270	28	11.1	6.0	160
4.5 ,,	20	16.3	14.7	079	16	16.0	14.3	074	9	27.0	26.1	269	25	30.6	27.7	277	28	33.0	30.2	269	2	10.5	10.0	247
5.4 ,,	16	18.4	16.3	065	16	16.9	15.5	076	2	27.5	27.3	264	21	37.6	35.6	272	28	42.7	40.3	271				
6.0 ,,	16	19.7	15.5	064	16	18.3	16.4	084	2	31.0	34.0	271	19	41.2	39.7	272	28	47.8	45.9	271				
7.2 ,,	12	20.0	9.2	077	15	16.8	12.9	087					10	56.5	55.8	277	21	58.5	56.2	273				
9.0 ,,	7	29.0	11.5	100	14	17.5	13.8	101					2	89.5	89.1	270	14	78.2	75.4	273				

Station	VENGURLA								VERAVAL												VISAKHAPATNAM			
Time in I.S.T.	0730				1430				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	28	1.0	1.0	360	28	7.5	6.9	268	28	7.6	6.7	009	28	8.2	7.5	018	28	11.8	8.0	265	28	0.7	0.5	305
0.15 a.g.	28	8.5	7.3	023	28	8.9	8.1	277	28	17.0	13.9	004	28	18.0	15.7	021	28	10.2	6.7	273	28	5.4	4.3	280
0.3 a.m.s.l.	28	12.0	9.0	009	28	8.6	6.2	276	28	16.0	12.4	004	28	17.2	13.2	019	28	8.6	5.4	300	28	6.5	5.2	225
0.6 ,,	28	14.1	9.8	013	28	6.3	2.4	298	28	13.3	9.4	005	28	12.9	8.7	018	28	8.4	5.3	545	28	6.7	4.9	225
0.9 ,,	28	14.0	7.1	013	28	5.6	1.6	358	28	10.1	6.1	009	28	9.9	5.2	014	28	9.0	5.9	360	28	5.8	3.4	230
1.5 ,,	28	9.9	2.7	144	28	8.7	2.3	112	28	8.8	1.3	302	27	9.6	2.2	307	28	10.2	4.0	345	25	6.8	2.9	338
2.1 ,,	28	9.5	4.6	177	28	10.2	3.2	123	28	11.6	5.5	240	25	10.6	4.2	295	28	11.9	4.9	295	22	9.7	8.1	338
3.0 ,,	28	11.4	6.1	208	28	10.6	2.6	238	27	15.2	12.2	264	25	15.6	10.8	278	28	17.9	14.2	274	19	14.8	12.2	310
4.5 ,,	27	17.0	10.0	278	28	16.3	9.2	285	6	22.3	20.0	260	22	29.3	27.3	268	28	28.8	26.3	269	17	20.2	17.3	290
5.4 ,,	26	19.5	12.4	275	28	18.2	10.6	276	1	30.0	30.0	255	18	29.3	28.3	272	28	39.9	32.2	270	4	25.5	23.9	268
6.0 ,,	26	21.8	15.3	274	28	21.2	13.0	281	1	37.0	37.0	255	16	35.9	34.5	276	26	39.0	36.0	272				
7.2 ,,	17	22.9	15.4	264	22	24.1	19.8	270					4	44.5	42.8	276	20	46.6	44.0	272				
9.0 ,,	6	14.5	12.8	275	11	27.8	24.7	263					1	51.0	51.0	265	12	58.4	55.5	268				

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1937

Station	VISAKHAPATNAM							
Time in I.S.T.	0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D
Surface . .	28	1.1	0.5	292	28	9.7	6.7	167
0.15 a.g. . .	28	3.9	1.8	261	28	8·4	6·2	163
0.3 a.m..s.l. .	28	5.2	2.9	224	28	7.9	5.7	163
0.6 ,, .	28	6.1	3.0	210	28	5·9	3.1	189
0.9 ,, .	27	5.7	1.7	184	28	5.1	1.7	216
1.5 ,, .	27	6.5	2.6	018	26	7.7	4.3	336
2.1 ,, .	26	9.9	6 8	351	25	10 6	7.7	331
3.0 ,, .	25	13.2	9.3	305	24	14.0	10.8	303
4.5 ,, .	21	21.4	17.8	289	25	24 8	20.7	290
5.4 ,, .	17	25.1	19.5	284	25	27.0	23.1	285
6.0 ,, .	12	26.0	21.0	272	25	28.9	24.1	282
7.2 ,, .	4	33.5	35.0	255	25	34.3	30.1	277
9.0 ,, .					20	33.9	30.1	269

TABLE V— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km. above mean sea level

February 1957

Ht. in Km.	n	V	v	D
		AMBALA		
		1430 hrs		
10.5	5	73·2	72·2	260
12.0	1	64·0	64·0	280
14.1	1	53·0	53·0	260
16.2	1	69·0	69·0	280
18.0	1	31·0	13·0	265
		ANANTAPUR		
		0730 hrs.		
10.5	14	20.0	12.9	233
12.0	8	17 4	8.0	227
14.1	2	25.0	24 8	157
		1430 hrs.		
10.5	12	27.5	24.6	247
12.0	6	36 2	34.5	260
14.1	1	20.0	20.0	235
		BAIRAGARH		
		1430 hrs.		
10.5	4	70.3	68·6	272
		BAMRAULI		
		0830 hrs.*		
10.5	6	97.8	89·0	261
12.0	1	100.0	100.0	230
		2030 hrs. *		
10·5	4	83·3	78·2	259
		BANGALORE		
		0730 hrs.		
10.5	6	18·5	13·2	205
12.0	3	27.3	17·1	195
14.1	1	32·0	32·0	040
		1430 hrs.		
10.5	18	20.3	9.1	226
12.0	17	21.5	7.7	209
14.1	14	24.6	12.6	184
16.2	7	24.4	10.8	179
18.0	2	14.5	14.5	022
		BEGUMPET		
		0730 hrs.		
10.5	2	35.5	35.1	279
		1430 hrs.		
10.5	16	28.1	26.6	261
12.0	6	30.1	29.1	259
14.1	2	34.0	34.0	260
16·2	2	24·5	24·5	270
18·0	2	15·5	13·5	275
20·0	2	7·0	3·7	321
23·0	1	11·0	11·0	070
		BHUBANESHWAR		
		1430 hrs.		
10.5	1	62 0	62·0	250
		BHUJ		
		1430 hrs.		
10.5	1	87.0	87.0	265
		COCHIN		
		0730 hrs.		
10·5	1	7.0	7.0	215
		1430 hrs.		
10·5	4	17.7	12·2	290
12·0	2	8·0	6·8	264
14·1	2	31·5	21·4	221
		DUM DUM		
		0830 hrs.*		
10·5	11	76·4	73·8	265
12·0	7	84·8	84·0	265
14·1	2	70·5	69·7	255
		2030 hrs.*		
10·5	8	89.9	86·3	263
12·0	6	69·0	68·3	261
14·1	1	52·0	52·0	240
		GADAG		
		0730 hrs.		
10·5	2	4.0	3.9	183
		1430 hrs.		
10.5	5	22·8	20·2	239
12·0	3	22·0	18·2	201
14.1	1	47·0	47·0	180
		GAUHATI		
		0830 hrss.*		
10.5	1	113·0	113.0	220
12.0	1	125·0	125.0	240
		2030 hrs.*		
10.5	4	113.8	110.1	273
12.0	2	176·5	174.7	279
10·5	1	34.0	34 0	290
		GOPALPUR		
		0730 hrs.		
		1430 hrs.		
10·5	4	41 0	39·8	280
12·0	3	35.7	33·0	283
14·1	1	15 0	15·0	290
		JODHPUR		
		0830 hrs. *		
10·5	5	147.4	145·0	266
12·0	4	100.5	99·0	275
14·1	2	102.0	101·4	274
16·2	1	95 0	95·0	280
		1430 hrs.		
10·5	1	136.0	136 0	250
12·0	1	191.0	191.0	245
		2030 hrs.*		
10·5	10	101.2	99.5	265
12·0	6	84.8	81.7	265
14.1	1	137.0	137.0	260
		MADRAS		
		0830 hrs.*		
10.5	24	23.7	11·2	245
12.0	24	27.9	12·7	234
14.1	18	31.7	14·7	173
16·2	13	27 2	7·5	236
18.0	9	21.9	9·2	260
21.0	3	22.7	7·3	099
		1430 hrs.		
10.5	16	19·8	10.7	245
12.0	13	22·8	14.6	250
14.1	8	27·5	5.4	236
16.2	6	26·5	11.9	258
18.0	2	34·5	31.5	294
		2030 hrs.*		
10.5	20	27.1	15·7	247
12.0	18	28.5	16·8	241
14.1	14	34.6	23 3	217
16.2	7	24.7	9.1	113
18.0	2	17.0	16·4	236
		MANGALORE		
		0730 hrs.		
10.5	11	16.2	3.6	263
12.0	1	5.0	5.0	335
10.5	18	22.2	8.5	232
12.0	13	23.2	14.2	228
14.1	11	22.0	17.0	202
16.2	9	21.3	4.9	191
18.0	4	13.3	7.3	274
20.0	2	14.5	7.4	130
		MASULIPATNAM		
		0730 hrs.		
10.5	5	12.6	10.3	241
12.0	1	4.0	4.0	240
		1430 hrs.		
10.5	16	26.0	24.0	254
12.0	12	34·3	33.1	259
14.1	8	39.7	38.9	254
16.2	2	50.0	50.0	255
		MINICOY		
		0730 hrs.		
10.5	5	36.0	22.8	291
12.0	2	40.5	40.5	305
14.1	2	42.5	35.0	285
16.2	2	20.0	14.3	205
18.0	1	30.0	30.0	230
		1430 hrs.		
10.5	12	20.3	6.5	111
12.0	8	26.6	12.9	146
14.1	3	33.3	33.0	127
		MUSSOORIE		
		1430 hrs.		
10.5	1	75.0	75.0	265
		NAGPUR		
		0830 hrs.*		
10.5	15	59.1	57.1	262
12.0	13	58.0	57.5	263
14.1	7	41.7	40.6	256
16.2	5	33.8	29.8	271
18.0	3	23.0	21.7	271
21.0	1	32.0	32.0	260
		1430 hrs.		
10.5	7	56.7	55.2	275
		2030 hrs.*		
10.5	11	55.9	54.1	264
12.0	6	62.3	58.4	261
14.1	5	48.2	47.5	260
16.2	1	61.0	61.0	265
		NEW DELHI		
		0830 hrs.*		
10.5	15	93.1	90.1	266
12.0	7	85.1	84.4	265
14.1	4	70.0	68.3	265
16.2	2	46.0	46.0	268
		1430 hrs.		
10.5	8	115.9	113.9	265
12.0	4	139.5	136.9	257
		2030 hrs.*		
10.5	13	90.0	85.3	266
12.0	8	95.2	93.0	268
14.1	1	78.0	78.0	260
		POONA		
		0730 hrs.		
10.5	4	32.7	31.5	262
12.0	2	24.0	23.4	256
		1430 hrs.		
10.5	6	31.5	30.9	257
12.0	4	22.5	21.5	238
14.1	2	19.0	18.7	222
16.2	1	18.0	18.0	225
		PORT BLAIR		
		1430 hrs.		
10.5	5	12.8	8.1	155
12.0	1	23.0	23.0	115
14.1	1	29.0	29.0	090
		2030 hrs.*		
10.5	15	17.5	5.2	177
12.0	13	22.0	8.3	174
14.1	6	32.2	13.6	110
16.2	5	24.4	7.0	170

TABLE V— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

February 1957

Ht. in Km.	n	V	v	D
		RAIPUR		
		1430 hrs.		
10.5	3	59.3	57.4	264
		SANTACRUZ		
		0830 hrs.*		
10.5	24	49.8	46.8	263
12.0	18	50.5	45.8	262
14.1	9	49.1	47.7	256
16.2	3	58.0	57.3	263
18.0	2	49.0	49.0	270
		1430 hrs.		
10.5	11	55.6	53.2	262
12.0	4	46.3	42.7	269
14.1	1	33.0	33.0	230
		2030 hrs.*		
10.5	16	53.4	51.9	256
12.0	14	50.7	48.2	259
14.1	5	35.8	35.3	257
16.2	1	52.0	52.0	270
		TEZPUR		
		1430 hrs.		
10.5	1	81.0	81.0	275
		TIRUCHIRAPALLI		
		0730 hrs.		
10.5	11	21.1	3.3	25[illegible]
12.0	6	24.7	20.9	261
14.1	4	25.7	21.7	24[illegible]
16.2	1	10.0	10.0	16[illegible]
18.0	1	27.0	27.0	14[illegible]
		1430 hrs.		
10.5	11	21.2	3.3	251
12.0	5	17.2	1.5	229
14.1	3	23.3	18.7	256
16.2	1	48.0	48.0	260
18.0	1	58.0	58.0	260
20.0	1	48.0	48.0	115
23.0	1	46.0	46.0	240
26.0	1	50.0	50.0	230
30·0	1	70.0	70.0	240
35.0	1	83.0	83.0	265

Ht. in Km.	n	V	v	D
		TRIVANDRUM		
		0830 hrs.*		
10.5	14	21.3	18.1	107
12.0	14	26.2	19.8	119
14.1	12	38.8	25.7	114
16.2	8	30.1	16.1	097
18.0	5	17.8	12.8	091
20.0	1	15.0	15.0	125
		1430 hrs.		
10.5	4	29.5	3.5	065
12.0	2	42.5	22.9	327
14.1	2	39.5	4.9	281
16.2	1	43.0	43·0	120
		20·30 hrs.*		
10.5	13	20.0	14.3	119
12.0	7	19.1	15.5	113
14.1	7	28.4	20.9	127
16.2	1	31.0	31.0	090
		UDAIPUR		
		1430 hrs.		
10.5	3	83.7	80.2	262
		VENGURLA		
		0730 hrs.		
10.5	1	8.0	8.0	255
		1430 hrs.		
10.5	6	22.8	19.5	244
12.0	2	30.5	30.5	254
		VERAVAL		
		1430 hrs.		
10.5	7	68.6	67.1	262
12.0	4	67.3	67.1	261
14.1	1	54.0	54.0	270
		VISAKHAPATNAM		
		1430 hrs.		
10.5	17	33.2	31.1	265
12.0	11	32.3	28.1	250
14.1	6	40.2	30.8	241

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RADIOSONDE DATA

February 1957

During the month, observations of upper air temperature, pressure and humidity were made at 12 stations in India as given in the list below. For a detailed description of the instruments used a reference may be made to the I. M. D. Scientific Notes Nos. 112 and 113 Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

Serial No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad	Clock type	1st October, 1944	03 and 15	
2	Bombay	Clock type	7th September, 1954	03 and 15	
3	Calcutta	Clock type	13th December, 1946	03 and 15	Fan type used from 13th December 1946 to 30th November, 1947
4	Gauhati	Clock type	22nd July, 1955	03 and 15	
5	Jodhpur	Clock type	17th April, 1946	03 and 15	
6	Madras	Fan type	29th June, 1946	03 and 15	
7	Nagpur	Fan type	1st October, 1946	03 and 15	
8	New Delhi	Clock type	3rd December, 1943	03 and 15	
9	Port Blair	Fan type	4th December, 1949	15	
10	Trivandrum	Fan type	1st July, 1947	03 and 15	
11	Veraval	Fan type	3rd October, 1944	03 and 15	03 hrs. ascent started on 15th December 1956.
12	Visakhapatna m.	Fan type	8th December, 1946	03 and 15	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 03 Hours G. M. T.

February 1957

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (1004 mb.)						BOMBAY (1013 mb.)						CALCUTTA (1014 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	28	98	288.0	293	283	279.8	28	9	292.5	299	288	289.5	27	6	293.5	298	289	287 7
1000	25	131	..	..	..	..	28	120	..	..	..	..	27	126	..	..	..	..
900	25	1026	287.4	293	281	269.3	28	1032	292.3	298	286	281.1	27	1025	287.0	292	281	277.4
850	25	1509	285.1	290	279	264.0	28	1521	289.6	293	282	277.6	27	1505	284 2	291	279	278.4
800	25	2011	282.5	287	279	263.4	28	2035	286.8	290	284	276.3	27	2008	281 2	287	275	270.6
700	25	3107	276.5	284	270	245.5	28	3149	280.7	285	276	269.4	26	3101	276.3	280	271	263.9
600	24	4341	269.2	278	260	..	28	4405	273.7	277	270	262.9	26	4337	270 0	275	263	..
500	24	5757	260.9	267	253	..	28	5847	265.1	270	262	..	26	5761	262.1	271	254	..
400	21	7435	251.2	256	242	..	27	7550	254.8	262	249	..	24	7468	252.5	262	244	..
300	20	9512	240.0	245	232	..	26	9647	241.2	248	234	..	20	9530	239.9	248	232	..
250	19	10773	232.3	238	222	..	23	10910	232.4	236	226	..	14	10777	230.2	238	221	..
200	13	12225	224.1	234	217	..	19	12405	223.0	236	217	..	12	12286	223.0	229	212	..
175	10	13104	220.5	237	212	..	15	13279	218.4	232	210	..	7	13124	219.1	225	209	..
150	8	14091	217.1	235	206	..	10	14283	214.8	225	203	..	7	14110	214.3	220	204	..
125	6	15159	211.3	224	200	..	6	15455	213.7	220	207	..						
100	5	16516	204.8	221	195	..												
80	5	17851	203.4	221	192	..												

	GAUHATI (1010 mb.)						JODHPUR (991 mb.)						MADRAS (1012 mb.)					
Surface	28	49	290.3	295	287	289.6	26	218	286.8	290	279	273.6	28	15	298.3	301	297	294.8
1000	28	132	..	..	..	..	26	138	..	..	..	..	26	123	..	..	..	..
900	28	1022	284.8	290	280	281.6	26	1031	287 8	291	282	269.6	26	1033	292 2	296	287	283.7
850	28	1496	281.3	287	276	279.0	26	1510	284.8	289	277	266.3	26	1527	290 5	294	288	277.0
800	28	1995	277.8	284	272	276.3	26	2014	281 6	285	275	263.8	26	2043	288 0	293	285	272.7
700	28	3072	271.7	278	265	271.7	26	3105	275.4	281	265	252.6	26	3164	283 8	289	281	266.9
600	27	4289	267.0	280	260	..	26	4335	268.4	276	260	..	26	4435	277.3	283	274	256 3
500	27	5701	260.8	273	252	..	26	5747	260.2	267	248	..	24	5897	268.7	272	264	..
400	24	7385	252.4	262	241	..	25	7422	250.5	257	244	..	23	7623	258.2	264	251	..
300	20	9455	241.5	257	229	..	24	9489	238 6	246	228	..	22	9736	243.6	249	233	..
250	18	10719	233.1	246	221	..	23	10747	231.1	240	221	..	22	11013	234.2	241	227	..
200	16	12218	223.7	239	210	..	22	12231	223.0	230	214	..	20	12521	225.2	231	217	..
175	9	13169	218.7	235	204	..	20	13104	219.3	227	208	..	19	13381	219.9	227	214	..
150	8	14066	215.5	232	199	..	16	14100	216.5	225	203	..	17	14365	214.3	221	205	..
125	8	15188	211.0	226	193	..	10	15263	212.1	220	197	..	14	15479	208.4	215	198	..
100	5	16693	209.6	224	201	..	6	16601	207.8	213	197	..	13	16858	203 4	209	196	..
80													10	18212	201.2	207	193	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 15 Hours G. M. T.

February 1957

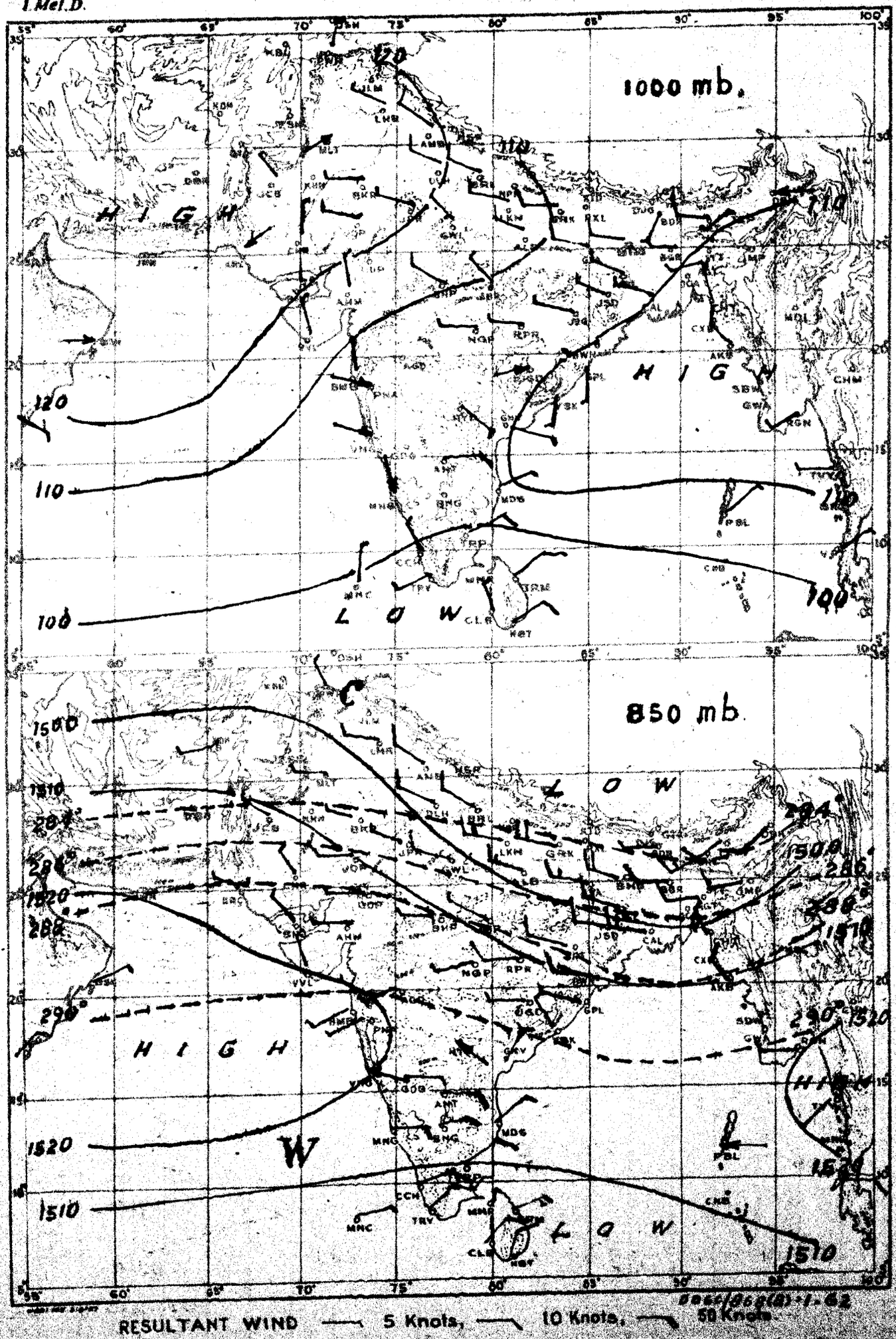
Standard Pressure Surface mbs.	NAGPUR Surf. Pr. (976 mb.)						NEW DELHI (990 mb.)						PORT BLAIR (1003 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	25	311	297.6	302	292	279.3	28	210	287.2	293	284	280.2	28	79	298.7	301	297	293.9
1000	25	100	..	..	..	..	27	123	..	..	..	..	28	106	..	..	..	..
900	25	1021	295.5	300	290	274.0	27	1020	287.8	292	281	271.8	28	1024	292.8	296	290	286.3
850	25	1514	291.7	297	286	271.5	27	1498	284.3	289	276	268.3	28	1515	290.2	293	287	280.3
800	25	2029	287.6	293	284	269.4	27	2005	280.5	286	271	265.4	28	2031	287.5	292	284	275.5
700	25	3135	280.1	288	274	257.7	27	3 86	273.1	279	261	255.8	28	3152	283.0	287	279	264.7
600	25	4392	273.0	278	267	243.7	27	4305	265.6	271	256	..	28	4418	276.7	283	271	254.2
500	24	5830	264.2	270	257	..	27	5703	256.8	263	249	..	25	5879	268.4	274	265	..
400	22	7525	254.0	259	247	..	27	7347	245.6	254	236	..	24	7605	257.7	264	251	..
300	21	9606	239.7	245	231	..	25	9368	234.3	243	220	..	19	9719	242.6	253	231	..
250	17	10869	230.5	239	221	..	23	10609	228.6	235	218	..	16	10983	232.6	245	221	..
200	12	12321	218.3	225	206	..	22	12085	222.5	231	215	..	13	12450	220.4	232	210	..
175	11	13175	212.2	217	205	..	22	12991	218.3		212	..	9	13321	216.3	228	205	..
150	10	15111	206.2	209	202	..	21	13933	214.7	221	209	..	7	14202	205.4	217	199	..
125	6	14263	201.7	203	198	..	14	15061	211.4	215	208	..	5	15214	196.8	207	187	..
100							7	16445	209.4	213	205	..						
80																		

	TRIVANDRUM (1003 mb.)						VERAVAL (1012 mb.)						VISAKHAPATNAM (1007 mb.)					
Surface	24	64	300.4	301	298	295.3	27	8	295.3	297	292	292.1	23	48	298.7	300	298	295.4
1000	24	93	..	..	..	..	27	116	..	..	..	..	23	109	..	..	..	..
900	24	1016	293.4	297	289	288.9	27	1028	291.4	297	283	278.7	23	1028	293.3	297	288	286.0
850	24	1507	290.2	295	286	286.1	27	1515	288.2	4	281	273.5	23	1519	289.8	293	287	284.6
800	24	2023	287.2	293	282	282.4	27	2026	285.0	292	278	270.9	23	2034	286.6	292	283	281.0
700	24	3142	281.7	287	276	270.1	25	3136	280.2	286	274	265.6	23	3149	281.3	288	276	272.7
600	24	4405	274.7	279	269	264.6	25	4390	273.2	281	270	261.1	23	4406	274.2	280	270	266.5
500	24	5854	266.9	272	261	..	24	5828	263.0	271	256	..	23	5852	266.0	271	263	..
400	23	7567	256.1	261	248	..	24	7520	252.7	257	245	..	23	7557	254.9	261	249	..
300	23	9664	240.4	249	234	..	20	9600	238.5	245	231	..	21	9651	240.2	247	229	..
250	20	10917	230.7	241	225	..	15	10863	231.7	237	227	..	17	10903	230.2	237	219	..
200	17	12389	217.8	229	207	..	11	12346	220.7	228	215	..	15	12397	220.8	229	211	..
175	14	13247	213.1	225	204	..	9	13221	215.0	220	211	..	11	13283	214.7	219	207	..
150	13	14207	205.9	209	197	..	7	14218	208.1	213	205	..	8	14232	207.5	212	200	..
125	7	15364	204.3	213	197	..							5	15376	201.8	207	199	..
100	6	16710	200.2	209	191	..												
80																		

NOTE.—Number of observations refer to those of dynamic hieght.
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273°A.
Means are not worked out for less than five observations at standard pressure surfaces.

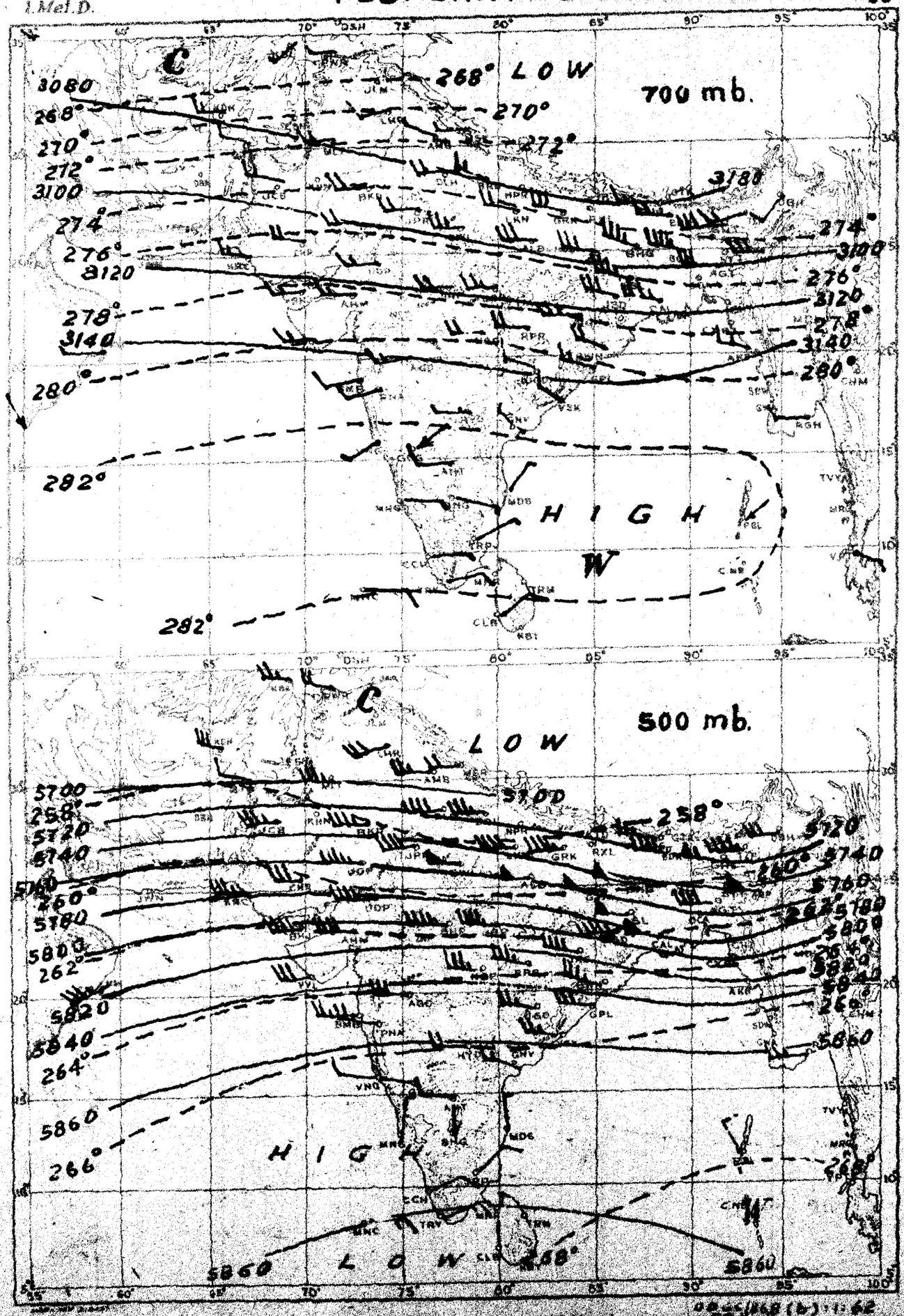
MONTHLY MEAN CONSTANT PRESSURE CHARTS
FEBRUARY 1957

I.Met.D. Plate I



MONTHLY MEAN CONSTANT PRESSURE CHARTS
FEBRUARY 1957

I.Met.D. Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

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INDIA WEATHER REVIEW, 1957

Monthly Weather Report

MARCH

Published by authority of the Government of India

Chief features :—

(1) Good rainfall in northwest India and Uttar Pradesh in association with the passage of eight western disturbances.

(2) Good thunderstorm activity in the central parts of the country.

Eight western disturbances moved across the northern parts of the country during the month. Most of them gave precipitation in Jammu and Kashmir, Himachal Pradesh and the Punjab-Kumaon hills. Some of the disturbances together with the respective low pressure areas induced by them also gave good rainfall in the plains of northwest India and of Uttar Pradesh and in the central parts of the country.

The sixth and seventh western disturbances were particularly active. They, together with the low pressure areas induced by them, caused good precipitation in Jammu and Kashmir, Himachal Pradesh, the Punjab(I) and west Uttar Pradesh between the 19th and 24th. Thunderstorms or hailstorms accompanied by squalls were also reported from a number of places in the Punjab(I) and west Uttar Pradesh. Delhi experienced a severe hailstorm with a violent squall on the evening of 20th, when a maximum wind speed of 124 kms per hour (77 miles per hour) was recorded. According to newspaper reports, hailstorms caused damage to standing crops in several parts of the Punjab(I) and west Uttar Pradesh. Details regarding the movement and activity of each of the eight western disturbances are given in the following table :—

Statement showing the movement and activity of western disturbances in the month of March 1957

S. No.	Period	Course	Region affected	Nature of precipitation	Period	Remarks
1	28th Feb.-3rd March.	Baluchistan-the Punjabs-Western Himalayas.	...	...	...	Did not cause any precipitation.
2	4th-6th	Northern divisions of West Pakistan-Jammu and Kashmir.	Kumaon hills	Fairly widespread thundershowers	5th	
			Punjab(I)	Local or scattered thundershowers	5th & 6th	
			Himachal Pradesh and Kumaon hills	Local rain or snow	6th	
2(a)	4th-6th	West Rajasthan-north Madhya Pradesh-Bihar.	Plains of Uttar Pradesh, East Madhya Pradesh and Northeast India	Local or scattered thundershowers	5th and 6th	Induced by western disturbance No. 2.
3	6th-7th	Sind and adjoining Baluchistan-Punjab(P)-Jammu and Kashmir.	Jammu and Kashmir	Local rain or snow	7th	
			Punjab(I) and Himachal Pradesh	Local or scattered rain	7th	
			Kumaon hills	Scattered thundershowers	8th	
4	9th-10th	Afghanistan-Kashmir.	Jammu and Kashmir	Local rain or snow	10th	
			Jammu and Kashmir, Punjab(I) and in and near the Kumaon hills	Local thundershowers	11th	
			Himachal Pradesh	Fairly widespread thundershowers	11th	
4(a)	10th-11th	West Rajasthan-northwest Uttar Pradesh.	East Rajasthan	Scattered thundershowers	11th	Induced by western disturbance No. 4.
5	13th-16th	North Baluchistan-Jammu and Kashmir.	Jammu and Kashmir	Local thundershowers	16th	
6	17th-19th	Baluchistan-the Punjabs-Western Himalayas.	Jammu and Kashmir	Scattered or local thundershowers	17th & 18th	
			Himachal Pradesh	Scattered thundershowers	18th	
			Jammu and Kashmir	Fairly widespread rain or snow	19th	
			Punjab(I)	Fairly widespread thundershowers	19th	
			Kumaon hills and Himachal Pradesh	Local thundershowers	19th	
			Kumaon hills	Fairly widespread thundershowers	20th	
6(a)	19th-21st	Sind and west Rajasthan-west Uttar Pradesh.	West Madhya Pradesh	Local thundershowers	20th	Induced by western disturbance No. 6.
			West Madhya Pradesh and plains of west Uttar Pradesh	Local thundershowers	21st	
			Kumaon hills	Fairly widespread thundershowers	21st	
			East Rajasthan, east Madhya Pradesh and north Maharashtra	Scattered thundershowers	21st	

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I—I D. D. G. Obs. P./62.

1	2	3	4	5	6	7
7	21st-23rd	Baluchistan-Jammu and Kashmir.	Jammu and Kashmir and Punjab hills	Fairly widespread thundershowers	22nd	
			Himachal Pradesh and the plains of the Punjab(I)	Local or scattered thundershowers	22nd	
			Jammu and Kashmir and Himachal Pradesh	Fairly widespread thundershowers	23rd	
			Northwest Uttar Pradesh	Local thundershowers	23rd	
			Jammu and Kashmir and Punjab hills	Scattered thundershowers	24th	
7(a)	22nd-23rd	Northeast Rajasthan and adjoining Punjab(I)-Kumaon hills.	Rajasthan, Uttar Pradesh and Madhya Pradesh	Local or scattered thundershowers	22nd	Induced by western disturbance No. 7.
			North Madhya Pradesh and east Uttar Pradesh	Local or scattered thundershowers	23rd	
8	28th-31st	North Baluchistan-Jammu and Kashmir.	Jammu and Kashmir, Himachal Pradesh, west Uttar Pradesh and Punjab(I)	Local or scattered thundershowers	30th	
			Jammu and Kashmir	Fairly widespread thundershowers	31st	
			West Uttar Pradesh and Himachal Pradesh	Local or scattered thundershowers	31st	
8(a)	28th-31st	Sind and Gujarat-west Utter Pradesh.	Madhya Pradesh and Vidarbha	Local or scattered thundershowers	28th-31st	Induced by western disturbance No. 8.
			Rajasthan	Scattered thundershowers	29th-31st	
			West Uttar Pradesh, north Maharashtra and Telangana	Local or scattered thundershowers	30th	

The feeble trough which lay in the east Arabian Sea off the Konkan coast on the 28th February moved into Gujarat on the 1st March and filled up over west Madhya Pradesh on the 2nd. Under its influence, moist air penetrated into the central parts of the country. Fairly widespread or local thundershowers occurred in Vidarbha on the 2nd and 3rd, in Madhya Pradesh and Orissa on the 3rd and 4th and in Chota Nagpur on the 4th. Scattered thundershowers also occurred in east Maharashtra on the 1st and 2nd, in north Mysore on the 2nd and in Telangana on the 3rd. Amravati recorded 5 cms. of rain on the 2nd and Gopalpur 10 cms. on the 3rd. A few hailstorms were also reported from east Madhya Pradesh on the 3rd.

Another feeble trough of low pressure appeared over Vidarbha and east Maharashtra on the 10th, persisted there till the 12th and then moved away northeastwards as a low pressure wave. Under its influence, local or scattered thundershowers occurred in Vidharbha and Madhya Pradesh between the 11th and 13th and in Telangana, Chota Nagpur and Gangetic West Bengal on the 12th. A severe hailstorm accompanied by a violent squall occurred at Hyderabad on the afternoon of the 11th. The maximum wind speed during the squall was 143 kms. per hour (89 miles per hour). According to newspaper reports, some of the hail stones were 2 to 3 inches in diameter. A shallow trough of low pressure appeared over Madhya Pradesh and adjoining areas on the 24th and persisted there till the 26th. In association with it, local or scattered thundershowers occurred in west Madhya Pradesh from the 24th to 27th, in east Madhya Pradesh from the 25th to 27th, in Chota Nagpur on the 25th and 26th and in Gangetic West Bengal and Orissa on the 26th.

The total rainfall during the month was in large excess in Orissa, Uttar Pradesh, Rajasthan, Madhya Pradesh, Maharashtra, Vidarbha, coastal Andhra Pradesh, Telangana and north Mysore, in moderate excess in Chota Nagpur, Bihar and the Punjab(I) and normal in south Mysore. It was, in slight defect in Jammu and Kashmir, in moderate defect in the Madras State and in coastal Mysore and in large defect over the rest of the country.

Mean maximum temperature was normal in the Bay Islands, Assam, west Rajasthan and Kerala and below normal elsewhere over the country. Mean minimum temperature was below normal in Chota Nagpur, the Konkan and north Mysore and normal elsewhere.

Mean relative humidity was in excess in Chota Nagpur, Bihar, Uttar Pradesh, the Punjab(I) east Rajasthan, Madhya Pradesh, Saurashtra and Kutch, the Konkan, Maharashtra, Vidarbha and Telangana. It was in defect in the Bay Islands and Assam and normal elsewhere over the country.

Mean cloud amount was normal in the Bay Islands, Assam, Gangetic West Bengal, the Punjab(I) Jammu and Kashmir, west Rajasthan, Telangana, the Madras State and coastal Mysore and in excess over the rest of the country.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amount for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
Dated the 31st July, 1958.

S. S. LAL,
for Director General of Observatories.

Errata to M.W.R. March 1957

Page No.	Station	Item	Hour	Column	For	Read
107	-		-	Heading of Table	In	during
"				4(a)	Uttrar	Uttar
"		6		Period	9th	19th
108		8		5	Lacal	Local
"				Penul-timate para.	13, 28	14, 29
109		7		Rela-tive Humi-dity %	730 I.S.T.	1730 I.S.T.
"		4		Assam	9.8	29.8
"		5		West Bengal	9.0	19.0
"		6		Rajas-than	-7	+7

Table II

110	Walong		1	Walong (R)	Delete
111	Heading Division and station		1	Gangetic West Bengal	Orissa
"	Puri		19	-0.2	-1.2
112	Banihal		1	Banihal (R)	Delete
"	Gulmarg		2 to 29	Nil	Closed during winter months.
"	Digar		13	Nil	0
113	Bhavnagar		9	Nil	2
"	Veraval		20	Nil	0
114	Deolali		5	18, 19	18
"	Aurangabad		5	24, 25	19, 24, 25
"	Parbhani		16	+3	+3.5
115	Mathurai		10	0	0.8
"	Nagapattinam		7	+0.4	-0.4
"	Kallakurichi		11	21.2	21.1
"	Division and station		1	Bangalore (Central Aerodrome)	Bangalore (Central Observatory)
"	Kozikode		7	+0.4	-0.4
"	Kohima		18	5.0	5.1
"	Shillong		22	0	1
"	Mukteswar (Kumaon)		10	40.0	40.4
116	Nainital		8	-1.1	1.1
"	Chungthong		11 re-mark (g)	Mean of 24 days	Total for 24 days
117	Gangtok		5	22, 23	22, 24

Table III

118	Walong	0830	1	Walong (R)	Delete
"	Digboi	0830	5	997.2	Delete
"	"	1730	5	992.7	Delete
"	Dibrugarh	0830	14	0.9	-0.9
"	"	"	28	-	0
"	Golaghat	0830	5	1003.4	Delete
"	"	1730	5	998.2	Delete
"	Majbat	0830	5	1000.4	Delete
"	"	1730	5	995.5	Delete

Page No.	Station		Hour	Column	For	Read
119	Cooch Behar (C.W.O.)		0830	1	Cooch Behar (C.W.)	Cooch Behar (C.W.O.)
120	Cuttack		0830	18	46	4
"	Bhubaneswar		0230	3	-	46
"	Bolangir		1730	27	-	0
121	Ranchi (C.W.O.)Division and station			1	Ranchi (C.W.)	Ranchi(C.W.O.)
122	Sabour		0830	17	0	1
"	Gorakhpur (P.B.O.)		0230	17	0	1
123	Nazibabad		1730	23, 24	1, 0	0, 1 respectively
124	Alwar		0830	2	830	0830
125	Sheopurkalan		1730	11	2	22
"	Guna		2330	10	11.1	10.1
128	Aurangabad		0830	21	Blank	15
129	Sholapur		0530	1	Blank	Sholapur
"	Kolhapur		0530	1	Blank	Kolhapur
"	"		0830	2	0836	0830
"	"		1130	4	1006.3	1010.5
130	Tuticorin		1730	22, 25	0, Blank	9, 0
132	Bangalore (Aerodrome)		2330	22	6	16
"	Kozikode		1730	17	1	0
"	Palghat		0830	17	4	0
"	"		1730	17	0	4
"	Cochin (Naval Air Station)		2330	9	23.	23.1
133	Pamban		0830	9	1.6	21.6
"	Ootacamund		0830	28	Blank	0
135	Dailekh		1730	8	0.8	10.8
"	[illegible] Bhojpur		1730	2	0830	1730 Delete
"	Chainpur		0830	2	1730	0830
Table IV		Ht.in Km.				
139	Anantapur	Surface	1430	V	14.1	4.1
"	"	0.15	"	v	16.5	6.5
"	"	3.0	"	D	407	047
141	Bhubaneswar	3.0	"	D	395	305
142	Gadag	9.0	0730	D	27	277
144	Gwalior	1.5	1130	D	074	274
145	Jaipur	Surface	1430	D	250	255
146	Madras	5.4	0130	D	027	270
"	"	4.5 to 9.0	0830	n	31	30
"	Mangalore	6.0	0130	V	11	11.0
147	New Delhi	0.9	0130	v	2.2	2.2
"	"	3.0	0130	v	4.4	14.4
149	Santacruz	1.5	2030	v	82	4.8
"	Trivandrum	0.6	0830	n	33	30
Table V						
152	Begumpet	10.5	1430	V	5.83	58.3
"	Dum Dum	10.5	0830	-	-	Read line 25, 75.7, 69.7, 261
"	"	12.0	0830	-	-	Read line 23, 68.8, 65.2, 263
"	"	14.1	0830	V	6.30	63.0

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C.	Mean minimum temperature °C	Relative humidity. % 0830 hrs. IST.	Relative humidity. % 1730 hrs IST.	Cloud. 0830 hrs. IST.	Cloud. 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura).	14.6	18	29.8	15.8	66	53	2.5	3.1
	−67.4		+1.0	−0.4	−7		−0.6	
2. West Bengal . .	9.6	30	31.5	19.0	61	48	1.9	2.3
	−22.2		−1.4	−0.2	−1		−0.2	
3. Orissa . .	37.7	151	31.6	20.6	68	54	2.5	2.8
	+12.7		−2.0	−0.9	−1		+0.5	
4. Bihar . .	20.4	132	31.1	16.6	56	40	2.3	2.9
	+5.0		−1.4	−0.5	+9		+0.8	
5. Uttar Pradesh .	24.8	208	29.3	14.9	59	33	2.5	3.1
	+12.9		−2.1	−0.1	+10		+1.0	
6. Punjab (I) (Including Himachal Pradesh and Delhi.)*	26.6	142	28.2	13.8	67	40	2.0	3.0
	+7.9		−1.5	−0.3	+13		−0.1	
7. Jammu and Kashmir.	79.4	83	14.3	3.3	63	55	4.5	5.3
	−16.1		−1.2	−0.7	−1		+0.3	
8. Rajasthan .	18.9	332	30.7	15.6	49	24	2.5	3.2
	+13.2		−1.1	0	−7		+0.9	
Sub-Division								
1. Bay Islands .	0	0	31.6	21.4	62	70	3.0	3.0
	−28.5		+0.8	−0.5	−10		+0.1	
2. Assam (Including Manipur & Tripura).	14.6	18	29.8	15.8	66	53	2.5	3.1
	−67.4		+1.0	−0.4	−7		−0.6	
3. Sub-Himalayan West Bengal.	14.9	48	29.5	16.9	63	37	1.8	1.8
	−16.3		−1.4	+0.9	+3		+0.5	
4. Gangetic West Bengal.	7.5	23	32.0	19.6	60	51	1.9	2.4
	−24.5		−1.5	−0.5	−3		−0.4	
5. Orissa . .	37.7	151	31.6	20.6	68	54	2.5	2.8
	+12.7		−2.0	−0.9	−1		+0.5	
6. Chota Nagpur .	30.9	131	30.7	16.6	57	41	2.1	3.1
	+7.3		−1.9	−1.3	+11		+0.4	
7. Bihar . .	16.3	133	31.3	16.5	56	40	2.5	2.8
	+4.0		−1.1	0	+8		+1.1	
8. Uttar Pradesh (East).	13.7	156	30.1	15.5	58	38	2.6	2.9
	+4.9		−2.3	−0.1	+10		+1.3	
9. Uttar Pradesh (West).	37.3	244	28.5	14.3	61	38	2.4	3.2
	+22.0		−1.9	0	+10		+0.7	
10. Punjab (India) (including Delhi).	26.6	142	28.2	13.8	67	40	2.0	3.0
	+7.9		−1.5	−0.3	+13		−0.1	
11. Himachal Pradesh.	80.1	..	24.8	9.4	79	43	3.7	5.4
12. Jammu & Kashmir.	79.4	83	14.3	3.3	63	55	4.5	5.3
	−16.1		−1.2	−0.7	−1		+0.3	
13. Rajasthan (West)	18.2	294	30.9	15.8	51	23	2.3	2.9
	+12.0		−0.4	+0.8	+3		+0.3	
14. Rajasthan (East)	19.5	390	30.5	15.5	48	24	2.7	3.3
	+14.5		−1.6	−0.6	+10		+1.3	
15. Madhya Pradesh (West).	39.3	504	31.1	15.7	53	30	2.8	4.0
	+31.5		−2.4	−0.8	+17		+1.6	

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity. % 0830 hrs. IST	Relative humidity. % 1730 hrs. IST	Cloud. 0830 hrs. IST	Cloud. 1730 hrs. IST
1	2	3	4	5	6	7	8	9
Division—*contd.*								
9. Madhya Pradesh	53.3	448	30.9	16.0	56	33	2.9	3.8
	+41.4		−2.5	−0.7	+17		+1.6	
10. Bombay . .	12.8	346	32.3	18.6	62	39	2.1	2.3
	+9.1		−1.7	−0.5	+8		+0.8	
11. Andhra Pradesh	17.7	213	33.4	21.8	66	48	2.5	2.4
	+9.4		−1.9	−0.5	+1		+0.6	
12. Madras . .	10.3	69	32.3	22.7	70	48	2.9	2.5
	−4.6		−1.6	+0.1	−5		+0.4	
13. Mysore . .	11.0	133	32.9	20.1	60	33	2.3	3.0
	+2.7		−1.5	−0.5	+2		+0.8	
14. Kerala . .	9.4	26	31.8	24.9	73	67	2.7	3.1
	−26.5		−0.1	+0.1	−3		+0.6	
Mean of India .	23.6	161	31.3	17.7	60	39	2.5	2.9
(Excluding Jammu & Kashmir and Himachal Pradesh).	+8.9		−1.6	−0.4	+6		+0.8	
Sub-Division—*Contd.*								
16. Madhya Pradesh (East).	73.3	412	30.6	16.5	61	38	3.1	3.5
	+55.5		−2.6	−0.7	+16		+1.7	
17. Gujarat . .	0	0	33.7	17.7	54	25	2.1	2.0
	−0.9		−1.7	0	+4		+1.1	
18. Saurashtra & Kutch.	0	0	31.8	18.0	70	43	2.3	1.6
	−2.2		−1.3	−0.3	+7		+0.9	
19. Konkan . .	0	0	28.5	20.5	77	66	2.2	1.5
	−0.9		−1.7	−1.1	+6		+0.6	
20. Maharashtra .	6.6	174	34.8	17.8	48	25	1.6	3.0
	+2.8		−1.2	−0.4	+7		+0.6	
21. Vidarbha .	81.1	614	33.7	18.7	55	32	2.4	3.6
	+67.9		−3.1	−0.8	+19		+1.1	
22. Coastal Andhra Pradesh.	21.3	245	32.4	22.3	72	61	2.9	2.7
	+12.6		−1.7	−0.6	−1		+0.5	
23. Telangana .	28.3	253	33.5	20.4	62	36	2.6	2.0
	+17.1		−2.3	−0.2	+8		+1.0	
24. Rayalaseema .	0	0	36.0	22.3	53	25	1.5	2.1
	−4.6		−2.1	−0.7	−1		+0.5	
25. Madras . .	10.3	69	32.3	22.7	70	48	2.9	2.5
	−4.6		−1.6	+0.1	−5		+0.4	
26. Coastal Mysore	1.3	68	30.5	22.8	68	65	2.7	2.1
	−0.6		−1.5	−0.8	+2		+0.3	
27. Mysore (North)	14.2	189	34.1	19.9	50	28	2.3	3.2
	+6.7		−1.7	−1.1	+3		+1.2	
28. Mysore (South)	12.6	103	32.5	19.5	64	27	2.1	3.1
	+0.4		−1.4	+0.1	+2		+0.6	
29. Kerala (including Laccadive).	9.4	26	31.8	24.9	73	67	2.7	3.1
	−26.5		−0.1	+0.1	−3		+0.6	

Note.—The entries in the second line for each division and sub-division indicate departures from normal.
*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days, (2·5 mms. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	*Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours.	Departure from normal	Heaviest fal lin 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	28·2	..	33·6	25	22·3	..	20·6	18	0	0	..	0	..	0	..	10·7	6·2	..	0	0	0	0	0	0	0	0	0	0
Long Island	30·8	..	32·9	31	21·5	..	19·8	18	0	0	..	0	..	0	..	4·1	1·8	..	0	0	0	1	0	0	0	0	0	0
Port Blair	31·6	+0·8	33·1	28	21·4	−0·5	18·3	28	0	0	−28·5	0	..	0	−2·1	8·0	4·6	−4·9	0	0	0	3	0	0	0	0	0	0
Car Nicobar	31·0	..	32·3	30	21·5	..	16·8	22	1·3	1·3	..	1·3	31	0	..	9·9	5·3	..	1	0	0	0	0	0	0	0	0	0
Nancowry	33·0	..	34·5	29	24·3	..	22·9	19	9·2	10·2	..	5·1	31	2	..	0·3	0	..	4	0	0	3	0	0	0	0	0	0
Kondul	30·0	..	30·7	7 days	25·4	..	23·4	19	18.3	48·7	..	22·3	27	3	..	9·6	7·0	..	3	0	0	3	0	0	0	0	0	0
Assam (Including Manipur & Tripura)																												
Walong (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pasighat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	2	0	0	0	0	0	0
Digboi	27·7	..	31·6	24	12·7	..	10·0	8	3·9	43·0	..	11·7	28	7	..	..	..	..	9	0	0	0	0	0	0	0	0	0
Dibrugarh	28·0	+1·9	31·7	22	15·9	−0·1	10·4	1	2·0	45·6	−57·5	20·6	13	5	−3·5	3·1	2·5	+0·2	8	0	0	10	0	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	27·5	..	31·7	22	14·3	..	8·3	2	23·6	86·7	..	22·7	13	8	..	6·0	3·8	..	9	0	1	11	0	0	0	0	0	0
North Lakhimpur	27·6	..	31·4	22	14·4	..	8·1	2	8·9	49·2	..	17·3	28	4	..	..	..	..	6	0	1	2	0	0	0	0	0	0
Sibsagar	28·5	+2·3	32·9	25	15·5	−0·1	9·6	2	2·0	8·4	−103.4	4·6	6	1	−7·5	5·1	3·7	−0·2	4	0	0	3	0	0	0	0	0	0
Jorhat	28·8	..	32·8	23	15·0	..	8·9	2	0·3	20·6	..	8·7	12	4	..	..	..	..	5	0	1	9	1	0	0	0	0	0
Golaghat	29·3	..	33·9	23	..	..	..	..	2·0	9·7	..	4·3	6	2	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Gohpur (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tezpur	30·4	+1·8	34·3	23	15.2	−1·6	11·7	15	0	6·6	−42·2	2·8	28	2	−2·5	..	..	..	4	0	0	3	0	0	0	0	0	0
Tezpur (P.B.O.)	29·8	..	34·2	23	15·8	..	11·2	1	0	3·8	..	2·0	6	0	..	4·9	3·1	..	2	0	0	2	0	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	0	17·8	..	17·8	6	1	..	..	..	..	1	0	0	5	0	0	0	0	0	0
Chaparmukh (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tangla	..	..	..	..	..	..	..	..	6.3	6·3	..	6·3	5	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Gauhati	30·3	+0·4	35·1	23	16·7	+1·0	12·2	1	0	6·4	−44.1	6.1	6	1	−2.8	5·6	3·1	0	2	0	0	1	3	1	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	30·4	..	36·2	24	14·8	..	10.3	1	0	4·6	..	4·6	6	1	..	7·9	5·3	..	1	0	0	5	0	0	0	0	0	0
Rangiya	..	..	..	..	..	..	..	..	0	2·3	..	2·3	6	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Goalpara	30·5	..	35·4	23	14·8	..	10·2	1	0	3·3	..	3·3	6	1	..	4·6	2·0	..	1	0	0	0	0	0	0	0	0	0
Dhubri	29·5	−0·5	35·1	23	18·2	+0·9	13·9	1	2·8	11·2	−31.0	6·6	5	2	−0·5	5·5	5·4	−1·8	2	0	0	2	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome).	30·2	..	34·5	23	14·8	..	11·1	1,14	0	0	..	0	..	0	..	8·4	4·8	..	0	0	0	0	0	0	0	0	0	0
Tura	29·3	..	33·7	23	18·0	..	12·8	1	0	15·5	..	15·5	6	1	..	7·3	6·6	..	1	0	0	0	0	0.	0	0	0	0
Agartala	31·7	..	36·1	26	16·5	..	10·0	1	0	1·6	..	0·8	6,30	0	..	6·7	5·7	..	2	0	0	1	1	0	0	0	0	0
Silchar	30·8	+0·5	34·5	26	16·3	−0·9	12·5	1	17·3	8·1	−163·6	3·6	15	2	−6·1	3·2	1·5	−1·6	4	0	0	4	0	0	0	0	0	0
Imphal	26·4	..	29·8	29	9·6	..	4·3	4	15.0	5·4	..	2·1	7	0	..	12·7	7.7	..	3	0	0	1	0	0	0	0	0	0
Haflong	26·0	..	29·2	28	15·3	..	10·7	1	25·4	19·7	..	9·1	6	3	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Lumding	30.8	+0·7	36.2	23	12.9	−1·7	8.4	15	16.6	15·8	−29.9	6.9	14	2	−2.3	5.7	3.1	..	6	0	1	4	0	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar (C.W.O.)	29·7	..	33·2	24	14·2	..	11·2	14	0	4.1	−37.6	2·5	6	1	−1·5	6·3	3·3	..	3	0	0	3	0	0	0	0	0	0
Jalpaiguri	28·1	−1·5	33·3	24	16·4	+0·7	12·4	21	0	17·0	−15·3	15·7	6	1	−1·3	7·6	5·1	+2·2	3	0	0	2	0	0	0	0	0	0
Bagdogra	29·6	..	33·9	24	13·1	..	9·4	1	0	5·3	..	5·3	6	1	..	8·2	4·4	..	1	0	0	6	3	0	0	0	0	0
Malda	31·0	−1·3	35·6	20,21	17·5	+1·1	11.1	1	3·6	23·7	+4·1	20·9	6	2	+0·7	8·6	5·4	−0·6	2	0	0	2	0	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	32·7	..	37·3	22	19·3	..	12·2	1	0·3	0·6	..	0·3	5,6	0	..	6·8	5·1	..	2	0	0	2	2	0	0	0	0	0
Calcutta	33·0	−0·6	37·4	22	20·2	−0·2	13·7	1	0·6	3·2	−31·3	1·0	31	0	−2·3	6·3	4·7	−0.9	5	0	0	4	5	0	0	0	3	0
Barrackpore	32·2	..	36·8	21	18·6	..	11·0	1	0·8	6·1	..	4.3	4	1	..	..	..	..	3	0	0	2	3	0	0	0	0	0
Saugor Island	29·8	−0·5	34·4	28	22·8	−0·6	15·1	1	0	2·8	−30·0	2·3	4	0	−1·8	..	..	..	2	0	0	0	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	6·9	6·9	−13·9	6·9	5	1	0	..	..	..	1	0	0	0	0	0	0	0	0	0
Contai	32·0	..	36·7	23,24,26	20·7	..	14·7	1	3.3	5·6	..	2·0	6	0	..	9·6	6·5	..	4	0	0	0	0	0	0	0	0	0
Midnapore	32·8	−2·3	38·4	21,22	19·6	−1·2	13·2	1	0·8	7·7	−28·1	3·1	6	2	−0·4	6·2	5·0	+0·8	5	0	0	1	0	0	0	0	0	0
Purulia	31·3	..	37·2	20	18·4	..	13·5	1	0	25·9	..	20·6	25	2	..	7·2	4·6	..	3	0	0	2	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	2·5	−25·2	2·5	26	1	−0·9	..	..	..	1	..	..	..	..	..	..	..	..	..
Burdwan	31·0	−3·1	36·9	21	19·4	−0·3	15·5	2	0	10·9	−28·7	10·9	12	1	−1·3	12·1	9·5	+6·3	1	0	0	0	0	0	0	0	0	0
Krishnagar	33·7	0	38·9	21	17·9	−0·8	11·6	1	0·8	19·3	−19·3	15·2	6	1	−1·1	5·3	3·8	−0·9	4	0	0	0	0	0	0	0	0	0
Asansol	31·7	−2·6	37·2	20	18·8	0	12·8	1	2·8	7·9	−12·9	4·3	12	1	−0·8	10·3	6·9	+0·1	4	0	0	4	0	0	0	0	0	0
Suri	32·0	..	37·3	21	18·9	..	12·7	1	0	12·7	..	11·9	6	1	..	10.5	7·5	..	2	0	0	0	1	0	0	0	0	0
Berhampore	32·3	−1·1	36·8	20	18·4	−0·1	12·1	1	0	6·1	−20·3	6·1	6	1	−0·9	2·9	1·7	−1·8	1	0	0	0	0	0	0	0	0	0
Orissa																												
Baripada	33·8	..	39·9	21	..	..	..	..	2·3	18·2	..	9·1	4	2	..	4·2	2·7	..	5	0	0	3	0	0	0	0	0	0
Balasore	32·2	−1·5	37·7	21	20·1	−0·7	14·9	1	4.6	7·9	−38·8	5·6	31	1	−1·9	11·5	6·6	+0·3	5	0	0	6	0	0	0	0	0	0

(R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (or 3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Gangetic West Bengal—*Contd.*																												
Chandbali	29·3	−4·9	33·6	21,23	20·6	−0·9	16·1	1	26·7	59·7	+26·9	26.7	31	4	+1·9	11·7	8·4	−1·3	4	0	0	3	0	0	0	0	0	0
Cuttack	34·2	−1·7	38·9	26	21·3	−0·8	17·8	7	6·6	8·1	−18·3	3·8	5	1	−0·4	5·3	4·5	+0·6	4	0	0	1	1	0	0	0	0	0
Bhubaneswar	33·6	..	38·3	25,26	20·7	..	18·1	15	26·6	33·7	..	25·4	3	3	..	12·9	11·8	..	4	0	0	4	0	0	0	0	2	0
Puri	30·4	+0·2	34·5	28	23·0	−1·2	19·8	1	16.5	25·9	+13·2	15·2	13	3	+2·1	17·7	15·9	−0·2	4	0	0	2	0	0	0	0	0	0
Gopalpur	30·7	+0·1	35·9	30	21·8	−0.9	19.4	16	12·2	108·0	+92·0	95·8	3	2	+0.9	16·1	13·8	−2.0	2	0	0	6	1	0	0	0	1	0
Koraput	29·9	..	33·9	27,29	16·7	..	13·9	7,31	15·0	30·8	..	15·0	29	4	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Titilagarh	31·7	..	37·8	25	19·6	..	15·3	8	6·6	59·0	..	25·9	4	5	..	4·3	3·2	..	7	0	0	8	0	0	0	0	0	0
Bolangir	..	..	..	..	..	..	..	..	11·7	12·0	..	11·4	4	1	..	(i) 8·0	(j) 6·0	..	3	0	0	0	0	0	0	0	0	0
Angul	32·4	−3·0	38·1	21	19·3	−0·8	15·1	15	2·5	25·0	+6·5	8·6	4	4	+2·3	8·0	6·8	+0·2	4	0	0	3	0	0	0	0	0	0
Sambalpur	32·0	−3·4	38·6	25	18·1	−1·2	13·9	8	0	29·0	+7·2	8·9	26	5	+3·3	6·3	4·4	+0·4	6	0	0	0	0	0	0	0	0	0
Jharsuguda	31·7	..	37·7	25	16·9	..	12·9	1	7·6	23·3	..	8·7	26	2	..	8·2	6·5	..	9	0	0	8	0	0	0	0	1	0
Chota Nagpur																												
Jamshedpur	32·2	−2·2	38·4	21	18·6	+0·4	12·7	1	7·1	12·5	−5·8	6·3	29	2	0	7·9	5·6	+1·3	5	0	0	7	0	0	0	0	0	0
Jamshedpur (P.B.O.)	32·3	..	38·5	21	18·5	..	12·7	1	6·3	13·2	..	8·9	26	1	..	..	..	..	6	0	0	8	0	0	0	0	0	0
Chaibasa	32·2	−2·4	37·9	21	18·1	−0·7	12·3	1	0	17·0	−5·1	7·1	26	3	+1·3	4·7	2·8	−0·4	4	0	0	2	0	0	0	0	0	0
Ranchi	29·4	−1·1	33·7	23,24	14·3	−3·1	9·8	2	2·6	35·1	+4.9	17·5	12	3	+0·5	4·8	3·5	−3·5	6	0	0	2	0	0	0	0	0	0
Ranchi (C.W.O.)	28·3	..	34·6	20	15·5	..	10·4	1	6·5	22·1	..	8·9	12	3	..	(e) 14·0	(f) 10·0	..	8	0	0	7	0	0	0	0	1	0
Daltonganj	30·7	−2·2	38·3	20	16·0	+0·5	9·7	1	3·8	17·8	+0·8	11·2	26	2	+0·4	..	..	..	5	0	0	5	0	0	0	1	0	0
Hazaribagh	28·8	−2·1	34·9	20	15·5	−1·8	8·4	1	37·3	59·1	+35·2	36·5	6	3	+1·1	11·3	8·7	−1·6	5	0	0	0	0	0	0	0	0	0
Dhanbad	31·3	..	37·3	20	18·7	..	13·3	1	0	19·1	..	10·2	6	2	..	3·6	3·0	..	3	0	0	6	20	0	0	0	0	0
Bihar																												
Purnea	30·9	−1·0	34·8	25	14·8	−0·4	7·8	1	0	5·1	−7·6	4·3	6	1	−0·1	8·4	4·3	−0·2	2	0	0	1	0	0	0	0	0	0
Forbesganj	31·2	..	35·1	21,22	14·3	..	9·4	1	8·1	17·0	..	8·9	6	2	..	10·9	6·8	..	2	0	0	3	0	0	0	0	0	0
Darbhanga	30·4	−1·2	35·2	20	15·9	+0·1	10·7	1	6·9	7·9	−5·0	6·9	31	1	−0·1	4·5	2·0	−2·3	2	0	0	1	0	0	0	0	0	0
Motihari (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muzaffarpur	..	..	..	..	..	..	..	..	..	0	−9·7	0	..	0	−0·9	..	..	..	0	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	9·4	+0·3	9·4	6	1	+0·1	..	..	..	1	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	76·5	+66·8	76·5	6	1	+0·1	..	..	..	1	..	..	..	..	..	..	..	..	..
Patna	31·8	−0·3	37·6	20	18·0	+0·1	11·6	1	0	2·0	−8·7	1·0	6,12	0	−1·1	9·5	7·4	+1·8	2	0	0	3	0	0	0	0	0	0
Patna (Aerodrome)	30·3	..	36·6	20	16·1	..	10·4	1	0	2·5	..	2·0	12	0	..	9·3	4·7	..	2	0	0	4	0	2	0	0	0	0
Dehri	30·9	..	38·3	20	17·9	..	12·2	1	2·3	16·0	+4·8	7·6	6	3	+2·0	9·0	6·0	..	3	0	0	2	0	0	0	0	0	0
Gaya	31·0	−2·2	37·8	20	16·6	−0·7	9·6	1	3·3	35·9	+23·4	31·8	6	2	+0·8	10·0	14·5	+6·9	2	0	0	3	0	0	0	1	2	0
Jamui	32·2	..	37·7	20	17·4	..	10·1	1	0	4·8	..	4·8	6	1	..	9·5	5·5	..	1	0	0	1	0	0	0	0	0	0
Dumka	32·3	−0·9	37·3	20	18·0	−0·1	11·4	1	0	0	−23·1	0	..	0	−1·6	..	..	..	0	0	0	0	0	0	0	0	0	0
Bhagalpur	31·6	..	36·3	20	18·3	..	12·1	1	0·3	4·1	..	3·8	6	1	..	10·3	6·8	..	2	0	0	1	0	2	0	0	0	0
Sabour	31·6	−1·0	36·5	20	16·0	+0·9	8·2	1	0·8	9·7	−1·0	7·4	6	1	+0·1	(b) 10·3	(b) 5·6	−2·8	3	0	0	5	0	0	0	0	1	0
Uttar Pradesh (East)																												
Gonda	29·6	−2·6	37·7	28	14·8	−0·3	10·4	3	1·3	24·1	+19·5	24·1	6	1	+0·2	7·0	4·1	−3·3	1	0	1	1	0	0	0	0	0	0
Nautanwa	31·1	..	36·1	26	14·7	..	10·4	3	0	17·3	..	9·7	6	2	..	7·4	3·8	..	2	2	0	2	0	0	0	0	0	0
Gorakhpur	29·3	−2·9	35·0	19	16·3	0	11·0	7	0	0	−9·9	0	..	0	−0·8	5·4	1·3	−2·4	0	0	0	0	0	0	0	0	0	0
Azamgarh	31·3	..	35·9	27	16·6	..	12·3	7	0	26·4	..	23·6	5	2	..	..	..	..	2	0	1	0	0	0	0	0	0	0
Ballia	31·3	..	36·6	20	..	..	..	..	5·3	8·9	..	6·1	6	1	..	8·1	4·9	..	4	0	0	1	0	1	0	0	0	0
Varanasi (Banaras)*	30·5	−2·6	37·0	20	16·5	+0·1	11.0	1,15, 16	0	10·5	+1·1	8·4	6	1	+0·1	..	..	..	3	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome)	30·2	..	37·0	20	16·1	..	11·8	8	18·8	22·9	..	11·9	6	3	..	12·0	8·0	..	5	0	0	6	0	0	0	1	1	0
Allahabad (Bamrauli)	31·2	−2·0	37·9	20	16·6	+0·5	11·5	6	7·4	32·1	+17·9	19·6	22	2	+0·7	6·8	4·0	−2·1	5	0	0	8	0	0	0	0	4	0
Banda	32·2	..	38·1	19	16·6	..	11·2	7,8	0	5·9	..	5·6	21	1	..	3·1	1·6	..	2	0	0	0	0	2	0	0	0	0
Fatehpur	29·4	−3·5	35·1	19	15·2	−0·5	8·5	7	0	5·4	−1·7	4·6	24	1	+0·1	..	..	..	2	0	0	2	0	0	0	0	0	0
Kanpur	30·4	−1·5	36·6	19	15·9	+0·3	11·8	6	0·8	13·8	+6·4	5·3	22	2	+1·2	12·9	9·0	−0·7	3	0	0	1	1	0	0	0	0	0
Lucknow*	30·8	−1·9	37·0	19,20	15·5	−0·4	9.0	3	0	1·5	−7·1	1·5	31	0	−0·9	..	..	..	1	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	29·9	−2·4	35·6	19	13·6	−0·5	8·5	8	0·5	4·6	−4·0	2·8	22	1	+0·1	11·3	8·4	..	3	0	0	4	0	0	0	1	1	0
Hardoi	29·4	..	35·8	19	14·6	..	10·3	6	9·7	56·1	..	40·6	5	4	..	8·2	5·0	..	4	0	1	4	0	0	0	0	0	0
Lakhimpur Kheri	29·4	..	34·4	22	15·1	..	10·9	2	13·2	34·3	..	19·8	5	2	..	5·4	3·0	..	3	0	0	2	0	0	0	0	0	0
Bahraich*	29·8	−1·7	34.0	4days	14·9	0	11.0	13	24·2	31·7	+21·8	23·1	6	2	+1·2	..	..	..	4	0	0	0	0	0	0	0	0	0
Uttar Pradesh (West)																												
Orai	30·8	..	37·8	19	14·5	..	8·9	7	0·5	7·1	..	5·6	22	1	..	8·5	7.4	..	3	0	0	0	0	4	0	0	0	0
Jhansi	30·5	−3·1	37·0	19	16·2	−0·5	10·8	6	5·3	13·0	+4·6	6·1	30	2	+1·2	6·2	4·6	−0·5	3	0	0	4	0	0	0	0	0	0
Agra	29·4	−2·2	35·9	18	14·6	0	7·2	5	7·1	72·1	+64·0	36·3	5	4	+3·2	4·4	3·8	−2·2	5	0	0	6	1	2	0	0	0	0

(e) Mean of 26 days. (f) Mean of 25 days. (R) Register not received. (i) Mean of 22 days. (j) Mean of 21 days. (b) Mean of 28 days.

*Data extracted from Indian Daily Weather Reports.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation 0·3 mm. or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West)—*Contd.*																												
Mainpuri*	30·2	—2·0	36·0	18	14·7	0	10·0	3,23	7·6	46.7	+38·1	33·3	22	3	+2·2	..	..	..	4	0	0	0	0	0	0	0	0	0
Aligarh	29·2	—0·9	35·2	19	13·7	—1·0	10·0	7	1·8	10.7	—3·8	6.1	22	1	—0·3	6·2	5·0	—1·9	5	0	0	4	0	1	0	0	0	0
Bareilly	28·9	—1·7	33·9	19	15·5	+0·7	11·1	6	1·8	28.4	+12·9	18·5	5	2	+0·7	4·1	1·9	—2·1	4	0	1	7	0	1	0	0	2	0
Meerut	27·8	—2·1	33·2	18	14·1	+0.1	9·8	2,6	..	29·7	+14·5	9.1	5	5	+3·6	..	2·9	..	5	0	0	0	0	0	0	0	0	0
Najibabad	27·5	..	32·4	19	13·1	..	8·1	1	10·4	20·8	..	10.4	6	3	..	1·8	1·6	..	5	0	0	0	0	0	0	0	0	0
Roorkee	26·9	—1·9	31·7	29	13.5	+0·7	6·9	1	32.3	69·8	+50·0	26.7	21	5	+3·4	5·4	3·7	—0·3	5	0	0	5	0	0	0	0	0	0
Dehra Dun	24·8	—1·5	28·7	20	12·2	—0·1	7·4	6	4·6	27·8	—4·2	12.9	23	5	+2·3	4·9	3·4	0	7	0	0	8	0	0	0	0	0	0
Punjab (I) (Including Delhi)																												
New Delhi	28·0	—2·6	34·2	18	15·1	+0·3	9·2	6	12.5	41.7	+28·8	18.5	5,21	2	+0·7	9·7	7·7	—3·7	6	0	2	8	2	0	0	13	3	0
Hissar	29·1	—1·9	35·6	17	13·3	—0·5	8·4	1	30·0	37.1	+20·8	17·0	11	4	+2·5	6·8	5·6	—1·8	5	0	0	6	0	0	0	0	0	0
Karnal	26·4	..	31·1	29	12.4	..	7·0	6	24.6	45·5	..	13.2	6	5	..	1·4	0·8	..	6	0	0	4	1	1	0	0	0	0
Patiala	27·6	..	32·8	17,18	12.8	..	6·7	6	3·5	10·3	—6·5	4·3	19	3	+1·3	8·8	7·1	..	4	0	0	1	0	0	0	0	0	0
Ambala	27·9	—1·2	32·4	17	..	..	..	..	7·7	18·3	—5·6	4·6	6	5	+3·2	6·4	4·9	—1·1	5	0	0	0	0	0	0	0	0	0
Chandigarh	27·5	..	31·1	19	13·6	..	7·2	1	6·7	20·6	..	3·8	23	4	..	..	..	..	6	0	0	1	0	1	0	0	0	0
Ludhiana	27·9	—0·5	32·4	17,29	12·9	—0·6	7·7	1	7·8	25·8	+1·9	13·2	19	2	+0·2	6·9	4·4	+1·2	4	0	0	0	0	0	0	0	0	0
Ferozepur	26·8	..	30.9	17	11·8	..	7·3	6	8·4	76·3	..	55·1	19	2	..	5·4	3·0	..	2	0	1	2	0	1	0	0	0	0
Amritsar	25·4	..	30·1	29	11·4	..	6·6	1	12·1	48·0	..	10·5	30	5	..	9·6	7·8	..	9	0	0	6	0	1	0	0	0	0
Pathankot	25·7	..	30·2	17	13·0	..	8·9	5	9·9	58·8	..	16·3	19	5	..	5·3	4·7	..	9	0	0	1	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur	25·7	..	30·7	18	10·2	..	6·4	1	35.1	82·5	..	35·6	30	6	..	6·4	5·6	..	7	0	2	11	3	0	0	0	0	0
Mandi	23·9	..	28·2	17	8·6	..	5·0	9	13·6	77·6	..	26·4	19	5	..	4·2	3·4	..	14	0	2	7	4	0	0	2	0	0
Jammu and Kashmir																												
Banihal (R)																												
Srinagar	12·3	—1·5	18·3	29	3·6	+0·2	—0·6	9	52·5	142·6	+50·9	18·0	17	12	+4.6	3·4	3·5	—1·6	16	0	0	1	0	0	0	0	0	0
Gulmarg																												
Sonemarg†											Closed	during	winter	months.														
Dras†																												
Kargil (R)																												
Leh	4·7	—2·1	10·6	18	—6·6	—0·5	—12·8	2	0	2·0	—5·1	2·0	19	0	—0·9	7·5	6·0	+2·8	1	1	0	0	0	0	0	0	0	0
Skardu (R)																												
Gurez	..	..	..	..	..	..	..	..	..	93·9	—137·8	22·9	18	10	—1·3	..	..	..	10	..	..	..	..	..	..	..	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	26·0	—0·1	30·5	22	13.4	—1·8	9·1	18	..	79·2	+27·6	23·1	19	6	+2·3	..	..	..	11	..	..	..	..	..	..	..	..	..
Gond	..	..	..	..	..	..	..	..	..	124·4	..	37·3	18	8	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	16·2	..	5·1	19	3	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	16·4	..	2·3	17,28	0	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Kamgra	..	..	..	..	..	..	..	..	..	1·3	..	1·0	19	0	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	0	..	..	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	4·1	..	1·3	11,23	0	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	20·3	..	15·2	19	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	28·0	—0·3	33·2	29,30	13·7	+2·5	9·5	1	14.5	65.5	+52·6	47.0	5	3	+1·6	5.4	5·4	—3·3	5	0	1	3	0	0	0	0	0	0
Churu	29·5	..	35·3	17	14·3	..	9·9	2	20.4	27.0	..	13.8	5	4	..	9·7	7·9	..	6	0	0	6	0	2	0	0	0	0
Bikaner	30·3	—1·6	35·9	17	14.3	—0·3	6·8	1	0	1.0	—4·8	1·0	18	0	—0·6	8.1	6.2	—0.6	1	0	0	1	0	1	0	0	0	0
Jaisalmer	31·6	..	36·1	17,28	15·6	..	7·3	1	0	0	..	0	..	0	..	15·3	9·2	..	0	0	0	0	1	0	0	0	0	0
Phalodi	29·8	..	35·4	17	14·7	..	9·1	5	6.6	10,2	+6·6	10,2	30	1	+0·6	13·7	10·1	..	1	0	0	3	0	0	0	0	0	0
Jodhpur	32·4	—0·1	37·8	17	17·2	+0·8	9·7	6	0.3	12.2	+9·4	5.8	19	2	+1·8	9·9	8·4	—2·7	5	0	1	3	0	1	0	0	2	0
Barmer	32·8	+0·5	37·1	17,28	18·1	+0·2	12·9	6	0	2.3	—4·0	2,3	29	0	—0·6	..	..	..	1	0	0	2	1	0	0	0	0	0
Rajasthan (East)																												
Alwar	29·2	..	35·5	20	..	..	..	..	0	5.1	..	5.1	11	1	..	..	..	..	1	0	0	2	0	0	0	0	0	0
Sikar	29·4	..	32·9	19,20	15·0	..	9·2	6	0.4	8.2	..	4.2	5	1	..	12·0	7·4	..	5	0	0	0	0	0	0	0	0	0
Jaipur	29·0	—2·3	34·4	19	15·7	+0·8	8·3	5	7.1	38.9	+30·3	31.5	5	3	+2·1	7·9	5·9	—1.0	6	0	1	6	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	28·9	..	34·3	19	15·7	..	9·1	6	2.8	16.8	..	14.0	5	2	..	..	..	..	2	0	1	7	0	0	0	0	0	0
Dholpur	29·4	..	37·8	19	14·8	..	8·9	2	0	83.8	..	26.7	5	5	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Ajmer	29·5	—1·4	34·1	17	14·2	—1·5	7·2	6	2.5	12.4	+6·6	6.1	30	2	+1·3	8·5	6·0	+0·9	3	0	1	3	0	0	0	0	0	0
Kotah	32·0	—1·7	37·8	19	17·4	—1·0	12·2	2,7	6.1	16.3	+12·0	8.4	30	3	+2·5	6·0	3·7	+0·3	4	0	0	3	0	0	0	0	0	0
Chambal	31·3	..	36·7	19	13·3	..	6·4	6	23.9	80.2	..	29.7	30	1	..	9·1	5·8	..	2	0	0	2	0	0	0	0	0	0
Jhalawar	31·6	—1·4	36·6	18	16·3	+0·4	9·4	6	12.9	68.2	24·6	14.2	25	2	+1·4	8·1	6·0	+1.2	3	0	0	3	0	0	0	0	0	0

*Data extracted from Daily Weather Reports.
(R) Register not received.
†Data not available.

Division and station	Air temperature in C								Rainfall in millimetres					No. o rainy days (2·5 mm. or more)		Wind speed, km. per hours			Weather phenomena—Nos of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm or more)	Snow or sleet	Hail	Thunder	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (East)—Contd.																												
Udaipur	30·8	—1·4	33·9	17,18	13·6	—2·2	7·4	6	0	1·6	—0·9	1·8	30	0	—0·3	4·9	3·0	..	2	0	1	2	0	0	0	0	0	0
Erinpura (Jawai Dam).	31·8	..	36·7	17	18·4	..	13·1	5	14·7	18·8	..	16·8	30	1	..	7·8	6·7	..	2	0	0	2	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	30·5	—2·9	38·0	19	15·0	—0·9	8·9	2	5·1	13·1	+7·8	3·3	31	3	+2·0	10·8	6·7	..	7	0	0	8	0	0	0	0	1	0
Sheopurkalan	31·3	..	37·1	18	15·1	..	9·4	2	0	14·7	..	5·8	26	3	..	9·3	7·3	..	4	0	1	3	0	2	0	0	5	0
Guna	30·4	—2·0	35·6	18	15·0	+0·7	8·3	6	3·8	22·4	+9·7	8·4	20	3	+2·1	10·2	6·2	+1·4	6	0	0	10	0	0	0	0	0	0
Rajgarh	32·0	..	37·7	19	15·2	..	8·9	6	12·0	44·2	..	19·3	20	5	..	11·3	8·8	..	5	0	0	2	0	0	0	0	0	0
Neemuch	30·7	—1·9	34·4	17	15·9	—0·3	9·4	6	1·5	8·9	+5·8	6·6	29	1	+0·7	9·8	7·1	—1·1	2	0	0	4	0	0	0	0	0	0
Ratlam	32·2	..	35·8	17,28	16·9	..	9·4	6	3·3	4·6	..	3·8	22	1	..	10·7	9·0	..	2	0	1	2	0	0	0	0	2	0
Alirajpur	35·5	..	36·2	16,17	16·9	..	9·8	7	0	0	..	0	..	0	..	8·0	6·0	..	0	0	0	0	0	0	0	0	0	0
Indore	31·6	—2·5	35·6	18	15·0	—0·2	7·8	6	1·3	2·8	+0·8	1·3	25	0	—0·3	12·8	10·9	..	3	0	0	4	0	0	0	0	0	0
Bhopal (Bairagarh)	30·5	—2·6	35·6	19	15·4	—1·2	8·8	6	32·1	80·8	+72·2	28·5	25	8	+7·2	11·6	10·1	+0·3	9	0	4	13	0	0	0	0	5	0
Khandwa	34·6	—1·7	38·1	18	17·5	—0·6	10·0	7	3·6	20·5	+16·2	8·1	20	4	+3·5	8·4	5·9	—0·7	5	0	0	5	0	0	0	0	0	0
Hoshangabad	31·9	—2·3	36·7	19	18·0	—0·2	12·3	6	0	77·9	+71·8	41·9	3	6	+5·4	3·5	3·5	0	6	0	0	8	0	0	0	0	0	0
Betul	30·2	..	35·3	25	15·	..	8·8	6	72·1	122·6	..	34·5	28	9	..	8·5	6·1	..	9	0	1	11	0	0	0	0	0	0
Chhindwara	29·8	..	36·3	24	15·2	..	8·9	7	5·1	30·3	..	10·2	28	5	..	9·7	6·7	..	6	0	0	7	0	0	0	0	0	0
Seoni	30·0	—3·3	35·1	19,26	15·6	—1·5	9·9	7	20·4	50·0	+29·9	11·2	28	6	+4·0	10·9	7·3	+2·6	8	0	0	10	0	0	0	0	0	0
Sagar	29·7	—3·0	35·6	19	16·1	—2·0	9·1	30	57·1	99·2	+90·8	60·9	29	8	+7·1	8·1	7·2	..	8	0	2	10	0	2	0	0	0	0
Nowgong	31·0	—2·2	38·1	19	13·6	—1·7	7·3	6	0	17·5	+9·9	13·7	22	1	+0·2	8·0	4·9	+1·8	3	0	0	1	0	0	0	0	0	0
Madhya Pradesh (East.)																												
Sutna	29·8	—2·7	36·1	19,20	15·7	—0·6	10·7	6	6·9	46·0	+34·6	16·3	22	6	+4·9	7·6	4·9	—0·1	8	0	0	0	0	0	0	0	0	0
Umaria	30·0	—2·4	36·6	19	14·5	—0·7	7·9	1	8·8	76·8	+59·0	22·4	25	7	+5·3	7·3	4·6	—0·1	13	0	2	13	0	0	0	0	0	0
Jabalpur	30·6	—2·5	36·6	20	15·4	+0·5	10·4	6	66·4	128·7	+114·5	39·4	27	9	+7·6	7·0	4·8	+1·6	13	0	0	14	0	0	0	0	0	0
Mandla	29·9	..	35·8	19,20	13·9	..	7·8	1	23·4	118·9	..	22·9	3	9	..	6·8	3·4	..	10	0	2	11	1	6	0	0	2	0
Pendra	27·8	—2·9	34·8	20	15·5	—1·4	10·3	7	36·2	60·3	+32·6	24·4	4	7	+4·7	11·7	8·2	..	9	0	0	9	0	0	0	0	0	0
Ambikapur	28·4	..	35·2	20	13·8	..	8·2	1	13·8	53·2	..	16·8	4	6	..	11·6	8·6	..	10	0	1	12	0	0	0	0	0	0
Champa	31·8	..	37·8	20	18·3	..	13·2	1	4·1	21·4	..	7·6	12	3	..	5·5	4·2	..	6	0	0	6	0	2	0	0	0	0
Raigarh	32·2	..	38·3	20,24	18·9	..	13·9	1	12·8	25·0	..	9·4	27	4	..	6·6	5·1	..	7	0	0	2	0	1	0	0	0	0
Raipur	31·7	—3·4	37·3	20	18·5	—1·5	14·1	1	9·6	75·7	+57·7	24·9	4	8	+6·3	8·3	6·6	—0·2	9	0	0	6	0	0	0	0	0	0
Kanker	31·0	—3·2	35·7	25	17·8	—0·8	11·9	7	4·1	87·2	+65·6	48·3	4	5	+2·9	5·8	4·0	—1·1	7	0	0	6	0	0	0	0	0	0
Jagdalpur (P.B.O.)	33·2	—1·4	37·2	24	18·1	—0·2	13·3	7	3·8	38·2	+24·7	17·5	28	3	+1·8	6·8	4·5	..	6	0	0	8	0	0	0	0	0	0
Gujarat																												
Deesa	33·4	..	36·8	16	16·9	..	11·2	6	0	0·5	..	0·5	28	0	..	9·5 (a)	8·0	..	1	0	0	3	0	0	0	0	0	0
Idar	32·5	..	36·4	28	19·2	..	10·2	6	0	0	..	0	..	0	..	9·8	8·3	..	0	0	0	1	0	0	0	0	0	0
Ahmedabad	33·5	—2·6	37·7	28	17·1	—0·9	11·5	6	0	0	—1·3	0	..	0	—0·2	10·6	6·9	—0·7	0	0	0	0	0	0	0	0	0	0
Dohad	32·7	—1·9	36·7	28	17·9	+0·2	12·1	7	0	0	—1·5	0	..	0	—0·2	11·1	10·8	+5·5	0	0	0	1	0	0	0	0	0	0
Baroda	34·8	—0·8	38·9	16,28	16·5	+1·0	9·4	6	0	0	—0·5	0	..	0	0	5·1	3·9	—0·4	0	0	0	0	0	0	0	0	0	0
Baroda (Aerodrome)	34·4	..	38·5	28	17·7	..	10·9	6	0	0	..	0	..	0	..	8·6	6·6	..	0	0	0	0	0	0	0	0	0	0
Broach	35·1	..	39·4	15	18·5	..	11·5	6	0	0	..	0	..	0	..	6·9	6·1	..	0	0	0	0	0	0	0	0	0	0
Surat	34·0	—1·6	40·1	15	19·2	—0·2	13·9	7	0	0	—0·3	0	..	0	—0·1	8·4	7·0	+1·7	0	0	0	0	0	0	0	0	0	0
Saurashtra and Kutch																												
Bhuj	32·9	—0·9	37·8	28	17·2	—0·7	11·6	5	0	0	—2·8	0	..	0	—0·2	8·3	6·5	—2·5	0	0	0	1	0	0	0	0	0	0
Bhuj (P.B.O.)	..	..	..	..	..	..	..	..	0	0	..	0	..	0	..	6·4	4·6	..	0	0	0	1	0	0	0	0	0	0
Bhuj (Aerodrome)	32·6	..	36·9	28	17·5	..	11·1	5	0	2·0	..	2·0	11	0	..	10·7	9·8	..	1	0	0	1	0	0	0	0	0	0
Kandla	31·4	..	37·8	28	19·1	..	14·3	6	0	0	..	0	..	0	..	12·5	12·8	..	0	0	0	0	0	0	0	0	0	0
Mandvi	28·2	..	35·0	28	17·8	..	13·2	5	0	0	..	0	..	0	..	20·9	18·1	..	0	0	0	0	4	0	0	0	0	0
Dwarka	26·9	—1·0	32·0	26	20·9	—0·5	15·9	5	0	0	—2·8	0	..	0	—0·2	16·7	15·9	+0·8	0	0	0	0	0	0	0	0	0	0
Porbandar	29·3	..	36·9	27	18·9	..	13·2	6	0	0	..	0	..	0	..	15·5	13·1	..	0	0	0	0	3	0	0	0	0	0
Porbandar(Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	3	0	0	0	0	0
Jamnagar	..	..	..	..	17·4	+0·5	12·1	7	0	0	—2·0	0	..	0	—0·1	..	..	..	0	0	0	0	0	0	0	0	0	0
Rajkot (Aerodrome)	33·6	—1·5	37·9	28	16·5	— ·2	9·4	7	0	0	—1·5	0	..	0	—0·1	15·8	14·4	+4·7	0	0	0	0	3	0	0	0	0	0
Surendranagar	33·8	..	38·3	28	18·6	..	12·9	2	0	0	..	0	..	0	..	10·7	10·1	..	0	0	0	0	0	0	0	0	0	0
Bhavnagar	33·7	—1·7	37·2	15,28	18·2	—0·5	11·8		0	0	—2·8	0	..	0	—0·2	10·4	8·7	+1·0	0	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome)	32·5	..	36·5	15	18·6	..	13·1	6	..	0	..	0	..	0	..	..	14·8	..	0	0	0	0	0	0	0	0	0	0
Mahuva	31·4	..	35·5	15	18·2	..	12·5	2	0	0	..	0	..	0	..	(c) 9·7	(f) 7·3	..	0	0	0	0	0	0	0	0	0	0
Kodinar	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	16·1	13·5	..	..	0	0	0	4	0	0	0	0	0
Veraval	28·8	..	33·6	15	17·0	..	10·7	6	0	0	—1·3	0	..	0	—0·3	21·0	17·1	..	3	0	0	0	23	0	0	0	0	0

(a) Mean of 20 days. (c) Mean of 26 days. (f) Mean of 23 days.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—MARCH, 1957.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5 mm. or more)		Wind speed (km. per hour)			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan																												
Dahanu	28·0	—2·2	30·8	29	18·9	—1·2	14·8	7	0	0	0	0	..	0	0	20·5	13·5	+0·3	0	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	29·3	—0·8	30·6	30	21·3	—0·9	18·4	7	0	0	—1·3	0	..	0	—0·1	13·9	10·4	—1·2	0	0	0	0	0	0	0	0	0	0
Bombay (Santa Cruz Aerodrome)	30·0	—1·2	32·9	9	19·1	+0·2	14·1	7	0	0	—1·3	0	..	0	—0·1	17·1	10·5	..	0	0	0	0	1	0	0	0	0	0
Alibag	28·1	—1·6	29·6	30	19·7	—1·1	16·8	7	..	0	—0·5	0	..	0	—0·1	..	10·2	+0·5	0	0	0	0	0	0	0	0	0	0
Harnai	26·5	—2·6	27·8	10	22·1	—1·7	19·4	7	0	0	0	0	..	0	0	21·2	15·9	—0·5	0	0	0	0	0	0	0	0	0	0
Ratnagiri	29·4	..	30·7	29	20·8	..	16·8	6	0	0	—0·8	0	..	0	—0·1	..	..	..	0	0	0	0	0	0	0	0	0	0
Devgad	28·9	—1·9	30·8	29	22·1	—1·8	18·7	6	0	0	—2·5	0	..	0	—0·2	21·2	16·6	+1·2	0	0	0	0	0	0	0	0	0	0
Vengurla	30·5	..	32·4	2	20·3	..	15·9	6	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Maharashtra																												
Jalgaon	35·6	..	38·6	24,28	18·6	..	9·8	6	0	10.9	+7·1	7·1	16	2	+1·5	10·0	8·2	..	3	0	0	2	0	0	0	0	0	0
Malegaon	35·1	—1·3	37·6	28	17·1	0	8·6	6	0	0	—2·0	0	..	0	—0·3	8·1	7·2	—1·0	0	0	0	3	0	0	0	0	0	0
Deolali	33·5	..	35·8	18,19	15·4	..	7·2	6	0	0	..	0	..	0	..	10·1	7·9	..	0	0	0	0	0	0	0	0	0	0
Aurangabad	34·1	—1·4	36·7	24,25	18·6	—0·8	11·8	6,7	0	4·7	—0·4	3·1	21	1	+0·5	10·6	10·1	+0·1	3	0	0	4	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	33·6	..	36·3	24	16·4	..	7·1	7	22.4	31·5	..	12·5	16	3	..	11·2	8·4	..	5	0	0	5	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	0	0	0	..	0	0	..	..	..	0	..	..	..	..	..	..	..	..	..
Ahmednagar	34·0	—1·2	36·1	20,25	16·9	—0·4	9·4	4	4·6	4·6	—0·7	4·6	30	1	+0·7	9·0	6·9	—1·6	1	0	0	0	0	0	0	0	0	0
Parbhani	34·9	..	37·9	26,27	18·9	..	11·6	6	11·1	36·9	+30·0	13·5	29	4	+3·	11·2	8·9	..	6	0	0	4	0	0	0	0	0	0
Poona	35·3	—0·8	37·9	20	16·4	—0·1	10·1	6	0	0	—1·5	0	..	0	—0·2	4·9	3·5	—4·7	0	0	0	0	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	34·1	..	36·2	18	16·9	..	11·3	4	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Baramati	35·1	..	37·3	25	17·7	..	11·1	6	0	5·3	..	3·3	15	1	..	9·2	8·5	..	2	0	0	2	0	0	0	0	0	0
Jeur	35·5	..	37·3	25,27	18·0	..	10·4	6	0	4·8	..	4·8	16	1	..	12·9	9·7	..	1	0	0	0	0	0	0	0	0	0
Sholapur	35·4	—1·9	37·4	20	20·6	—0·1	13·8	6	0	0	—5·8	0	..	0	—0·5	12·2	10·1	+0·9	0	0	0	2	0	0	0	0	0	0
Miraj	34·7	—0·6	36·3	23	17·3	—0·8	11·2	6	0·5	2·3	—1·5	1·8	17	0	—0.7	9·1	8·6	+0·1	2	0	0	0	1	1	0	0	0	0
Kolhapur	34·7	..	36·7	26	17·0	..	12·8	6	0	22·3	..	22·3	17	1	..	9·8	9·7	..	1	0	0	1	0	0	0	0	0	0
Vidarbha																												
Buldana	32·2	..	35·7	25	19·1	..	14·8	5	11.7	18·1	..	11·2	16	2	..	11·0	9·9	..	5	0	0	0	0	0	0	0	0	0
Akola	35·1	—2·0	39·1	25	19·3	+0·4	9·8	7	38·9	51·0	+41·9	38·6	30	2	+1·3	10·1	8·5	+2·7	3	0	0	6	0	0	0	0	0	0
Amravati	33·5	—2·9	38·5	25	19·2	—1·6	13·2	6	71·4	81·3	+72·4	51.6	2	5	+4·2	11·8	9·9	+3·1	7	0	0	6	0	0	0	0	0	0
Yeotmal	32·9	..	38·0	26	19·0	..	14·4	6	18.1	72·2	..	29·7	10	4	..	8·5	6·2	..	7	0	1	9	0	0	0	0	0	0
Nagpur	32·5	—4·0	37·7	20,26	17·3	—1·9	12·4	6	55·3	104·2	+89·0	39·1	30	8	+6·5	11·9	9·9	..	10	0	3	12	0	0	0	0	6	0
Gondia	31·3	..	36·1	4 days	18·0	..	13·1	7	13·5	43·5	..	10·9	5	7	..	6·3	4·1	..	9	0	1	9	0	1	0	0	0	0
Brahmapuri	31·8	..	36·3	20,26	18·9	..	13·5	6	43·0	126·7	..	47·5	3	8	..	7·6	5·8	..	9	0	0	3	0	0	0	0	0	0
Chanda	33·5	—3·6	37·8	26	19·2	—0·2	12·3	6	20·4	87·7	+68·1	26·9	29	6	+4·8	7·5	5·7	+1·8	7	0	0	7	0	0	0	0	0	0
Sironcha	35·4	..	39·2	23	21·4	..	14·9	6,7	0·5	13·5	..	6·6	30	2	..	8·0	5·9	..	4	0	0	5	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	32·6	—2·0	34·8	19	22·6	—0·1	19·9	22	0	3·1	—1·2	3·1	7	1	+0·7	12·8	8·5	+1·6	1	0	0	1	0	0	0	0	0	0
Ongole	30·4	..	33·3	26	22·8	..	20·9	22	0	0	..	0	..	0	..	10·4	7·9	..	0	0	0	0	0	0	0	0	0	0
Rentachintala	35·6	—1·8	38·3	20	21·6	—2·6	18·4	22	0	7·9	+5·6	7·9	8	1	+0·7	8·6	7·0	—2·3	1	0	0	2	0	0	0	0	0	0
Gannavaram	33·9	..	35·7	19	21·9	..	18·6	8	0	46·7	..	46·7	8	1	..	16·3	11·1	..	1	0	0	1	0	0	0	0	0	0
Masulipatam	30·7	—1·8	33·4	26	22·8	+0·4	20·3	21	45·0	45·0	+34·3	41·4	7	2	+1·5	13·8	8·9	+2·0	2	0	0	2	4	0	0	0	0	0
Nidadavolu	33·7	..	35·3	19	21·8	..	20·1	22	9·2	18·6	..	5·3	8	4	..	7·9	5·2	..	6	0	0	3	0	0	0	0	0	0
Kakinada	31·8	—1·4	35·0	25	22·6	—0·5	20·6	1	0·5	0·5	—11·7	0·5	8	0	—0·7	13·6	9·4	+2·2	1	0	0	1	0	0	0	0	0	0
Visakhapatnam	33·0	—1·3	36·7	26	22·4	—0·3	19·8	18	31.3	32·1	+20·2	30·8	31	1	+0·2	16·3	9·2	+1·0	3	0	0	3	1	0	0	0	0	0
Calingapatam	30·7	—1·9	33·4	18,30	22·1	—0·6	19·6	18	0	39·4	+28·2	38·1	3	1	+0·4	16·4	10·4	+0·3	2	0	0	2	1	0	0	0	0	0
Telangana																												
Ramagundam	35·5	..	38·6	20	22·0	..	15·6	6	0	13·4	..	11·7	30	1	..	9·6	7·5	..	4	0	0	4	1	0	0	0	0	0
Nizamabad	34·4	—2·4	38·3	26	21·0	+0·5	13·3	6	0	18·5	+8·3	11·7	30	2	+1·2	7·9	6·8	+2·5	4	0	0	0	0	0	0	0	0	0
Mahabub Nagar	33·9	..	36·2	26	20·2	..	16·7	28	0	0	..	0	..	0	..	10·7	9·3	..	0	0	0	1	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	32·2	—2·9	35·0	26	19·2	—0·4	13·2	6	48·5	51·6	+39·9	48·5	12	1	+0·1	15·0	11·4	+3·0	5	0	1	3	0	0	0	0	3	0
Hakimpet	31·2	..	35·1	25	19·6	..	16·7	8	7·4	20·3	..	8·6	8	4	..	..	..	..	5	0	0	2	0	0	0	0	0	0
Hanamkonda	34·0	—1·6	36·6	25	21·1	—0·7	17·3	7	10·9	14·7	+8·0	10·9	17	2	+1·2	12·0	10·8	+2·4	2	0	0	2	0	0	0	0	0	0
Bhadrachalam	35·6	..	38·4	19	22·2	..	20·1	7	0	14·0	..	8·9	5	2	..	9·8	9·0	..	2	0	1	1	0	0	0	0	0	0
Khammameth	35·0	..	37·7	19	22·2	..	19·7	8	0	0	..	0	..	0	..	9·3	8·1	..	0	0	0	0	0	0	0	0	0	0
Rayala Seema																												
Arogyavaram	31·5	..	33·3	14	18·1	..	14·8	22	0	21·1	..	18·0	7	2	..	10·0	8·9	..	2	0	0	1	0	0	0	0	0	0
Cuddapah	35·9	—2·4	37·3	20	22·6	+1·2	19·8	20	0	0	—4·6	0	..	0	—0·3	13·9	10·7	—1·5	0	0	0	0	0	0	0	0	0	0
Anantapur	35·2	..	36·7	20	21·5	..	16·5	25	0	0	—3·8	0	..	0	—0·3	8·7	9·4	..	0	0	0	0	0	0	0	0	0	0
Kurnool	36·1	—1·7	38·6	21,26	22·0	—0·2	17·4	6	0	0	—5·3	0	..	0	—0·4	11·8	9·6	+3·3	0	0	0	1	0	0	0	0	0	0

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—MARCH, 1957.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days, (2·5 mm or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras																												
Palayamcottai	35·5	..	37·3	7	24·0	..	22·3	20	9·7	49·6	+23·2	36·3	31	3	+1·0	11·7	8·9	..	3	0	0	1	0	0	0	0	0	0
Tuticorin	28·6	..	30·2	14	24·2	..	22·2	3,24	0	62·2	..	62·2	3	1	..	20·6	17·6	..	1	0	0	0	0	0	0	0	0	0
Pamban	29·2	—2·2	31·0	7	24·4	—0·4	21·2	20	0	0	—18·3	0	..	0	—1·4	10·7	9·6	+0·7	0	0	0	0	0	0	0	0	0	0
Mathurai	34·7	—0·5	36·1	8	23·3	+0·8	20·8	20	0	0·8	—17·0	0·8	9	0	—1·0	7·2	6·2	+0·7	1	0	0	1	0	0	0	0	0	0
Nagapattinam	29·5	—1·7	33·9	31	24·2	+0·4	21·1	22	0	0	—20·1	0	..	0	—1·0	14·8	15·3	+5·2	0	0	0	0	0	0	0	0	0	0
Tiruchirapalli	34·1	—1·7	36·4	8	22·1	—0·2	18·9	20	0	0	—9·1	0	..	0	—0·7	8·3	8·6	+1·0	0	0	0	1	0	0	0	0	0	0
Coimbatore	33·3	—1·9	35·1	29	21·8	+0·6	19·3	19	0·5	0·5	—12·2	0·5	16	0	—0·9	8·5	6·8	+2·8	1	0	0	0	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome).	33·8	..	35·1	23,29	21·1	..	17·8	19	0	0	..	0	..	0	..	12·0	12·0	..	0	0	0	1	0	0	0	0	0	0
Salem	34·8	—1·9	36·1	8	21·8	—0·1	18·3	19	1·8	14·7	+2·2	12·9	8	1	+0·1	7·8	11·2	+4·0	2	0	0	2	0	0	0	0	0	0
Kallakurichi	34·7	..	36·7	7	22·1	..	19·1	19	0·5	21·2	..	21·1	7	1	..	..	..	..	1	0	0	1	0	0	0	0	0	0
Cuddalore	30·3	—1·0	31·1	15,28	22·4	—0·2	19·4	19,22	0	0	—17·5	0	..	0	—0·6	9·8	7·6	+1·0	0	0	0	0	0	0	0	0	0	0
Vellore	32·9	—1·7	33·8	7,19,20	21·1	+0·1	17·0	20	36·8	37·3	+30·4	36·8	5	1	+0·5	8·5	8·3	+3·3	2	0	0	3	0	0	0	0	0	0
Madras	31·6	—1·4	33·5	19	22·8	+0·4	20·3	22	0	0	—7·4	0	..	0	—0·4	14·0	9·3	—1·3	0	0	0	0	0	0	0	0	0	0
Madras (Nungambakkam).	30·5	..	31·9	19	22·5	..	19·2	22	..	0	..	0	..	0	..	..	5·7	..	0	0	0	0	0	0	0	0	0	0
Coastal Mysore																												
Karwar	29·2	..	30·0	3,10, 24	20·8	..	17·7	6	0	3·8	+3·8	3·8	1	0	+1·0	..	..	..	1	0	0	0	0	0	0	0	0	0
Honavar	30·5	—1·7	31·3	15,24	21·4	—1·5	18·8	8	0	0	—0·3	0	..	0	0	9·9	8·3	+3·2	0	0	0	0	0	0	0	0	0	0
Mangalore	30·6	—1·4	31·6	20	24·2	—0·1	21·6	7	0	0	—5·3	0	..	0	—0·3	12·2	10·6	+2·7	0	0	0	0	0	0	0	0	0	0
Mangalore (Bajpe Aerodrome)	32·2	..	33·9	25	22·6	..	20·1	7	0	0	..	0	..	0	..	..	..	..	0	0	0	1	0	0	0	0	0	0
Mysore (North)																												
Bidar	32·7	—2·2	35·5	25	20·0	—2·1	17·2	8	5·8	31·9	+21·2	10·4	31	4	+2·8	15·4	13·3	+3·3	5	0	0	0	0	0	0	0	0	0
Gulbarga	35·1	—2·2	37·2	25	20·9	—0·5	17·2	7	0·8	24·0	+14·6	12·5	15	2	+1·2	16·3	12·1	+2·9	4	0	0	2	..	..	..	..	..	..
Bijapur	34·3	—1·8	36·3	25	19·7	—1·5	14·1	11	0	21·6	+16·3	19·8	2	1	+0·4	8·0	6·3	—0·1	2	0	0	2	0	0	0	0	0	0
Belgaum	32·8	—1·4	34·4	24	15·5	—2·1	10·0	8	4·1	4·1	—6·3	2·8	21	1	+0·1	8·9	5·5	+0·2	2	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	33·8	—1·5	35·2	27	16·3	—1·8	10·4	8	0·8	0·8	—9·6	0·5	21	0	—0·9	9·9	6·9	+0·2	2	0	0	1	3	0	0	0	0	0
Belgaum (Sambre Aerodrome).	33·4	..	34·8	24,25	17·1	..	9·4	8	1·0	4·8	..	2·5	18	1	..	16·8	12·8	..	3	0	0	3	7	0	0	0	0	0
Gadag	34·9	+0·4	36·3	26	20·4	0	17·8	7,8	0	0·8	—4·8	0·8	16	0	—0·7	8·1	6·6	—1·3	1	0	0	1	0	0	0	0	0	0
Raichur	35·0	—1·9	37·2	26	22·9	—0·3	17·3	6	0	2·8	—0·8	2·0	3	0	—0·4	9·0	9·0	+0·1	2	0	0	2	0	0	0	0	0	0
Mysore South																												
Bellary	35·0	—2·5	36·1	5 days	21·8	—0·6	18·9	6	14·8	11·7	+6·4	11·7	17	1	+0·4	7·0	4·6	—0·7	1	0	0	1	0	0	0	0	0	0
Chitaldrug	33·4	—1·5	34·5	15	20·7	—0·6	17·8	23	0	0	—4·3	0	..	0	—0·4	6·6	4·9	—1·4	0	0	0	1	0	0	0	0	0	0
Shimoga	34·5	..	35·6	24,30	18·6	..	14·5	7	0·0	0·8	..	0·8	30	0	..	5·7	3·7	..	1	0	0	1	3	0	0	0	0	0
Balehonnur	31·0	+0·2	32·8	24	17·3	+0·2	14·7	8	..	1·5	—30·0	1·0	18	0	—1·8	..	..	..	2	0	0	0	0	0	0	0	0	0
Hassan	31·9	—1·2	33·1	13	18·1	+0·8	16·6	7,8,24	0	15·8	+6·4	12·5	16	2	+1·4	5·4	5·0	—0·1	2	0	0	3	0	0	0	0	0	0
Mysore	32·4	—1·9	34·4	7	20·5	+0·7	18·8	24	0	27·0	+14·1	26·2	16	1	+0·2	8·4	7·7	+0·3	2	0	0	2	0	0	0	0	0	0
Bangalore (Central Aerodrome).	31·0	—1·4	32·8	7	18·3	+0·2	14·3	23	1·5	19·8	+9·6	12·8	8	2	+1·2	9·5	9·5	+2·3	3	0	0	3	0	0	0	0	0	0
Bangalore (Aerodrome).	32·0	..	33·3	21	18·1	..	15·4	23	0	6·1	..	2·8	8	1	..	..	..	..	3	0	0	2	0	0	0	0	0	0
Kerala (including Laccadives).																												
Kozhikode	32·1	—0·2	33·9	22	24·1	+0·4	22·7	7	0	0·8	—16·5	0·8	17	0	—0·8	13·5	12·7	+2·1	1	0	0	1	0	0	0	0	0	0
Palghat	36·4	..	38·3	23,29	23·8	..	21·7	19	21·3	25·4	..	21·3	16	2	..	9·0	7·3	..	2	0	0	1	0	0	0	0	0	0
Fort Cochin	31·0	—0·1	32·4	22	26·3	+0·7	25·4	28	0	14·6	—36·5	13·5	28	1	—1·8	12·4	7·8	—1·1	3	0	0	3	0	0	0	0	0	0
Cochin (Naval Air Station).	31·9	..	32·8	16	24·6	..	22·9	4	2·3	22·0	..	7·5	18	4	..	10·5	6·0	..	5	0	0	9	0	0	0	0	1	0
Alleppey	31·9	..	33·6	1	24·4	..	22·8	27	0	131·8	..	38·1	28	6	..	17·3	12·6	..	12	0	0	9	0	0	0	0	0	0
Punalur	35·7	..	37·1	9	22·1	..	17·9	19	47·0	81·3	..	28·2	9	6	..	7·0	4·1	..	7	0	0	0	0	0	0	0	0	0
Trivandrum	32·3	—0·1	33·3	19	24·2	0	22·1	19	1·3	12·7	—26·4	11·4	16	1	—1·5	10·3	6·6	+0·5	2	0	0	3	0	0	0	0	0	0
Trivandrum (Aerodrome).	32·0	..	32·7	29,31	23·7	..	21·9	2	..	18·8	..	16·5	6	1	..	..	7·9	..	2	0	0	3	0	0	0	0	0	0
Hill Stations (excluding Kashmir.)																												
Walong (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kohima	20·2	..	26·7	24	12·2	..	7·1	1	7·1	17·0	..	10·9	31	2	..	6·0	5·0	..	3	0	0	0	0	0	0	0	0	0
Aijal (R)																												
Shillong	20·8	—0·5	26·6	23	9·0	—1·4	3·3	1	20·6	55·7	+5·7	16·5	17	6	+2·1	2·7	1·8	—5·0	8	0	0	3	0	0	0	0	0	0
Cherrapunji	20·6	+0·2	23·7	26,29	12·2	—0·5	7·7	1	2·0	36·6	—148·1	28·5	6	2	—5·1	10·5	10·1	—0·5	4	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	67·4	..	48·3	17	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Darjiling (Rajbhawan)	16·1	+2·3	19·4	23	8·4	+1·3	3·4	14	24·2	42·2	—5·5	18·1	12	4	+0·4	3·7	3·2	+0·5	7	0	0	4	3	0	0	0	0	0
Kalimpong	16·5	—4·3	24·8	28	8·7	—3·9	4·6	8	24·1	25·4	—2·8	12·7	9	3	0	5·9	4·8	—7·6	3	0	0	0	0	0	0	0	0	0
Katmandu (R)																												
Mukteswar (Kumaon)	14·0	—4·2	18·5	18	4·6	—1·3	—1·4	6	40·6	69·6	+21·3	21·6	5	7	+2·9	14·0	13·0	+2·9	9	4	0	9	3	0	23	0	0	0

(R) Reinforcement received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days, (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal.	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation 0·3 mm. or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations excluding Kashmir)— *(Contd.)*																												
Nainital	14·3	..	19·5	19	5·6	..	—1·1	6	31·2	69·6	..	20·8	6	7	..	9·9	7·2	..	8	1	0	0	0	0	0	0	0	0
Tapoban	16·7	..	22·2	18	5·6	..	—0·6	13	..	24·4	..	7·6	30	4	..	..	..	..	8	0	0	0	0	0	0	0	0	0
Badrinath										Closed	during	winter	months															
Lokpal	—4·8	..	—3·3	31	—9·4	..	—10·6	1,2,8	..	106·7	..	17·8	19	15	..	..	..	..	17	17	0	0	0	0	12	0	0	0
Jamuna Chetty	..	..	..	..	..	..	..	..	..	106·6	..	26·7	19	10	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Mussooree	15·4	0	19·2	22	6·1	—1·0	—0·1	23	1·9	39·1	—18·3	7·6	23	8	+4·3	9·7	8·1	+0·5	9	0	5	7	2	0	2	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	125·6	..	24·1	6	11	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	317·0	..	33·0	30	18	..	..	..	..	20	..	..	..	..	..	..	..	..	..
Simla	12·9	—1·0	18·6	18	5·3	—1·1	—0·8	6	36·3	78·3	+18·4	15·2	31	8	+3·3	5·7	5·0	—1·4	15	3	4	11	0	0	0	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	51·3	+3·3	14·2	23	6	+3·1	..	..	..	6	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	102·8	+5·3	22·9	18	12	+4·5	..	..	..	14	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	128·3	..	38·1	18	8	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	454·7	..	77·5	17	15	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Koksar	..	..	..	..	..	..	..	..	..	186·5	..	53·3	19	8	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Dalhousie	15·2	..	20·7	16,29	5·8	..	1·4	5	55·2	264·8	+166·5	78·8	19	9	+3·1	4·3	6·0	..	9	0	5	0	0	0	0	0	0	0
Dharamshala	19·9	..	25·5	18	11·2	..	7·3	7	28·7	182·9	..	61·0	22	9	..	1·0	0·4	..	10	0	2	5	0	0	0	0	0	0
Abu	24·9	+0·1	29·5	16,17	14.5	—1·6	9·4	5	0	2·3	—2·0	1·3	29	0	—0·5	10·0	7·3	—0·9	2	0	0	2	0	0	0	0	0	0
Pachmarhi	26·8	—2·1	31·2	19,25	13·0	—2·2	5·8	7	11·3	65·9	+51·7	19·3	21	6	+4·7	7·0	4·5	—1·1	9	0	1	13	0	0	0	0	0	0
Mahabaleshwar	27·8	—0·2	29·8	24	15·3	—1·7	9·9	5,6	0	0	—4·3	0	..	0	—0·4	9·6	10·1	—0·5	0	0	0	0	0	0	0	0	0	0
Nandi Hills	27·4	..	30·3	31	15·2	..	13·4	9	..	0	..	0	..	0	..	..	..	..	0	0	0	0	6	0	0	0	0	0
Mercara	27·8	—1·2	29·3	26	16·3	—0·1	15·1	6,8,22	0	31·5	+12·2	31·5	17	1	—0·6	9·8	8·5	+3.5	1	0	0	0	0	0	0	0	0	0
Kodaikanal	19·1	+0·1	20·7	31	9·2	—0·9	5·3	25	27·4	32·5	—13·5	16·0	31	3	—0·1	12·2	11·7	—1·5	5	0	1	2	3	0	2	0	0	0
Ootacamund	20·4	—0·7	22·2	25	7·3	—1·5	5·0	20,21, 24·	33·9	41·3	+8·8	15·0	9	5	+2·4	3·4	1·7	—3·6	8	0	0	0	0	0	4	0	0	0
Coonoor	21 7	—1·0	23·3	22,29	10·8	—0·5	7·5	20	..	78·8	—3·5	40·1	9	4	+1·2	..	5·7	+0·1	9	0	0	1	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	67·2 (g)	..	27·2	6	3	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	371·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lachen	(a) 13·5	..	..	..	(a) —2·9	..	..	..	..	(a) 102·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung	12·3	+1·4	16·1	26	—4·2	—1·7	—7·2	28	..	175.8	+123·5	55·1	10	13	+7·6	..	..	..	13	0	0	0	0	0	0	0	0	0
Lhasa	11·2	..	17·2	25	—7·1	..	—11·1	8,10	..	1·3	..	0·8	14	0	..	..	..	..	3	3	0	0	0	0	0	0	0	0
Ceylon																												
Colombo	31·3	—0·3	33·0	2,18	22·7	—0·7	21·0	4 days	0	4·4	—104·3	4·1	20	1	—5·1	..	..	..	2	0	0	2	0	0	0	0	0	0
Trincomalee	30·1	—1·0	31·0	5 days	25·0	+0·5	23·0	12	0	0	—49·8	0	..	0	—2·7	..	..	..	0	0	0	0	0	0	0	0	0	0
Batticoloa	29·0	..	31·0	8	23·5	..	21·0	19	0·3	0·3	..	0·3	4	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Hambantota	30·1	—0·4	31·0	9 days	23·3	0	21·0	18,19	5·3	9·2	—78·7	5·3	5	2	—3·0	..	..	..	3	0	0	1	0	0	0	0	0	0
Mannar	31·6	..	33·0	11	23·3	..	21·0	20,24	0	0·8	..	0·8	8	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Hydrometeorological Observatories																												
Damodar Catchment																												
Bokaro	31·1	..	37·2	20	15·5	..	8·2	1	7·4	45·3	..	30·5	12	3	..	8·1 (b)	5·6 (b)	..	6	0	0	8	0	0	0	0	0	0
Hazaribagh	29·1	..	34·0	29	14·5	..	8·7	1	47·0	66·6	..	35·9	6	3	..	3·6	5·4	..	5	0	0	3	0	0	0	0	0	0
Tilaiya	29·7	..	36·2	20	17·5	..	10·1	1	29·2	44·2	..	29·7	31	2	..	..	..	..	3	0	0	6	0	3	0	0	0	0
Ramgarh	31·4	..	37·6	20	14·7	..	7·8	1	1·0	26·9	..	18·3	12	2	..	6·0	3·1	..	6	0	0	8	0	0	0	0	0	0
Panchet Hills	32·1	..	37·6	20	18·2	..	14·8	1	0	9·7	..	6·9	12	1	..	11·1	7·7	..	3	0	0	5	0	0	0	0	0	0
Durgapur	33·9	..	38·1	28,31	20·3	..	15·1	1	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	7·9	..	4·3	12	1	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	13·7	..	11·2	6	1	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	52·4	..	27·4	6	3	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	40·4	..	37·1	6	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	50·2	..	19·8	6	5	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Baramul	33·5	..	38·4	22	16·5	..	10·4	15	3·1	16·1	..	5·1	23	3	..	3·8	2·2	..	6	0	0	6	0	0	0	0	0	0
Hirakud	32·0	..	38·4	25	19·5	..	14·9	1	2·3	33·3	..	15·0	4	7	..	3·3	4·3	..	8	0	1	9	0	0	0	0	0	0
Khijrawan	31·3	..	36·2	20,25	17·1	..	11·8	7	1·8	94·1	..	40·9	4	6	..	7·8	4·3	..	6	0	0	6	0	1	0	0	2	0
Sonepur	30·4	..	38·9	26	18·9	..	15·6	14	..	37·6	..	15·0	4	3	..	..	2·7	..	3	0	0	0	0	0	0	0	0	0
Ginabahar	29·3	..	37·8	20	14·9	..	8·9	1	..	42·2	..	16·5	30	5	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Narbada Catchment																												
Punasa	34·9	..	38·4	18	17·9	..	10·7	7	0	5·3	..	3·8	20	1	..	6·6	5·5	..	2	0	0	6	0	1	0	1	0	0
Bagra Tawa	32·4	..	37·4	18	16·3	..	9·1	7	24·2	61·5	..	25·4	3	5	..	7·2	5·1	..	9	0	2	4	0	1	0	0	0	0
Thikri	35·4	..	38·4	18	17·7	..	10·6	7	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0

(R) Register not received. (a) Mean or total for 30 days. (b) Mean of 29 days. (g) Mean of 24 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days. (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
HYDROMETEOROLOGICAL OBSERVATORIES— (*Contd.*)																												
Tapti Catchment																												
Nandurbar	35·5	..	41·7	17	19·9	..	14·5	6	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																												
Jhadol	29·4	..	33·6	17	11·9	..	5·3	6	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	1·8	..	1·8	29	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	8·9	..	8·9	29	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Dharoi	33·2	..	37·3	16	16·9	..	9·6	6	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Ganga Catchment																												
Mukhim	16·0	..	19·4	18	6·4	..	2·1	6	24·1	81·5	..	21·6	29	9	..	..	..	..	11	0	0	0	0	0	0	0	0	0
Tehri	25·8	..	29·4	29	10·4	..	7·3	9	8·0	35·4	..	14·2	5	5	..	..	..	..	7	0	0	1	0	0	0	0	0	0
Gandak Catchment																												
Gorkha	(a) 23·7	..	27·6	24	13·8	..	8·4	6	..	12·0	..	5·1	6	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Pokhara	25·3	..	28·9	26	12·1	..	7·6	6	..	60·4	..	17·8	8	6	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Nawakot	(a) 25·9	..	30·1	20	(c) 15·2	..	11·3	3	..	10·7	..	4·8	12	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Gogra catchment (Trans Himalayan Region)																												
Dailekh	20·0	..	24·4	19	..	..	..	..	38·1	81·9	..	52·6	6	2	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	15·8	..	20·6	19	7·2	..	−0·2	6	42·0	87·0	..	35·6	6	7	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Munsiyari	16·3	..	20·7	29	6·7	..	1·7	6	45·6	83·3	..	25·2	6	10	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Sallyana	(j) 21·2	..	25·5	23	..	..	..	..	13·2	23·4	..	10·2	1	3	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Butwal	29·7	..	33·8	20	17·5	..	12·9	6	0	0	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	23·0	..	27·3	22	6·1	..	1·7	1	4·8	15·9	..	5·1	12	3	..	1·3	0·6	..	5	0	2	9	2	0	0	0	0	0
Kosi Catchment																												
Chautara	(i) 23·7	..	28·4	22	10·9	..	5·8	3	6·3	24·6	..	14·0	8	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Okhaldhunga	19·7	..	23·7	22	8·6	..	4·2	6	22·4	9·2	..	4·6	6	1	..	10·6	5·3	..	7	0	0	8	0	0	0	0	0	0
Barahkshetra	30·5	..	34·8	24	16·6	..	11·7	1	2·0	2·0	..	2·0	31	..	..	11·2	6·7	..	1	0	0	2	0	0	0	0	0	0
Angbung	(e) 24·3	..	28·4	28	(e) 13·1	..	8·6	9	..	(d) 15·0	..	10·7	12	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Taplejung	18·3	..	22·7	22,24	8·3	..	3·3	14	45·9	60·4	..	18·3	13	5	..	..	..	..	8	0	0	7	0	0	0	0	0	0
Taplethok	23·0	..	27·7	25	9·3	..	5·8	1	..	92·2	..	16·8	30	8	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Wallangchung Gola	6·9	..	9·3	21	−3·8	..	−6·5	5	..	42·7	..	9·4	4	8	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Bhojpur	(f) 20·5	..	25·3	25	10·7	..	5·9	1	8·3	5·0	..	2·0	12,31	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Chainpur	23·8	..	28·0	29	11·8	..	8·8	8	..	20·1	..	3·8	8	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	17·9	..	21·9	22,23	7·6	..	4·1	13,9	96·4	155·7	..	61·0	23	8	..	..	..	..	14	0	4	10	1	0	0	0	0	0
Geyzing	21·3	..	26·4	25	8·9	..	2·1	15	3·8	54·8	..	17·5	13	6	..	..	..	..	6	..	..	..	..	..	..	..	..	..

(a) Mean of 30 days. (c) Mean of 28 days. (d) Mean of 27 days. (e) Mean of 26 days. (f) Mean of 25 days. (i) Mean of 22 days (j) Mean of 21 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	(Cloud amount Oktas)		Mean wind speed, km. per hour	Wind speed (km. p.h.)			No. of observations										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar . .	0830	23	1013·4	1010·7	..	27·2	22·9	20·6	24·1	68	..	3·2	..	3.4	0	0	26	3	9	1	1	0	1	1	10	5	0
	1730	,,	1010·0	1007·4	..	27·1	23·1	21·2	25·2	70	..	3·7	..	3·7	0	0	20	0	13	2	0	0	0	1	4	11	0
Long Island . .	0830	32	1014·5	1010·7	..	27·2	23·4	21·3	25·7	71	..	3·0	..	2·3	0	0	19	1	1	0	0	0	8	1	8	12	0
	1730	,,	1011·2	1007·5	..	27·6	23·7	21·5	26·2	70	..	3·8	..	3·1	0	0	1	0	1	0	0	0	0	0	0	30	0
Port Blair . .	0530	79	1011·6	1002·5	..	21·8	21·1	20·7	24·2	94	..	2·1	..	1·2	0	0	10	1	2	0	0	0	2	4	1	21	0
	0830	,,	1013·3	1004·5	+1·4	28·7	23·4	20·7	24·6	62	—10	3·0	+0·1	4·5	0	0	22	3	16	1	0	0	0	1	1	9	0
	1130	,,	1011·8	1003·1	..	30·7	23·8	20·2	23·8	54	..	2·1	..	8·2	0	0	30	0	19	11	0	0	0	0	0	1	0
	1730	,,	1010·3	1001·4	..	26·7	22·8	20·8	24·6	70	..	3·0	..	3·6	0	0	21	0	14	4	2	0	0	0	1	10	0
	2330	,,	1011·9	1002·9	..	23·2	21·8	21·0	24·5	88	..	1·6	..	1·5	0	0	12	1	6	0	0	0	0	3	2	19	0
Car Nicobar . .	0830	10	1012·7	1011·5	..	29·2	24·0	21·4	25·8	63	..	3·4	..	7·2	0	0	31	1	24	6	0	0	0	0	0	0	0
	1730	,,	1009·8	1008·6	..	27·7	23·7	21·8	26·4	70	..	3·3	..	2·6	0	0	22	0	21	1	0	0	0	0	0	9	0
Nancowry . .	0830	26	1012·3	1009·4	..	29·7	25·3	23·2	28·6	68	..	4·5	..		0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	1009·5	1006·6	..	28·1	24·6	23·0	28·0	74	..	4·1	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Kondul . .	0830	8	1012·4	1011·5	..	28·1	27·5	27·1	36·2	92	..	4·4	..	7·0	0	0	21	3	17	1	0	0	0	0	0	10	0
	1730	,,	1009·5	1008·6	..	28·0	27·4	27·2	36·3	95	..	3·7	..	7·3	0	0	27	7	17	2	0	0	0	0	1	4	0
ASSAM (including Manipur & Tripura)																											
Walong (R)	0830																										
(R)	1730																										
Pasighat . .	0830	..	..	..	..	..	..	..	..	..	..	3·5	..	..	0	19	11	14	0	0	0	0	1	0	15	1	0
	1730	..	..	..	..	..	..	..	..	..	..	4·4	..	..	0	9	13	8	0	0	0	0	0	1	13	9	0
Digboi . . .	0830	..	..	997·2	..	18·8	16·3	14·5	16·6	77	..	3·6	..	..	0	0	31	2	19	0	2	0	6	0	2	0	0
	1730	..	..	992·7	..	25·5	18·8	14·2	16·4	51	..	4·5	..	..	0	0	31	6	13	2	0	0	2	1	7	0	0
Dibrugarh . .	0830	106	1014·3	1002·0	+0·9	21·9	17·8	14·9	17·0	65	—11	3·3	0·9	3·5	0	0	26	10	5	9	0	0	1	1	0	5	
	1730	,,	1009·6	997·5	..	23·4	19·0	16·2	18·4	65	..	3·6	..	1·2	0	0	8	2	4	2	0	0	0	0	0	23	
Dibrugarh (Mohanbari Aerodrome).	0230	111	1011·6	998·6	..	16·1	15·2	14·4	16·4	91	..	3·7	..	2·5	0	1	10	1	3	4	2	1	0	0	0	20	0
	0530	,,	1012·7	999·6	..	15·1	14·2	13·5	15·6	91	..	3·6	..	2·3	0	1	8	2	5	1	0	0	0	0	1	22	0
	0830	,,	1014·6	1001·8	..	21·5	17·4	14·4	16·7	65	..	3·4	..	4·7	0	0	27	3	15	7	0	0	0	1	1	4	0
	1130	,,	1012·8	1000·1	..	25·1	18·3	13·5	16·2	50	..	3·2	..	4·3	0	0	25	0	19	5	0	0	0	0	1	6	0
	1730	,,	1009·8	997·1	..	23·1	18·3	15·1	17·3	62	..	3·7	..	2·2	0	0	11	3	7	1	0	0	0	0	0	20	0
	2330	,,	1012·1	999·1	..	17·3	16·1	15·2	17·4	88	..	3·2	..	1·5	0	1	5	0	1	2	1	0	0	1	1	25	0
North Lakhimpur .	0830	102	1014·2	1002·4	..	20·8	17·4	15·1	17·3	70	..	3·5	..	..	0	0	21	9	8	1	0	0	1	0	2	10	0
	1130	,,	1012·7	1001·1	..	25·6	18·8	14·1	16·3	50	..	3·6	..	..	0	0	31	8	4	16	0	1	0	0	2	0	0
	1730	,,	1009·6	997·9	..	23·3	19·3	16·7	19·2	67	..	4·7	..	..	0	0	24	12	5	2	0	0	0	0	5	7	0
Sibsagar . . .	0830	97	1014·7	1003·6	+1·7	22·2	18·3	15·6	17·9	67	—14	3·0	—2·0	3·7	0	0	25	8	8	3	2	2	1	0	1	6	0
	1730	,,	1009·9	998·9	..	24·4	19·5	16·3	18·4	62	..	4·2	..	2·7	0	0	18	11	3	1	0	1	0	0	2	13	0
Jorhat . . .	0530	90	1012·2	1001·6	..	15·4	15·1	14·8	16·9	97	..	2·7	..	3·1	0	1	11	5	3	1	1	0	0	0	2	19	0
	0830	,,	1014·1	1003·7	..	21·6	18·1	15·7	18·0	70	..	2·6	..	9·1	0	2	23	5	10	3	0	2	2	1	2	6	0
	1130	,,	1012·4	1002·2	..	26·4	19·6	15·0	18·1	51	..	2·5	..	11·7	0	3	26	12	8	0	0	2	4	1	2	2	0
	1730	,,	1008·9	998·7	..	24·4	19·0	15·4	17·6	58	..	3·4	..	5·5	0	1	19	13	5	1	0	0	0	0	1	11	0
Golaghat . . .	0830	..	..	1003·4	..	20·6	17·1	16·0	16·8	70	..	5·3	..	..	0	0	12	0	3	0	3	0	0	0	6	19	0
	1730	..	..	998·2	..	27·2	19·4	14·1	16·3	46	..	4·2	..	..	0	0	6	0	0	0	5	0	0	0	1	25	0
Gohpur . (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tezpur . . .	0830	79	1014·8	1005·7	+1·5	22·1	17·9	15·0	17·2	65	—6	2·8	+0·3	..	0	2	23	1	2	18	0	0	0	0	1	6	3
	1730	,,	1009·3	1000·5	..	26·4	19·6	14·9	16·4	52	..	3·5	..	..	0	0	23	2	4	16	0	0	0	1	0	8	0
Tezpur (P.B.O.) .	0230	78	1011·6	1002·4	..	17·6	15·8	14·6	16·4	83	..	2·1	..	1·6	0	0	10	2	6	1	0	0	0	0	1	21	0
	0530	,,	1012·7	1003·4	..	16·4	15·1	14·0	16·0	87	..	2·5	..	2·2	0	0	9	2	3	3	0	0	1	0	0	22	0
	0830	,,	1014·6	1005·5	..	22·4	17·8	14·7	16·4	62	..	2·4	..	6·1	0	0	28	3	6	15	1	1	0	2	0	3	0
	1130	,,	1012·9	1004·0	..	27·1	19·1	13·5	15·6	44	..	3·0	..	7·0	0	0	30	2	5	12	6	1	1	1	1	1	1
	1730	,,	1009·4	1000·5	..	26·0	19·0	14·2	16·3	50	..	3·2	..	1·5	0	0	9	0	0	3	2	0	1	2	1	22	0
	2330	,,	1012·1	1003·0	..	19·8	17·4	15·5	18·1	78	..	1·5	..	1·6	0	0	7	0	1	4	0	2	0	0	0	24	0
Majbat . . .	0830	..	..	1000·4	..	..	..	..	..	..	..	3·4	..	..	0	0	31	0	0	31	0	0	0	0	0	0	0
	1730	..	..	995·5	..	..	..	..	..	..	..	4·6	..	..	0	0	17	2	0	13	0	0	0	2	0	14	0
Chaparmukh . (R)	0830	66																									
(R)	1730	,,																									
Tangla . . .	0830	78	..	..	..	..	..	..	..	..	..	2·1	..	..	..	..	..	8	14	12	0	0	0	0	0	2	0
	1730	,,	..	..	..	..	..	..	..	..	..	2·4	..	..	..	..	..	4	1	0	0	0	0	11	1	14	0
Gauhati .	0830	55	1013·9	1007·5	+1·4	22·0	18·0	15·4	17·4	67	—3	2·0	—0·3	3·0	0	0	29	4	13	8	2	1	0	1	0	2	0
	1730	,,	1009·1	1002·8	..	27·7	19·8	14·6	16·6	45	..	3·4	..	0·9	0	0	8	0	2	1	0	2	2	0	1	23	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Okta): Mean amount	Cloud amount (Okta): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h): 62 or more	Wind speed (km.p.h): 20 to 61	Wind speed (km.p.h): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur and Tripura)— *(Contd.)*																											
Gauhati (Kaikuchi Aerodrome)	0230	49	1011·1	1005·3	..	16·8	15·1	13·7	15·8	84	..	1·3	..	3·5	0	0	15	0	0	1	1	5	6	1	1	16	0
	0530	,,	1012·0	1006·3	..	15·6	14·3	13·3	15·3	87	..	3·0	..	2·1	0	0	15	2	4	2	0	0	5	1	1	16	0
	0830	,,	1013·7	1008·0	..	23·1	18·0	14·4	16·6	59	..	2·4	..	6·1	0	0	23	5	11	2	0	0	2	1	2	8	0
	1130	,,	1012·3	1006·7	..	28·1	19·2	13·0	15·0	40	..	2·5	..	10·2	0	1	30	14	7	0	0	0	0	2	8	0	0
	1730	,,	1009·1	1003·4	..	27·0	19·0	13·5	15·4	45	..	4·3	..	3·7	0	1	15	3	1	0	0	1	3	5	3	15	0
	2330	,,	1011·7	1006·0	..	18·7	16·2	14·4	16·4	78	..	1·2	..	4·0	0	2	18	0	3	0	0	8	8	1	0	11	0
Rangiya	0830	..	..	..	..	20·8	17·9	15·8	18·2	72	..	0·9	..	..	0	0	24	0	0	22	0	0	0	2	0	7	0
	1730	..	..	..	..	27·8	21·4	17·2	20·3	58	..	0·3	..	..	0	0	7	0	0	1	0	0	0	5	1	24	0
Goalpara	0830	38	1012·8	1008·3	..	21·6	17·2	14·8	16·2	69	..	2·0	..	1·6	0	0	10	0	5	0	2	0	3	0	0	21	0
	1730	,,	1008·6	1004·2	..	28·6	19·7	13·9	15·8	43	..	1·9	..	3·6	0	0	20	0	1	0	0	0	10	7	2	11	0
Dhubri	0830	35	1013·9	1009·9	+1·7	22·7	18·6	15·9	18·0	67	+1	1·8	0	5·8	0	0	30	1	22	3	0	0	4	0	0	1	0
	1730	,,	1009·8	1005·8	..	25·3	19·7	15·3	17·8	52		1·7	..	3·3	0	0	30	0	4	0	0	1	24	1	0	1	0
Dhubri (Rupsi Aerodrome)	0830	36	..	1008·7	..	22·9	17·7	14·1	16·2	59	..	2·3	..	3·7	0	0	26	0	7	8	5	3	2	1	0	5	0
	1130	,,	..	1007·7	..	27·9	19·2	13·1	15·2	41	..	2·4	..	7·1	0	0	31	0	0	5	10	4	8	4	0	0	0
	1730	,,	..	1004·3	..	25·6	19·0	14·4	16·6	53	..	1·8	..	0·9	0	0	8	2	0	0	0	0	4	1	1	23	0
Tura	0830	370	1014.4	972.1	..	21.0	16.0	12.2	14.2	60	..	2.5	..	2.9	0	0	25	0	2	7	6	4	4	2	0	6	0
	1730	,,	1010.0	968.7	..	26.6	18.1	11.0	13.0	40	..	3.0	..	3.5	0	0	27	1	0	2	1	7	13	2	1	4	0
Agartala	0230	16	1010·2	1008·3	..	18·8	16·9	15·5	17·8	82	..	1·8	..	2·9	0	0	14	1	2	3	2	4	0	0	2	17	0
	0530	,,	1011·0	1009·1	..	17·2	16·1	15·3	17·4	88	..	2·9	..	3·5	0	0	20	2	3	3	4	7	1	0	0	11	0
	0830	,,	1013·0	1011·2	..	24·9	19·3	15·5	18·1	57	..	2·4	..	3·3	0	0	21	2	2	3	1	4	2	4	3	10	0
	1130	,,	1011·9	1010·1	..	30·3	19·1	10·9	13·4	32	..	2·7	..	8·1	0	0	29	4	1	2	1	0	1	11	9	2	0
	1730	,,	1008·7	1006·9	..	28·7	19·2	12·4	14·0	38	..	2·8	..	6·5	0	0	30	8	0	1	1	1	6	8	5	1	0
	2330	,,	1011·0	1009·1	..	21·0	17·7	15·5	17·7	72	..	1·7	..	3·0	0	0	15	2	2	2	2	4	1	0	2	16	0
Silchar	0830	29	1014·3	1010·8	+0·9	22·7	18·5	15·7	17·9	65	—7	2·1	—0·6	1·5	0	0	19	1	3	10	4	0	0	0	1	12	0
	1730	,,	1009·4	1006·1	..	28·0	20·1	14·8	17·1	47	..	2·3	..	1·7	0	0	17	1	1	2	0	0	5	6	2	14	0
Imphal	0530	801	1015·7	924·0	..	10·8	10·0	9·3	11·6	1	..	2·0	..	2·2	0	0	13	0	0	1	0	2	3	6	1	18	0
	0830	,,	1014·8	926·4	..	18·7	14·2	10·7	12·7	61	..	2·2	..	4·8	0	0	23	0	1	0	5	9	6	1	1	8	0
	1130	,,	1011·1	923·7	..	24·4	16·2	10·1	11·7	41	..	2·9	..	12·9	0	6	25	0	1	0	5	9	14	2	0	0	0
	1730	,,	1009·1	931·4	..	22·5	15·2	9·5	11·3	45	..	2·7	..	14·4	0	7	24	0	1	1	0	1	12	15	1	0	0
	2330	,,	1013·8	923·4	..	14·8	12·5	10·5	12·6	77	..	1·7	..	4·2	0	0	20	1	2	2	0	3	2	4	6	11	0
Haflong	0830	682	1013·4	937·1	..	20·5	15·3	11·4	13·3	58	..	2·1	..	..	0	0	31	1	9	0	1	9	10	1	0	0	0
	1730	,,	1009·4	933·9	.	22·6	15·6	1003	12·7	48	..	2·9	..	..	0	0	31	0	2	0	0	13	16	0	0	0	0
Lumding	0830	149	1014.6	997.3	..	20.8	17.1	14·7	16.6	68	—8	2.3	..	3.3	0	0	18	1	4	8	2	0	0	1	2	13	0
	1730	,,	1009.2	992.3	..	26.7	19.1	13.8	15.9	47	..	4.4	..	3.6	0	0	19	2	0	0	3	3	5	1	5	12	0
Sub-Himalayan West Bengal																											
Cooch Behar (C.W.)	0830	43	1014·0	1008·9	..	22·2	17·6	14·3	16·2	62	..	2·1	..	9·5	0	2	25	0	8	14	2	0	2	1	0	4	0
	1130	,,	1012·7	1007·7	..	27·6	19·5	14·1	16·1	44	..	2·5	..	9·8	0	0	31	0	0	11	5	1	7	1	0	0	6
	1730	,,	1009·4	1004·4	..	26·3	19·4	14·8	16·8	50	..	3·3	..	1·7	0	0	10	1	0	0	0	0	3	5	1	21	0
Jalpaiguri	0830	83	1014·0	1004·2	+1·9	19·2	16·3	14·0	16·4	73	+3	1·3	—0.2	3·8	0	0	24	13	4	1	0	0	1	1	4	7	0
	1730	,,	1009·2	999.8	..	28·1	18·6	11·2	13·8	36	..	1·4	..	5·5	0	2	20	0	4	0	1	1	12	3	1	9	0
Bagdogra	0230	131	1010·4	995·1	..	16·2	14·9	14·0	15·7	88	..	1·6	..	3·5	0	0	23	8	8	1	0	0	0	2	4	8	0
	0530	,,	1011·3	995·9	..	14·3	13·5	12·6	14·7	91	..	2·2	..	1·9	0	0	14	9	1	1	0	0	2	0	1	17	0
	0830	,,	1013·3	998·2	..	22·7	17·5	13·7	15·6	58	..	2·4	..	6·1	0	0	26	1	6	12	3	0	1	1	2	5	0
	1130	,,	1012·0	997·1	..	27·6	19·1	13·4	14·9	42	..	2·8	..	8·6	0	0	30	0	0	10	14	5	1	0	0	1	0
	1730	,,	1008·5	993·6	..	25·7	18·9	14·2	16·6	50	..	4·0	..	5·6	0	0	25	1	2	3	1	3	10	4	1	6	0
	2330	,,	..	..	..	18·2	16·8	15·5	18·0	86	..	1·9	..	2·7	0	0	16	6	2	4	1	0	0	2	1	15	0
Malda	0830	31	1013·5	1009·9	+2·1	24·1	17·9	13·3	15·6	52	+3	2·3	+1.2	8·0	0	3	23	3	1	2	2	3	5	7	3	5	0
	1730	,,	1009·3	1005·8	..	28·6	19·1	12·3	14·5	38	..	2·2	..	6·7	0	0	27	2	2	2	3	2	1	8	7	4	0
Gangetic West Bengal																											
Dum Dum	0230	6	1010·7	1009·9	..	20·6	19·0	18·0	20·5	85	..	1·4	..	3·5	0	0	18	4	0	1	0	1	9	2	1	13	0
	0530	,,	1011·4	1010·6	..	19·8	18·5	17·7	20·0	88	..	2·6	..	2·5	0	0	14	2	0	1	0	3	6	2	0	17	0
	0830	,,	1013·6	1012·8	..	25·5	20·4	17·1	20·1	61	..	2·1	..	5·1	0	0	25	5	2	1	0	3	5	2	7	6	0
	1130	,,	1012·7	1012·0	..	30·4	21·0	14·9	17·1	41	..	2·5	..	7·8	0	0	31	6	2	1	3	3	4	3	9	0	0
	1730	,,	1009·4	1008·7	..	29·7	21·7	16·9	19·3	47	..	2·7	..	3·4	0	0	17	2	0	0	0	5	3	4	3	14	0
	2330	,,	1011·4	1010·7	..	22·5	20·0	18·5	21·8	79	..	1·3	..	4·1	0	0	22	3	0	1	0	4	9	2	3	9	0
Calcutta	0830	6	1013·7	1013·0	+1·9	26·3	21·0	17·3	20·5	61	—15	1·9	—0·3	4·4	0	0	24	2	4	1	1	1	5	2	8	7	0
	1130	,,	1012·7	1012·0	..	31·0	22·0	16·6	19·4	43	..	2·2	..	6·4	0	1	26	3	2	2	3	2	5	2	8	4	0
	1730	,,	1009·6	1008·9	..	29·8	22·1	17·4	20·1	49	..	3·2	..	3·0	0	0	21	1	0	0	1	1	7	6	5	10	0
Barrackpore	0530	7	1011·5	1010·7	..	19·3	18·1	17·2	20·0	88	..	2·4	..	2·8	0	0	16	1	0	0	0	1	7	5	2	15	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed per hour km.	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal— (*Contd.*)																											
Barrackpore—(*Contd.*)	0830	7	1013·9	1013·1	..	25·7	20·3	17·2	19·7	61	..	2·1	..	6·0	0	0	29	3	5	5	0	0	3	10	3	2	0
	1130	,,	1012·9	1012·1	..	30·3	20·9	14·8	16·9	41	..	2·5	..	9·3	0	2	28	6	1	0	1	4	5	5	8	1	0
	1730	,,	1009·5	1008·7	..	28·6	20·6	15·7	17·7	46	..	3·1	..	3·9	0	0	20	4	0	0	1	4	3	1	7	11	0
	2330	,,	1011·6	1010·8	..	21·4	19·2	17·7	20·4	81	..	1·1	..	4·5	0	0	20	0	0	2	0	5	9	2	2	11	0
Saugor Island	0830	3	1012·9	1012·6	+1·1	26·0	21·7	19·2	22·1	68	—5	2·9	—0·1	16·3	0	8	23	8	4	0	0	6	6	1	6	0	0
	1730	,,	1009·5	1009·2	..	27·2	22·5	19·8	23·4	65	..	3·4	..	19·6	0	10	21	1	1	1	6	14	8	0	0	0	0
Sandheads	0530	10	1011·3	1010·2	..	25·6	23·0	21·6	26·2	79	..	2;4	..	..	0	2	26	0	2	0	0	1	12	8	5	3	0
	0830	,,	1013·6	1012·5	+1·4	26·9	23·4	21·6	25·7	73	—1	2·8	+0·6	..	0	3	25	2	2	0	0	0	13	6	5	3	0
	1130	,,	1013·4	1012·3	..	27·9	23·7	21·4	26·0	69	..	2·2	..	..	0	3	25	5	5	0	0	0	9	5	4	3	0
	1730	,,	1010·2	1009·2	..	27·9	23·5	21·3	25·3	68	..	2·2	..	..	0	0	29	0	0	0	3	10	12	2	2	2	0
	2330	,,	1011·4	1010·3	..	26·1	23·4	22·0	26·4	79	..	1·1	..	..	0	3	27	0	1	0	3	6	19	1	0	1	0
Contai	0830	11	1013·3	1012·1	..	27·2	21·5	18·0	20·7	58	..	(c) 2·2	..	(c) 2·4	0	0	20	3	1	1	0	1	4	3	7	8	0
	1730	,,	1010·2	1009·0	..	27·1	24·1	22·4	27·4	75	..	(b) 3·2	..	(b) 4·1	0	0	23	1	0	0	5	14	1	1	1	6	0
Midnapore	0830	45	1013·6	1008·4	+1·8	27·3	19·4	13·9	16·4	46	—13	1·5	—0·3	3·9	0	0	23	4	10	0	0	3	3	0	3	8	0
	1730	,,	1009·3	1004·3	..	30·8	19·9	12·2	14·5	34	..	1·8	..	3·8	0	1	20	0	12	0	0	1	5	0	3	10	0
Purulia	0830	255	1014·2	985·3	..	23·2	16·9	12·1	14·1	50	..	1·9	..	3·2	0	0	22	2	3	0	1	1	4	3	8	9	0
	1730	,,	1009·1	981·2	..	28·9	18·3	9·7	12·5	32	..	2·9	..	3·1	0	0	22	5	1	0	0	2	3	8	3	9	0
Burdwan	0830	32	1013·8	1010·1	+2·1	26·3	..	..	..	..	..	1·4	—0·9	0·7	0	0	4	0	1	0	0	0	1	0	2	27	0
	1730	,,	1010·1	1006·5	..	29·6	..	..	..	..	..	1·8	..	0·6	0	0	4	1	0	0	0	0	0	0	3	27	0
Krishnagar	0830	15	1014·0	1012·3	+2·3	26·1	19·7	16·0	17·8	55	—8	1·4	—1·0	2·0	0	0	20	0	0	1	4	4	1	10	0	11	0
	1730	,,	1010·0	1008·3	..	29·8	20·7	15·4	16·8	43	..	1·4	..	0·8	0	0	7	0	0	0	0	0	1	6	0	24	0
Asansol	0230	126	1011·0	996·4	..	20·6	16·3	12·9	15·5	63	..	1·6	..	4·1	0	0	19	0	5	0	0	2	0	6	6	12	0
	0530	,,	1011·9	997·3	..	19·1	15·9	13·5	15·7	71	..	2·5	..	2·5	0	0	9	1	0	0	0	0	0	3	5	22	0
	0830	,,	1013·6	999·2	+2·1	24·8	18·0	13·0	15·4	49	+3	2·1	+0·3	5·4	0	1	21	2	0	0	1	1	1	7	10	9	0
	1130	,,	1012·6	998·6	..	29·7	18·9	10·6	13·0	32	..	2·5	..	8·1	0	0	30	0	1	1	5	1	1	4	17	1	0
	1730	,,	1009·2	995·1	..	29·4	18·8	10·9	13·3	33	..	2·8	..	4·5	0	0	19	0	0	1	1	0	0	3	14	12	0
	2330	,,	1011·7	997·2	..	22·4	17·0	13·0	15·2	56	..	1·6	..	3·1	0	0	14	1	0	0	1	2	0	4	6	17	0
Suri	0830	77	1013·9	1005·0	..	24·6	17·9	12·8	15·1	50	..	2·2	..	5·0	0	0	28	2	2	3	2	2	3	8	6	3	0
	1730	,,	1009·9	1001·3	..	29·8	18·5	9·6	11·9	30	..	3·5	..	7·2	0	2	26	2	2	1	3	2	2	8	8	3	0
Berhampore	0830	19	1013·3	1011·1	+1·4	23·4	18·4	14·8	17·1	61	+1	1·9	—0·3	1·7	0	0	12	0	0	1	1	3	5	1	1	19	0
	1730	,,	1009·1	1007·0	..	29·5	19·8	12·4	15·2	35	..	2·4	..	1·5	0	0	11	0	0	0	0	4	5	1	1	20	0
Orissa																											
Baripada	0830	54	1014·3	1008·1	..	24·7	..	..	..	..	..	2·1	..	2·1	0	0	20	5	5	0	1	0	2	0	7	11	0
	1730	,,	1010·0	1003·9	..	29·6	..	..	..	..	..	3·1	..	3·5	0	0	22	5	4	0	4	3	2	1	3	9	0
Balasore	0830	20	1013·6	1011·3	+1·6	26·0	19·9	15·8	18·3	56	—11	2·2	+0·3	7·2	0	2	26	10	5	0	0	1	9	1	2	3	0
	1730	,,	1009·7	1007·4	..	27·6	21·7	18·3	21·3	59	..	4·3	..	10·2	0	2	29	1	3	0	15	10	2	0	0	0	0
Chandbali	0830	6	1013·7	1013·0	+1·8	26·1	22·3	21·2	23·6	77	+1	2·2	—0·4	4·4	0	0	31	1	3	0	2	0	11	0	14	0	0
	1730	,,	1009·6	1008·9	..	28·7	22·9	19·9	23·0	61	..	2·6	..	5·8	0	0	31	0	5	0	23	0	0	0	3	0	0
Cuttack	0830	27	1013·5	1010·4	+1·2	24·4	20·8	18·7	21·7	72	—1	2·4	—0·1	0·9	0	0	46	0	0	0	0	1	0	3	0	27	0
	1730	,,	1009·2	1006·2	..	31·7	21·5	14·6	17·1	38	..	2·3	..	4·3	0	1	16	1	0	0	0	10	1	5	0	14	0
Bhubaneswar	0230	,,	1010·9	1005·6	..	22·5	20·6	19·5	22·7	83	..	2·3	..	9·5	0	4	22	5	1	1	0	5	8	4	2	5	0
	0530	,,	1011·6	1006·2	..	21·2	19·7	18·7	22·1	86	..	2·9	..	3·7	0	0	21	4	2	0	0	1	3	5	6	10	0
	0830	,,	1013·6	1008·3	..	26·0	21·4	18·6	21·4	65	..	2·7	..	6·8	0	1	26	6	4	0	1	1	4	5	6	4	0
	1130	,,	1012·7	1007·5	..	31·2	21·4	14·8	17·8	39	..	2·7	..	11·5	0	3	27	3	2	1	1	6	5	4	8	1	0
	1730	,,	1009·5	1004·3	..	30·3	21·2	15·0	17·6	43	..	2·9	..	13·3	0	8	22	1	1	0	1	14	4	3	6	1	0
	2330	,,	1012·0	1006·7	..	24·0	21·3	19·8	23·3	79	..	1·7	..	8·5	0	4	19	0	1	0	2	5	10	3	2	8	0
Puri	0830	6	1013·9	1013·2	+1·8	26·9	22·7	21·0	24·3	71	—6	2·4	+0·1	9·3	0	2	29	8	5	1	2	1	8	2	2	0	2
	1730	,,	1010·1	1009·4	..	27·6	23·8	21·8	26·1	71	..	2·9	..	18·6	0	11	20	0	0	0	5	13	12	0	1	0	0
Gopalpur	0530	17	1011·7	1009·7	..	22·3	20·8	19·8	23·6	86	..	2·5	..	4·5	0	0	25	3	0	0	0	0	7	1	14	6	0
	0830	,,	1013·9	1011·9	+1·9	26·0	22·2	20·0	23·4	70	—4	2·2	+1·2	6·2	0	0	29	9	1	0	0	2	6	0	11	2	0
	1130	,,	1013·5	1011·5	..	29·2	24·0	21·4	25·4	64	..	2·0	..	12·1	0	2	29	1	0	4	13	8	2	0	3	0	0
	1730	,,	1010·1	1008·2	..	27·6	24·3	22·8	27·5	76	..	2·4	..	19·6	0	12	19	0	1	1	7	15	7	0	0	0	0
	2330	,,	1012·4	1010·4	..	25·0	23·0	22·0	26·6	84	..	1·1	..	10·9	0	3	24	1	1	0	1	5	16	0	3	4	0
Koraput	0830	913	1532·2	913·4	..	20·0	16·1	13·5	15·5	68	..	1·4	..	3·9	0	0	31	2	1	3	0	19	4	1	1	0	0
	1730	,,	1514·9	910·4	..	26·1	16·1	8·1	11·0	34	..	2·7	..	4·6	0	0	31	14	1	1	6	4	0	3	2	0	0
Titilagarh	0830	211	1013·3	989·9	..	23·2	18·5	15·1	17·4	62	..	2·1	..	1·9	0	0	15	0	2	3	5	3	1	0	1	16	0
	1730	,,	1008·9	985·6	..	31·4 (g)	20·8 (g)	13·1 (g)	16·1 (g)	35 (g)	..	1·4 (g)	..	2·0 (g)	0	0	18 (g)	5 (g)	9	1	0	0	2	0	1	13	0
Bolangir	0830	..	..	..	..	27·1 (f)	21·6 (f)	17·4 (f)	21·2 (f)	56 (f)	..	5·1 (f)	..	4·1 (f)	0	0	23 (f)	1	3	4	7	4	1	1	2	1	0
	1730	..	..	..	..	30·7	21·9	16·4	19·0	43	..	5·1	..	4·1	0	0	25	3	7	4	1	1	2	3	4		0

(b) Mean of 29 days. (c) Mean of 28 days. (g) Mean of 24 days. (f) Mean of 25 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Departure from normal	Cloud amount (Oktas): Mean amount	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—(*Contd.*)																											
Angul	0830	139	1014·1	998·2	+1·9	23·2	18·6	15·6	17·1	64	+4	3·2	+0·9	5·3	0	1	26	3	3	1	0	0	2	10	8	4	0
	1730	,,	1009·5	994·0	..	31·0	19·4	10·5	13·4	31	..	2·9	..	4·4	0	0	27	4	7	1	0	2	1	4	8	4	0
Sambalpur	0830	148	1014·2	997·2	+1·9	23·2	18·6	15·3	17·4	63	+12	2·8	+1·4	2·6	0	0	25	2	10	5	2	2	3	1	0	6	0
	1730	,,	1010·0	993·4	..	29·4	20·6	14·6	17·0	43	..	2·5	..	2·5	0	0	21	4	4	1	0	1	2	2	7	10	0
Jharsuguda	0230	230	1011·5	985·0	..	20·0	16·9	14·5	16·8	74	..	1·8	..	4·7	0	0	22	4	12	1	1	1	1	1	1	9	0
	0530	,,	1012·0	985·5	..	18·6	16·1	14·2	16·2	77	..	2·2	..	3·6	0	0	20	7	7	1	0	1	1	1	2	11	0
	0830	,,	1014·1	987·9	..	22·7	17·4	13·5	16·3	58	..	2·9	..	3·8	0	1	19	8	9	1	1	0	0	1	0	11	0
	1130	,,	1013·2	987·4	..	28·2	19·1	12·0	14·6	40	..	2·6	..	4·4	0	0	25	2	10	0	1	2	2	2	6	6	0
	1730	,,	1009·2	983·6	..	29·4	19·4	11·7	14·5	38	..	2·9	..	5·6	0	1	22	2	5	0	0	4	5	6	1	8	0
	2330	,,	1012·1	985·9	..	22·1	17·6	14·3	16·6	63	..	2·1	..	4·0	0	1	18	5	8	0	0	1	3	1	1	12	0
Chota Nagpur																											
Jamshedpur	0830	129	1014·1	999·3	+2·2	23·3	17·5	13·3	15·2	55	+3	2·1	+0·3	6·3	0	1	25	1	0	2	1	0	3	13	6	5	0
	1730	,,	1009·1	994·8	..	30·1	19·4	10·7	13·6	33	..	3·0	..	7·6	0	3	23	4	0	1	1	2	3	7	8	5	0
Jamshedpur (P.B.O.)	0530	145	1012·3	995·4	..	19·2	16·0	13·5	16·5	71	..	2·7	..	4·5	0	0	21	1	0	0	0	1	6	4	9	10	0
	0830	,,	1014·1	997·4	..	22·5	17·0	12·7	14·8	56	..	2·6	..	5·8	0	1	25	0	0	0	1	1	6	6	12	5	0
	1130	,,	1012·8	996·5	..	29·2	18·9	11·0	13·5	34	..	2·5	..	7·2	0	2	22	1	1	0	0	1	7	4	10	7	0
	1730	,,	1009·1	992·9	..	30·1	18·7	9·4	12·4	30	..	3·6	..	6·9	0	3	25	4	0	2	1	1	3	8	9	3	0
	2330	,,	1011·9	995·3	..	22·7	17·2	13·2	15·1	57	..	1·7	..	3·9	0	1	20	0	2	0	2	1	5	1	10	10	0
Chaibasa	0830	226	1013·9	988·1	+2·0	23·7	19·2	16·7	19·6	64	+6	2·2	+0·5	1·7	0	0	15	2	3	0	0	3	7	0	0	16	0
	1730	,,	1009·2	984·0	..	29·2	21·5	17·4	19·2	50	..	3·9	..	1·6	0	0	12	2	5	0	0	0	3	1	1	19	0
Ranchi	0830	655	1013·4	940·2	+1·4	21·0	16·2	12·9	15·1	60	+21	1·8	+0·2	1·4	0	0	10	0	0	6	0	1	1	1	1	21	0
	1730	,,	1010·1	938·0	..	24·4	16·5	10·7	13·4	44	..	2·2	..	0·6	0	0	3	0	0	1	0	0	0	2	0	28	0
			(e)	(e)		(e)	(e)	(e)	(e)	(e)		(e)		(e)													
Ranchi (C.W.)	0530	652	1012·9	938·8	..	15·3	11·8	8·6	11·2	65	..	2·0	..	3·0	0	0	10	0	0	1	0	1	1	5	2	16	0
												(e)		(e)													
	0830	,,	1013·4	940·8	..	21·8	15·3	10·1	12·8	50	..	2·4	..	5·0	0	2	19	3	3	2	1	2	4	1	5	5	0
			(b)	(b)		(b)	(b)	(b)	(b)	(b)		(e)		(b)													
	1130	,,	1012·4	940·6	..	25·2	15·9	8·4	10·5	37	..	2·8	..	10·6	0	4	24	3	2	0	0	6	4	7	5	1	1
												(b)		(a)													
	1730	,,	1008·8	937·5	..	26·2	16·3	8·3	11·1	35	..	3·2	..	8·4	0	0	25	2	0	0	0	2	2	13	6	5	0
Daltonganj	0830	221	1014·3	989·0	+1·9	22·3	16·8	12·4	14·7	54	0	3·3	+2·1	1·8	0	0	11	2	0	1	1	0	1	5	1	20	0
	1730	,,	1009·1	984·7	..	28·2	17·7	9·5	11·7	33	..	3·7	..	7·9	0	1	25	3	1	1	2	1	0	6	12	5	0
Hazaribagh	0830	611	1013·7	945·4	+2·1	21·6	15·0	9·7	12·1	48	+12	2·2	+0·5	7·1	0	3	21	3	1	0	1	3	6	2	8	7	0
	1730	,,	1009·3	942·0	..	25·1	15·5	7·3	10·8	35	..	3·1	..	10·4	0	1	28	9	2	0	0	0	2	3	13	2	0
Dhanbad	0830	257	1013·3	984·2	..	24·6	16·7	10·3	12·8	42	..	2·0	..	3·5	0	0	31	8	0	1	1	2	3	8	8	0	0
	1730	,,	1009·0	980·3	..	28·7	17·6	8·3	11·4	29	..	3·2	..	3·5	0	0	31	5	0	1	1	6	2	2	14	0	0
Bihar																											
Purnea	0830	38	1013·5	1009·1	+1·9	22·9	17·5	13·7	15·8	57	—3	2·0	+0·6	2·8	0	0	17	0	1	1	2	0	4	9	0	14	0
	1730	,,	1009·2	1004·9	..	26·9	20·2	15·7	18·3	52	..	2·6	..	1·5	0	0	13	0	0	1	1	0	3	8	0	18	0
Forbesganj	0830	61	1013·3	1006·3	..	21·3	17·5	14·8	16·7	68	..	2·5	..	6·0	0	0	28	1	3	9	2	1	3	8	1	3	0
	1730	,,	1008·9	1002·1	..	28·1	19·9	14·1	16·8	45	..	3·5	..	8·3	0	1	27	0	0	1	1	0	4	22	0	3	0
Darbhanga	0830	49	1013·5	1007·8	+2·1	21·7	17·5	14·2	16·9	63	+9	2·7	+1·4	2·4	0	0	19	0	0	1	2	0	3	13	0	12	0
	1730	,,	1009·6	1004·0	..	28·1	19·5	13·5	15·6	42	..	3·1	..	2·0	0	0	18	1	0	0	1	0	4	10	2	13	0
Motihari (R)	0830	65																									
(R)	1730	,,																									
Patna	0830	53	1013·3	1007·3	+1·8	23·9	17·4	12·5	14·8	50	+4	3·3	+1·9	7·5	0	0	27	1	1	0	1	2	13	6	3	4	0
	1730	,,	1009·6	1003·7	..	28·4	18·5	10·9	13·6	35	..	2·7	..	7·6	0	1	23	1	0	1	0	1	1	17	3	7	0
Patna (Aerodrome)	0530	60	1010·9	1003·9	..	17·1	14·9	12·9	15·2	77	..	2·0	..	3·7	0	2	9	1	0	0	0	2	1	5	2	20	0
	0830	,,	1012·9	1006·0	..	23·3	17·6	13·6	15·8	56	..	3·0	..	7·6	0	0	28	1	1	0	1	2	11	9	3	3	0
	1130	,,	1012·2	1005·5	..	28·6	18·8	11·4	13·9	36	..	3·1	..	12·8	0	5	23	1	0	0	2	1	6	9	9	3	0
	1730	,,	1008·9	1002·3	..	28·3	19·3	12·7	14·8	40	..	3·3	..	9·5	0	3	19	1	0	1	1	1	0	5	13	9	0
	2330	,,	1011·7	1005·7	..	22·0	17·7	14·8	16·6	65	..	1·2	..	0·4	0	0	2	0	0	0	0	0	1	1	0	29	0
Dehri	0830	107	1013·6	1001·3	..	23·6	17·8	13·6	15·6	55	..	3·0	..	3·2	0	0	31	0	0	0	1	2	24	1	3	0	0
	1730	,,	1009·2	997·1	..	29·1	18·9	10·8	13·3	35	..	3·3	..	3·6	0	0	31	1	3	1	1	4	2	7	12	0	0
Gaya	0230	116	1011·9	998·1	..	18·7	15·4	12·6	14·8	69	..	1·8	..	3·7	0	1	11	1	0	0	1	3	6	1	0	19	0
	0530	,,	1012·2	998·5	..	17·4	14·8	12·7	14·9	76	..	2·3	..	2·3	0	0	12	0	0	0	1	3	4	1	3	19	0
	0830	,,	1014·1	1000·7	+2·4	22·6	17·2	12·8	15·0	55	+22	2·6	+1·2	3·7	0	0	17	0	0	1	1	1	9	3	2	14	0
	1130	,,	1013·5	1000·4	..	28·6	18·7	11·4	13·3	35	..	2·9	..	9·0	0	3	20	1	0	0	2	1	4	6	9	8	0
	1730	,,	1009·8	996·7	..	28·6	18·5	10·7	13·1	35	..	3·1	..	7·3	0	1	20	5	1	0	1	0	2	3	9	10	0
	2330	,,	1012·4	998·9	..	20·8	16·5	13·1	15·5	63	..	1·9	..	2·2	0	1	11	1	0	0	1	3	5	3	1	19	0
Jamui	0830	82	1013·5	1004·0	..	24·3	18·7	15·0	17·1	58	..	2·7	..	4·9	0	0	27	2	0	7	5	0	1	1	11	4	0
	1730	,,	1009·4	1000·0	..	28·6	20·2	14·4	16·9	43	..	3·4	..	4·8	0	0	28	2	0	1	0	0	2	1	22	3	0

(a) Mean of 30 days. (b) Mean of 29 days. (c) Mean of 26 days. (R) Register not received.

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed, (km.p.h.): 62 or more	Wind speed, (km.p.h.): 20 to 61	Wind speed, (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—(*Contd.*)																											
Dumka	0830	149	1014·0	997·0	+2·3	25·3	17·8	12·2	14·2	45	+1	1·4	+0·2	2.7	0	0	31	3	1	1	4	0	7	10	5	0	0
	1730	,,	1009·0	992·4	..	28·6	18·2	10·0	12·7	31	..	2·0	..	2.6	0	0	31	3	1	1	3	2	2	11	8	0	0
Bhagalpur	0530	49	1011·5	1005·8	..	18·9	15·9	13·5	15·5	72	..	2·0	..	3·0	0	0	18	0	0	0	2	4	6	6	0	13	0
	0830	,,	1013·4	1007·9	..	23·9	18·2	14·2	16·6	56	..	2·2	..	4·1	0	1	17	0	0	2	2	1	3	10	0	13	0
	1130	,,	1012·8	1007·3	..	29·5	19·9	13·0	15·2	39	..	1·8	..	6·6	0	2	23	0	0	2	3	2	1	15	2	6	0
	1730	,,	1009·5	1004·0	..	28·0	19·9	14·3	16·7	45	..	2·5	..	6·6	0	2	23	0	0	2	0	1	0	20	2	6	0
	2330	,,	1011·6	1006·0	..	22·0	17·1	13·8	15·3	61	..	1·2	..	2·8	0	0	17	0	1	2	0	1	3	9	1	14	0
Sabour	0830	37	1013·4	1009·1	+2·3	23·2	18·7	15·6	18·0	64	+14	2·8 (a)	+1·0	6·0 (a)	0	0	23	1	0	0	3	2	8	7	3	6	0
	1730	,,	1009·2	1005·0	..	28·6	20·5	15·5	17·7	46	..	3·3 (b)	..	6·2 (b)	0	0	20	0	0	0	0	1	0	7	12	9	0
Uttar Pradesh (East) Gonda	0830	110	1013·7	1001·0	..	25·1	17·1	14·3	16·7	69	+21	2·6	+1·2	2·1	0	0	17	2	0	3	0	0	1	4	7	14	0
	1730	,,	1010·2	997·6	..	27·2	22·8	20·1	24·1	68	..	1·9	..	2·0	0	0	12	3	0	0	0	0	1	0	8	19	0
Nautanwa	0830	99	1013·1	1001·8	..	24·7	16·2	12·8	14·7	63	..	2·1	..	3·8	0	0	24	3	3	3	3	3	4	1	4	7	0
	1730	,,	1009·8	998·5	..	27·6	17·8	10·6	12·8	34	..	1·7	..	4·3	0	1	22	2	0	0	0	1	8	8	4	8	0
Gorakhpur	0830	77	1013·1	1003·5	+1·3	20·8	15·9	11·4	14·3	55	+3	2·0	+0·9	1·4	0	0	15	0	1	0	0	0	0	14	0	16	0
	1730	,,	1009·6 (d)	1000·7 (d)	..	28·1 (d)	18·1 (d)	10·3 (d)	13·0 (d)	34 (d)	..	2·4 (d)	..	2·8 (d)	0	0	18	0	1	0	0	0	0	17	0	13	0
Gorakhpur (P.B.O)	0230	78	1010·7	1000·6	..	19·2	15·4	11·7	14·5	67	..	2·1	..	2·6	0	0	9	3	0	0	0	0	1	6	0	17	0
	0530	,,	1011·2	1002·0	..	17·6	14·7	12·3	14·8	72	..	3·1	..	2·6	0	0	15	0	2	0	0	2	6	4	1	16	0
	1130	,,	1012·9	1004·1	..	28·3	18·1	10·0	12·4	33	..	3·2	..	5·3	0	0	28	0	0	0	4	6	6	8	4	3	0
	2330	,,	1011·5	1002·5	..	24·7	16·5	13·1	15·3	64	..	1·3	..	1·8	0	0	9	0	1	0	1	1	1	5	0	22	0
Azamgarh	0830	78	1013·2	1003·9	..	21·7	17·4	15·7	16·3	67	..	2·8	..	3·7	0	0	22	1	0	0	0	0	0	21	0	9	0
	1730	,,	1008·8	1000·3	..	28·2	20·5	15·9	17·8	51	..	1·1	..	0·6	0	0	3	0	0	0	0	0	0	3	0	28	0
Ballia	0330	64	1012·9	1004·7	..	21·3	16·3	12·4	14·9	58	..	3·9	..	3·6	0	0	28	0	0	1	1	2	12	12	0	3	0
	1730	,,	1008·5	1002·4	..	29·2	18·0	8·8	11·8	29	..	3·6	..	7·1	0	0	31	0	0	1	3	0	10	16	1	0	0
Varanasi(Banaras)*	0330	76	1013·7	1005·0	+2.1	23·2	17·6	13·5	15·9	56	+8	2·9	+1·5	6·8 (b)	0	1	18	1	0	0	2	3	8	3	2	12	0
	1730	,,	1009·3	1000·7	..	28·9	18·4	11·2	13·1	35	..	3·1	..	7·2	0	0	21	3	0	1	0	1	8	3	5	8	0
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	1012·6	1002·6	..	16·7	14·7	13·1	15·2	79	..	3·3	..	3·8	0	0	22	0	0	0	2	2	10	6	2	9	0
	0830	,,	1014·4	1004·5	..	22·7	17·3	13·4	15·7	57	..	3·3	..	9·5	0	1	30	2	1	0	1	2	13	7	5	0	0
	1130	,,	1014·1	1004·4	..	27·8	18·6	11·8	13·4	39	..	2·5	..	10·6	0	0	30	2	3	0	1	3	6	9	6	1	0
	1730	,,	1010·4	1000·8	..	28·4	18·9	11·6	14·2	37	..	3·2	..	9·1	0	0	31	4	1	1	2	0	5	10	8	0	0
	2330	,,	1012·7	1002·8	..	20·1	16·5	14·0	15·7	69	..	2·2	..	4·1	0	0	20	3	0	0	1	4	6	3	3	11	0
Allahabad (Bamrauli)	0230	98	1011·7	1000·3	..	18·6	15·4	13·0	14·9	70	..	2·6	..	5·4	0	0	22	1	4	0	3	2	4	5	3	9	0
	0530	,,	1011·9	1000·4	..	17·4	14·9	13·0	14·7	75	..	2·9	..	3·5	0	0	20	3	3	1	3	4	4	2	0	11	0
	0830	,,	1013·9	1002·6	+2·1	21·9	16·5	12·4	13·8	56	+12	3·0	+1·4	5·9	0	0	27	0	2	1	2	8	8	2	4	4	0
	1130		1013·4	1002·4	..	28·3	18·3	9·9	13·0	33	..	2·8	..	10·1	0	3	26	3	2	1	5	3	3	8	4	2	0
	1730	,,	1009·7	998·6	..	29·0	18·2	9·4	11·9	31	..	3·5	..	6·5	0	0	27	3	1	2	1	3	2	4	11	4	0
	2330	,,	1012·3	1000·9	..	21·1	16·4	12·8	14·8	60	..	2·7	..	4·6	0	0	23	2	2	1	2	5	4	3	4	8	0
Banda	0830	121	1014·4	1000·1	..	22·8	18·3	15·2	17·5	63	..	2·5	..	0·4	0	0	4	0	0	0	3	0	1	0	0	27	0
	1730	,,	1009·4 (m)	996·2 (m)	..	30·0	22·0	17·1	19·8	47	..	2·8	..	1·2	0	0	8	0	1	0	0	0	2	0	5	23	0
Fatehpur	0830	114	1013·7 (l)	1000·5 (l)	..	23·2	16·6	11·5	11·9	48	—4	2·4	+1·1	0·8	0	0	3	0	0	1	0	1	0	1	0	28	0
	1730	,,	1009·7	997·0	..	28·8	17·9	9·4	11·9	31	..	3·2	..	1·6	0	0	4	0	0	0	0	0	0	3	1	27	0
Kanpur	0830	126	1014·1	999·5	+2·4	21·1	16·6	12·8	15·4	60	+15	2·9	+2·1	6·7	0	1	26	1	1	1	4	6	6	2	6	4	0
	1730	,,	1010·3	996·2	..	28·6	19·0	12·0	13·6	38	..	3·6	..	10·0	0	2	28	7	1	1	1	0	1	10	9	1	0
Lucknow*	0830	113	..	..	..	21·5	16·4	12·9	15·4	58	+10	2·2	+0·8	2·5	0	0	23	0	0	3	0	1	4	7	8	8	0
	1730	,,	..	..	..	28·6	18·5	10·8	13·0	33	..	2·4	..	3·7 (b)	0	0	26	1	0	2	1	0	4	6	12	3	0
Lucknow (Amausi Aerodrome).	0230	128	1011·7	996·7	..	16·4	13·4	10·7	13·1	71	..	3·3	..	4·0	0	0	19	4	3	2	1	0	1	3	5	12	0
	0530	,,	1011·7	996·8	..	14·7	12·6	10·7	13·0	78	..	2·9	..	4·1	0	0	21	2	1	0	1	2	5	2	8	10	0
	0830	,,	1013·5	998·7	+1·9	21·2	16·0	11·7	13·7	58	+19	2·8	+1·4	6·8	0	2	24	2	0	0	3	3	5	5	8	5	0
	1130	,,	1013·2	998·8	..	27.4	17·4	8·9	11·6	33	..	2·6	..	11·5	0	3	27	2	2	1	2	4	3	6	10	1	0
	1730	,,	1009·7	995·3	..	28·0	17·3	8·2	10·5	30	..	2·8	..	10·8	0	1	29	2	2	1	0	0	3	4	18	1	0
	2330	,,	1012·2	997·3	..	18·3	14·6	10·6	13·8	66	..	2·7	..	6·6	0	1	22	5	2	2	2	2	1	4	5	8	0
Hardoi	0830	142	1013·4	996·9	..	18·6	15·3	12·6	14·7	69	..	2·1	..	4·4	0	0	23	6	1	1	1	2	3	4	5	8	0
	1730	,,	1009·7	993·7	..	27·8	18·6	11·8	14·0	39	..	2·6	..	6·0	0	1	23	6	0	0	1	0	0	8	9	7	0
Lakhimpur Kheri	0830	147	1013·1	995·8	..	17·2	15·0	13·3	15·3	79	..	1·0	..	1·9	0	0	20	0	0	0	0	0	0	20	0	11	0
	1730	,,	1009·7	993·3	..	26·6	19·3	14·9	16·7	48	..	2·6	..	1·8	0	0	18	0	1	0	0	0	0	16	1	13	0
Bahraich*	0830	124	1012·7	998·3	+1·7	20·8	16·1	12·7	15·4	61	+5	2·4	+1·2	3·5	0	0	22	0	1	0	3	1	7	0	10	9	0
	1730	,,	1009·6	995·6	..	20·7	18·3	12·3	14·5	41	..	3·4	..	4·3	0	0	22	0	0	0	1	0	6	0	15	9	0

*Data extracted from Indian Daily Weather Reports. (a) Mean of 30 days. (b) Mean of 29 days. (l) Mean of 19 days. (m) Mean of 18 days. (d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperat in °C: Dry bulb	Mean temperat in °C: Wet bulb	Mean temperat in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Culod amoun (Oktas): Mean amount	Culod amoun (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (West)																											
Orai	0630	141	1015·3	998·9	..	22·1	16·4	11·7	14·5	53	..	1·8	..	4·5	0	0	30	2	4	1	8	4	2	1	8	1	0
	1730	,,	1010·3	994·6	..	28·8	18·3	11·1	12·5	33	..	1·3	..	3·7	0	0	30	3	6	1	2	0	2	2	14	1	0
Jhansi	0830	251	1013·8	984·9	+1·0	20·7	15·4	10·9	13·1	55	+18	2·5	+1·4	2·4	0	0	22	1	1	5	1	4	7	2	1	9	0
	1730	,,	1009·6	981·6	..	28·9	18·0	9·4	11·9	32	..	3·6	..	3·9	0	0	29	3	6	4	2	0	3	2	9	2	0
Agra	0830	169	1014·4	994·9	+2·2	20·5	15·7	11·9	14·2	58	+15	1·6	−0·1	1·9	0	0	16	2	1	1	0	5	6	1	0	15	0
	1730	,	1010·5	991·3	..	28·0	17·9	9·6	12·3	35	..	2·5 (a)	..	1·8 (a)	0	0	14	2	2	1	0	1	4	1	3	16	0
Mainpuri*	0830	157	1014·4	996·2	+2·6	19·6	15·4	12·9	14·0	59	+11	2·0 (a)	+0·4	3·2	0	0	18	2	1	3	1	1	5	3	2	12	0
	1730	,,	1010·4	992·6	..	27·5	19·2	12·3	15·1	41	..	1·9	..	1·1	0	1	3	0	0	0	0	0	0	3	1	27	0
Aligarh	0830	187	1014·0	992·2	..	18·4	14·9	12·1	13·8	68	+21	2·7	+1·3	1·5	0	0	14	2	0	0	0	2	0	9	1	17	0
	1730	,,	1010·5	989·1	..	26·2	17·7	10·3	13·7	37	..	3·5	..	1·8	0	0	15	1	0	2	0	0	0	6	6	16	0
Bareilly	0830	173	1013·5	993·4	+2·1	20·1	15·3	11·3	13·5	58	−2	2·9	+1·1	1·7	0	0	10	0	2	1	0	0	0	4	3	21	0
	1730	,,	1009·7	990·4	..	26·3	17·2	9·6	12·3	37	..	3·4	..	2·3	0	0	16	2	0	1	0	0	3	8	2	15	0
Bareilly (P.B.O.)	0230	172	1011·5	991·5	..	18·3	15·3	13·4	14·9	74	..	1·8	..	3·9	0	1	19	2	4	4	0	2	1	4	3	11	0
	0530	,,	1011·7	991·6	..	16·8	14·5	13·0	14·7	79	..	2·3	..	3·9	0	0	16	3	3	3	0	0	0	3	4	15	0
	1130	,,	1013·4	993·8	..	25·2	17·7	12·1	13·9	46	..	3·1	..	7·5	0	2	28	3	3	4	1	0	1	12	6	1	0
	2330	,,	1012·4	992·5	..	19·7	16·4	14·3	16·3	71	..	2·0	..	3·8	0	1	15	2	0	3	0	0	1	6	4	15	0
Meerut	0830	222	1014·3	988·3	+2·2	19·3	15·3	11·6	14·5	62	+5	1·5	−0·3	1·5	0	0	15	0	0	1	0	0	0	11	3	16	0
Najibabad	0830	270	1014·2	982·9	..	17·2	13·7	10·7	12·7	67	..	2·5	..	1·3	0	0	8	2	1	0	2	1	0	0	2	23	0
	1730	,,	1011·9	981·3	..	25·9	17·0	9·8	12·5	38	..	2·5	..	1·8	0	0	9	3	0	0	0	1	0	0	5	22	0
Roorkee	0830	274	1014·2	982·3	+2·2	17·3	14·0	11·2	13·2	69	+8	3·8	+1·9	0·8	0	0	8	0	0	0	3	0	0	0	5	23	0
	1730	,,	1010·7	979·8	..	24·9	17·0	10·9	13·4	43	..	4·2	..	1·8	0	0	19	0	1	1	1	0	1	0	15	12	0
Dehra Dun	0530	682	1013·0	934·8	..	13·2	10·6	8·1	11·0	71	..	2·3	..	1·4	0	0	14	5	8	0	0	0	1	0	0	17	0
	0830	,,	1013·9	936·9	+2·3	17·0	12·6	8·5	11·8	59	+1	2·5	−0·3	1·2	0	0	12	0	1	1	0	2	3	4	1	19	0
	1130	,,	1012·7	936·8	..	22·3	14·5	8·0	10·8	42	..	3·4	..	2·5	0	0	23	0	0	0	3	6	10	4	0	8	0
	1730	,,	1010·0	934·5	..	22·7	15·0	8·8	11·5	43	..	3·6	..	3·3	0	0	24	1	1	1	0	2	9	9	1	7	0
	2330	,,	1013·3	935·8	..	16·1	12·2	8·8	11·4	63	..	2·2	..	3·8	0	2	17	9	9	0	0	0	1	0	0	12	0
Punjab (I) (Including Delhi)																											
New Delhi	0230	216	1012·3	987·1	..	17·3	14·1	11·2	13·2	69	..	2·1	..	5·5	0	1	16	2	1	1	2	0	5	1	5	14	0
	0530	,,	1012·2	986·8	..	16·2	13·3	10·7	13·1	72	..	2·6	..	3·8	0	1	17	2	1	3	2	1	2	3	4	13	0
	0830	,,	1013·9	988·7	+1·7	18·8	14·5	9·1	12·9	61	+13	3·3	+1·1	7·3	0	0	31	0	4	3	1	4	5	10	4	0	0
	1130	,,	1013·9	989·2	..	25·1	16·9	10·1	12·8	41	..	2·8	..	9·5	0	2	27	1	4	3	4	3	2	7	5	2	0
	1730	,,	1010·3	985·8	..	26·3	17·1	9·2	11·9	36	..	3·7	..	10·8	0	1	25	3	1	6	1	1	1	1	12	5	0
	2330	,,	1013·0	987·5	..	18·8	15·1	12·1	14·5	66	..	1·5	..	4·1	0	0	15	3	3	1	1	0	1	0	6	16	0
Hissar	0530	221	1012·3	986·4	..	14·8	12·4	10·2	12·2	76	..	2·3	..	5·2	0	0	25	2	3	7	6	2	1	2	2	6	0
	0830	,,	1013·8	988·1	+1·4	16·6	13·3	10·1	12·6	68	+17	2·0	+0·3	4·6	0	0	24	2	3	2	4	4	4	4	1	7	0
	1130	,,	1013·8	988·8	..	25·3	17·0	9·6	12·5	41	..	2·3	..	5·4	0	1	22	3	1	1	11	3	1	0	3	8	0
	1730	,,	1010·4	985·6	..	26·5	17·0	8·8	11·7	33	..	2·6	..	7·6	0	0	30	7	7	4	3	0	1	1	7	1	0
	2330	,,	1012·7	987·3	..	18·0	14·1	11·0	13·0	64	..	2·1	..	4·7	0	0	21	3	6	1	7	3	1	0	0	10	0
Karnal	0830	249	1013·9	984·7	..	16·3	13·8	11·3	13·8	72	..	3·2	..	0·1	0	0	1	0	0	0	0	0	1	0	0	30	0
	1730		1010·5	982·4	..	26·1	17·7	10·9	13·6	43	..	4·4	..	0·6	0	0	3	0	0	0	1	0	0	1	1	28	0
Patiala	0830	251	1013·9	984·8	..	17·6	13·7	10·5	12·7	63	..	2·9	..	5·3	0	0	21	0	4	1	6	1	1	0	8	10	0
	1730	,,	1010·9	982·8	..	24·8	16·5	10·1	11·6	42	..	4·0	..	10·0	0	1	28	5	1	0	4	0	1	0	18	2	0
Ambala	0830	272	1014·3	981·3	+1·1	16·1	13·2	10·6	13·0	70	+14	1·4	−0·9	2·0	0	0	15	0	0	0	5	0	0	0	10	16	0
	1730	,,	1009·7	979·7	..	25·1	17·4	11·2	14·2	45	..	2·8	..	2·3	0	0	22	0	0	0	3	0	1	0	18	9	0
Ambala (P.B.O.)	0230	278	1011·3	979·7	..	16·5	13·4	10·9	13·6	67	..	2·8	..	6·8	0	1	24	6	3	3	4	0	1	1	7	6	0
	0530	,,	1011·3	979·5	..	14·8	12·5	10·6	13·0	77	..	3·3	..	5·7	0	0	24	6	2	4	4	1	1	1	5	7	0
	1130	,,	1013·5	982·1	..	23·6	16·4	11·8	13·9	49	..	3·0	..	7·3	0	1	27	2	3	3	6	2	1	5	6	3	0
	2330	,,	1011·7	980·3	..	18·2	14·5	11·4	13·6	62	..	2·4	..	7·4	0	1	23	5	1	3	1	2	2	2	8	7	0
Chandigarh	0830	347	1012·4	973·1	..	19·1	13·7	8·8	11·8	52	..	1·2	..	1·7	0	0	15	1	4	4	3	1	1	0	1	16	0
	1730	,,	1010·0	970·5	..	24·3	16·9	10·7	12·7	45	..	1·5	..	3·1	0	0	29	4	4	0	4	1	4	0	12	2	0
Ludhiana	0830	247	1013·8	985·0	+1·7	18·0	14·6	12·0	13·8	70	+9	1·4	−0·8	3·1	0	0	19	3	2	2	2	2	2	6	0	12	0
	1730	,,	1010·7	982·8	..	25·5	17·3	11·8	13·5	45	..	2·8	..	6·5	0	1	28	2	5	2	3	5	1	8	3	2	0
Ferozepur	0830	200	1011·7	988·2	..	15·7	13·7	11·9	14·0	79	..	1·9	..	1·7	0	0	13	1	6	0	2	0	0	0	4	18	0
	1730	,,	1009·5	985·8	..	24·5	17·4	11·6	13·8	45	..	2·6	..	1·6	0	0	14	3	5	0	0	0	0	0	6	17	0
Amritsar	0530	234	1012·9	985·2	..	12·5	11·6	10·8	12·9	90	..	2·7	..	7·6	0	3	21	7	6	3	0	0	1	4	3	7	0
	0830	,,	1014·2	986·4	..	15·2	13·5	12·0	13·8	81	..	3·4	..	6·7	0	1	25	6	5	2	1	2	1	2	7	5	0
	1130	,,	1015·4	987·6	..	22·1	16·4	11·8	13·9	54	..	3·0	..	9·5	0	2	28	3	6	4	4	0	1	5	7	1	0
	1730	,,	1011·0	984·4	..	23·7	17·0	11·6	14·0	51	..	3·4	..	9·4	0	2	28	1	5	3	1	2	1	8	9	1	0
Pathankot	0830	344	1013·2	974·2	..	15·9	12·9	9·9	12·6	69	..	3·2	..	3·9	0	1	19	1	4	10	2	0	1	1	1	11	0
	1730	,,	1011·8	972·9	..	23·3	16·3	10·7	13·0	47	..	3·8	..	3·8	0	0	24	1	2	4	1	0	2	12	2	7	0

(a) Mean of 30 days.

*Data extracted from Indian Daily Weather Report

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of the nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Kms. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Himachal Pradesh																											
Bilaspur	0830	493	1015·1	957·9	..	14·3	11·8	9·5	11·7	75	..	4·1	..	3·3	0	1	14	2	2	1	3	1	1	0	3	16	2
	1730	„	1010·3	955·2	..	23·8	15·1	7·1	10·3	35	..	5·6	..	6·9	0	1	30	2	2	1	0	3	5	6	11	0	1
Mandi	0830	761	1015·7	928·4	..	11·7	10·7	8·5	11·9	83	..	3·4	..	1·7	0	0	12	2	0	0	2	0	3	2	3	19	0
	1730	„	1009·7	925·5	..	20·6	14·7	8·5	12·5	50	..	5·2	..	4·8	0	1	23	1	1	2	4	3	0	4	9	7	0
Jammu and Kashmir																											
Banihal (R)	0830																										
(R)	1730																										
Srinagar	0830	1587	1531·2	844·5	+1·6	4·8	3·9	2·9	7·5	87	+2	5·5	+0·6	1·3	0	0	12	0	1	0	7	1	0	0	3	19	0
	1130	„	1534·7	844·8	..	9·3	6·3	3·1	7·7	67	..	5·3	..	1·0	0	0	9	0	1	0	2	0	0	2	4	22	0
	1730	„	1508·1	842·2	..	11·1	6·9	2·3	7·3	58	..	5·8	..	2·5	0	0	17	4	0	0	3	1	1	4	4	14	0
Gulmarg	0830	2655																									
	1730	„										Closed during winter months.															
Dras (R)	0830	3066																									
Kargil (R)	0830	2679																									
Leh	0530	3514	(a) 3090·2	(a) 663·6	..	(a) —5·7	(a) —8·3	(a) —15·1	(a) 1·7	(a) 46	..	(a) 3·5	..	(a) 5·7	0	0	18	2	15	0	0	0	1	0	0	12	0
	0830	„	3091·5	664·2	—0·8	—3·6	—6·5	—13·1	2·1	44	—10	3·9	—1·0	1·6	0	0	7	2	1	0	0	1	3	0	0	24	0
	1730	„	3039·7	660·7	..	2·3	—1·2	—7·1	3·9	51	..	4·8	..	9·5	0	1	30	8	3	0	1	9	6	1	3	0	0
Skardu (R)	0830	2288																									
(R)	1730	„																									
Gilgit (R)	0830	1490																									
(R)	1730	„																									
Misgar (R)	0830	3106																									
(R)	1730	„																									
Jammu	0830	..	..	..	..	16·4	12·0	7·8	10·4	58	+6	4·0	+1·4	11·2	0	2	29	0	30	0	0	0	1	0	0	0	0
Rajasthan (West)																											
Sriganganagar	0530	177	1012·1	991·3	..	14·9	12·5	10·5	12·5	76	..	2·9	..	3·1	0	0	20	3	2	6	5	1	2	0	1	11	0
	0830	„	1013·4	992·3	..	16·2	13·2	10·4	12·6	72	+14	2·0	—0·4	3·1	0	0	23	3	6	5	4	1	2	0	2	8	0
	1130	„	1013·8	993·6	..	24·7	17·0	11·2	13·0	44	..	2·0	..	5·0	0	0	31	5	5	4	4	2	10	0	1	0	0
	1730	„	1009·9	990·2	..	26·3	17·3	10·1	12·5	38	..	2·8	..	4·7	0	0	27	3	3	7	1	0	3	6	4	4	0
	2330	„	1012·6	992·0	..	17·9	14·1	10·8	13·0	64	..	0·8	..	1·7	0	0	12	1	1	7	1	0	2	0	0	19	0
Churu	0830	291	1013·9	980·1	..	17·7	13·5	9·7	12·2	62	..	2·6	..	5·2	0	1	23	2	1	9	4	6	1	0	1	7	0
	1730	„	1009·6	977·1	..	27·5	17·3	8·3	11·3	34	..	3·7	..	10·3	0	2	29	11	2	1	4	3	3	3	4	0	0
Bikaner	0830	224	1013·4	987·5	+1·4	18·7	12·6	6·1	9·8	47	+4	1·4	—0·4	5·5	0	0	31	1	3	3	15	0	5	2	2	0	0
	1730	„	1009·6	984·6	..	29·4	17·1	5·3	9·8	21	..	2·0	..	8·1	0	2	29	3	5	1	2	0	7	0	13	0	0
Bikaner (P. B. O.)	0530	224	1011·9	985·6	..	15·3	11·4	7·0	13·3	60	..	2·3	..	2·7	0	0	11	0	2	3	1	2	2	0	1	20	0
	1130	„	1012·8	987·6	..	28·3	17·3	7·9	10·7	31	..	2·3	..	8·9	0	0	28	3	1	1	5	8	4	4	2	3	0
	2330	„	1012·0	986·2	..	20·4	14·2	8·0	11·8	45	..	1·5	..	5·6	0	1	19	5	8	1	2	3	1	0	0	11	0
Jaisalmer	0830	242	1012·3	984·5	..	18·8	13·5	9·1	11·3	53	..	1·0	..	7·3	0	0	22	0	9	0	3	0	8	0	2	9	0
	1730	„	1008·6	981·9	..	30·3	17·8	7·2	10·2	25	..	2·3	..	10·9	0	3	27	0	4	0	2	0	11	0	13	1	0
Phalodi	0830	234	1013·4	986·1	..	16·8	11·2	5·9	8·8	47	..	2·3	..	6·9	0	0	24	4	2	2	3	8	4	1	0	7	0
	1730	„	1009·6	983·5	..	29·7	15·8	2·2	6·5	16	..	3·9	..	14·7	0	5	26	6	4	0	0	1	6	3	11	0	0
Jodhpur	0230	224	1011·5	985·6	..	20·6	12·7	4·1	8·3	35	..	2·2	..	10·4	0	0	30	7	14	0	0	1	3	4	1	1	0
	0530	„	1011·5	985·5	..	18·6	12·3	5·6	9·2	43	..	2·0	..	9·8	0	0	29	7	12	1	0	1	4	1	3	2	0
	0830	„	1013·4	987·5	+2·3	20·4	13·1	5·2	9·3	39	+3	3·2	+1·2	7·4	0	0	26	2	17	2	2	1	1	1	0	5	0
	1130	„	1013·5	988·0	..	28·6	16·1	4·2	9·8	22	..	3·0	..	12·3	0	4	26	1	4	7	5	5	5	2	1	1	0
	1730	„	1009·2	984·2	..	30·2	16·7	2·7	7·7	18	..	4·0	..	12·2	0	3	26	2	2	1	1	4	8	3	8	2	0
	2330	„	1011·8	986·2	..	23·2	14·0	4·2	8·8	32	..	1·4	..	8·6	0	0	27	6	10	0	1	1	2	5	2	4	0
Barmer	0530	194	1010·9	988·4	..	20·1	13·1	5·7	9·5	41	..	1·4	..	7·8	0	0	28	0	1	0	0	1	1	3	22	3	0
	0830	„	1013·0	990·5	+1·0	20·1	13·6	6·9	10·4	45	—10	2·5	+0·9	4·6	0	0	24	0	0	0	3	0	2	2	17	7	0
	1130	„	1013·1	991·3	..	29·0	17·0	5·7	9·6	25	..	2·0	..	7·8	0	0	27	1	7	4	5	3	3	1	3	4	0
	1730	„	1009·1	987·5	..	31·6	16·9	1·5	7·4	16	..	3·0	..	8·4	0	1	25	0	4	0	2	5	10	2	3	5	0
	2330	„	1011·6	989·5	..	24·9	14·9	4·7	9·0	28	..	1·8	..	8·1	0	0	26	0	0	0	1	1	9	1	14	5	0
Rajasthan (East)																											
Alwar	830	271	1014·0	981·6	..	18·4	15·0	12·5	14·2	69	..	3·0	..	0·2	0	0	2	1	0	0	1	0	0	0	0	29	0
	1730	„	1009·8	978·7	..	27·6	18·6	11·7	14·3	40	..	3·6	..	2·0	0	0	23	4	1	8	2	1	2	0	5	8	0
Sikar	0830	423	1013·1	963·7	..	20·0	16·1	13·9	15·5	85	..	2·5	..	3·1	0	0	29	0	2	10	11	2	1	2	1	2	0
	1730	„	1009·5	961·7	..	26·7	21·7	18·9	21·8	63	..	3·6	..	3·1	0	0	31	0	2	3	1	4	1	10	10	0	0

(R Register not received. (a) Mean of 30 days.

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East)—*Contd.*																											
Jaipur	0830	436	1013·7	964·3	+0·9	21·3	14.6	8·5	11·3	47	+12	2·8	+1·1	5·7	0	0	23	1	4	8	3	4	2	0	1	8	0
	1130	,,	1013·2	964·6	..	26·5	16·4	7·4	10·7	31	..	2·5	..	7·6	0	0	31	0	1	1	7	6	4	8	4	0	0
	1730	,,	1009·5	961·2	..	27·5	16·6	6·4	9·0	29	..	3·1	..	5·1	0	0	23	3	0	2	1	2	6	3	6	8	0
Jaipur (Sanganer Aerodrome)	0230	390	1011·8	967·0	..	18·4	13·9	10·0	12.3	58	..	2·3	..	8·5	0	2	24	1	5	14	2	0	0	0	4	5	0
	0530	,,	1012·4	966·8	..	16·6	13·1	10·2	12·1	66	..	2·5	..	8·2	0	2	26	2	6	12	3	0	0	2	3	3	0
	0830	,,	1013·5	968·8	..	19·5	14·9	11·0	13·5	59	..	3·2	..	4·5	0	1	21	1	1	13	4	2	0	0	1	9	0
	1130	,,	1013·1	969·3	..	25·5	17·5	11.3	13.5	42	..	3·2	..	7·9	0	1	28	0	0	5	6	4	6	6	2	2	0
	1730	,,	1009·2	965·9	..	27·6	17·6	9·8	12·0	34	..	3·6	..	8·3	0	1	26	1	0	1	3	4	5	5	8	4	0
	2330	,,	1012·0	967·4	..	20·1	14·3	9.8	12·0	53	..	1·9	..	6·8	0	1	26	6	5	12	0	0	0	0	4	4	0
Dholpur*	0830	176	..	..	..	20·7	16·4	13·3	17·5	63	..	2·5 (b)	..	6·1 (b)	0	0	25	2	2	2	4	2	5	0	8	4	0
	1730	,,	..	..	..	27·3	19·4	14·3	15·7	47	..	3·6 (b)	..	5·7 (b)	0	0	27	8	6	3	0	1	2	0	7	2	0
Ajmer	0830	486	1013·9	958·6	+0·7	19·2	13·2	7·8	10·5	51	+15	3·6	+2·2	4·0	0	0	19	2	4	3	4	3	1	0	2	12	0
	1730	,,	1009·0	955·6	..	28·0	15·2	3·4	7·8	22	..	3·4	..	7·7	0	2	27	2	1	1	4	6	5	5	5	2	0
Kotah	0530	257	1012·0	982·3	..	18·1	13·9	10·0	12·8	61	..	2·0	..	1·0	0	0	9	1	1	0	4	0	1	2	0	22	0
	0830	,,	1013·7	984·2	+1·0	20·9	14·7	8·5	12·1	48	+14	2·7	+1·2	2·0	0	0	18	0	1	1	0	4	1	5	1	18	0
	1130	,,	1013·1	984·3	..	28·7	17·4	7·4	10·8	28	..	2·6	..	3·1	0	0	24	2	2	3	7	2	4	2	2	7	0
	1730	,,	1009·2	980·6	..	29·9	17·6	7·4	10·5	26	..	3·5	..	5·2	0	0	20	1	0	0	3	0	3	2	11	11	0
	2330	,,	1011·9	982·6	..	22·1	15.3	9·1	12·3	46	..	2·4	..	1·2	0	0	9	1	1	2	2	1	1	1	0	22	0
Chambal	0830	351	1013·7	973·6	..	21·1	15·1	9·7	12·7	50	..	3·0	..	4·3	0	1	15	4	3	3	1	3	1	1	0	15	0
	1730	,,	1008·6	970·1	..	28·9	18·5	10·6	12.7	34	..	3·4	..	8·0	0	3	22	4	7	2	0	0	1	5	6	6	0
Jhalawar	0830	321	1013·6	976·9	+0·9	20·9	14·5	8·3	11·3	48	+12	1·8	+0·6	3·7	0	0	17	2	5	2	2	2	1	1	2	14	0
	1730	,,	1008·4	973·3	..	30·0	17·0	3·9	8·7	21	..	3·1	..	6·4	0	0	29	4	6	0	2	1	4	6	6	2	0
Udaipur	0230	582	1012·9	946·4	..	15·8	11.8	7·8	10·9	59	..	2·0	..	1·0	0	0	8	1	1	0	0	0	0	1	5	23	0
	0530	,,	1013·1	946·2	..	14·7	11·1	7·5	10·6	63	..	2·1	..	1.2	0	0	10	3	1	0	0	0	0	2	4	21	0
	0830	,,	1014·0	948·3	+0·7	19·9	13·3	7·4	10·5	45	—2	2·6	+1·3	2·1	0	0	14	3	2	1	0	1	0	0	7	17	0
	1130	,,	1012·6	948·5	..	27·0	15·8	6·1	10·2	28	..	3·2	..	5·5	0	0	24	3	7	6	3	1	3	0	1	7	0
	1730	,,	1008·5	944·9	..	28·6	16·2	5·6	9·2	24	..	3·5	..	4·4	0	0	20	2	1	1	2	0	9	1	4	11	0
	2330	,,	1013·2	947·1	..	18·2	13·0	8·5	11·2	55	..	1·7	..	1·2	0	0	7	2	0	1	0	0	2	0	2	24	0
Erinpura	0830	295	1013·1	979·4	..	21·6	15·5	10·5	12·7	50	..	3·1	..	7·1	0	0	26	1	1	1	2	16	2	3	0	5	0
(Jawai Dam)	1730	,,	1008·8	976·1	..	29·7	19·1	11·8	13·3	36	..	4·3	..	6·6	0	2	22	4	2	2	0	3	1	10	2	7	0
Madhya Pradesh, (West) Gwalior (P.B.O.)	0230	210	1011·8	987·5	..	18·0	13·9	10·2	12·5	62	..	2·6	..	3·6	0	0	18	3	2	0	1	3	5	1	3	13	0
	0530	,,	1012·1	987·7	..	16·3	13·2	10·2	12·7	70	..	2·0	..	2·4	0	0	13	0	1	0	1	6	5	0	0	18	0
	0830	,,	1013·6	989·6	+1·5	21·6	15·4	9·9	12·6	49	+11	2·1	+0·8	4·2	0	0	20	1	1	1	3	6	2	1	5	11	0
	1130	,,	1013·3	989·7	..	27·7	17·0	7·6	10·8	31	..	2·5	..	9·6	0	1	29	5	5	1	1	11	3	0	4	1	0
	1730	,,	1009·5	986·1	..	28·6	17·0	6·7	10·0	27	..	2·9	..	9·1	0	0	31	15	3	2	2	1	2	0	6	0	0
	2330	,,	1012·6	988·3	..	19·6	14.8	10.5	13·0	58	..	2·5	..	2·2	0	0	13	1	2	0	1	2	4	2	1	18	0
Sheopurkalan	0830	235	1013·5	986·4	..	20·0	14·8	9·7	12·6	55	..	3·7	..	5·2	0	0	26	7	4	2	3	5	1	2	2	5	0
	1730	,,	1007·9	981·7	..	29·9	17·3	5·3	9·6	2	..	4·6	..	11·1	0	2	28	12	3	0	0	3	4	4	4	1	0
Guna	0530	479	1012·6	957·6	..	16·1	12·0	8·0	11·1	62	..	2·9	..	2·0	0	0	14	0	2	9	3	0	0	0	0	17	0
	0830	,,	1013·6	959·2	+0·2	19·8	13·9	8·6	11·6	52	+15	2·7	+1.7	2·6	0	0	21	1	1	14	2	2	0	1	0	10	0
	1130	,,	1012·6	959·7	..	27·7	16·3	6·6	10·2	28	..	2·7	..	7·1	0	1	28	1	5	11	2	3	3	2	2	2	0
	1730	,,	1008·7	956·1	..	28·6	16·1	5·1	9·2	24	..	4·5	..	6·7	0	1	24	5	1	3	0	1	5	6	4	6	0
	2330	,,	1012·7	958·3	..	19·5	13·5	8·0	11·1	50	..	2·2	..	3·6	0	0	17	2	4	5	4	0	1	1	0	14	0
Rajgarh	0830	382	1013·7	970·0	..	20·0	13·7	7·1	10·5	47	..	2·5	..	7·0	0	1	25	1	4	0	11	5	1	0	4	5	0
	1730	,,	1008·5	966·4	..	29·4	16·9	4·0	9·2	24	..	4·6	..	10·1	0	3	27	3	6	2	5	1	1	7	5	1	0
Neemuch	0830	496	1014·2	958·0	+1·2	20·6	15·5	11·5	13·9	57	+20	3·0	+1·7	7·2	0	0	29	2	11	5	5	1	2	3	0	2	0
	1730	,,	1008·8	954·5	..	29·3	20·5	15·0	17·7	45	..	4·0	..	7·7	0	0	26	0	9	0	2	1	9	3	2	5	0
Ratlam	0830	486	1013·3	958·2	..	20·7	13·9	7·6	11·0	45	..	2·9	..	9·4	0	1	28	3	9	10	1	0	3	2	1	2	0
	1730	,,	1008·0	954·8	..	30·1	17·1	6·2	10·0	24	..	4·4	..	8·9	0	0	28	3	4	2	0	0	6	7	6	3	0
Alirajpur	0830	293	1013·5	980·0	..	20·7	15·6	11·1	13·5	55	..	2·3	..	4·9	0	0	20	0	3	7	0	0	1	7	2	11	0
	1730	,,	1008·0	975·9	..	32·4	19·6	10·6	12·4	25	..	3·3	..	9·1	0	0	28	3	2	2	2	1	7	4	7	3	0
Indore	0530	567	1011·9	947·3	..	16·6	11·4	6·3	9·8	53	..	2·0	..	5·6	0	2	23	2	2	6	3	7	3	2	0	6	0
	0830	,,	1013·3	949·4	+0·3	20·9	13·7	7·1	10·4	43	+11	2·9	+1.8	8·7	0	0	28	1	6	5	4	5	2	4	1	3	0
	1130	,,	1011·8	949·4	..	27·6	16·4	6·7	10·6	29	..	2·7	..	13·0	0	6	25	2	5	7	6	7	1	1	2	0	0
	1730	,,	1007·1	945·6	..	30·4	16·3	3·8	8·2	19	..	4·2	..	16·0	0	9	22	5	2	2	0	3	11	6	2	0	0
	2330	,,	1011·7	948.0	..	21·0	13·0	5·3	9·3	37	..	2·5	..	10·0	0	4	21	4	7	3	2	4	1	2	2	6	0
Bhopal (Bairagarh)	0230	523	1011·3	952·1	..	19·0	13·6	8·3	11.6	55	..	2·1	..	10.1	0	3	25	3	8	3	9	3	0	0	2	3	0
	0530	,,	1011·8	952·2	..	17·2	12·9	8·6	11·7	61	..	1·7	..	7·2	0	0	25	4	7	3	6	4	0	1	0	6	0

*Data extracted from Indian Daily Weather Reports.

(b) Mean of 10 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Km. Mean wind speed per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh, (West)—*Contd.*																											
Bhopa (Bairagarh)—*Contd.*	0830	523	1013·5	954·5	+0·7	20·7	14·6	9·0	12·1	52	+23	2·7	+1·6	9·0	0	2	23	2	6	6	8	1	0	1	1	6	0
	1130	,,	1012·1	954·3	..	27·0	16·8	8·3	11·7	33	..	2·4	..	12·7	0	2	29	2	7	2	10	5	3	1	1	0	0
	1730	,,	1007·9	950·8	..	28·7	16·6	6·0	10·0	27	..	3·8	..	12·0	0	5	25	7	4	2	2	5	3	4	3	1	0
	2330	,,	1011·9	953·0	..	20·7	14·3	8·5	11·6	49	..	2·4	..	10·1	0	2	27	6	9	3	6	2	1	1	1	2	0
Khandwa	0830	318	1013·2	976·9	+0·8	22·1	15·7	9·7	12·6	48	+15	3·0	+2·1	4·3	0	0	19	3	6	2	3	1	1	2	1	12	0
	1730	,,	1007·2	972·3	..	32·9	19·3	8·2	11·3	23	..	4·3	..	9·4	0	1	26	1	2	1	1	6	6	3	7	4	0
Hoshangabad	0830	302	1013·8	979·2	+0·9	21·2	15·9	11·3	13·8	55	+21	2·8	+1·6	2·1	0	0	13	0	4	8	1	0	0	0	0	18	0
	1730	,,	1008·0	974·7	..	30·7	19·9	9·5	12·5	30	..	3·7	..	1·1	0	0	7	3	1	1	1	0	0	1	0	24	0
Betul	0830	653	1013·6	940·6	..	21·3	15·6	11·0	13·5	55	..	3·2	..	5·2	0	0	28	2	2	11	9	1	1	1	1	3	0
	1730	,,	1007·9	936·7	..	27·0	17·2	8·9	12·5	38	..	4·5	..	9·5	0	0	30	5	8	5	3	0	3	1	5	1	0
Chhindwara	0830	685	1013·6	937·0	..	20·4	15·1	10·9	13·2	57	..	2·5	..	6·1	0	0	27	0	9	8	1	0	0	5	4	4	0
	1730	,,	1008·3	933·8	..	27·5	18·6	13·1	14·8	43	..	3·9	..	8·6	0	0	26	2	5	3	1	2	4	3	6	5	0
Seoni	0830	618	1013·0	943·8	+0·6	21·2	15·9	11·9	14·3	58	+21	4·2	+2·9	4·1	0	0	26	2	5	4	5	3	5	1	1	5	0
	1730	,,	1008·2	940·7	..	27·0	18·1	11·6	14·2	43	..	4·8	..	6·0	0	0	30	2	1	6	7	9	3	1	1	1	0
Sagar	0830	551	1013·5	951·3	+1·0	20·0	14·3	9·3	12·1	54	+23	2·5	+1·2	6·2	0	0	28	0	6	11	5	0	3	2	1	3	0
	1730	,,	1008·4	947·8	..	27·0	16·2	7·2	10·5	32	..	4·0	..	6·2	0	1	25	0	6	2	3	0	3	7	5	5	0
Nowgong	0830	229	1014·3	987·9	+1·8	20·2	15·4	11·3	13·7	59	+13	2·1	+0·3	3·9	0	0	26	3	3	2	2	5	9	0	2	5	0
	1730	,,	1009·7	984·2	..	29·4	17·8	7·9	10·9	28	..	3·7	..	7·8	0	0	28	9	5	1	1	1	3	3	5	3	0
Madhya Pradesh, (East)—																											
Sutna	0530	317	1012·4	975·6	..	16·5	14·2	12·4	14·3	77	..	3·1	..	3·4	0	1	12	0	1	0	4	4	4	0	0	18	0
	0830	,,	1013·9	977·6	+1·7	21·1	16·1	12·1	14·3	58	+18	3·2	+1·7	2·6	0	0	23	0	0	5	3	6	3	5	1	8	0
	1130	,,	1012·8	977·3	..	26·7	17·9	10·9	13·5	39	..	3·1	..	6·5	0	0	27	0	1	6	3	5	8	2	2	3	0
	1730	,,	1009·2	973·9	..	27·8	18·0	10·2	12·7	36	..	3·8	..	3·6	0	0	29	3	1	3	1	3	3	5	10	2	0
	2330	,,	1012·5	976·1	..	20·3	16·0	12·4	14·7	62	..	3·1	..	2·9	0	0	16	3	0	3	2	2	2	2	2	15	0
Umaria	0830	459	1014·2	961·9	..	20·1	16·1	13·2	15·4	67	+25	3·4	+1·6	4·0	0	0	18	1	3	4	5	2	1	0	2	13	0
	1730	,,	1008·9	958·3	..	27·6	18·9	12·8	15·6	44	..	3·7	..	3·7	0	0	15	3	1	1	2	0	0	1	7	16	0
Jabalpur	0530	393	1012·5	967·1	..	15·9	14·3	13·1	14·9	84	..	3·7	..	3·4	0	1	16	2	2	2	9	1	1	0	0	14	0
	0830	,,	1014·0	969·2	+1·6	20·2	16·3	13·2	15·4	65	+22	3·5	+2·3	3·8	0	0	22	0	3	2	12	3	2	0	0	9	0
	1130	,,	1012·7	969·0	..	27·3	18·6	11·6	14·5	41	..	2·9	..	5·1	0	0	27	0	5	4	7	6	3	1	1	4	0
	1730	,,	1008·8	965·3	..	27·8	18·7	11·6	15·1	41	..	3·5	..	7·0	0	1	27	3	6	0	2	5	7	2	2	3	1
	2330	,,	1012·4	967·6	..	19·4	16·2	13·7	15·7	71	..	2·8	..	3·9	0	0	21	0	4	2	9	4	0	0	2	10	0
Mandla	0830	443	1014·8	964·1	..	18·1	15·8	14·2	16·1	79	..	3·2	..	2·5	0	0	13	2	2	2	1	3	1	2	0	18	0
	1730	,,	1008·8	960·0	..	27·2	19·2	13·3	15·7	46	..	3·8	..	5·6	0	0	28	6	2	3	5	6	1	1	4	3	0
Pendra	0530	625	1012·9	942·0	..	16·4	13·0	10·0	12·5	67	..	2·4	..	8·6	0	7	22	5	0	0	1	6	4	4	9	2	0
	0830	,,	1014·4	944·3	+1·3	20·5	15·1	11·0	13·2	57	+16	2·9	+1·5	7·3	0	1	26	6	5	0	4	6	3	1	1	4	1
	1130	,,	1013·1	944·1	..	25·1	16·3	9·3	12·3	40	..	2·6	..	11·9	0	4	27	7	3	3	1	7	7	2	0	0	1
	1730	,,	1009·5	941·0	..	25·3	16·6	9·9	12·5	42	..	3·9	..	10·5	0	3	25	8	4	0	1	6	5	1	3	3	0
	2330	,,	1013·3	942·9	..	18·9	14·5	10·8	13·3	62	..	2·3	..	8·2	0	3	25	4	1	2	1	3	5	5	6	3	1
Ambikapur	0830	611	1014·7	945·8	..	19·7	15·3	12·1	14·2	62	..	1·9	..	4·8	0	0	24	2	5	3	0	4	6	4	0	7	0
	1730	,,	1009·4	942·5	..	26·4	16·9	9·6	12·3	38	..	2·8	..	10·4	0	2	29	12	3	0	0	0	5	6	5	0	0
Champa	0830	245	1014·1	986·0	..	21·8	17·0	13·5	15·5	60	..	3·0	..	3·8	0	1	12	2	5	0	2	2	0	0	2	18	0
	1730	,,	1009·4	982·2	..	30·0	19·3	10·7	13·6	36	..	3·3	..	5·3	0	0	20	8	2	0	1	0	2	5	2	11	0
Raigarh	0830	220	1014·1	988·9	..	23·1	17·2	12·7	14·9	54	..	3·0	..	4·0	0	0	27	2	16	2	4	1	0	1	1	4	0
	1730	,,	1009·1	984·6	..	30·3	19·1	10·3	13·1	32	..	3·2	..	4·3	0	1	22	2	6	0	1	0	3	4	7	8	0
Raipur	0530	298	1011·9	977·7	..	19·4	15·7	12·7	14·9	67	..	2·7	..	4·6	0	1	18	6	2	2	1	0	4	1	3	12	0
	0830	,,	1013·9	980·0	+1·8	22·6	16·7	12·0	14·3	54	+14	2·9	+1·6	5·7	0	0	27	6	5	3	4	4	2	1	2	4	0
	1130	,,	1013·2	979·9	..	27·9	18·4	10·7	13·6	39	..	2·6	..	7·8	0	1	28	2	4	7	1	2	4	3	5	2	1
	1730	,,	1008·8	975·9	..	30·1	18·7	9·3	12·3	32	..	2·9	..	6·3	0	1	28	8	4	1	2	1	4	4	5	2	0
	2330	,,	1011·9	978·1	..	23·2	17·2	12·4	14·9	54	..	2·1	..	6·8	0	4	18	5	2	3	3	2	1	2	4	9	0
Kanker	0830	402	1013·9	968·4	+1·7	21·9	17·8	14·9	16·9	66	+13	3·0	+1·3	1·2	0	0	5	0	0	1	1	1	1	0	1	26	0
	1730	,,	1008·6	964·3	..	29·7	20·4	14·2	16·5	42	..	3·0	..	1·2	0	0	11	1	5	0	0	0	3	1	1	20	0
Jagdalpur (P.B.O.)	0530	553	1012·3	949·8	..	18·6	15·8	13·8	16·0	75	..	2·9	..	1·2	0	0	4	0	1	1	0	0	0	0	2	27	0
	0830	,,	1013·9	952·1	+1·4	22·8	17·5	14·1	16·2	59	+2	3·1	+1·2	1·5	0	0	8	0	2	1	1	2	1	1	0	23	0
	1130	,,	1011·6	951·3	..	29·6	18·9	11·6	14·0	35	..	2·9	..	4·0	0	0	18	1	4	3	2	3	1	1	3	13	0
	1730	,,	1007·6	947·7	..	30·2	18·7	10·5	13·1	32	..	3·5	..	3·1	0	0	17	2	3	1	2	3	3	1	2	14	0
	2330	,,	1012·1	950·4	..	22·5	17·0	13·0	15·3	57	..	2·2	..	1·9	0	0	9	2	1	1	3	0	2	0	0	22	0
Gujarat																											
Deesa	0830	136	1013·1	997·4	+0·8	22·1	15·8	10·3	13·0	49	..	3·6	..	7·4	0	2	27	3	5	4	6	1	0	5	5	2	0
	1730	,,	1008·8	993·6	..	31·9	19·3	8·3	12·0	26	..	3·6 (a)	..	7·1 (a)	0	0	30	4	2	0	2	4	5	7	6	0	0

(a) Mean of 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat—*Contd.*																											
Idar	0830	219	1012·8	987·8	..	23·0	..	..	..	..	..	2·7	..	6·8	0	0	28	2	10	11	1	0	1	3	0	3	0
	1730	,,	1008·7	984·4	..	31·3	..	..	..	..	..	2·8	..	5·1	0	0	28	4	3	1	1	1	6	9	3	3	0
Ahmedabad	0230	55	1010·6	1004·3	..	20·8	14·1	7·5	10·6	43	..	1·6	..	9·5	0	1	27	5	1	0	2	1	6	8	5	3	0
	0530	,,	1010·7	1004·3	..	19·3	13·7	8·3	11·2	51	..	1·9	..	8·4	0	0	24	4	7	0	0	0	2	8	3	7	0
	0830	,,	1012·7	1006·2	0	22·5	15·3	8·7	11·5	45	—2	2·7	+1·6	10·2	0	1	25	4	5	6	0	1	0	5	5	5	0
	1130	,,	1012·9	1006·8	..	29·5	18·1	8·4	11·6	28	..	2·7	..	14·2	0	8	22	1	7	9	3	1	3	1	5	1	0
	1730	,,	1008·8	1002·8	..	32·9	18·5	5·7	9·6	19	..	2·3	..	11·5	0	2	28	2	5	0	0	8	7	6	2	1	0
	2330	,,	1011·1	1004·9	..	23·2	15·5	8·8	11·6	40	..	1·2	..	7·5	0	0	26	6	1	0	1	3	4	3	8	5	0
Dohad	0830	333	1013·1	975·1	..	21·4	14·2	7·3	10·4	41	—3	1·6	+0·4	9·2	0	1	28	2	8	5	3	1	6	4	0	2	0
	1730	,,	1008·6	972·0	..	31·9	17·9	6·3	9·2	20	..	1·5	..	7·3	0	4	25	2	1	1	3	0	11	8	3	2	0
Baroda	0530	35	1010·7	1006·6	..	17·8	14·6	11·6	14·1	69	..	1·6	..	2·1	0	0	16	0	5	0	2	1	6	2	0	15	0
	0830	,,	1012·9	1008·8	..	21·5	16·0	11·3	13·7	54	+7	2·1	+1·2	2·5	0	0	17	0	6	0	2	2	6	0	1	14	0
	1130	,,	1012·9	1009·0	..	30·4	18·8	9·5	12·3	29	..	2·5	..	4·5	0	0	28	1	8	1	7	4	4	2	1	3	0
	1730	,,	1008·7	1004·8	..	33·7	19·8	8·9	11·9	22	..	1·9	..	6·2	0	0	25	2	5	1	0	1	4	3	9	6	0
	2330	,,	1011·2	1007·2	..	21·8	16·0	11·3	13·5	52	..	1·0	..	2·0	0	0	19	2	3	1	0	0	11	1	1	12	0
Baroda (Aerodrome)	0830	38	1013·0	1008·7	..	22·3	15·9	10·0	12·9	48	..	2·0	..	7·8	0	0	28	8	1	1	8	3	7	0	0	3	0
	1130	,,	1012·9	1008·7	..	30·3	18·5	8·5	11·8	28	..	2·5	..	7·7	0	0	26	4	3	5	5	2	4	1	0	5	2
	1730	,,	1008·7	1004·5	..	33·3	18·8	6·5	10·0	20	..	2·2	..	5·6	0	0	29	4	1	0	0	0	10	3	10	2	1
Broach	0830	17	1012·7	1010·6	..	20·8	16·0	12·2	14·3	60	..	2·1	..	5·1	0	0	30	2	4	0	4	2	13	0	5	1	0
	1730	,,	1008·6	1006·7	..	33·6	19·6	8·2	11·5	23	..	2·0	..	11·4	0	1	30	1	1	0	4	3	10	5	7	0	0
Surat	0530	12	1010·9	1009·5	..	19·5	17·8	16·4	19·1	81	..	2·1	..	4·8	0	0	27	2	5	2	9	3	2	1	3	4	0
	0830	,,	1013·1	1011·7	+0·8	21·7	18·9	17·0	19·7	75	+15	2·0	+1·0	4·0	0	0	25	2	5	1	6	2	4	1	4	6	0
	1130	,,	1013·2	1011·8	..	29·9	20·6	14·3	16·6	40	..	2·9	..	7·5	0	0	29	5	2	3	0	5	4	5	5	2	0
	1730	,,	1009·2	1007·8	..	31·3	21·0	14·9	16·5	39	..	2·3	..	6·8	0	0	31	2	3	0	0	0	10	5	11	0	0
	2330	,,	1011·7	1010·3	..	23·0	19·7	17·5	20·3	72	..	1·1	..	6·5	0	0	30	3	2	0	3	6	5	8	3	1	0
Saurashtra & Kutch																											
Bhuj	0830	105	1013·3	1001·2	+0·7	20·4	16·4	13·1	15·4	63	+7	2·4	+1·2	2·0	0	0	13	2	1	0	0	0	2	3	5	18	0
	1730	,,	1009·5	997·8	..	31·8	18·0	5·5	9·4	20	..	1·7	..	8·9	0	1	29	7	2	1	1	2	7	8	2	1	0
Bhuj (P.B.O.)	0230	106	1011·6	999·5	..	20·5	16·3	12·8	15·2	64	..	1·5	..	2·4	0	0	13	0	0	0	0	1	4	6	2	18	0
	0530	,,	1011·5	999·2	..	18·5	15·5	12·8	15·2	72	..	1·9	..	1·8	0	0	11	2	0	0	1	1	5	2	0	20	0
	0830	,,	1013·0	1000·8	..	22·0	18·1	15·7	17·5	69	..	2·4	..	2·2	0	0	12	1	0	0	0	0	4	4	3	19	0
	1130	,,	1013·0	1001·1	..	28·5	17·5	8·9	11·1	31	..	1·9	..	7·7	0	0	29	6	9	0	1	1	2	4	6	2	0
	1730	,,	1009·5	997·7	..	31·4	20·2	13·6	14·5	35	..	2·2	..	7·1	0	0	30	6	4	1	1	2	8	4	3	1	1
	2330	,,	1012·0	999·9	..	22·5	16·8	11·6	14·6	53	..	1·3	..	5·8	0	0	25	2	1	0	0	1	10	9	2	6	0
Bhuj (Aerodrome)	0830	80	1012·7	1003·4	..	21·3	..	..	..	..	..	2·5	..	6·5	0	0	25	3	1	0	0	0	8	3	10	6	0
	1130	,,	1012·9	1003·8	..	28·4	..	..	..	..	..	2·1	..	10·9	0	0	30	11	2	5	0	0	1	3	8	1	0
	1730	,,	1008·8	999·8	..	31·7	..	..	..	..	..	2·7 (d)	..	12·4 (d)	0	2	21	4	3	3	0	2	2	6	3	4	0
Kandla	0830	5	1013·3	1012·7	..	21·0	17·2	14·4	16·6	68	..	3·0	..	7·5	0	0	31	1	2	0	2	1	7	4	14	0	0
	1730	,,	1010·0	1009·4	..	30·1	19·2	10·3	13·5	33	..	2·9	..	18·3	0	13	18	2	2	1	1	1	18	1	5	0	0
Mandvi	0830	9	1013·1	1012·0	..	20·7	18·2	16·2	18·8	78	..	2·1	..	9·4	0	0	29	6	4	1	0	0	1	1	13	2	3
	1730	,,	1010·4	1009·4	..	25·5	22·2	20·4	24·0	74	..	1·4	..	30·8	0	30	1	0	0	0	0	0	7	24	0	0	0
Dwarka	0830	11	1013·4	1012·1	+0·4	22·5	20·3	18·9	22·0	80	+4	2·6	+0·8	11·0	0	1	29	11	1	0	0	0	2	5	11	1	0
	1730	,,	1011·0	1009·7	..	25·2	21·6	19·4	22·9	71	..	1·6	..	18·4	0	6	25	2	0	0	0	0	0	12	17	0	0
Porbandar	0830	7	1013·1	1012·3	..	20·8	18·7	17·1	19·9	81	..	2·4	..	7·1	0	0	28	13	3	1	0	0	0	1	10	3	0
	1730	,,	1010·3	1009·5	..	26·5	22·3	19·9	23·6	69	..	2·8 (d)	..	22·4 (d)	0	20	11	1	0	0	0	0	5	17	8	0	0
Porbandar (Aerodrome)	0830	7	1013·3	1012·5	..	22·0	18·3	16·0	18·0	71	..	2·6 (d)	..	4·1 (d)	0	1	23	11	1	3	1	0	0	3	5	3	0
	1130	,,	1013·8	1013·0	..	29·0	20·0	14·4	16·1	44	..	2·3 (d)	..	11·8 (d)	0	3	24	6	5	0	0	0	4	5	7	0	0
Jamnagar	0530	23	1011·3	1008·6	..	18·6	17·0	15·9	18·1	85	..	2·0	..	8·0	0	0	29	1	0	0	1	5	8	11	3	2	0
	0830	,,	1013·1	1010·5	+0·4	21·7	18·7	16·9	19·1	75	+4	2·8	+1·7	7·5	0	1	26	1	2	0	2	3	7	8	4	4	0
	1130	,,	1013·6	1011·0	..	28·2	19·9	14·0	16·6	43	..	2·3	..	14·9	0	9	22	8	7	0	0	0	1	7	8	0	0
	1730	,,	1009·9	1007·3	..	29·5	19·9	12·9	15·5	39	..	2·0	..	24·3	0	23	8	6	1	0	0	0	0	15	9	0	0
Rajkot (Aerodrome)	0830	134	1013·4	997·9	+0·8	20·6	16·6	13·1	15·7	66	+6	2·2	+0·4	6·9	0	0	23	4	1	0	1	1	2	6	8	8	0
	1130	,,	1013·1	998·1	..	29·0	17·9	8·4	11·5	30	..	1·5	..	13·2	0	5	26	7	7	3	0	1	2	4	7	0	0
	1730	,,	1008·9	994·1	..	32·7	18·1	4·8	8·9	19	..	1·4	..	13·4	0	5	26	4	6	1	2	0	4	7	7	0	0
Surendranagar	0830	74	1013·1	1004·6	..	21·8	16·3	12·0	14·0	57	..	2·9	..	7·2	0	0	29	4	2	0	0	0	2	3	18	2	0
	1730	,,	1008·5	1000·3	..	33·1	17·8	3·3	8·0	16	..	2·5	..	6·5	0	0	29	4	2	0	2	1	4	9	7	2	0
Bhavnagar	0830	17	1013·6	1011·6	+0·9	21·0	15·7	11·1	13·6	54	+7	1·3	+0·1	4·1	0	0	29	1	0	0	0	2	4	16	6	2	0
	1730	,,	1009·3	1007·5	..	32·7	20·5	11·7	14·2	29	..	1·1	..	3·7	0	0	31	0	11	0	16	0	3	0	1	0	0
Bhavnagar (Aerodrome)	0830	11	1013·0	1011·8	...	22·5	15·8	9·7	12·6	47	..	1·9	..	12·1	0	0	29	8	0	0	1	3	2	4	11	2	0
	1130	,,	1013·4	1012·2	..	28·5	18·3	10·2	12·7	33	..	2·2	..	14·8	0	2	28	3	14	9	3	0	0	1	0	1	0

(d)—Mean of 27 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Km. Mean wind speed per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch— *Contd.*												(e)		(e)													
Mahuva	0830	16	1012·8	1011·0	..	22·0	18·4	15·4	18·2	68	..	1·3	..	5·6	0	0	23	3	3	2	1	1	1	0	12	3	0
	1730	,,	1009·8	1008·0	..	29·1	24·6	22·5	27·2	69	..	(e) 1·6	..	(e) 19·4	0	10	16	0	0	5	4	9	8	0	0	0	0
Keshod	0830	51	1013·6	1007·7	..	21·1	17·4	14·8	17·0	70	..	2·4	..	8·7	0	1	27	13	12	0	0	0	0	1	2	3	0
	1130	,,	1013·8	1008·0	..	28·3	19·5	14·1	15·6	44	..	2·2	..	16·1	0	9	21	10	9	0	0	0	2	3	6	1	0
	1730	,,	1010·0	1004·3	..	30·6	21·2	16·0	17·5	43	..	2·1	..	31·4	0	30	1	1	0	0	0	2	6	20	2	0	0
Veraval	0230	8	1011·6	1010·7	..	19·5	17·9	16·6	19·3	86	..	1·1	..	14·0	0	4	26	8	2	1	0	0	0	3	16	1	0
	0530	,,	1011·2	1010·3	..	17·9	16·5	15·2	17·6	86	..	1·3	..	12·7	0	0	30	13	2	0	0	0	0	1	14	1	0
	0830	,,	1013·2	1012·3	+0·5	20·2	18·0	16·4	18·0	80	+17	2·3	+1·2	13·1	0	2	28	8	6	0	0	0	1	1	14	1	0
	1130	,,	1013·7	1012·8	..	27·4	21·0	17·0	19·7	58	..	2·2	..	16·9	0	8	23	1	3	0	0	4	3	11	8	0	1
	1730	,,	1010·4	1009·5	..	25·5	22·8	21·5	25·7	79	..	1·8	..	22·2	0	19	12	0	0	0	0	2	2	24	3	0	0
	2330	,,	1012·7	1011·8	..	21·9	20·3	19·2	22·5	85	..	0·8	..	15·0	0	6	25	7	0	0	0	1	1	6	16	0	0
Konkan																											
Dahanu	0830	5	1012·7	1012·2	+0·9	22·1	19·3	17·3	20·1	74	+1	1·4	—0·7	8·8	0	0	31	1	1	17	10	0	0	1	1	0	0
	1730	,,	1009·7	1009·2	..	26·0	21·6	19·1	22·0	66	..	1·1	..	19·3	0	7	24	14	0	0	0	0	0	11	6	0	0
Bombay (Colaba)	0830	11	1013·0	1011·8	+0·7	23·6	20·8	19·1	22·4	76	+3	2·3	+1·0	6·9	0	0	29	10	4	3	9	1	0	0	2	2	0
	1130	,,	1013·1	1011·9	..	27·8	22·2	19·0	22·3	59	..	1·0	..	10·1	0	0	30	1	0	1	2	1	4	7	14	1	0
	1730	,,	1009·9	1008·7	..	27·1	22·3	19·7	23·0	65	..	0·8	..	17·6	0	7	24	3	0	0	0	0	0	11	17	0	0
Bombay (Santacruz Aerodrome)	0230	8	1011·3	1010·4	..	21·0	19·2	17·6	20·7	83	..	1·2	..	2·3	0	0	12	8	2	0	1	0	0	0	1	19	0
	0530	,,	1011·2	1010·3	..	20·2	18·8	17·7	20·6	87	..	1·2	..	1·1	0	0	8	6	1	1	0	0	0	0	23	0	0
	0830	,,	1013·3	1012·4	+1·0	23·3	20·2	17·9	21·1	74	+4	2·5	+1·2	3·3	0	0	14	5	2	4	2	0	0	0	1	17	0
	1130	,,	1013·2	1012·3	..	28·6	21·3	16·6	19·4	50	..	1·6	..	9·7	0	0	30	2	2	0	0	1	2	7	16	1	0
	1730	,,	1009·9	1009·0	..	27·8	21·5	17·8	20·5	56	..	1·2	..	19·3	0	12	19	3	0	0	0	0	0	7	21	0	0
	2330	,,	1012·5	1011·6	..	22·5	19·7	17·6	20·7	77	..	0·8	..	1·3	0	0	9	3	0	0	0	1	0	0	5	22	0
Alibag	0830	7	1013·0	1012·2	+1·0	23·1	21·1	20·0	23·5	83	+18	1·7	+0·4	4·9	0	0	29	9	7	7	5	0	0	0	1	2	0
Harnai	0830	20	1012·2	1009·9	+1·3	23·4	20·0	18·4	20·8	75	+7	2·2	..	7·4	0	0	27	9	5	3	2	1	0	0	7	4	0
	1730	,,	1009·5	1007·2	..	25·9	22·7	21·1	25·0	75	..	1·2	..	27·5	0	24	6	2	0	0	0	0	0	7	21	1	0
Ratnagiri	0830	35	1012·5	1008·5	+0·7	23·0	20·5	19·2	22·1	79	..	2·0	..	..	0	0	31	0	0	30	0	0	0	1	0	0	0
	1730	,,	1009·7	1005·7	..	27·8	23·0	20·5	24·2	65	..	1·6	..	..	0	25	6	1	0	0	0	0	0	26	4	0	0
Devgad	0830	36	1012·8	1008·6	+1·2	24·1	21·6	20·3	23·7	79	+2	3·3	+1·1	8·7	0	0	31	9	12	10	0	0	0	0	0	0	0
	1730	,,	1009·6	1005·5	..	28·1	23·5	21·2	25·3	67	..	3·0	..	27·0	0	22	9	4	0	0	0	0	0	12	15	0	0
Vengurla	0230	9	1010·8	1009·8	..	22·0	20·4	19·5	22·7	86	..	0·4	..	..	0	0	8	7	0	0	0	0	0	0	1	23	0
	0530	,,	1010·8	1009·8	..	20·8	19·7	19·0	22·1	89	..	0·4	..	..	0	0	4	4	0	0	0	0	0	0	0	27	0
	0830	,,	1012·9	1011·9	..	23·9	20·9	19·2	22·2	75	..	1·3	..	..	0	0	4	2	1	1	0	0	0	0	0	27	0
	1130	,,	1012·9	1011·9	..	29·2	22·8	19·3	22·6	56	..	1·0	..	..	0	3	26	1	0	0	0	0	5	22	1	2	0
	1730	,,	1009·7	1008·7	..	28·8	23·0	19·9	23·3	59	..	1·0	..	..	0	4	25	0	0	0	0	0	2	23	4	2	0
	2330	,,	1012·2	1011·2	..	23·5	21·2	19·9	23·2	80	..	0·3	..	..	0	0	9	8	0	0	0	0	0	1	0	22	0
Maharashtra																											
Jalgaon	0830	201	1013·9	990·4	..	21·8	15·1	9·1	11·8	46	..	1·6	..	6·7	0	3	14	0	0	8	2	2	2	2	1	14	0
	1730	,,	1007·2	985·1	..	34·6	19·2	6·0	9·5	18	..	3·1	..	10·0	0	1	28	4	2	1	2	1	2	9	8	2	0
Malegaon	0830	437	1013·0	963·8	+0·6	23·0	14·6	5·1	9·8	34	—6	2·0	+0·9	2·7	0	0	24	1	2	2	1	1	1	10	6	7	0
	1730	,,	1006·6	959·4	..	33·1	18·2	3·6	8·7	17	..	4·2	..	5·4	0	0	26	8	2	2	0	0	4	6	4	5	0
Deolali	0830	571	1013·7	949·4	..	20·7	14·7	9·9	12·4	51	..	2·3	..	3·7	0	0	23	5	4	0	0	8	3	2	1	8	0
	1730	,,	1007·4	945·8	..	32·0	17·6	5·9	9·5	20	..	2·6	..	14·5	0	2	29	3	0	0	0	0	12	13	3	0	0
Aurangabad	0830	581	1012·9	947·9	0	21·9	15·1	9·6	12·1	47	+15	2·0	+0·9	5·9	0	1	23	3	1		1	0	0	3	1	7	0
	1730	,,	1006·3	944·0	..	32·5	18·3	8·0	10·7	24	..	4·0	..	13·6	0	6	24	2	2	2	0	5	3	14	2	1	0
Aurangabad (Chikalthana Aerodrome)	0230	579	1010·7	945·7	..	20·6	14·6	9·6	12·2	52	..	1·5	..	5·7	0	1	16	4	0	3	1	0	0	2	7	14	0
	0530	,,	1011·3	945·8	..	17·7	13·2	9·3	12·0	60	..	0·8	..	3·5	0	0	11	3	1	2	1	0	0	2	2	20	0
	0830	,,	1012·3	947·9	..	23·3	16·9	12·2	14·7	52	..	1·2	..	5·3	0	0	18	3	2	2	6	0	1	0	4	13	0
	1130	,,	1011·0	947·8	..	29·3	19·4	12·8	15·4	38	..	1·7	..	8·0	0	1	24	1	4	4	8	3	0	1	4	6	0
	1730	,,	1006·1	943·8	..	31·9	19·5	10·7	13·6	30	..	2·8	..	8·6	0	1	25	4	1	1	1	4	2	4	9	5	0
	2330	,,	1010·8	946·5	..	23·2	16·0	10·3	13·0	46	..	2·5	..	4·4	0	0	18	3	2	5	1	0	1	1	5	13	0
Ahmednagar	0830	657	1012·3	939·2	—0·1	22·0	..	..	..	..	..	0·8	0	2·7	0	0	26	0	1	0	4	0	1	0	20	5	0
	1730	,,	1005·8	935·5	..	32·1	..	..	..	..	..	2·0	..	2·8	0	0	28	0	4	0	1	0	7	0	16	3	0
Parbhani	0830	423	1013·0	965·5	..	24·5	17·5	11·4	14·4	48	..	1·4	..	8·7	0	2	28	2	9	4	6	0	2	4	3	1	0
	1730	,,	1006·9	961·0	..	32·7	18·3	7·0	9·3	21	..	3·6	..	10·2	0	2	29	1	3	2	6	8	2	7	2	0	0
Poona	0530	559	1011·6	948·1	..	17·5	14·2	12·0	13·8	69	..	0·6	..	0·6	0	0	5	0	1	0	0	1	3	0	0	26	0
	0830	,,	1013·0	950·1	+0·3	21·0	15·0	11·1	12·7	54	0	1·4	+0·6	0·5	0	0	4	0	0	0	0	2	0	2	0	27	0
	1130	,,	1010·8	949·9	..	30·2	17·4	7·3	10·5	25	..	1·4	..	2·8	0	0	17	3	6	5	0	2	0	0	1	14	0
	1730	,,	1006·1	946·0	..	32·6	18·7	8·6	11·5	29	..	1·9	..	6·7	0	0	25	1	2	0	0	1	4	9	8	6	0
	2330	,,	1011·6	949·1	..	22·5	16·5	12·3	14·4	53	..	0·5	..	0·9	0	0	7	0	0	0	0	3	2	1	1	24	0

(e) Mean of 28 days.

Division and station	Hour of observation I.S.T.	Height barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed kms. per hour	Wind speed (Km p.h.): 62 or more	Wind speed (Km p.h.): 20 to 61	Wind speed (Km p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra—*Contd.*																											
Poona (Lohagaon Aerodrome)	0230	593	1011·2	944·4	..	19·5	13·8	8·6	11·7	51	..	1·3	..	6·8	0	0	21	1	0	0	0	0	0	10	10	10	0
	0530	,,	1011·7	944·5	..	18·0	12·9	8·2	11·2	55	..	1·0	..	5·5	0	0	21	0	0	0	0	0	0	8	13	10	0
	0830	,,	1012·8	946·4	..	21·6	14·6	8·7	11·6	46	..	1·6	..	5·7	0	0	26	0	1	1	1	0	0	16	7	5	0
	1130	,,	1010·8	946·2	..	29·6	16·6	5·4	9·3	23	..	1·8	..	12·1	0	2	29	1	1	12	4	2	1	6	3	0	1
	1730	,,	1006·3	942·4	..	31·9	17·4	5·2	9·4	20	..	2·6	..	23·7	0	20	11	0	0	2	0	0	1	14	14	0	0
	2330	,,	1011·7	945·4	..	22·2	15·2	9·6	12·2	46	..	1·2	..	11·4	0	0	30	1	0	0	0	1	0	15	13	1	0
Baramati	0830	551	1012·7	951·0	..	21·6	16·0	11·8	14·2	55	..	0·9	..	5·1	0	0	27	1	3	1	1	0	1	8	12	4	0
	1730	,,	1005·5	946·4	..	33·8	20·8	12·5	15·1	31	..	2·6	..	6·7	0	1	27	2	0	1	4	3	8	5	5	3	0
Jeur	0830	521	1011·8	953·7	..	23·3	15·8	9·6	12·5	42	..	1·1	..	4·4	0	0	23	4	5	4	1	0	0	4	5	8	0
	1730	,,	1005·1	949·3	..	33·8	18·3	6·0	9·6	18	..	2·6	..	5·8	0	0	31	0	1	3	2	1	4	13	7	0	0
	0530	479	1010·6	956·8	..	21·8	15·5	10·5	13·0	50	..	1·6	..	5·1	0	1	23	3	3	3	6	2	3	2	2	7	0
Sholapur	0830	,,	1012·4	958·9	+0·7	24·2	16·7	11·5	13·5	45	+10	1·3	+0·3	8·7	0	1	27	1	4	2	10	2	4	1	4	3	0
	1130	,,	1010·9	958·7	..	31·2	19·4	11·4	14·1	31	..	1·1	..	12·0	0	3	28	3	2	0	12	4	7	0	3	0	0
	1730	,,	1005·6	954·2	..	34·3	19·7	9·2	12·4	23	..	2·7	..	8·1	0	2	25	2	3	0	6	2	10	0	4	4	0
	2330	,,	1010·1	957·2	..	26·6	16·8	9·4	12·1	36	..	2·0	..	10·1	0	3	26	0	6	1	11	3	2	3	3	2	0
Miraj	0830	554	1012·7	950·6	+0·3	21·5	17·0	14·2	16·1	63	+11	1·9	+0·9	3·9	0	0	24	1	4	4	2	2	1	5	5	7	0
	1730	,,	1005·4	946·2	..	33·5	22·1	15·7	18·3	37	..	3·3	..	11·1	0	5	24	1	1	2	4	3	7	9	2	2	0
	0530	570	1010·7	946·5	..	18·8	15·4	12·9	15·2	70	..	0·4	..	2·6	0	0	21	0	0	0	0	0	11	10	0	10	0
Kolhapur	0836	,,	1012·5	948·7	..	21·3	16·2	12·6	14·8	58	..	1·4	..	4·3	0	0	21	0	4	3	1	0	2	9	2	10	0
	1130	,,	1006·3	948·6	..	30·3	18·2	9·2	12·1	28	..	1·2	..	7·8	0	0	30	4	8	7	0	2	3	3	3	1	0
	1730	,,	1005·7	944·5	..	32·5	19·7	10·9	13·7	28	..	1·9	..	18·6	0	15	16	1	1	1	1	0	2	21	4	0	0
Vidarbha																											
Buldhana	0830	650	1012·5	940·0	..	21·8	15·7	10·7	13·3	52	..	1·3	..	2·9	0	0	25	0	4	0	11	0	2	0	8	6	0
	1730	,,	1006·3	936·4	..	30·7	17·9	7·7	11·1	26	..	2·9	..	2·4	0	0	24	0	5	0	0	0	10	0	9	7	0
Akola	0830	282	1012·9	980·8	+0·8	23·5	16·9	10·9	14·0	49	+17	2·5	+1·2	7·3	0	6	22	1	6	8	4	1	3	4	1	3	0
	1130	,,	1011·4	980·1	..	31·0	19·4	10·3	13·2	31	..	2·1	..	6·9	0	1	28	0	2	6	9	6	0	3	3	2	0
	1730	,,	1006·7	975·3	..	33·5	19·5	8·8	11·3	26	..	3·3	..	5·0	0	1	30	0	2	7	3	1	4	9	5	0	0
Akola (Aerodrome)	0530	309	1010·7	975·3	..	20·2	15·1	9·9	13·0	56	..	1·7	..	5·2	0	0	25	1	4	7	3	1	5	4	0	6	0
	2330	,,	1010·8	976·0	..	24·8	16·7	9·0	12·5	42	..	2·2	..	7·5	0	3	21	0	5	7	1	3	2	4	2	7	0
Amravati	0830	370	1013·3	971·5	+1·3	23·5	17·3	12·3	14·8	53	+21	2·2	+1·0	9·0	0	2	26	1	10	8	3	2	2	2	0	3	0
	1730	,,	1007·0	966·6	..	31·7	19·6	10·1	13·1	28	..	4·8	..	8·3	0	0	31	1	8	2	4	2	10	2	2	0	0
Yeotmal	0830	451	1012·8	962·2	..	23·4	18·2	14·5	16·6	60	..	2·0	..	5·1	0	2	24	1	4	9	4	1	2	3	2	5	0
	1730	,,	1007·2	958·0	..	31·0	20·9	14·1	16·6	39	..	3·5	..	5·4	0	1	19	1	3	4	5	2	3	1	1	11	0
Nagpur	0230	310	1011·0	975·4	..	19·9	16·1	12·9	15·1	67	..	2·1	..	7·2	0	1	27	5	7	5	2	2	1	3	3	3	0
	0530	,,	1011·9	976·0	..	18·1	15·6	13·5	16·2	76	..	1·9	..	5·5	0	0	23	4	6	4	1	1	0	0	7	8	0
	0830	,,	1013·9	978·6	+1·8	22·7	17·7	13·9	15·1	60	+22	2·4	+1·0	7·9	0	0	28	5	8	10	3	1	1	0	0	3	0
	1130	,,	1012·7	978·1	..	28·9	19·8	13·1	15·6	41	..	2·1	..	9·8	0	1	28	2	4	7	8	5	2	0	1	2	0
	1730	,,	1008·4	974·1	..	29·9	19·6	11·6	14·5	38	..	3·4	..	9·4	0	2	25	2	4	6	5	5	2	3	0	4	0
	2330	,,	1012·0	976·5	..	21·5	17·2	13·7	16·2	64	..	2·2	..	7·6	0	1	25	5	8	6	1	1	2	1	2	5	0
Gondia	0830	313	1014·3	978·6	..	21·7	16·8	12·9	15·1	58	..	2·9	..	2·9	0	0	25	5	7	0	6	2	1	0	1	6	3
	1730	,,	1009·1	974·5	..	29·8	19·2	9·3	13·7	32	..	3·2	..	3·9	0	0	28	4	3	2	1	1	6	2	2	3	7
Brahmapuri	0830	229	1014·2	988·0	..	22·9	18·4	15·6	17·6	65	..	2·3	..	5·8	0	0	26	1	5	6	10	3	1	0	0	5	0
	1730	,,	1008·9	983·5	..	30·5	20·6	13·4	16·1	40	..	2·4	..	5·1	0	0	25	2	6	4	4	4	3	1	1	6	0
Chanda	0830	193	1013·4	991·4	+1·4	23·8	18·5	15·0	17·0	59	+17	2·4	+1·2	4·8	0	0	28	1	3	11	9	2	0	0	2	3	0
	1730	,,	1008·0	986·7	..	31·4	20·4	12·4	15·0	35	..	2·8	..	5·6	0	0	30	3	3	8	8	5	2	1	0	1	0
Sironcha	0830	123	1013·8	999·7	..	24·8	20·6	18·1	20·9	67	..	2·3	..	7·5	0	0	29	1	2	7	12	6	1	0	0	2	0
	1730	,,	1007·7	994·1	..	34·3	21·9	13·8	16·2	30	..	2·9	..	5·4	0	0	29	3	2	3	4	8	6	1	2	2	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1011·1	1008·7	..	23·0	21·7	20·9	24·6	88	..	0·9	..	2·6	0	0	23	0	0	1	11	11	0	0	0	8	0
	0830	,,	1013·5	1011·2	+1·5	27·1	23·0	21·0	24·8	69	—9	2·4	+0·3	6·3	0	0	30	0	0	1	17	11	1	0	0	1	0
	1130	,,	1012·9	1010·6	..	31·2	23·6	19·5	22·7	50	..	2·0	..	8·1	0	0	31	0	0	4	17	10	0	0	0	0	0
	1730	,,	1009·9	1007·6	..	29·1	23·4	20·3	24·1	60	..	1·8	..	14·2	0	0	31	0	0	13	16	2	0	0	0	0	0
	2330	,,	1012·2	1009·9	..	24·9	22·6	21·5	25·4	81	..	1·0	..	2·6	0	0	21	0	1	4	12	4	0	0	0	10	0
Ongole	0830	12	1013·5	1012·2	..	27·2	24·9	23·9	29·6	82	..	2·7	..	2·7	0	0	22	0	1	1	11	4	5	0	0	9	0
	1730	,,	1009·9	1008·6	..	28·9	26·7	25·7	33·2	83	..	1·8	..	8·1	0	0	31	0	0	2	29	0	0	0	0	0	0
Rentachintala	0830	106	1013·3	1001·3	..	26·1	21·8	19·6	23·5	68	+6	3·6	+0·5	3·8	0	0	24	1	0	6	1	15	0	1	0	7	0
	1730	,,	1008·8	997·1	..	34·0	21·7	13·5	15·9	30	..	3·8	..	6·2	0	0	29	1	0	13	4	11	0	0	0	2	0
Gannavaram	0530	23	1011·1	1008·5	..	22·4	21·3	20·7	24·3	90	..	1·3	..	3·2	0	0	22	2	0	14	3	0	1	1	1	9	0
	0830	,,	1013·6	1010·9	..	26·4	23·0	21·3	25·5	73	..	2·3	..	5·4	0	0	30	1	1	13	5	6	3	1	0	1	0

(e) Mean of 26 days.

(f) Mean of 25 days

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957.

Division and station	Hours of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (Km. p.h.): Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 0 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh—*Contd.*																											
Gannavaram—*Contd.*	1130	23	1012·9	1010·3	..	31·0	23·0	18·5	21·4	48	..	2·9	..	7·7	0	1	29	0	1	6	9	10	3	1	0	1	0
	1730	„	1009·2	1006·6	..	30·9	22·5	17·7	20·5	46	..	2·2	..	12·4	0	0	31	0	0	1	21	8	1	0	0	0	0
	2330	„	1011·9	1009·2	..	24·0	21·8	20·7	24·3	81	..	0·5	..	1·6	0	0	13	0	1	1	7	3	0	1	0	18	0
Masulipatam	0230	3	1011·0	1010·7	..	23·6	22·6	22·1	26·6	91	..	1·8	..	4·7	0	0	21	1	1	0	10	5	3	1	0	10	0
	0530	„	1011·3	1011·0	..	23·0	22·3	21·8	25·5	93	..	2·5	..	2·1	0	0	14	2	0	2	5	3	1	1	0	17	0
	0830	„	1013·6	1013·3	+1·2	27·2	24·3	22·9	28·1	78	—1	3·6	+1·3	4·7	0	0	24	6	0	2	4	11	0	1	0	7	0
	1130	„	1013·6	1013·3	..	29·9	25·3	23·1	28·4	67	..	3·2	..	10·2	0	0	30	0	0	4	13	12	0	1	0	1	0
	1730	„	1010·2	1009·9	..	28·2	24·5	22·8	27·8	72	..	1·7	..	9·8	0	0	31	0	0	2	9	20	0	0	0	0	0
	2330	„	1012·4	1012·0	..	24·6	23·2	22·5	27·3	88	..	0·5	..	5·3	0	0	22	0	0	0	8	13	0	1	0	9	0
Nidadavolu	0830	12	1014·0	1012·6	..	26·2	23·0	21·7	25·6	76	..	2·5	..	4·6	0	0	24	10	4	6	0	0	1	2	1	7	0
	1730	„	1009·6	1008·2	..	30·7	23·5	19·7	22·8	53	..	2·3	..	12·1	0	1	29	0	0	5	0	22	3	0	0	1	0
Kakinada	0830	8	1014·3	1013·4	+1·6	28·1	24·1	22·2	26·9	70	—4	2·8	+0·1	8·6	0	0	31	1	3	1	14	1	8	1	2	0	0
	1730	„	1010·3	1009·4	..	29·3	24·7	22·6	27·3	67	..	2·4	..	12·0	0	0	31	0	0	1	28	1	1	0	0	0	0
Visakhapatnam	0230	3	1011·3	1010·9	..	23·9	22·4	21·7	25·9	87	..	1·5	..	1·6	0	0	8	1	1	0	0	1	0	2	3	23	0
	0530	„	1011·7	1011·3	..	22·8	21·6	21·0	24·7	90	..	1·9	..	1·5	0	0	8	1	0	0	1	0	0	0	6	23	0
	0830	„	1014·0	1013·6	+1·5	27·3	23·2	21·2	25·1	70	—3	1·8	—0·5	5·9	0	0	24	2	0	1	1	0	9	3	8	7	0
	1130	„	1013·2	1012·8	..	31·7	24·6	21·2	25·0	56	..	2·5	..	15·4	0	5	26	0	0	3	9	7	10	0	2	0	0
	1730	„	1010·4	1010·0	..	28·4	24·2	22·1	26·7	68	..	3·1	..	16·5	0	4	27	0	1	0	9	10	9	0	2	0	0
	2330	„	1012·7	1012·3	..	25·1	23·3	22·4	27·4	85	..	1·4	..	2·0	0	0	14	1	0	1	1	0	2	2	7	17	0
Calingapatam	0830	6	1013·8	1013·1	+1·4	25·9	23·0	21·5	25·7	77	+2	2·9	+1·2	6·6	0	0	31	0	1	2	0	0	4	13	11	0	0
	1730	„	1010·3	1009·6	..	28·1	24·4	22·7	27·7	72	..	3·3	..	9·6	0	0	31	0	0	5	6	10	10	0	0	0	0
Telangana																											
Ramagundam	0830	156	1013·0	995·3	..	26·1	20·2	16·3	18·9	57	..	2·9	..	7·8	0	0	30	2	3	3	15	4	3	0	0	1	0
	1730	„	1007·9	990·7	..	34·1	20·9	11·5	13·8	27	..	2·2	..	5·9	0	0	28	1	6	4	5	8	4	0	0	3	0
Nizamabad	0830	381	1012·6	969·9	+0·7	24·7	18·9	14·9	16·7	56	+12	2·1	+0·9	3·0	0	0	23	0	2	0	9	4	1	1	6	8	0
	1730	„	1006·9	965·5	..	33·4	20·3	11·3	13·2	27	..	2·3	..	3·8	0	0	24	2	5	6	8	1	2	0	0	7	0
Mahbubnagar	0830	505	1012·4	956·4	..	25·2	18·4	13·8	16·2	52	..	2·2	..	6·7	0	2	28	0	2	7	11	4	5	0	1	1	0
	1730	„	1006·5	952·1	..	32·4	18·9	9·2	12·1	25	..	1·7	..	8·0	0	1	28	0	1	11	10	3	1	2	1	2	0
Hyderabad (Begumpet Aerodrome)	0230	545	1010·3	949·5	..	22·3	17·8	14·7	17·2	64	..	1·9	..	6·0	0	0	19	0	0	4	13	2	0	0	0	12	0
	0530	„	1011·2	950·1	..	20·5	17·3	15·5	18·2	72	..	2·5	..	5·3	0	0	18	1	1	3	10	2	1	0	0	13	0
	0830	„	1013·1	952·4	+1·4	23·8	18·5	14·9	17·5	60	+3	3·1	+1·7	7·7	0	1	25	0	0	3	15	4	2	1	1	5	0
	1130	„	1011·6	952·2	..	29·1	19·1	12·1	14·7	37	..	2·5	..	13·5	0	5	24	1	1	1	18	6	2	0	0	2	0
	1730	„	1007·4	948·4	..	30·4	19·3	11·7	13·9	34	..	2·3	..	12·4	0	2	29	2	2	7	15	3	2	0	0	0	0
	2330	„	1011·3	951·1	..	24·7	18·5	14·4	16·9	54	..	1·5	..	9·4	0	2	24	1	1	2	20	2	0	0	0	5	0
Hakimpet	0830	613	1012·4	944·4	..	23·4	18·4	14·9	17·4	62	..	3·1	..	11·3	0	0	31	0	2	3	16	7	2	1	0	0	0
	1730	„	1007·4	941·1	..	29·5	19·4	12·8	15·2	38	..	2·2	..	11·1	0	0	31	1	2	7	18	1	1	0	1	0	0
Hanamkonda	0830	269	1013·6	983·1	+1·2	24·0	20·5	18·4	20·0	71	+9	2·5	+0·5	12·1	0	3	28	1	1	1	11	15	1	0	1	0	0
	1730	„	1006·7	977·2	..	32·7	20·6	12·1	14·3	31	..	1·5	..	7·0	0	0	31	2	1	1	10	14	0	1	2	0	0
Bhadrachallam	0830	111	1013·9	1001·3	..	25·8	22·6	20·8	24·7	74	..	3·3	..	8·0	0	1	30	0	4	6	13	6	2	0	0	0	0
	1730	„	1008·3	996·1	..	33·8	22·6	15·7	18·3	36	..	2·2	..	9·5	0	3	28	0	2	2	10	8	6	2	1	0	0
Khammameth	0830	112	1013·6	1000·8	..	25·1	22·0	20·4	24·0	75	..	3·4	..	5·4	0	0	30	0	2	12	16	0	0	0	0	1	0
	1730	„	1008·4	996·1	..	33·9	21·5	13·2	15·5	30	..	2·5	..	4·3	0	0	28	0	0	8	17	2	0	1	0	3	0
Rayala Seema																											
Arogyavaram	0830	701	1013·3	935·5	..	21·7	18·1	15·7	18·1	71	..	2·5	..	5·4	0	0	29	0	0	0	20	6	3	0	0	2	0
	1730	„	1006·9	931·7	..	30·1	18·9	11·5	13·7	32	..	3·2	..	8·5	0	0	31	2	7	9	13	0	0	0	0	0	0
Cuddapah	0830	130	1013·3	998·7	+1·8	28·9	21·7	17·1	20·0	50	—7	0·5	—0·7	2·0	0	0	9	0	0	9	0	0	0	0	0	22	0
	1730	„	1007·6	993·3	..	34·6	21·7	13·2	15·5	28	..	1·5	..	9·7	0	0	31	1	0	30	0	0	0	0	0	0	0
Anantapur	0530	350	1010·1	970·5	..	22·2	18·0	14·9	17·3	64	..	0·9	..	5·0	0	0	21	0	1	6	10	1	2	0	1	10	0
	0830	„	1012·2	973·0	..	25·7	19·7	15·6	18·1	54	..	1·0	..	5·4	0	1	23	0	1	3	12	3	1	2	2	7	0
	1130	„	1010·8	972·4	..	31·4	20·2	12·0	14·5	32	..	0·8	..	7·4	0	0	29	2	8	7	9	1	0	2	0	2	0
	1730	„	1006·0	968·0	..	33·9	20·3	10·3	12·7	25	..	1·9	..	8·6	0	1	28	0	7	17	3	1	0	1	0	2	0
	2330	„	1010·0	971·1	..	27·1	19·8	14·7	17·2	48	..	0·5	..	11·1	0	2	28	0	2	23	4	0	0	0	1	1	0
Kurnool	0830	281	1012·5	980·9	+1·1	25·5	19·5	15·4	17·8	55	+6	2·6	+1·6	3·8	0	0	18	1	1	4	6	5	1	0	0	13	0
	1730	„	1006·6	976·1	..	35·1	20·4	9·3	12·0	21	..	2·7	..	5·2	0	0	21	1	1	9	6	4	0	0	0	10	0
Madras																											
Palayamcottai	0830	51	1012·9	1007·1	..	27·0	22·7	20·6	24·0	67	..	3·5	..	5·7	0	0	31	22	2	2	0	0	0	3	2	0	0
	1730	„	1007·7	1002·7	..	31·5	23·6	19·7	22·6	50	..	3·0	..	14·8	0	3	28	0	6	19	3	3	0	0	0	0	0
Tuticorin	0830	4	1013·3	1012·9	..	26·9	23·4	21·9	25·8	73	..	1·9	..	12·4	0	1	30	12	10	1	2	0	0	2	4	0	0
	1730	„	1009·3	1009·0	..	27·9	24·8	23·2	28·9	74	..	1·1	..	24·0	0	22	9	0	0	21	0	1	0		0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in K.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Pamban	0830	11	1013·1	1011·8	+1·2	28·1	23·5	21·3	25·3	67	—9	3·3	+0·7	8·3	0	1	29	0	17	8	4	0	1	0	0	1	0
	1730	,,	1009·3	1008·0	..	28·6	23·9	21·5	25·7	66	..	2·5	..	12·4	0	2	29	6	15	6	3	1	0	0	0	0	0
Mathurai	0830	133	1013·1	998·0	+0·8	26·9	22·6	20·0	23·7	67	—2	3·6	+0·2	3·2	0	0	27	8	13	4	0	0	0	1	1	4	0
	1730	,,	1007·2	993·2	..	33·4	22·0	15·0	17·1	34	..	3·5	..	3·2	0	0	31	0	18	9	2	1	0	1	0	0	0
Nagapatinam	0830	9	1013·5	1012·4	+1·3	27·0	22·7	20·3	24·0	67	—8	3·1	—0·4	6·7	0	0	25	3	9	4	3	0	0	0	6	6	0
	1730	,,	1010·2	1009·1	..	27·9	23·2	20·8	24·5	66	..	2·4	..	13·5	0	1	30	1	8	20	2	0	0	0	0	0	0
Tiruchirapalli	0230	88	1011·1	1001·0	..	23·6	21·4	20·2	23·6	81	..	2·2	..	3·3	0	0	16	1	3	11	1	0	0	0	0	15	0
	0530	,,	1011·4	1001·3	..	22·5	20·9	20·0	22·7	86	..	1·9	..	1.7	0	0	7	0	2	4	1	0	0	0	0	24	0
	0830	,,	1013·4	1003·4	+0·7	26·4	22·3	20·2	23·5	68	—9	2·7	+0·4	2·7	0	0	13	0	5	6	0	0	0	0	0	18	2
	1130	,,	1012·6	1002·8	..	30·7	22·7	18·2	21·0	48	..	2·7	..	6·3	0	0	22	0	7	10	0	1	0	0	0	9	4
	1730	,,	1008·3	998·3	..	33·1	22·1	15·4	17·6	35	..	1·8	..	10·1	0	2	25	0	3	19	5	0	0	0	0	4	0
	2330	,,	1012·4	1002·4	..	24·9	21·7	20·0	23·3	74	..	0·6	..	6·3	0	0	19	0	3	12	4	0	0	0	0	12	0
Coimbatore	0830	409	1013·3	967·5	+1·0	24·6	20·5	18·5	20·9	67	—8	4·1	+1·5	9·7	0	0	31	0	5	6	0	1	5	8	6	0	0
	1730	,,	1006·8	962·5	..	33·0	21·3	12·3	15·9	30	..	3·4	..	9·8	0	0	31	0	5	6	0	1	2	7	10	0	0
Coimbatore (Peelamedu Aerodrome)	0530	398	1011·3	966·3	..	21·8	19·2	17·5	20·4	77	..	2·7	..	8·8	0	0	29	6	14	5	2	2	0	0	0	2	0
	0830	,,	1013·3	968·6	..	24·2	20·3	18·0	20·7	69	..	3·3	..	11·9	0	0	31	1	19	10	0	0	1	0	0	0	0
	1130	,,	1011·8	967·8	..	28·8	21·1	16·1	18·8	48	..	3·1	..	10·2	0	0	31	1	15	7	6	1	0	0	1	0	0
	1730	,,	1006·7	963·5	..	32·8	20·0	10·6	13·0	26	..	2·5	..	16·5	0	10	21	0	5	18	3	2	1	2	0	0	0
	2330	,,	1011·3	966·8	..	25·3	20·6	17·5	20·4	64	..	1·2	..	14·0	0	4	27	0	1	4	4	12	8	2	0	0	0
Salem	0530	278	1011·2	979·6	..	22·2	20·5	19·5	22·8	84	..	1·3	..	3·2	0	0	19	1	7	5	2	0	3	1	0	12	0
	0830	,,	1013·2	981·8	+0·8	25·2	21·5	19·3	22·9	70	0	2·1	+0·6	7·9	0	0	30	0	12	11	7	0	0	0	0	1	0
	1130	,,	1012·0	981·2	..	30·0	22·0	17·3	19·9	47	..	2·2	..	3·1	0	0	24	3	2	9	2	2	3	2	1	7	0
	1730	,,	1006·9	976·5	..	33·3	22·9	16·6	20·4	37	..	1·8	..	6·2	0	0	29	0	4	20	2	1	0	2	0	2	0
	2330	,,	1011·5	980·3	..	25·7	22·1	20·2	23·6	72	..	1·1	..	7·2	0	0	29	0	4	14	8	2	0	1	0	2	0
Kallakurichi	0830	127	1013·4	999·1	..	25·9	21·7	19·5	22·4	68	..	2·2	..	0·5	0	0	5	2	0	2	0	0	0	1	0	26	0
	1730	,,	1008·1	994·1	..	32·8	22·0	15·4	17·6	35	..	2·2	..	2·0	0	0	18	0	0	11	7	0	0	0	0	13	0
Cuddalore	0530	12	1011·2	1009·8	..	22·6	21·2	20·3	24·0	86	..	3·0	..	3·2	0	0	27	1	0	3	6	0	3	1	13	4	0
	0830	,,	1013·6	1012·2	+1·1	26·3	22·9	21·4	25·3	74	—6	1·8	—0·7	1·5	0	0	12	0	2	1	1	1	3	1	3	19	0
	1130	,,	1013·3	1011·9	..	29·4	23·4	20·3	23·8	58	..	3·2	..	7·0	0	0	31	1	4	11	14	1	0	0	0	0	0
	1730	,,	1009·8	1008·5	..	28·2	23·4	20·9	25·0	65	..	3·1	..	8·3	0	1	28	0	5	13	11	0	0	0	0	2	0
	2330	,,	1012·4	1011·0	..	25·8	22·7	21·1	25·2	75	..	1·6	..	7·3	0	1	29	0	4	14	12	0	0	0	0	1	0
Vellore	0530	214	1011·6	987·0	..	21·5	20·2	19·4	22·5	88	..	3·5	..	1·7	0	0	14	0	1	0	3	5	3	1	1	17	0
	0830	,,	1013·5	989·1	+1·3	24·0	21·2	19·5	22·8	77	+1	2·9	+1·1	3·4	0	0	21	1	1	1	0	3	5	7	3	10	0
	1130	,,	1012·4	988·5	..	29·7	22·0	17·3	20·2	48	..	2·8	..	5·0	0	0	26	2	5	2	4	5	2	3	3	5	0
	1730	,,	1008·3	984·7	..	31·5	21·6	15·3	17·8	39	..	2·4	..	7·4	0	1	30	0	5	12	12	2	0	0	0	0	0
	2330	,,	1012·7	988·4	..	24·8	21·3	19·3	22·4	72	..	2·3	..	9·8	0	1	29	0	0	3	16	11	0	0	0	1	0
Madras	0230	16	1010·9	1009·1	..	23·9	21·9	20·9	24·8	83	..	1·4	..	3·2	0	0	21	0	0	4	4	3	3	3	4	10	0
	0530	,,	1011·3	1009·5	..	23·2	21·6	20·7	24·5	87	..	2·1	..	3·9	0	0	24	0	0	0	0	3	3	9	9	7	0
	0830	,,	1013·7	1011·9	+1·3	26·7	22·8	20·7	24·6	70	—7	2·2	+0·1	6·5	0	0	28	1	0	2	1	7	4	10	3	3	0
	1130	,,	1013·2	1011·5	..	30·7	23·2	19·1	22·6	51	..	2·2	..	10·0	0	1	30	0	0	7	13	9	1	0	1	0	0
	1730	,,	1010·1	1008·4	..	29·0	23·1	20·2	22·8	60	..	1·2	..	17·7	0	8	23	0	0	19	12	0	0	0	0	0	0
	2330	,,	1012·6	1010·8	..	25·1	22·3	21·1	24·6	78	..	0·7	..	6·0	0	1	25	0	1	9	11	3	1	0	1	5	0
Madras (Nungambakkam.)	0830	6	1013·3	1012·6	..	27·1	22·7	20·4	24·0	67	..	5·3	..	4·8	0	0	28	1	0	1	4	5	6	7	4	3	0
Coastal Mysore																											
Karwar	0830	4	1012·8	1012·3	+0·8	23·3	21·1	19·9	23·2	82	..	1·3	..	0·1	0	0	1	0	1	0	0	0	0	0	0	30	0
	1730	,,	1009·3	1008·9	..	28·2	23·9	21·8	26·1	68	..	1·3	..	4·3	0	0	31	0	0	0	0	0	0	22	9	0	0
Honavar	0830	26	1012·7	1009·7	+0·4	23·3	21·4	20·3	23·9	83	+5	3·5	+0·5	5·6	0	0	29	0	3	25	1	0	0	0	0	2	0
	1730	,,	1009·4	1006·5	..	29·0	24·1	21·6	25·9	65	..	2·7	..	11·7	0	0	31	0	0	0	0	0	10	6	15	0	0
Mangalore	0230	22	1010·3	1007·8	..	25·4	22·9	21·6	25·7	79	..	1·8	..	5·9	0	0	29	8	13	7	0	0	0	1	0	2	0
	0530	,,	1010·5	1007·9	..	24·5	22·4	21·3	25·3	82	..	2·0	..	6·2	0	0	26	2	13	11	0	0	0	0	0	5	0
	0830	,,	1012·5	1010·1	+0·7	26·9	23·3	21·5	25·8	73	—1	2·0	+0·2	6·0	0	0	29	3	9	15	2	0	0	0	0	2	0
	1130	,,	1012·4	1009·9	..	29·4	24·1	21·7	25·5	63	..	1·5	..	10·0	0	0	31	0	0	0	0	0	2	11	18	0	0
	1730	,,	1008·9	1006·5	..	28·8	24·1	21·8	26·2	66	..	1·6	..	23·5	0	5	26	1	0	0	0	0	0	8	22	0	0
	2330	,,	1011·7	1009·2	..	26·5	23·3	22·0	26·1	75	..	1·3	..	7·6	0	0	28	13	7	1	0	0	0	0	7	3	0
Mangalore (Bajpe Aerodrome)	0530	103	1011·1	999·3	..	23·6	22·9	21·4	27·4	88	..	4·1	..	4·0	0	0	14	0	3	10	1	0	0	0	0	17	0
	0830	,,	1012·8	1001·1	..	26·6	22·9	21·1	24·0	72	..	2·6	..	9·2	0	0	27	4	3	18	2	0	0	0	0	4	0
	1730	,,	1009·2	997·67	..	28·6	23·5	20·9	24·9	64	..	1·7	..	16·8	0	7	24	1	0	0	0	0	0	12	18	0	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour.	Wind speed (Km. p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore North																											
Bidar	0830	664	1012·3	938·8	..	23·4	16·4	11·1	13·5	48	+7	2·7	+0·9	13·7	0	1	30	1	2	4	5	10	6	1	2	0	0
	1730	,,	1006·2	935·0	..	30·2	17·7	7·4	11·1	24	..	3·7	..	10·5	0	6	25	1	7	6	6	3	5	1	2	0	0
Gulbarga	0830	458	1012·4	961·3	+0·9	25·2	17·3	11·3	14·0	44	+3	2·4	+1·7	11·5	0	2	29	2	4	3	13	4	1	2	2	0	0
	1730	,,	1006·0	956·6	..	33·5	18·3	6·1	9·8	20	..	3·6	..	13·8	0	1	30	1	0	2	10	9	4	3	2	0	0
Bijapur	0830	594	1012·0	946·1	+0·4	24·1	17·3	11·9	14·3	47	0	2·3	+1·4	9·1	0	0	30	6	3	0	3	6	6	2	4	1	0
	1730	,,	1005·3	941·7	..	33·1	19·1	9·5	11·9	27	..	3·8	..	4·4	0	0	27	3	2	1	9	3	4	1	4	4	0
Belgaum	0830	781	1012·7	926·3	+0·5	20·7	14·7	9·6	12·3	51	—2	..	..	1·7	0	0	15	0	0	0	4	5	5	1	0	16	0
	1730	,,	1007·9	924·4	..	29·5	18·6	11·6	13·2	35	..	..	..	5·7	0	0	25	1	0	1	1	2	6	7	7	6	0
Belgaum (C.T.O.)	0830	753	1012·1	929·4	+0·5	23·2	15·8	10·4	12·8	45	—15	1·1	+0·2	1·9	0	0	17	3	4	3	1	0	2	0	4	14	0
	1730	,,	1006·6	925·9	..	29·6	19·7	13·5	15·5	40	..	2·2	..	12·6	0	0	31	0	1	0	2	0	7	20	1	0	0
Belgaum (Sambre Aerodrome)	0530	761	1011·4	926·5	..	18·2	13·9	10·3	13·0	62	..	0·5	..	3·8	0	1	13	1	1	0	4	2	0	6	0	17	0
	0830	,,	1012·0	928·5	..	23·5	15·6	9·2	11·8	43	..	0·8	..	5·3	0	0	20	3	8	3	2	0	2	1	1	11	0
	1130	,,	1010·1	928·4	..	29·8	17·1	7·5	10·4	25	..	1·1	..	11·9	0	4	24	3	7	2	4	3	2	3	4	3	0
	1730	,,	1006·1	924·9	..	30·7	18·9	10·0	13·2	34	..	1·8	..	16·4	0	9	22	2	2	0	3	4	7	12	1	0	0
Gadag	0830	650	1012·0	940·6	+0·8	25·3	18·2	13·1	15·7	49	—8	1·6	+0·7	5·2	0	0	29	0	2	10	3	4	1	7	2	2	0
	1730	,,	1005·7	936·1	..	32·8	19·3	9·1	12·5	25	..	2·3	..	5·9	0	0	28	0	3	9	1	1	2	9	3	3	0
Gadag (P.B.O.)	0530	661	1010·6	937·1	..	21·4	17·5	15·6	17·4	67	..	0·7	..	3·4	0	0	11	1	0	1	2	0	0	7	0	20	0
	0830	,,	1011·9	939·2	..	24·9	18·4	14·4	16·6	51	..	1·5	..	5·1	0	0	16	0	1	1	3	1	5	3	2	15	0
	1130	,,	1010·3	938·9	..	30·2	19·3	12·2	14·3	33	..	1·5	..	8·5	0	0	18	0	1	2	6	1	2	2	4	13	0
	1730	,,	1005·7	935·0	..	32·0	19·0	10·6	12·8	26	..	2·1	..	8·4	0	1	21	0	0	3	10	0	2	4	3	9	0
	2330	,,	1010·6	938·0	..	24·8	18·3	15·0	16·6	53	..	0·7	..	7·9	0	0	23	0	1	1	5	2	4	7	3	8	0
Raichur	0830	400	1012·5	967·8	+1·1	26·0	20·9	17·6	20·5	62	+15	2·3	+1·3	9·0	0	0	31	0	1	1	13	12	1	1	2	0	0
	1730	,,	1006·7	963·2	..	33·9	22·9	16·0	18·7	36	..	2·7	..	5·8	0	0	30	0	4	6	10	6	1	2	1	1	0
Mysore South																											
Bellary	0830	449	1012·0	962·0	+0·8	25·1	18·4	13·5	15·6	50	+4	2·1	+0·9	4·5	0	0	20	0	0	0	14	1	2	0	3	11	0
	1730	,,	1005·8	957·3	..	33·1	19·3	8·1	11·1	23	..	3·3	..	7·1	0	0	31	0	0	2	14	0	6	0	9	0	0
Chitaldrug	0830	733	1011·5	931·2	+0·2	24·5	17·6	13·1	15·0	51	+1	1·9	+0·6	2·7	0	0	19	0	0	0	3	1	7	8	0	12	0
	1730	,,	1005·8	927·3	..	31·6	18·3	8·5	11·4	25	..	2·9	..	5·8	0	0	26	0	0	11	6	2	1	4	2	5	0
Shimoga	0830	571	1012·9	949·1	..	21·9	19·1	17·3	20·0	76	..	2·8	..	0·8	0	0	8	1	0	0	2	3	2	0	0	23	0
	1730	,,	1005·2	944·1	..	32 9	19·6	10·4	13·0	29	..	3·0	..	5·5	0	0	26	1	3	6	1	0	7	7	1	5	0
Balehonnur	0830	..	..	..	..	19·6	17·2	15·5	18·0	79	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1527·6	907·8	..	21·8	17·9	15·4	17·5	69	+4	2·3	+0·8	1·7	0	0	11	0	0	3	2	1	2	3	0	20	0
	1730	,,	1506·4	904·1	..	29·7	19·2	12·2	14·5	36	..	2·5	..	6·7	0	0	23	0	0	6	1	0	7	9	0	8	0
Mysore	0830	767	1012·6	927·8	+0·2	22·9	19·3	17·6	19·6	71	+4	2·0	0	6·1	0	1	29	2	0	0	7	6	12	1	1	2	0
	1730	,,	1005·5	923·9	..	31·6	18·2	8·3	11·3	25	..	3·7	..	8·9	0	0	30	5	7	11	2	1	1	2	1	1	0
Bangalore (Central Observatory).	0230	921	1503·8	909·7	..	20·3	17·2	15·0	17·5	73	..	2·2	..	9·8	0	0	30	0	0	12	15	1	1	0	1	1	0
	0830	,,	1530·5	912·1	+0·7	22·4	17·9	15·1	17·1	64	0	2·1	+0·7	7·5	0	0	30	0	0	7	12	5	3	3	0	1	0
	1130	,,	1536·9	911·7	..	27·7	18·3	11·6	14·6	39	..	2·4	..	9·2	0	1	28	1	2	6	7	2	5	4	2	2	0
	1730	,,	1507·1	908·2	..	29·3	17·4	8·2	11·3	28	..	3·1	..	10·2	0	1	29	1	1	12	13	0	1	1	1	1	0
Bangalore (Aerodrome)	0530	897	1503·6	912·5	..	19·2	17·1	15·6	18·3	80	..	1·6	..	5·3	0	0	15	1	0	2	9	2	1	0	0	16	0
	0830	,,	1530·9	914·7	..	22·5	18·1	15·4	17·8	65	..	2·4	..	10·1	0	0	26	0	0	2	14	3	2	4	1	5	0
	1130	,,	1539·3	914·3	..	27·7	18·5	11·7	14·7	38	..	2·5	..	10·1	0	1	23	1	0	5	6	5	3	3	1	7	0
	1730	,,	1509·5	910·8	..	30·3	18·0	9·0	12·1	28	..	3·0	..	12·1	0	4	20	0	1	17	5	0	0	1	0	7	0
	2330	,,	1522·4	913·7	..	22·9	17·6	14·1	16·2	58	..	1·4	..	11·9	0	3	25	0	0	9	6	3	0	0	0	3	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1010·6	1010·1	..	24·8	22·7	21·6	25·8	83	..	2·1	..	8·2	0	0	31	1	14	13	3	0	0	0	0	0	0
	0830	,,	1012·3	1011·8	+0·6	27·5	23·5	21·6	25·7	70	—6	0·8	—1·3	6·8	0	0	31	0	10	18	2	0	0	0	1	0	0
	1130	,,	1012·3	1011·8	..	31·4	25·2	22·0	27·2	59	..	3·0	..	12·8	0	0	31	0	0	0	0	0	8	17	6	0	0
	1730	,,	1009·1	1008·6	..	30·6	25·7	23·5	29·0	65	..	1·7	..	15·1	0	1	31	0	0	0	0	0	0	14	17	0	0
	2330	,,	1011·5	1011·0	..	27·7	24·3	22·6	27·7	74	..	2·4	..	11·4	0	1	29	13	4	1	0	0	0	0	12	1	0
Palghat	0830	97	1012·8	1001·8	..	27·0	22·2	19·5	22·0	65	..	3·3	..	7·8	0	4	25	0	0	21	2	0	0	2	0	6	0
	1730	,,	1007·2	996·5	..	34·7	22·7	15·0	17·9	38	..	3·4	..	11·1	0	0	27	1	3	14	0	0	0	11	2	0	0
Fort Cochin	0830	3	1012·6	1012·3	+0·7	28·2	24·8	22·9	28·7	72	—3	5·3	+3·3	2·1	0	0	11	3	5	2	1	0	0	0	0	20	0
	1730	,,	1008·6	1008·3	..	29·5	25·7	23·9	29·6	72	..	4·3	..	15·1	0	2	29	1	0	0	1	0	2	18	9	0	0
Cochin (Naval Air station)	0230	3	1010·9	1010·6	..	26·3	24·2	23·3	28·4	84	..	4·1	..	3·5	0	0	18	1	4	9	1	0	1	1	1	13	0
	0530	,,	1010·8	1010·5	..	25·1	23·7	23·0	28·0	87	..	3·1	..	1·4	0	0	12	0	1	9	0	1	0	1	0	19	0
	0830	,,	1012·3	1012·0	..	27·3	24·3	22·8	27·7	75	..	3·1	..	4·4	0	0	21	3	8	6	2	0	0	1	1	10	0
	1130	,,	1012·2	1011·9	..	30·3	24·8	22·3	26·6	62	..	3·2	..	13·1	0	0	30	4	0	0	0	0	5	10	11	1	0
	1730	,,	1009·2	1008·9	..	29·4	25·1	23·0	28·1	67	..	2·7	..	13·1	0	1	30	0	0	1	0	0	3	13	14	0	0
	2330	,,	1014·0	1013.7	..	27·2	24·6	23·	28·4	79	..	3·2	..	1·7	0	0	12	2	1	3	1	0	0	3	2	19	0

Division and station	Hour of observation I.S.T.	Hight of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour.	Wind speed (Km. p.h.): 62 & more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives)—(*Contd.*)																											
Alleppey	0830	4	1012·1	1011·7	..	28·4	25·2	23·7	29·3	76	..	5·1	..	6·5	0	0	31	1	8	13	9	0	0	0	0	0	0
	1730	,,	1008·5	1008·1	:	30·2	26·4	24·7	31·3	73	..	4·2	..	20·8	0	16	15	1	0	0	0	0	4	14	12	0	0
Punalur	0830	34	1012·4	1008·5	..	25·3	22·8	1·6	25·7	80	..	2·6	..	2·9	0	0	28	10	7	1	3	3	2	0	2	3	0
	1730	,,	1008·3	1004·4	..	31·6	24·5	20·8	25·0	55	..	4·5	..	5·1	0	0	31	2	0	1	2	11	12	1	1	0	0
Trivandrum	0230	64	1010·2	1002·8	..	25·6	23·7	22·9	27 7	85	..	2·5	..	3·0	0	0	22	4	8	3	4	0	0	0	3	9	0
	0530	,,	1010·2	1003·0	..	24·5	23·1	22·7	27·1	88	..	1·5	..	4·0	0	0	28	6	13	3	2	0	0	3	1	3	0
	0830	,,	1012·2	1004·9	+0·5	27·2	24·5	22·9	28·6	76	−0·1	2·1	−0·1	3·1	0	0	28	8	8	4	5	2	0	0	1	3	0
	1130	,,	1011·6	1004·5	..	31·1	24·7	21·6	25·8	57	..	3·4	..	4·8	0	0	30	0	1	0	2	2	16	6	3	1	0
	1730	,,	1008·9	1001·7	..	29·8	24·7	22·3	27·1	64	..	3·3	..	6·6	0	0	31	0	0	1	1	2	22	5	0	0	0
	2330	,,	1012·0	1004·6	..	26·7	24·2	23·1	28·1	81	..	2·2	..	2·9	0	0	26	5	4	3	5	1	1	1	6	5	0
Trivandrum(Aerodrome)	0830	8	1012·3	1011·4	..	27·7	24·5	23·0	28·4	76	..	1·7	..	6·3	0	0	21	5	2	1	1	1	8	3	0	10	0
Hill Stations (excluding Kashmir).																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1541·7	863·8	..	16·5	12·8	9·6	11·7	65	..	2·4	..	..	0	0	31	3	0	3	14	3	0	1	7	0	0
	1730	,,	1511·0	861·7	..	17·7	12·4	7·7	10·3	53	..	4·5	..	..	0	0	31	2	0	0	1	2	3	4	19	0	0
Aijal (R)	0830	1097	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shillong	0830	1500	1517·7	851·8	+1·2	16·9	10·6	3·6	7·7	44	−1	1·9	0	1·1	0	0	6	0	0	0	0	0	5	1	0	25	0
	1730	,,	1486·0	848·9	..	16·5	12·1	8·3	11·4	60	..	5·0	..	0·1	0	0	1	0	0	0	0	0	0	1	0	30	0
Cherrapunji	0830	1313	1517·3	870·5	+0·6	17·4	14·8	12·6	15·3	74	+16	1·3	−1·7	3·5	0	0	31	0	2	2	7	1	19	0	0	0	0
	1730	,,	1492·1	868·0	..	16·8	14·3	12·3	14·5	75	..	2·4	..	3·3	0	0	31	0	1	0	1	0	29	0	0	0	0
Darjeeling(Raj Bhawan)	0830	2127	1537·2	792·8	+4·5	11·1	8·4	5·7	9·2	71	+4	3·1	+0·1	1·7	0	0	17	3	0	1	0	0	3	4	6	14	0
	1730	,,	1512·5	790·4	..	10·9	8·7	7·3	10·0	79	..	4·7	..	3·6	0	1	17	0	0	0	0	0	11	7	0	13	0
Kalimpong	0830	1209	1474·4	877·5	−2·6	12·5	10·5	8·9	11·4	79	+17	1·2	−0·6	3·0	0	0	31	0	0	0	0	0	0	0	31	0	0
	1730	,,	1454·7	875·4	..	12·8	10·8	9·0	11·6	78	..	2·3	..	3·0	0	0	31	0	0	0	31	0	0	0	0	0	0
Katmandu (R)	0830	1337																									
(R)	1730	,,																									
Mukteswar (Kumaon)	0830	2311	3127·5	773·4	+0·8	8·2	4·0	−1·7	5·6	53	+9	3·3	+0·7	9·4	0	2	26	1	5	7	1	0	3	6	5	3	0
	1730	,,	3116·2	771·9	..	9·8	6·0	2·3	6·9	62	..	5·2	..	17·7	0	10	19	0	4	1	0	2	9	11	2	2	0
Nainital	0830	1953	1505·8	805·7	..	10·1	5·8	0·2	6·6	52	..	3·8	..	3·3	0	0	14	3	2	3	1	0	0	2	3	17	0
	1730	,,	1486·2	804·1	..	11 3	7·7	4·1	8·1	65	..	4·7	..	6·3	0	0	28	2	2	5	2	3	3	7	4	3	0
Tapoban	0830	..	..	..	..	10·3	4·5	−2·2	5·1	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath	0830							Closed	during	Winter	months																
Lokpal	0830	..	..	..	..	−8·4	−9·8	−13·0	2·0	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mussooree	0830	2042	1497·1	796·9	−0·2	10·8	6·5	3·2	6·3	59	+11	3·6	+0·6	2·0	0	0	19	4	3	0	3	6	2	0	1	12	0
	1730	,,	1483·9	795·4	..	11·3	8·5	6·1	8·8	72	..	5·0	..	4·1	0	0	28	6	3	0	6	8	3	0	2	3	0
Simla	0830	2202	1496·4	781·7	+0·5	9·0	3·8	−4·0	4·6	47	+11	4·1	+0·9	3·2	0	0	28	2	3	2	8	10	3	0	0	3	0
	1730	,,	1506·6	781·6	..	9·7	5·8	1·7	6·7	58	..	5·3	..	4·6	0	0	30	3	3	o	2	9	8	1	4	1	0
Dalhousie	0830	1959	1450·7	799·9	..	8·4	4·6	−0·4	6·0	54	..	3·0	..	2·9	0	0	8	1	7	0	0	0	0	0	0	23	0
	1730	,,	1454·0	800·5	..	11·8	8·0	4·5	8·3	63	..	3·9	..	1·2	0	0	3	0	2	0	1	0	0	0	0	28	0
Dharamshala	0830	1212	1543·7	884·1	..	14·4	9·6	4·5	8·5	52	..	3·1	..	3·5	0	0	22	7	8	1	0	0	1	2	3	9	0
	1730	,,	1538·4	883·2	..	17·8	12·2	7·4	10·2	52	..	5·1	..	4·2	0	0	31	1	2	2	0	0	24	1	1	0	0
Abu	0830	1195	1527·7	882·8	+0·5	18·1	10·6	2·3	7·6	37	+2	2·9	+1·4	2·6	0	o	15	2	2	2	1	3	1	2	2	16	0
	1730	,,	1503·7	881·0	..	22·0	12·1	1·4	6·7	27	..	2.7	..	5·6	0	1	21	5	2	0	1	7	4	2	1	9	0
Pachmarhi	0830	1075	1526·9	896·1	+0·5	19·4	13·9	8·9	11·9	53	+16	2·7	+1·1	3·1	0	0	21	0	2	5	4	8	1	1	0	10	0
	1730	,,	1509·9	893·5	..	24·3	15·7	8·8	11·5	41	..	3·5	..	4·3	0	0	25	4	4	1	3	1	3	6	3	6	0
Mahabaleshwar	0830	1382	1524·2	864·3	+0·3	19·6	12·3	4·9	9 1	39	+2	1·3	+0·6	9·5	0	0	31	1	19	4	1	0	3	0	3	0	0
	1730	,,	1505·4	862·3	..	24·2	16·5	10·8	13·2	44	..	1·4	..	10·3	0	0	31	1	0	0	0	0	6	4	20	0	0
Nandi Hills	0830	..	..	..	..	18·4	15·3	13·1	15·1	71	..	4·8	..	23·9	0	26	5	6	15	8	0	0	1	0	1	0	0
Mercara	0830	1152	1517·1	887·4	+0·4	18·1	16·1	14·4	16·9	81	+12	2·8	+0·2	4·3	0	0	29	0	11	12	1	0	0	2	3	2	0
	1730	,,	1507·7	885·1	..	26·6	22·2	20·0	23·6	71	..	3·0	..	8·1	0	0	31	0	2	3	0	0	1	12	13	0	0
Kodaikanal	0830	2343	3168·8	772·7	+0·6	13·1	8·4	2·5	7·9	55	+9	1·5	−0·2	5·9	0	1	23	3	15	2	2	0	0	0	2	7	0
	1130	,,	3181·7	773·1	..	17·9	11·3	4·6	9·0	46	..	2·5	..	7·5	0	1	28	5	11	3	7	0	0	1	2	2	0
	1730	,,	3155·7	771·5	..	15·0	12·1	9·9	12·2	73	..	4·9	..	2·9	0	0	18	2	3	0	6	4	0	1	2	13	0
Ootacamund	0830	2249	1523·5	781·0	+0·3	13·4	10·3	8·1	10·3	72	+ 22	1·0	−0·7	0·2	0	0	2	0	1	1	0	0	0	0	0	29	
	1730	,,	1495·7	779·4	..	17·2	14·5	13·2	14·4	77	..	3·9	..	0·6	0	0	5	0	1	1	1	1	1	0	0	26	0
Coonoor	0830	1747	1526·4	828·9	..	16·7	12·7	9·5	12·1	65	−10	1·6	−0·6	0·4	0	0	4	2	0	0	2	0	0	0	0	27	0
Sikkim																											
Lachen	0830	..	..	..	..	7·2	4·9	2·8	7.3	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R) Register not received.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MARCH, 1957.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mb.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Km. Mean wind speed per hour.	Wind speed (Km. p. h.): 62 or more	Wind speed (Km. p. h.): 20 to 61	Wind speed (Km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Tibet																											
Yatung	0830	..	..	..	..	3·3	2·4	1·6	6·9	90	+6	0·6	—1·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa	0830	3685	3069·7	649·9	..	3·5	1·2	—1·5	5·4	67	..	3.7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ceylon																											
Colombo	0830	7	1012·5	1011·7	+0·9	26·3	24·1	22·8	28·1	79	−8	2·7	−1·0	6·3	0	0	31	1	5	15	6	2	2	0	0	0	0
	1730	„	1009·1	1008·3	..	29·0	24·6	22·7	27·2	69	..	4·0	..	11·8	0	0	31	0	0	0	0	2	6	14	9	0	0
Trincomalee	0830	3	1012·7	1012·3	+1·6	27·6	23·4	21·9	25·4	72	—11	3·3	+0·3	8·7	0	1	28	1	10	3	5	4	5	1	0	2	0
	1730	„	1009·8	1009·5	..	28·3	24·3	21·6	25·9	67	..	3·3	..	12·1	0	2	29	6	18	6	1	0	0	0	0	0	0
Batticoloa	0830	3	1012·9	1012·6	..	26·2	22·5	20·6	24·3	72	..	3·0	..	5·4	0	1	20	0	1	3	0	0	0	7	10	10	0
	1730	„	1009·7	1009·4	..	27·7	22·7	20·0	23·7	63	..	2·9	..	18·7	0	13	18	2	22	6	1	0	0	0	0	0	0
Hambantota	0830	15	1012·6	1010·9	+1·5	26·6	23·3	22·0	26·1	77	−8	2·9	−0·1	18·1	0	11	20	7	22	1	0	0	0	0	1	0	0
	1730	„	1009·4	1007·7	..	28·1	24·7	23·2	28·4	74	..	4·1	..	26·5	0	23	8	1	3	19	4	3	1	0	0	0	0
Mannar	0830	4	1013·2	1012·8	..	26·0	22·7	21·1	24·8	75	..	2·6	..	10·4	0	0	31	1	9	13	8	0	0	0	0	0	0
	1730	„	1009·3	1008·9	..	29·8	23·7	20·4	24·3	58	..	2·6	..	17·2	0	10	21	17	5	4	0	0	1	3	1	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																											
Damodar Catchment																											
Bokaro	0830	239	1014·2	986·8	..	22·0	16·5	12·9	14·3	56	..	2·5	..	4·6	0	1	23	1	0	0	0	2	3	3	15	7	0
	1730	„	1009·1	982·5	..	28·6	17·7	8·5	11.4	30	..	3·7	..	7·9	0	2	27	2	1	0	1	1	3	5	16	2	0
Hazaribagh	0830	615	1013·0	944·1	..	20·7	14·2	9·0	11·5	48	..	1·8	..	4·8	0	0	25	1	2	4	1	4	3	7	3	6	0
	1730	„	1012·4	943·7	..	21·7	14·8	9·0	11·9	45	..	1·6	..	7·6	0	0	27	0	2	5	1	2	5	9	3	4	0
Tilaiya	0830	..	..	..	..	22·6	16·8	12·2	14·6	53	..	2·6	..	7·2	0	1	24	0	3	2	1	3	1	13	1	6	1
	1730	..	..	..	..	26·5	17·1	8·6	11·9	36	..	2·9	..	11 8	0	2	27	4	0	1	0	0	0	9	14	2	1
Ramgarh	0830	..	..	..	..	21·9	16·3	11·9	14·0	55	..	2·7	..	4·0	0	0	26	0	0	0	1	0	3	15	7	5	0
	1730	..	..	..	..	27·8	17·7	9·7	13·0	33	..	3·9	..	3·5	0	0	23	1	0	0	1	0	1	5	15	8	0
Panchet Hills	0830	..	..	..	..	24·6	17·6	12·3	14·4	48	..	2·3	..	4·3	0	0	31	1	1	1	0	1	14	6	7	0	0
	1730	..	..	..	..	29·3	18·0	8·9	11·5	29	..	3·1	..	3·9	0	0	31	5	2	3	3	0	5	5	8	0	0
Durgapur	0830	..	..	..	..	24·2	19·1	15·5	17·9	60	..	2·0	..	8·9	0	0	29	0	0	2	1	0	5	21	0	2	0
	1730	..	..	..	..	27·6	19·6	13·9	16·2	43	..	1·2	..	6·8	0	1	24	0	0	2	0	0	4	19	0	6	0
Mahanadi Catchment																											
Baramul	0830	64	1014·3	1006·9	..	23·3	19·4	16·6	18·9	65	..	3·1	..	2·9	0	0	23	1	14	0	3	0	3	2	0	8	0
	1730	„	1009·6	1002·4	..	28·1	20·0	14·2	16·8	45	..	2·8	..	0·6	0	0	3	0	1	0	0	0	2	0	0	28	0
Hirakud	0830	159	1014·2	996·1	..	24·4	18·8	15·0	17·0	57	..	2·6	..	3·0	0	0	22	1	3	2	2	1	4	6	3	9	0
	1730	„	1009·3	991·6	..	30·0	19·9	12·8	15·0	37	..	2·3	..	3·5	0	1	22	3	2	1	1	1	3	9	2	8	1
Khijrawan	0830	..	..	..	..	21·9	17·7	14·8	16·9	66	..	2·8	..	5·2	0	2	18	0	2	10	4	1	0	1	2	11	0
	1730	..	..	..	..	28·5	19·2	12·7	14·8	43	..	2·5	..	2·4	0	0	16	3	3	1	0	0	0	4	5	15	0
Sonepur	0830	..	..	..	..	25·6	19·8	16·3	18·4	60	..	..	..	3·2	0	0	16	4	0	4	2	2	3	0	1	15	0
Ginabahar	0830	..	..	..	..	22·9	17·1	12·8	14·7	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Narbada Catchment																											
Punasa	0830	..	..	..	..	24·3	16·5	9·6	12·5	41	..	(g) 3·5	..	5·4	0	0	26	3	8	6	3	2	1	2	1	5	0
	1730	..	..	..	..	33·3	18·8	6·1	10·0	19	..	(f) 4·9	..	4·9	0	0	24	3	1	0	1	3	6	5	4	7	1
Bagra Tawa	0830	..	..	..	..	21·3	16·0	11·6	13·9	56	..	1.8	..	5·5	0	0	23	4	8	4	1	0	5	1	0	8	0
	1730	..	..	..	..	29·3	18·5	10·0	12·5	34	..	1·9	..	(a) 4·3	0	0	21	7	2	3	3	2	3	0	1	9	0
Thikri	0830	..	..	..	..	23·9	19·4	15·2	19·0	63	..	2·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapti Catchment Nandurbar	0830	..	..	..	..	24·6	16·2	8·1	11.5	38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	18·1	13·4	7·3	11·8	54	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dharoi	0830	..	..	..	..	21·8	14·3	6·3	10.2	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	31·3	18·0	5·3	9·9	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim	0830	..	..	..	..	8·9	5·7	2·1	7·1	62	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	11·7	7·6	3·4	7·8	57	..																
Tehri	0830	..	..	..	..	13·6	10·9	8·5	11·1	72	..	1·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·6	14·4	7·3	10·5	39	..	2·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha	0830	..	..	..	..	16·8	12·2	8·2	10·9	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·6	12·6	6·2	9·5	42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Mean of 30 days. (f)—Mean of 25 days. (g) Mean of 24 days

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of standard nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity%	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES — *Contd.*																											
Gandak Catchment (*Contd.*)																											
Pokhara	0830	..	..	..	..	18·5	13·8	10·0	12·3	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·6	14·2	8·9	11·5	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	17·1	12·6	8·7	11·3	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·8	13·7	6·7	9·8	38	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh	0830	..	..	..	..	13·8	9·9	6·1	9·5	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·7	0·8	4·9	8·7	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura	0830	..	..	..	..	(a) 10·5	1 (a) 6·7	2·8	7·3	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	(a) 12·9	(a) 8·8	5·2	8·7	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari	0830	..	..	..	..	11·1	7·0	2·9	7·4	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	12·0	7·3	2·3	7·2	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sallyana	0830	..	..	..	..	15·6	11·3	7·6	10·3	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·7	11·1	6·8	9·9	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal	0830	..	..	..	..	20·6	15·4	11·3	13·3	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·3	17·9	11·8	13·8	40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1514·2	869·7	..	11·7	9·5	4·1	10·3	75	..	3·9	..	0	0	0	0	0	0	0	0	0	0	0	31	0
	1130	,,	1513·7	868·7	..	20·4	12·9	5·4	9·5	38	..	3·2	..	1·3	0	0	12	1	0	2	2	2	2	1	2	19	0
	1730	,,	1485·1	866·3	..	17·9	12·1	6·7	9·9	50	..	4·6	..	0·9	0	0	5	3	0	0	0	1	0	0	1	26	0
Kosi Catchment																											
Chautara	0830	..	..	..	..	14·2	10·2	6·8	9·9	61	..	..	..	..	0	....	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·6	11·0	4·2	8·3	39	..	..	..	..	0	....	..	..	..	..	..	..	..	..	..	..	..
Okhaldhunga	0830	..	..	..	..	13·7	9·4	5·4	9·1	60	..	3·2	..	2·0	0	0	17	1	1	2	2	4	4	3	0	14	0
	1130	..	..	..	..	15·9	9·8	3·8	8·3	47	..	3·6	..	2·8	0	0	23	0	0	0	0	6	11	6	0	8	0
	1730	..	..	..	..	13·9	9·3	4·9	8·8	57	..	4·7	..	6·3	0	0	28	0	0	0	0	3	8	14	3	3	0
Barahkshetra	0830	146	1013·9	996·9	..	21·3	15·6	10·9	13·1	51	..	2·3	..	4·9	0	0	19	1	2	2	2	1	6	2	3	12	0
	1130	,,	1012·0	995·4	..	27·4	18·2	11·2	13·4	37	..	2·8	..	12·9	0	3	28	0	0	0	0	0	14	14	3	0	0
	1730	,,	1009·0	992·4	..	26·5	18·1	11·8	13·9	40	..	4·0	..	3·8	0	0	23	1	5	7	2	2	2	4	0	8	0
Angbung	0830	..	..	..	..	(c) 15·9	(d) 13·1	10·8	13·0	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung	0830	..	..	..	..	13·3	8·9	4·9	8·6	57	..	3·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	16·7	10·9	5·9	9·4	50	..	4·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	14·1	9·4	5·0	8·9	57	..	5·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok	0830	..	..	..	..	13·6	10·1	6·6	9·9	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallangchung Gola	0830	..	..	..	..	2·8	0·6	—3·3	4·8	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhojpur	0830	..	..	..	..	15·2	11·4	8·4	11·1	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730							(d)		(d)																	
Chainpur *	0830	..	..	..	..	14·8	11·3	8·4	11·2	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·8	13·0	9·7	12·2	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tista Catchment																											
Gangtok	0830	1812	1513·2	820·5	..	11·2	8·4	5·7	9·2	70	..	2·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	,,	1503·2	820·1	..	15·9	11·6	8·3	..	61	..	3·6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	,,	1474·7	818·4	..	11·9	9·4	7·4	10·2	75	..	5·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Geyzing	0830	..	..	..	..	14·2	11·6	9·9	11·7	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	14·3	12·4	10·5	13·2	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

*Data not reliable (a) Mean of 30 days. (d) Mean of 27 days. (e) Mean of 26 days.

MONTHLY MEANS OF UPPER WINDS, March 1957

During the month, observations of velocity and direction of upper winds were made at 52 stations in India. Out of these, at 42 stations all the observations were taken by means of pilot balloons and at 10 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table below. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a.m.s.l. are given under Table IV and data above 9.0 km. a.m.s.l. under Table V.

In Tables IV and V:

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights:

Surface, 0.15 km. a.g., 0.3, 0.6., 0.9, 1.5, 2.1, 3.0, 4.5, 5.4, 6.0, 7.2, 9.0. 10.5, 12.0, 14.1, 16.2, 18.0, 20.0, 23.0, 26.0, 30.0 and 35.0 km. a.m.s.l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

Station	Lat. N	Long. E	Height of anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November, 1951	0130	0730	1430	
Ahmedabad	23°04′	72°38′	60	19th May, 1928	0130	0730	1430	
Amausi	26°45′	80°53′	132	20th November, 1950	0130	0730	1430	
Ambala	30°23′	76°46′	283	1st April, 1941	0130	0730	1430	
Anantapur	14°41′	77°37′	364	12th February, 1946	0730	1430		
Asansol	23°41′	86°59′	136	29th May, 1942	0130	0730	1430	
Baghdogra	26°38′	88°19′	140	7th June, 1953	0130	0730	1430	
Bairagarh	23°17′	77°21′	532	26th February, 1943	0130	0730	1430	
Bamrauli	25°27′	81°44′	103	28th February, 1930	0130	0830*	1430	2030 *
Bangalore	12°58′	77°35′	936	19th May, 1915	0130	0730	1430	
Bareilly	28°22′	79°24′	180	12th January, 1943	0730	1430		
Begumpet	17°27′	78°28′	553	1st September, 1929	0130	0730	1430	
Bhagalpur	25°14′	86°57′	61	19th May, 1950	0730	1430		
Bhubaneshwar	20°15′	85°50′	55	5th December, 1942	0130	0730	1430	
Bhuj	23°15′	69°48′	111	14th September, 1937	0130	0730	1430	
Bikaner	28°00′	73°18′	229	18th October, 1946	0130	0730	1430	
Chikalthana	19°51′	75°24′	583	7th October, 1951	0130	0730	1430	
Cochin†	09°56′	76°14′	3	16th March, 1942	0130	0730	1430	
Darjeeling	27°03′	88°16′	2115	21st May, 1956	0730	1430		
Dum Dum	22°39′	88°27′	19	14th May, 1921	0130	0830*	1430	2030*
Gadag	15°25′	75°38′	650	3rd May, 1943	0130	0730	1430	
Gauhati	26°05′	91°43′	51	12th March, 1955	0130	0830*	1430	2030*
Gaya	24°45′	84°57′	119	19th March, 1937	0130	0730	1430	
Gopalpur	19°16′	84°53′	24	15th February, 1946	0130	0730	1430	
Gorakhpur	26°45′	83°22′	83	5th January, 1943	0730	1430		
Gwalior	26°14′	78°15′	219	7th May, 1938	0130	0730	1430	
Imphal	24°51′	93°58′	805	8th March, 1952	0130	0730	1430	
Jabalpur	23°10′	79°57′	402	30th July, 1928	0130	0730	1430	
Jagdalpur	19°05′	82°02′	562	25th March, 1948	0130	0730	1430	
Jaipur	26°49′	75°48′	404	6th June, 1953	0730	1430		
Jamshedpur	22°49′	86°11′	147	23rd July, 1942	0730	1430		
Jharsuguda	21°55′	84°05′	234	1st May, 1944	0130	0730	1430	
Jodhpur	26°18′	73°01′	229	15th October, 1934	0130	0830*	1430	2030*
Madras	13°00′	80°11′	29	8th April, 1926	0130	0830*	1430	2030*
Mangalore	12°52′	74°51′	40	4th June, 1928	0130	0730	1430	
Masulipatnam	16°11′	81°08′	13	8th April, 1942	0130	0730	1430	
Minicoy	08°18′	73°00′	16	14th April, 1941	0130	0730	1430	
Mohanbari	27°29′	95°01′	110	1st June, 1948	0130	0730	1430	
Mussoorie	30°27′	78°05′	2050	3rd November, 1955	0730	1430		
Nagpur	21°06′	79°03′	316	23rd April, 1943	0130	0830*	1430	2030*
New Delhi	28°35′	77°12′	227	20th October, 1936	0130	0830*	1430	2030*
Poona	18°32′	73°51′	593	5th January, 1925	0130	0730	1430	
Port Blair	11°40′	92°43′	93	29th October, 1945	0130	0730*	1430	2030*
Raipur	21°14′	81°39′	308	15th July, 1944	0130	0730	1430	
Santa Cruz	19°07′	72°51′	12	14th May, 1933	0130	0830*	1430	2030*
Tezpur	26°37′	92°47′	79	12th August, 1932	0130	0730	1430	
Tiruchirapalli	10°46′	78°43′	96	22nd June, 1936	0130	0730	1430	
Trivandrum	08°29′	76°57′	73	8th December, 1928	0130	0830*	1430	2030*
Udaipur	24°35′	73°42′	587	24th June, 1947	0130	0730	1430	
Vengurla	15°52′	73°38′	8	22nd November, 1941	0130	0730	1430	
Veraval	20°54′	70°22′	17	13th October, 1941	0130	0730	1430	
Visakhapatnam	17°43′	83°14′	10	24th September, 1928	0130	0730	1430	

*Radiowind ascents.

†Naval Meteorological office.

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	AGARTALA									AHMEDABAD								
Time in I. S. T.	0130				0730				1430				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.2	0.3	327	31	2.1	1.4	202	31	4.7	3.4	275	31	4.6	2.1	313	31	4.7	2.5	023	31	5.7	1.4	343
0.15 a.g.	29	9.5	3.2	297	31	6.0	0.4	028	31	6.7	4.6	274	30	14.5	7.7	324	31	14.5	7.6	037	31	6.2	0.8	264
0.3 a.m.s.l.	29	9.7	4.9	300	31	6.4	2.8	324	31	6.4	4.7	275	30	14.2	8.3	319	31	16.8	7.9	038	31	6.6	0.7	290
0.6 ,,	29	9.4	6.4	299	31	7.4	4.3	313	31	5.8	4.7	273	31	11.6	7.1	325	31	15.3	8.4	044	31	7.0	0.6	295
0.9 ,,	29	9.1	6.8	293	31	8.3	5.4	302	31	6.3	4.7	279	31	9.8	5.4	321	31	12.2	4.9	035	31	7.1	0.8	252
1.5 ,,	28	10.0	8.9	278	31	10.3	8.3	289	31	7.9	6.0	274	31	7.9	3.7	277	31	9.7	2.1	292	31	8.8	2.9	239
2.1 ,,	27	12.3	11.3	274	31	13.0	11.2	287	31	10.8	8.0	278	30	11.2	6.7	234	31	10.7	4.9	259	30	10:4	6.7	253
3.0 ,,	22	17.2	14.9	289	30	18.9	16.0	283	31	17.8	14.2	275	26	15.6	11.6	232	25	23.8	20.8	253	30	17.1	13.7	254
4.5 ,,	2	19.0	9.7	241	22	24.2	21.1	268	24	25.1	20.1	272	4	17.7	17.7	248	15	27.1	24.4	272	28	25.9	23.4	254
5.4 ,,					17	30.0	24.5	267	28	31.4	27.4	274					12	30.9	28.6	275	28	33.4	31.1	266
6.0 ,,					10	36.8	28.2	289	15	32.9	27.3	275					5	40.2	38.2	289	24	36.7	33.8	268
7.2 ,,					1	45.0	45.0	290	10	35.6	32.2	278					1	65.0	65.0	300	22	46.5	42.7	274
9.0 ,,									2	46.5	46.0	282									10	64.7	61.0	272

Station	AMAUSI									AMBALA								
Time in I. S. T.	0130				0730				1430				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.6	1.4	333	31	3.1	1.4	286	31	7.3	4.6	304	31	4.6	2.0	338	31	3.3	0.3	017	31	3.1	1.4	287
0.15 a.g.	31	11.0	7.4	336	31	9.7	3.4	307	31	9.7	6.6	297	31	13.3	6.3	360	31	11.5	3.9	060	31	7.9	3.4	281
0.3 a.m.s.l.	31	10.8	7.0	337	31	9.9	4.5	314	31	9.5	6.8	292	31	7.3	3.5	350	31	5.5	1.3	073	31	4.7	2.1	276
0.6 ,,	31	10.2	7.3	325	31	9.5	4.2	306	31	9.5	7.5	291	31	13.6	5.9	359	31	12.1	2.8	068	31	8.5	3.9	285
0.9 ,,	30	9.7	6.8	308	31	9.7	6.6	289	31	10.0	7.9	292	31	12.3	4.4	349	31	12.3	2.3	043	31	8.7	3.9	289
1.5 ,,	30	11.8	9.6	290	31	13.8	12.1	292	31	11.2	8.9	284	31	10.4	3.5	288	31	11.8	1.4	322	31	9.7	3.8	279
2.1 ,,	28	16.1	13.2	285	31	17.4	14.3	291	30	13.8	11.7	287	31	11.7	6.0	275	30	10.8	3.4	296	31	11.8	3.5	285
3.0 ,,	19	18.7	17.0	269	24	18.6	16.3	294	29	18.2	16.1	280	28	13.9	7.4	277	30	13.5	6.0	291	30	13.8	3.6	293
4.5 ,,					14	22.6	19.1	277	24	27.2	24.9	276	5	13.2	9.3	277	18	14.7	11.3	254	24	15.8	10.8	287
5.4 ,,					6	24.5	23.1	274	19	31.4	30.0	273	2	8.5	7.5	243	13	20.3	16.6	254	22	21.7	18.0	285
6.0 ,,					4	23.8	21.3	272	17	32.0	30.7	275	2	8.5	8.3	226	7	17.3	15.3	252	21	25.6	21.9	281
7.2 ,,									10	39.2	35.6	287	1	5·0	5.0	185	5	21.0	18.4	262	18	31.1	27.8	281
9.0 ,,									5	49.4	46.0	285					1	11.0	11.0	125	11	41·5	38.5	286

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	ANANTAPUR								ASANSOL										BAGHDOGRA			
Time in I. S. T	0730				1430				0130				0730				1430			0130		
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	2.6	1.5	160	31	4.9	14.1	073	31	3.7	1.7	294	31	2.5	1.2	295	31	3.7	2.7	290	31	2.5	1.9	010
0.15 a.g. .	31	8.5	4.9	151	31	7.6	16.5	078	30	11.4	4.5	306	31	8.6	4.3	294	31	7.9	6.2	290	31	6.1	3.9	045
0.3 a.m.s.l. .									30	11.4	4.5	310	31	9.1	4.2	302	31	8.0	6.3	291	31	6.0	4.4	060
0.6 ,, .	31	9.1	5.7	169	31	7.4	5.9	084	30	13.0	7.6	308	31	11.1	5.9	311	31	8.5	7.0	293	31	5.2	2.6	065
0.9 ,, .	31	10.0	6.5	172	31	7.5	5.4	095	30	12.6	10.0	298	30	10.6	8.3	296	31	8.4	6.9	292	31	4.9	0.9	056
1.5 ,, .	31	11.1	5.5	143	31	7.7	5.2	104	28	14.6	13.4	293	29	12.5	10.7	297	31	9.7	8.8	290	31	5.5	3.4	272
2.1 ,, .	31	8.6	3.3	105	31	8.1	3.9	107	27	18.6	16.5	281	28	16.4	14.9	293	30	14.0	12.9	288	31	10.0	9.1	269
3.0 ,, .	31	9.2	4.2	016	31	9.2	1.2	407	15	21.8	18.5	288	24	19.0	16.6	294	26	20.5	19.2	291	26	16.5	15.7	275
4.5 ,, .	31	14.1	7.7	289	27	13.2	9.7	263					8	25.1	21.7	284	16	26.8	24.6	290	1	8.0	8.0	275
5.4 ,, .	30	16.2	11.4	276	25	17.8	14.9	264					4	23.5	20.5	307	11	33.0	31.1	293	1	18.0	18.0	285
6.0 ,, .	28	18.0	13.5	277	25	19.4	16.0	268					1	32.0	32.0	005	6	33.9	31.0	298				
7.2 ,, .	22	26.6	20.4	289	22	27.1	24.6	271																
9.0 ,, .	10	30.7	24.7	278	19	40.0	36.0	272									1	40.0	40.0	010				

Station	BAGHDOGRA								BAIRAGARH										BAMRAULI			
Time in I. S. T.	0730				1430				0130				0730				1430			0130		
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	2.5	1.7	015	31	5.3	3.7	213	31	6.0	3.3	100	31	3.5	1.6	071	31	4.5	0.4	291	31	2.8	0.4	286
0.15 a.g. .	31	6.6	5.2	055	31	6.2	4.7	215	30	15.6	9.2	088	31	13.7	8.1	102	31	5.5	1.3	189	29	11.0	2.7	300
0.3 a.m.s.l. .	31	6.9	5.7	062	31	6.1	4.6	212													29	11.9	3.9	306
0.6 ,, .	31	7.2	6.0	075	31	6.5	5.2	222	30	14.8	8.5	088	31	11.5	7.0	092	31	5.8	1.7	194	29	12.0	4.8	290
0.9 ,, .	31	6.3	4.2	075	31	6.5	4.9	231	29	12.9	6.5	071	31	14.1	5.5	119	31	6.4	1.7	217	29	11.8	6.4	281
1.5 ,, .	31	4.8	1.2	292	30	7.2	6.1	251	29	8.3	2.9	311	31	10.8	1.1	151	31	8.0	4.0	247	27	11.8	9.3	267
2.1 ,, .	31	9.3	7.2	282	27	10.0	8.4	272	29	11.7	9.4	268	30	10.3	5.1	272	30	10.2	7.1	253	22	15.3	13.0	269
3.0 ,, .	30	15.3	14.3	280	24	14.2	12.7	288	25	19.2	16.5	255	29	15.8	14.0	262	28	17.3	14.9	260	14	18.3	16.1	271
4.5 , .	23	19.4	17.9	275	19	21.8	19.8	272	3	24.3	24.2	253	23	26.9	25.0	266	20	29.3	25.5	274				
5.4 ,, .	16	23.1	17.8	276	14	27.2	25.0	277					19	29.5	27.6	273	15	37.9	34.0	278				
6.0 ,, .	12	23.7	19.1	289	12	30.8	29.2	273					12	32.3	29.1	285	14	44.3	39.4	279				
7.2 ,, .	5	27.8	22.4	295	11	36.0	34.2	281					3	36.7	33.6	282	11	53.6	49.8	284				
9.0 ,, .	1	37.0	37.0	290	4	50.2	49.9	282					1	61.0	61.0	295	6	63.7	63.4	297				

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	BAMRAULI									BANGALORE								
Time in I. S. T.	0830*				1430				2030*				0130				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	3.6	1.7	229	31	6.1	4.8	308	31	3.1	1.3	275	31	6.3	5.4	121	31	4.4	3.2	148	31	6.2	4.6	091
0.15 a.g. .	30	6.1	2.9	242	31	7.9	5.3	309	29	5.8	3.6	308	31	15.1	12.4	131	30	9.4	6.5	164	31	6.9	5.3	086
0.3 a.m.s.l. .	30	6.8	3.7	249	31	7.7	5.5	308	29	6.4	4.1	306												
0.6 ,, .	30	8.0	5.3	264	31	7.9	6.1	298	29	9.1	6.1	303												
0.9 ,, .	30	8.9	6.3	267	31	8.2	6.9	291	29	10.4	7.4	292												
1.5 ,, .	30	11.9	9.0	283	31	9.8	8.2	283	29	11.2	9.6	276	31	15.6	10.6	150	28	11.7	4.7	174	31	7.0	5.7	089
2.1 ,, .	29	14.7	11.4	292	31	14.5	12.2	281	29	14.3	12.3	269	31	6.3	1.4	171	27	9.0	4.8	046	29	6.8	5.2	087
3.0 ,, .	29	19.1	15.9	280	28	19.1	17.2	278	29	19.4	16.9	273	30	8.9	5.7	028	27	11.1	7.2	041	26	8.1	4.7	066
4.5 ,, .	28	27.2	24.7	269	21	28.7	27.1	278	29	25.9	23.7	273	14	9.1	3.2	115	26	11.7	2.3	277	16	7.7	2.7	220
5.4 ,, .	27	30.7	29.1	269	16	30.2	28.5	280	29	30.4	27.7	271	6	7.3	3.6	240	24	12.8	4.9	270	16	10.2	3.5	264
6.0 ,, .	26	34.9	33.2	267	13	35.1	31.7	278	27	34.9	31.9	274	3	9.7	9.3	249	22	14.5	5.2	279	13	12.2	7.2	266
7.2 ,, .	23	44.6	41.4	264	7	50.7	45.7	282	25	45.1	41.2	267	1	21.0	21.0	250	15	23.4	15.2	254	11	17.1	12.5	265
9.0 ,, .	14	54.7	48.2	259	1	42.0	42.0	315	16	60.8	58.2	261					6	26.5	24.2	253	10	34.2	30.3	266

Station	BAREILLY								BEGUMPET												BHAGALPUR			
Time in I. S. T.	0730				1430				0130				0730				1430				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	3.3	1.2	359	31	4.1	3.2	276	31	4.3	4.0	125	31	3.1	2.0	125	31	6.1	6.3	138	31	3.4	2.4	259
0.15 a.g. .	30	11.0	5.5	331	31	7.7	6.0	283	31	14.2	12.9	135	31	11.2	7.5	140	31	10.7	8.2	130	31	7.7	5.1	242
0.3 a.m.s.l. .	30	9.6	5.0	331	31	7.6	5.1	285													31	10.3	6.7	276
0.6 ,, .	30	11.7	6.5	314	31	8.5	3.9	305	31	9.6	8.6	131	31	7.7	5.3	135	31	10.4	8.1	130	31	12.2	9.1	291
0.9 ,, .	30	10.5	6.9	308	31	9.0	6.6	294	31	16.4	15.0	137	31	15.5	10.7	156	31	10.4	8.6	128	31	12.3	9.8	293
1.5 ,, .	30	11.6	8.7	306	31	10.0	8.1	289	31	15.1	11.0	139	29	15.8	10.9	150	31	10.0	7.1	146	29	14.2	12.5	290
2.1 ,, .	30	12.7	9.8	297	31	13.2	9.8	294	31	11.1	3.1	172	29	9.9	2.7	165	31	10.8	5.8	170	25	16.6	15.2	285
3.0 ,, .	29	15.2	12.5	292	30	15.8	12.8	293	30	12.7	7.6	281	29	12.1	5.5	305	29	12.4	3.4	255	21	20.3	17.1	286
4.5 ,, .	19	18.4	15.7	265	27	22.5	19.8	284					27	15.7	12.9	270	23	15.0	8.9	280	11	19.7	17.7	285
5.4 ,, .	11	23.5	22.3	286	23	27.7	24.4	280					25	19.0	17.2	265	19	20.0	17.0	275	7	23.7	23.3	275
6.0 ,, .	7	20.7	20.0	271	19	29.9	25.7	276					25	22.4	19.8	268	17	28.4	20.1	262	4	23.7	23.5	267
7.2 ,, .	3	24.0	18.9	249	14	34.7	31.4	280					4	28.5	21.0	240	15	31.6	27.7	265	2	51.0	50.3	271
9.0 ,, .	2	31.0	30.9	250	2	19.0	18.4	266									15	46.2	39.0	266				

TABLE IV — MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	BHAGALPUR				BHUBANESHWAR												BHUJ							
Time in I. S. T.	1430				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5.4	4.8	280	31	5.0	3.0	242	31	4.2	1.5	270	31	7.8	3.0	226	31	1.6	1.4	256	31	0.8	0.6	253
0.15 a.g. .	31	9.0	8.0	278	31	12.5	9.0	218	31	7.8	3.5	268	31	7.9	2.9	228	31	13.0	11.5	297	31	10.3	7.9	303
0.3 a.m.s.l. .	31	9.5	8.7	286	31	13.5	10.6	231	31	8.6	4.7	260	31	8.3	3.3	240	31	13.9	12.1	299	31	12.2	9.3	319
0.6 ,, .	29	9.6	8.4	286	31	13.2	10.2	238	31	9.1	5.0	267	31	7.7	4.2	255	31	13.5	10.9	303	31	14.5	11.3	327
0.9 ,, .	29	10.1	9.2	286	31	11.4	8.0	250	31	8.9	4.0	285	31	7.5	4.7	265	31	10.5	6.8	307	31	11.5	6.6	333
1.5 ,, .	29	14.0	12.4	279	29	10.1	5.2	284	30	9.7	4.9	286	31	8.1	6.3	291	31	9.5	0.9	260	31	10.0	1.9	346
2.1 ,, .	28	15.1	9.8	276	25	11.6	7.9	316	30	11.6	6.7	301	31	11.1	8.3	298	31	11.6	4.4	214	31	12.1	5.1	223
3.0 ,, .	23	18.7	17.0	280	21	15.2	12.3	313	25	15.3	11.6	309	28	16.4	12.2	295	28	14.5	9.8	235	30	15.5	10.5	258
4.5 ,, .	18	23.6	21.2	283					17	19.4	15.9	276	14	21.3	18.2	295	4	23.0	18.6	267	26	23.9	21.5	266
5.4 ,, .	14	30.9	30.6	296					10	23.3	21.2	289	10	20.8	16.9	295					21	29.9	28.2	265
6.0 ,, .	12	34.6	31.1	287					7	31.4	28.9	292	9	26.3	20.9	295					16	30.6	29.1	271
7.2 ,, .	7	47.9	45.7	296									8	39.1	32.6	285					5	50.2	49.8	287
9.0 ,, .	2	63.5	63.2	293									4	55.0	45.6	283								

Station	BHUJ				BIKANER								CHIKALTHANA							
Time in I.S.T.	1430				0130				0730				1430				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4.3	0.9	298	31	3.3	1.4	079	31	2.8	1.3	141	31	3.7	1.9	232	31	4.5	2.0	329	31	3.0	0.6	058
0.15 a.g. .	31	6.9	1.5	287	30	15.5	9.0	085	31	14.6	7.0	139	31	7.7	4.1	243	31	12.4	5.6	003	31	9.2	3.5	063
0.3 a.m.s.l. .	31	6.9	1.5	285	30	13.5	7.1	084	31	11.3	6.5	139	31	7.3	3.6	244								
0.6 ,, .	31	6.9	1.6	274	30	15.5	4.7	095	31	13.3	3.2	158	31	7.3	3.3	249								
0.9 ,, .	31	6.5	2.3	271	30	12.2	0.6	109	31	12.1	2.5	219	31	7.0	3.1	250	31	14.1	5.8	008	31	11.5	4.6	080
1.5 ,, .	31	7.5	3.0	253	30	11.6	7.7	252	31	11.4	4.7	274	30	7.7	4.1	259	31	12.4	3.6	016	31	10.8	3.2	085
2.1 ,, .	31	9.9	6.6	255	28	14.6	10 8	258	29	13.1	8.0	291	28	10.4	6.5	253	31	9.1	6.7	283	31	9.9	3.6	201
3.0 ,, .	30	15.8	13.2	258	21	17.3	12.8	266	27	14.8	9.9	283	24	13.5	9.9	270	25	12.9	8.3	226	31	12.6	9.4	229
4.5 ,, .	27	26.6	23.9	267	5	13.8	13.6	282	20	19.7	16.7	276	21	20.6	18.3	275	4	22.7	20.1	282	27	23.0	19.8	273
5.4 ,, .	25	33.5	31.3	269	1	26.0	26.0	310	14	25.9	23.6	282	16	25.4	23.6	282					23	29.0	27.2	277
6.0 ,, .	23	35.1	32.9	275					8	24.5	23.1	277	15	30.1	27.7	280					22	34.0	30.2	279
7.2 ,, .	11	49.8	47.3	282					4	28.5	27.2	277	11	40.2	36.7	279					2	34.5	33.7	282
9.0 ,, .	3	75.3	72.8	282									5	48.6	45.0	282								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	CHIKALTHANA				COCHIN										DARJEELING							
Time in I. S. T.	1430				0130				0730				1430		0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4.3	1.5	282	31	2.3	0.2	288	31	1.8	1.6	050	31	10.4	9.7	277	31	1.0	0.4	219	31	2.7	2.4	242
0.15 a.g.	31	8.1	3.9	234	22	5.1	2.6	018	30	6.3	4.6	042	31	7.7	7.3	273	31	4.0	2.1	201	17	6.8	6.5	232
0.3 a.m.s.l.					22	5.1	3.1	340	30	6.3	4.4	017	31	8.5	7.8	277								
0.6 ,,					22	5.7	4.7	315	30	6.1	4.6	351	31	5.9	4.8	292								
0.9 ,,	31	8.3	4.4	224	22	4.8	2.6	323	30	4.7	3.0	358	31	5.0	3.2	277								
1.5 ,,	31	7.5	4.7	221	21	5.8	3.6	091	30	5.6	4.3	060	31	8.1	7.4	056								
2.1 ,,	31	7.1	5.0	227	20	8.1	6.8	084	29	8.2	7.1	064	31	11.6	10.7	064								
3.0 ,,	29	12.4	9.6	234	15	10.9	9.1	069	28	9.4	6.6	061	31	9.1	6.7	058	30	9.3	7.9	279	15	13.8	13.4	261
4.5 ,,	20	22.5	19.7	260	6	6.8	3.0	118	22	8.4	1.1	320	30	8.6	0.3	268	24	17.6	14.6	273	7	23.1	22.4	284
5.4 ,,	13	31.0	28.2	258	2	8.5	8.3	101	24	10.0	2.1	265	29	10.7	1.9	348	18	21.7	17.9	278	4	22.7	22.1	285
6.0 ,,	10	37.6	34.2	253	2	11.0	10.3	120	18	13.6	2.5	306	27	13.2	3.2	325	15	21.0	19.2	276	2	27.0	24.0	310
7.2 ,,	9	41.6	38.1	258	1	8.0	8.0	090	13	20.7	12.6	292	23	19.7	12.6	298	9	23.8	21.0	292	2	42.5	36.2	320
9.0 ,,	4	59.3	54.5	268	1	9.0	9.0	095	6	19.2	7.4	348	9	25.4	17.6	273	4	24.5	20.5	327	1	74.0	74.0	010

Station	DUM DUM												GADAG							
Time in I. S. T.	0130				0830*				1430				2030*				0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.3	1.5	242	31	3.9	1.5	304	31	3.4	2.2	278	30	2.8	1.5	214	31	5.3	3.0	256	31	3.7	1.7	217
0.15 a.g.	31	11.5	6.0	245	31	9.0	4.3	310	31	7.8	5.4	290	29	10.2	5.2	220	31	12.9	7.9	267	31	9.3	1.5	191
0.3 a.m.s.l.	31	11.6	6.5	247	31	9.0	4.1	310	31	7.6	5.8	294	29	9.2	4.3	235								
0.6 ,,	31	9.9	5.4	269	31	8.0	4.8	311	31	7.4	6.3	294	29	8.4	4.3	264								
0.9 ,,	31	8.8	5.4	279	31	8.0	5.0	236	30	7.1	6.2	294	29	7.1	4.7	286	31	13.3	6.2	274	31	9.9	0.8	126
1.5 ,,	31	11.0	9.3	293	31	10.7	8.8	302	31	9.0	7.6	285	29	9.5	8.2	298	31	12.5	3.9	138	31	11.2	2.1	175
2.1 ,,	29	14.4	13.2	300	31	13.6	11.3	298	30	13.2	11.7	289	29	12.7	11.4	293	31	9.4	5.4	135	31	8.7	2.8	151
3.0 ,,	22	19.5	18.0	296	31	19.5	15.7	284	29	19.8	18.1	299	29	20.7	19.0	294	31	8.7	3.7	131	31	9.6	2.1	131
4.5 ,,					28	27.8	25.7	277	22	26.8	25.1	285	29	28.4	26.6	283	19	14.4	11.1	279	26	15.1	10.5	277
5.4 ,,					27	33.4	30.9	270	17	29.8	27.5	287	28	34.4	31.8	275	12	17.3	14.8	267	25	19.0	13.6	279
6.0 ,,					26	38.0	34.4	270	15	34.6	32.6	287	28	38.9	36.1	275	7	16.1	14.0	270	23	21.0	16.5	286
7.2 ,,					26	45.9	42.1	269	7	43.4	38.7	296	28	48.9	44.8	275	2	29.0	20.0	279	18	25.8	20.5	291
9.0 ,,					26	62.0	56.7	272	1	44.0	44.0	315	26	61.8	55.8	277					7	44.3	37.1	27

Table IV—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9.0 km. above mean sea level

March 1957

Station	GADAG				GAUHATI												GAYA			
Time in I. S. T.	1430				0130				0830*				1430				2030*				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5.3	1.9	176	31	3.0	2.2	189	30	4.0	2.7	48	31	5.3	3.9	302	31	3.1	1.6	236	31	1.9	1.4	246
0.15 a.g.	31	6.8	2.2	190	30	8.3	5.3	211	30	6.5	3.9	58	31	8.8	6.7	300	27	7.4	4.3	253	31	7.8	6.0	264
0.3 a.m.s.l.					30	9.0	5.8	239	30	6.4	3.2	65	31	7.5	6.5	292	27	7.7	4.7	254	31	10.9	5.4	269
0.6 ,,					30	8.7	6.3	254	30	6.3	0.9	93	31	8.2	6.1	282	27	8.8	6.5	261	31	10.5	7.3	294
0.9 ,,	31	7.2	2.3	196	30	9.2	8.1	267	30	7.2	2.8	260	30	6.8	5.3	266	27	9.9	7.9	269	31	10.8	8.9	296
1.5 ,,	31	7.2	2.5	180	30	12.2	11.3	265	30	9.9	6.9	256	30	11.6	10.8	242	27	12.7	11.6	266	30	15.0	10.3	286
2.1 ,,	29	8.0	2.4	185	28	14.0	13.1	261	30	14.3	12.3	259	29	16.7	15.5	243	27	15.4	14.7	258	27	16.0	14.8	279
3.0 ,,	28	8.3	2.2	188	20	17.0	15.3	263	28	19.6	17.7	270	26	21.6	19.8	257	27	18.7	17.8	256	8	21.1	20.5	291
4.5 ,,	21	13.9	11.4	271					28	28.9	26.1	268	15	21.2	19.1	270	27	27.2	25.7	266				
5.4 ,,	19	21.2	17.6	280					28	35.5	31.4	264	14	28.0	25.0	273	27	33.9	31.8	264				
6.0 ,,	18	23.1	18.9	279					26	41.0	35.3	265	13	30.3	26.6	276	25	37.7	34.7	266				
7.2 ,,	15	27.5	23.1	284					24	50.0	42.9	266	7	37.4	29.8	274	24	44.8	40.8	267				
9.0 ,,	7	47.4	45.6	251					21	60.0	53.5	269	2	48.0	39.7	271	20	63.7	58.5	265				

Station	GAYA								GOPALPUR												GORAKHPUR			
Time in I. S. T.	0730				1430				0130				0730				1430				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.7	2.1	234	31	5.7	4.3	280	31	6.0	4.6	216	31	3.4	2.4	306	31	9.1	7.9	162	31	2.3	1.1	277
0.15 a.g.	31	10.4	7.5	224	31	8.5	6.3	279	30	11.9	9.8	215	31	7.9	3.9	297	31	11.2	9.4	160	31	11.7	6.7	284
0.3 a.m.s.l.	31	10.7	3.7	234	31	8.4	6.1	280	30	11.8	10.0	216	31	7.1	2.5	234	31	10.4	8.2	157	31	12.3	7.5	284
0.6 ,,	31	9.5	5.5	286	31	9.2	7.3	283	30	10.5	8.5	215	31	6.8	3.5	222	30	7.5	3.9	151	31	12.3	8.9	289
0.9 ,,	31	9.9	7.4	295	31	9.8	7.7	283	30	8.5	6.4	216	31	7.0	2.1	217	30	6.4	0.7	196	31	12.2	9.9	285
1.5 ,,	31	12.7	10.1	292	31	11.5	10.0	285	29	8.3	3.0	260	31	8.9	0.9	265	30	8.4	5.9	304	31	13.2	10.8	291
2.1 ,,	30	15.7	14.1	290	30	14.7	13.3	288	27	10.8	5.9	320	30	10.7	3.9	320	30	11.3	8.0	300	30	15.2	12.8	295
3.0 ,,	27	20.2	17.4	280	28	19.0	17.9	289	20	13.6	7.6	319	27	13.4	8.3	327	31	16.2	11.2	307	28	19.5	17.6	289
4.5 ,,	9	24.7	22.1	282	17	28.5	22.8	283	3	15.3	13.6	295	22	16.0	12.2	294	28	19.4	16.1	281	16	22.6	20.2	288
5.4 ,,	3	31.7	25.9	292	13	31.8	29.6	283	1	15.0	15.0	320	22	23.3	18.8	278	26	25.6	22.9	274	14	26.5	24.3	278
6.0 ,,	2	50.5	48.5	184	10	35.2	32.9	280					19	25.4	22.5	271	25	29.7	26.9	268	6	32.2	28.7	266
7.2 ,,	1	50.0	50.0	300									12	31.9	26.6	272	20	36.7	32.8	272	2	34.5	29.3	276
9.0 ,,													2	44.0	25.9	308	14	52.0	45.7	279				

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	GORAKHPUR				GWALIOR									IMPHAL							
Time in I.S.T.	1430				0130				0730				1430					0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	
Surface . .	31	4.7	3.2	256	31	1.8	0.2	078	31	1.7	0.7	231	31	3.3	1.9	355	31	1.7	0.7	243	31	1.2	0.2	164
0.15 a.g. .	31	9.9	7.3	270	31	10.5	4.0	071	31	8.4	3.3	150	31	7.1	4.0	341	31	3.9	0.2	275	31	2.7	0.8	125
0.3 a.m.s.l. .	31	10.7	7.6	270	31	9.0	2.9	084	31	6.6	2.8	156	31	6.5	3.4	351								
0.6 ,, .	31	12.0	9.6	273	31	10.4	3.7	051	31	12.1	2.4	129	31	6.8	4.0	338								
0.9 ,, .	31	12.2	9.8	276	31	9.7	0.8	020	31	11.2	1.3	184	31	7.0	4.1	320	31	3.8	0.5	135	31	2.8	1.0	136
1.5 ,, .	29	15.0	12.4	288	31	9.0	5.6	074	31	9.2	3.1	286	31	8.6	4.8	289	31	7.6	6.6	277	31	6.0	2.1	287
2.1 ,, .	28	16.7	15.0	286	30	12.7	10.9	275	31	11.9	8.5	289	31	10.3	6.7	274	31	13.6	11.8	271	31	11.5	8.6	277
3.0 ,, .	26	20.4	19.0	286	29	20.0	17.3	269	30	18.7	14.9	289	28	16.3	13.9	267	29	21.2	19.1	271	30	18.8	15.6	273
4.5 ,, .	19	24.8	23.9	286	1	13.0	13.0	280	23	27.7	24.0	267	22	30.5	28.0	276	7	18.0	15.7	294	17	21.3	17.5	264
5.4 ,, .	14	27.7	26.5	285					20	31.7	27.9	274	19	33.2	30.7	277	3	2.9	2.6	288	12	29.6	25.3	277
6.0 ,, .	12	32.0	29.9	286					15	33.5	31.2	278	17	35.1	32.7	282					8	28.9	22.2	282
									1	37.0	37.0	260									5	26.4	20.6	299
7.2 ,, .	6	38.6	35.6	279									16	42.7	40.6	288								
9.0 ,, .	3	50.3	45.0	270									9	56.0	55.0	288								

Station	IMPHAL				JABALPUR									JAGDALPUR							
Time in I.S.T.	1430				0130				0730				1430					0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	
Surface . .	31	7.7	6.1	239	31	2.7	0.8	098	31	2.3	1.6	141	31	2.9	0.9	231	31	1.4	0.3	210	31	0.7	0.1	225
0.15 a.g. .	31	10.7	8.8	246	31	10.9	5.3	107	31	10.3	6.4	131	30	6.6	2.2	236	31	10.2	2.7	168	30	6.1	2.2	154
0.3 a.m.s.l. .																								
0.6 ,, .					31	11.9	5.6	107	31	11.3	6.3	134	30	7.0	2.3	232	31	6.5	2.0	195	30	2.9	1.0	146
0.9 ,, .	31	10.1	8.2	244	31	11.3	4.0	095	31	12.9	4.7	145	30	7.2	3.1	236	31	11.4	2.5	147	30	9.4	2.8	164
1.5 ,, .	31	12.2	11.2	256	31	9.0	1.4	303	30	10.8	3.5	307	30	7.6	5.1	250	30	8.3	1.7	255	29	8.7	0.3	225
2.1 ,, .	30	14.8	13.7	265	29	11.3	7.5	257	28	12.7	8.1	063	30	10.4	8.1	250	28	9.8	7.0	284	29	9.8	4.0	316
3.0 ,, .	29	16.4	13.3	273	26	20.6	17.2	265	28	18.3	12.4	274	28	19.1	16.7	268	26	12.2	9.2	307	28	15.8	9.9	321
4.5 ,, .	17	26.0	22.0	280	5	31.4	28.7	285	19	26.6	24.0	279	22	25.8	24.8	282					14	15.0	12.8	291
5.4 ,, .	9	29.8	25.1	274	1	31.0	31.0	260	13	30.4	26.7	283	19	33.9	31.5	281					9	18.4	16.6	256
6.0 ,, .	4	33.0	30.4	281	1	34.0	34.0	265	11	31.8	28.4	278	17	36.6	34.3	284					6	25.0	23.7	265
7.2 ,, .	3	28.0	24.2	299					5	42.6	31.4	273	8	50.3	45.8	281					2	31.0	30.8	268
9.0 ,, .	2	52.5	30.3	297									3	59.0	58.3	278								

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	JAGDALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I.S.T.	1430				0730				1430				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.0	0.7	264	31	2.8	2.3	087	31	4.1	2.1	250	31	3.3	2.4	297	31	3.7	2.2	297	31	3.5	1.9	018
0.15 a.g.	31	5.5	2.3	265	31	10.6	5.9	108	31	7.5	4.0	257	31	6.7	4.7	290	31	7.1	4.3	297	29	8.2	3.2	034
0.3 a.m.s.l.													31	6.7	4.1	288	31	7.1	4.7	292	29	7.4	3.6	013
0.6 ,,	31	4.1	1.4	267	31	11.1	5.8	124	31	7.7	4.1	250	31	8.1	3.5	293	31	8.9	6.7	288	29	9.8	2.8	337
0.9 ,,	31	5.8	2.5	272	31	9.6	3.3	171	30	8.1	4.4	246	31	8.7	4.1	300	30	7.0	5.6	278	29	10.3	3.7	325
1.5 ,,	31	5.7	2.1	278	31	9.8	3.7	256	29	7.3	4.5	249	31	9.5	7.1	293	30	8.9	7.6	280	28	10.0	5.9	291
2.1 ,,	30	7.2	2.3	321	30	12.3	7.6	280	29	8.3	5.5	257	30	12.2	10.3	291	30	11.5	10.0	282	26	12.4	9.5	287
3.0 ,,	27	10.1	5.6	299	27	17.0	11.5	288	28	13.5	11.3	257	30	18.1	15.6	288	27	18.7	17.1	291	18	14.9	12.6	292
4.5 ,,	19	16.4	13.7	280	19	22.4	18.7	263	21	27.2	24.2	260	22	26.5	24.5	284	21	25.1	23.4	286				
5.4 ,,	16	23.7	21.4	274	12	24.2	22.9	284	16	31.6	28.1	264	9	27.2	24.2	287	18	32.1	29.8	281				
6.0 ,,	14	29.6	26.9	276	8	28.7	26.0	280	14	34.8	32.2	272	4	21.2	20.7	274	17	36.0	33.6	277				
7.2 ,,	12	35.0	32.0	291	4	31.5	31.5	281	7	36.0	35.5	290	1	37.0	37.0	255	10	43.4	41.2	276				
9.0 ,,	1	35.0	35.0	270					1	33.0	32.8	280												

Station	JHARSUGUDA								JODHPUR															
Time in I.S.T.	0730				1430				0130				0830*				1430				2030*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.9	1.7	036	31	3.3	1.5	283	31	5.8	2.0	018	31	4.6	3.0	050	31	6.3	2.2	260	27	4.9	0.9	355
0.15 a.g.	31	8.1	4.4	061	30	5.2	2.5	264	31	14.5	4.0	061	31	6.1	3.3	050	31	6.4	2.5	235	26	6.3	1.3	305
0.3 a.m.s.l.	31	7.1	3.8	057	30	5.5	2.9	261	31	10.8	3.6	047	31	5.8	3.3	049	31	5.9	2.2	259	26	6.0	1.1	320
0.6 ,,	31	9.1	2.6	075	30	6.0	4.2	276	31	13.9	2.8	034	31	7.5	2.8	062	31	6.8	2.2	241	26	7.7	2.0	284
0.9 ,,	31	9.2	1.1	028	30	7.0	4.9	284	31	11.3	1.0	282	31	9.5	1.4	119	31	6.8	2.6	238	26	9.2	3.3	272
1.5 ,,	29	11.2	6.1	307	30	9.3	7.6	280	31	9.8	5.0	245	31	11.1	3.0	252	30	7.2	3.8	251	26	9.6	3.9	257
2.1 ,,	28	14.2	11.0	238	29	12.1	9.1	292	27	9.7	6.9	246	30	11.9	5.6	261	30	9.8	6.3	251	26	10.8	5.9	250
3.0 ,,	26	19.7	16.5	300	27	16.4	13.6	295	22	15.1	11.3	267	30	16.0	9.8	263	29	14.3	10.8	258	25	14.7	11.8	250
4.5 ,,	15	22.2	21.4	277	18	22.8	20.2	280	2	24.5	24.5	306	30	25.3	22.3	249	26	27.5	23.5	269	25	24.8	21.6	259
5.4 ,,	4	22.3	21.8	264	17	30.7	26.7	277	1	17.0	17.0	280	30	32.9	28.7	263	21	31.9	28.0	269	24	31.3	28.7	262
6.0 ,,	1	19.0	19.0	260	14	37.4	34.1	275					30	38.0	33.3	265	19	36.1	33.7	274	25	36.1	33.2	266
7.2 ,,	1	39.0	39.0	245	8	46.0	44.7	273					29	52.6	47.4	269	15	41.9	39.7	277	24	59.0	45.5	266
9.0 ,,													28	69.9	62.9	271	9	52.7	48.9	277	28	66.2	60.4	272

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	MADRAS													MANGALORE						
Time in I.S.T.	0130				0830*				1430				2030*		0130				0730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2.1	1.6	131	31	3.3	1.6	240	31	6.5	6.1	107	31	6.4	5.8	113	31	4.5	3.5	035	31	4.9	4.4	068
0.15 a.g. .	31	8.9	8.2	132	31	6.7	3.1	190	31	8.2	7.7	119	31	11.3	11.0	118	31	8.5	7.9	348	31	8.0	6.9	034
0.3 a.m.s.l. .	31	9.0	8.5	131	31	7.3	3.9	170	31	8.4	7.7	120	31	10.6	10.1	111	31	8.9	8.6	335	31	7.5	6.7	350
0.6 „ .	31	9.0	8.3	130	31	8.0	5.6	148	31	6.7	4.4	128	31	9.7	9.1	106	31	8.7	8.0	330	31	7.1	6.1	343
0.9 „ .	31	8.3	7.2	121	31	9.0	7.2	134	31	6.3	2.8	120	31	9.6	8.3	098	31	7.9	6.7	323	31	7.8	6.1	340
1.5 „ .	31	9.7	6.6	099	30	11.7	9.5	104	31	8.7	5.1	077	31	10.1	7.5	076	29	6.7	4.0	303	31	6.9	1.7	323
2.1 „ .	29	10.9	7.8	068	30	12.2	9.0	072	31	10.2	7.3	064	31	10.8	7.7	057	27	8.3	5.0	100	31	7.2	3.6	109
3.0 „ .	29	11.0	6.9	006	31	12.5	8.2	020	31	11.3	6.7	020	31	10.7	5.6	003	25	8.9	4.2	104	31	7.9	4.0	080
4.5 „ .	24	10.0	2.8	304	31	11.2	3.2	335	31	11.7	4.1	277	31	12.1	5.9	287	15	11.5	7.4	283	27	11.1	4.3	290
5.4 „ .	10	12.4	7.6	027	31	14.9	7.5	293	30	14.1	8.0	280	31	13.8	8.2	385	5	16.6	15.5	284	27	14.4	5.8	285
6.0 „ .	7	13.6	10.5	264	31	17.8	11.5	289	29	14.6	9.0	279	30	16.7	10.8	286	1	11.	11.0	265	26	16.2	8.8	280
7.2 „ .	3	20.3	17.0	243	31	25.7	19.4	290	27	21.6	16.2	296	30	25.9	20.0	290					17	19.5	13.2	295
9.0 „ .					31	34.6	29.3	278	22	30.0	25.5	285	30	34.6	29.7	274					9	25.3	19.1	267

Station	MANGALORE				MASULIPATNAM									MINICOY						
Time in I.S.T.	1430				0130				0730				1430	0130				0730		
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	9.1	8.3	286	31	3.7	2.3	157	31	2.2	0.9	095	31	7.4	7.0	143	31	3.7	3.1	004	31	4.0	3.5	012
0.15 a.g. .	31	10.1	9.7	287	31	10.2	8.6	170	31	7.1	4.8	163	31	8.4	7.9	146	31	7.1	5.9	360	30	8.4	7.0	012
0.3 a. m.s.l. .	31	10.2	9.4	295	31	10.5	9.2	168	31	8.1	6.7	162	31	8.5	7.9	150	31	7.0	5.9	002	30	8.1	7.0	015
0.6 „ .	31	7.1	4.5	313	31	10.3	9.6	156	31	8.8	8.0	153	31	7.4	5.8	153	31	6.9	5.6	011	30	7.2	6.2	018
0.9 „ .	31	5.3	3.1	330	31	10.2	8.5	147	30	9.2	8.4	142	31	7.6	5.3	143	31	6.4	4.3	037	30	6.7	5.1	044
1.5 „ .	31	6.7	3.8	065	29	10.8	6.3	112	30	12.7	9.3	116	29	11.0	7.5	104	31	8.8	6.8	086	30	8.9	8.3	088
2.1 „ .	31	10.8	8.9	084	29	12.6	6.7	068	28	13.7	8.0	083	29	12.3	6.9	075	29	12.5	11.0	090	30	10.9	10.1	095
3.0 „ .	31	8.5	2.7	102	27	11.6	4.5	355	28	13.9	5.6	352	29	14.2	7.6	019	28	8.3	7.0	082	30	6.5	3.7	063
4.5 „ .	31	11.7	4.9	296	10	16.5	13.1	304	22	14.7	10.9	299	29	15.2	9.8	284	20	9.7	6.0	086	28	8.7	1.5	062
5.4 „ .	30	14.8	7.5	287	8	17.4	13.5	287	14	17.8	14.5	284	29	20.3	16.9	275	14	8.8	2.9	028	27	10.4	3.8	040
6.0 „ .	29	17.6	10.7	298	4	17.0	14.7	256	9	20.7	16.9	276	28	23.0	19.6	277	11	12.9	3.0	353	20	13.1	5.3	046
7.2 „ .	27	24.3	18.4	293	1	30.0	30.0	285	7	30.3	21.9	270	18	29.6	23.2	292	4	16.3	12.4	308	20	17.0	7.3	339
9.0 „ .	23	33.7	28.2	287									13	42.6	38.0	284					13	18.0	5.3	285

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	MINICOY				MOHANBARI												MUSSOORIE							
Time in I.S.T.	1430				0130				0730				1430				0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4.7	4.3	014	31	1.0	0.8	060	31	2.0	1.7	050	31	1.7	1.5	033	31	2.1	1.1	019	31	4.7	3.8	212
0.15 a.g. . .	31	8.2	7.6	013	28	8.0	7.5	057	31	9.3	8.6	053	30	3.9	2.6	052	28	6.8	2.0	034	27	8.7	7.4	195
0.3 a.m.s.l. .	31	8.4	7.9	015	28	7.6	6.7	054	31	10.0	9.1	048	30	4.1	2.8	053								
0.6 ,, .	31	7.6	6.9	020	28	6.6	5.6	052	31	8.6	7.3	047	30	4.1	1.7	063								
0.9 ,, .	31	6.8	5.0	044	28	4.9	3.8	063	31	6.4	3.8	069	31	4.2	0.8	157								
1.5 ,, .	28	7.3	5.7	085	28	5.0	2.2	222	31	6.5	3.5	187	30	8.0	6.0	224								
2.1 ,, .	27	8.6	7.1	089	24	9.3	8.1	246	31	9.3	7.2	225	29	10.9	9.4	225	28	5.4	1.3	013	27	8.5	7.6	201
3.0 ,, .	25	6.6	3.5	049	17	11.5	9.9	261	29	13.0	9.9	248	29	14.4	12.0	227	27	11.9	1.4	310	26	10.1	4.8	167
4.5 ,, .	22	7.6	2.7	010					18	21.4	15.8	264	23	21.8	18.3	251	24	12.8	6.4	288	21	12.7	4.0	257
5.4 ,, .	21	10.2	3.1	022					15	26.9	20.3	266	16	24.1	17.6	266	22	19.2	15.8	276	16	16.8	11.1	295
6.0 ,, .	19	12.4	2.8	009					15	31.0	23.3	272	15	28.1	21.9	270	19	21.4	18.4	270	16	20.6	17.2	281
7.2 ,, .	16	17.6	4.0	323					7	34.6	20.7	302	7	31.7	28.1	290	16	30.5	26.3	276	11	26.3	22.1	283
9.0 ,, .	13	20.2	8.5	281									2	60.0	59.5	285	5	33.8	30.2	283	4	43.0	36.1	275

Station	NAGPUR																NEW DELHI							
Time in I.S.T.	0130				0830*				1430				2030*				0130				0830*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4.5	1.3	028	30	4.2	2.7	054	31	4.2	2.0	213	27	4.7	2.8	099	31	2.9	1.1	309	31	3.8	1.3	300
0.15 a.g. . .	31	11.8	6.7	088	30	5.9	2.6	077	31	7.2	3.4	207	27	5.6	2.7	110	31	11.3	3.6	025	31	5.2	1.6	305
0.3 a.m.s.l. .																	31	8.9	2.3	015	31	4.6	1.7	302
0.6 ,, .	31	12.4	7.1	105	30	7.5	3.7	104	31	7.3	4.2	185	27	6.3	2.5	118	31	11.3	2.6	007	31	6.7	1.8	311
0.9 ,, .	31	10.9	6.1	129	30	10.0	2.7	115	31	7.4	4.7	189	27	7.9	2.1	159	31	11.2	2.9	290	31	8.2	3.4	292
1.5 ,,	31	9.1	5.3	192	30	10.7	6.9	198	29	6.9	4.7	215	27	9.0	4.8	225	31	12.2	8.0	286	31	10.1	5.1	295
2.1 ,, .	31	10.4	7.6	245	30	11.9	8.3	233	29	9.8	6.7	242	27	12.5	8.8	251	31	13.2	10.6	281	31	12.1	7.9	285
3.0 ,, .	26	19.2	16.7	270	30	16.8	13.4	262	28	14.9	11.4	268	27	18.7	15.3	263	26	17.6	4.4	275	31	15.8	11.0	280
4.5 ,, .	3	25.7	25.4	274	30	24.0	21.2	265	24	26.1	23.3	276	26	25.7	23.2	270	1	8.0	8.0	270	31	21.5	16.8	269
5.4 ,, .					27	30.9	29.0	266	22	33.0	30.4	276	26	30.8	28.3	270					31	25.8	22.2	272
6.0 ,, .					27	35.8	33.6	266	21	38.1	34.6	275	26	33.9	31.5	265					31	28.8	24.1	270
7.2 ,, .					26	43.7	38.9	265	17	43.1	38.4	277	25	42.5	39.4	266					31	35.5	30.7	267
9.0 ,, .					25	53.4	49.0	267	11	57.5	51.4	292	22	54.4	49.0	270					30	45.7	41.5	270

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	TRIVANDRUM								UDAIPUR												VENGURLA			
Time in I.S.T.	1430				2030*				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5.3	4.8	241	27	4.6	2.2	243	31	0.3	2.8	306	31	0.4	0.1	027	31	1.9	0.9	201	31	1.7	1.7	360
0.15 a. g, .	31	9.5	8.6	242	25	4.7	2.8	244	31	5.8	2.5	353	31	5.4	1.6	360	31	5.5	2.1	187	31	12.1	11.8	250
0.3 a.m.s.l. .	31	9.5	7.7	240	25	4.8	2.5	247													31	14.4	14.3	348
0.6 ,, .	31	6.8	5.7	252	25	5.1	1.3	270													31	14.2	13.9	341
0.9 ,, .	31	4.6	2.4	302	25	6.2	0.8	068	31	8.0	2.1	017	31	8.5	2.5	084	31	6.1	2.1	184	31	13.2	12.2	324
1.5 ,, .	29	10.3	9.9	045	25	8.5	6.4	044	30	9.4	0.8	277	31	11.3	10.3	072	31	7.0	3.5	198	31	9.2	6.8	271
2.1 ,, .	30	12.9	11.3	050	25	12.6	11.4	050	30	10.7	7.3	240	31	11.2	5.1	245	31	8.8	6.1	234	31	11.9	6.9	164
3.0 ,, .	27	9.4	5.1	043	24	8.1	5.0	050	30	16.4	13.8	233	31	14.0	10.3	244	31	15.0	12.1	253	31	13.4	8.5	133
4.5 ,, .	20	7.7	2.1	065	24	7.6	2.4	050	1	19.0	19.0	205	26	21.2	18.6	254	30	25.1	22.2	250				
5.4 ,, .	20	10.3	2.0	080	24	10.1	2.2	024					22	25.5	24.2	284	25	30.0	27.3	261				
6.0 ,, .	19	11.4	12.6	339	22	12.1	2.5	004					17	29.9	27.5	282	24	34.3	31.6	266				
7.2 ,, .	17	18.4	9.9	314	22	13.9	5.6	317					6	44.0	43.7	287	19	37.0	34.2	275				
9.0 ,, .	12	20.0	12.6	286	21	17.2	8.0	278									6	57.3	53.7	288				

Station	VENGURLA								VERAVAL												VISAKHAPATNAM			
Time in I.S.T.	0730				1430				0130				0730				1430				0130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	0.5	0.5	360	31	8.9	8.5	270	31	8.5	7.4	314	31	5.8	5.3	348	31	13.0	11.2	265	31	1.1	0.8	265
0.15 a.g. .	31	6.5	6.1	013	31	10.0	9.5	285	31	14.7	13.4	314	31	13.3	12.7	346	31	13.1	10.8	260	31	6.4	5.8	232
0.3 a.m.s.l. .	31	11.0	10.6	351	31	8.9	8.0	291	31	14.8	13.0	314	31	14.9	13.4	345	31	12.2	7.6	263	31	7.1	6.5	232
0.6 ,, .	31	12.4	11.5	347	31	6.7	5.0	297	31	11.9	9.7	311	31	13.4	11.1	347	31	8.9	2.3	302	31	6.1	5.2	218
0.9 ,, .	31	13.3	11.9	350	31	6.4	2.3	291	31	9.4	5.2	312	31	10.8	7.4	350	31	7.9	2.7	014	31	6.0	4.1	185
1.5 ,, .	31	10.6	3.8	329	31	7.5	1.7	235	31	8.9	0.7	269	31	9.3	0.4	158	31	8.2	2.4	004	30	7.6	1.3	130
2.1 ,, .	31	9.6	4.9	181	31	9.1	2.6	161	30	10.3	3.0	180	30	10.1	5.1	205	31	10.2	4.6	250	30	9.9	3.7	355
3.0 ,, .	30	9.9	7.6	174	31	9.7	3.8	165	28	13.4	10.0	231	28	15.1	11.0	237	31	14.6	12.2	250	28	11.6	6.6	327
4.5 ,, .	28	18.1	14.1	271	30	16.0	10.0	268	11	19.8	18.6	268	25	22.0	19.1	270	30	23.1	20.3	268	18	15.7	13.3	275
5.4 ,, .	27	22.2	18.1	277	29	20.0	15.7	274	6	20.7	19.8	271	21	30.3	27.3	273	29	28.1	26.9	271	9	21.9	20.3	251
6.0 ,, .	26	25.0	19.1	276	29	23.6	19.2	276	3	27.3	26.4	276	19	35.8	32.5	276	28	32.8	30.7	273	2	34.0	34.0	243
7.2 ,, .	14	28.6	23.8	286	24	28.1	23.9	277					5	44.4	43.1	287	25	43.2	40.0	277				
9.0 ,, .	1	32.0	32.0	255	14	38.6	34.8	278									19	59.7	57.9	282				

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

March 1957

Station	VISAKHAPATNAM							
Time in I.S.T.	0730				1430			
Ht. in Km.	n	V	v	D	n	V	v	D
Surface . .	31	1.5	0.9	285	31	10.6	8.3	181
0.15 a.g. . .	31	4.5	3.0	262	31	8·5	6·5	164
0.3 a.m.s.l. .	31	5.8	4.5	235	31	7.2	5.3	155
0.6 ,, .	31	5.2	3.4	221	31	5·4	3.3	142
0.9 ,, .	31	5.1	2.8	185	31	5.6	2.3	150
1.5 ,, .	31	8.9	2.6	103	31	7.0	0.5	047
2.1 ,, .	30	11.4	6.4	300	30	10.5	4.3	350
3.0 ,, .	28	12.8	7.5	336	30	12.9	8.0	323
4.5 ,, .	24	15.2	12.7	280	27	15.9	12.7	284
5.4 ,, .	20	21.4	20.0	271	23	22.3	17.9	269
6.0 ,, .	18	23.1	20.4	273	21	24.3	19.4	272
7.2 ,, .	9	29.7	27.2	269	20	29.9	22.6	280
9.0 ,, .	1	58.0	58.0	275	16	48.0	39.3	278

TABLE V— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km above mean sea level

March 1957

Ht. in Km.	n	V	v	D
	AHMEDABAD			
	1430 hrs			
10·5	1	84·0	84·0	280
	AMAUSI			
	1430 hrs			
10 5	3	50·3	48·2	269
	AMBALA			
	0730 hrs.			
10.5	1	6 0	6.0	265
	1430 hrs.			
10.5	8	48 6	46.1	286
12.0	6	54.2	53 3	292
14.1	5	83.4	82.8	282
16 2	2	51.0	50 3	260
18.0	2	61 5	60.1	260
20.0	2	59.5	59.0	260
	ANANTAPUR			
	0730 hrs.			
10.5	3	30.3	30·0	286
12.0	1	37.0	37.0	240
	1430 hrs.			
10.5	15	41.0	38·6	267
12.0	5	43.6	40.8	244
	BAGHDOGRA			
	1430 hrs.			
10·5	3	70·2	69·6	292
	BAIRAGARH			
	1430 hrs.			
10.5	5	89 4	88·9	297
	BAMRAULI			
	0830 hrs. *			
10.5	9	58.1	52.0	249
12.0	6	70.5	65.5	253
14.1	1	100.0	100 0	220
	1430 hrs.			
10.5	1	63.0	63 0	310
	2030 hrs.*			
10.5	10	73.5	69.9	256
12.0	3	56.7	55.7	257
	BANGALORE			
	0730 hrs.			
10.5	1	32.0	32.0	270
12.0	1	29.0	29 0	270
10·5	9	34·9	33·7	265
12·0	9	36·1	34·3	248
14·1	4	47·7	47·6	256
	BAREILLY			
	1430 hrs.			
10·5	1	33·0	33·0	255
12.0	1	54.0	54·0	250
	BEGUMPET			
	1430 hrs.			
10.5	13	5.83	54.5	268
12·0	8	60·1	57·9	258
14·1	5	50·0	48·0	267
16·2	4	23.0	18.7	250
18·0	4	20·0	5·9	218
20·0	1	29.0	29·0	250
23·0	1	43·0	43·0	255
	BHUBANESHWAR			
	1430 hrs.			
10·5	2	74·5	66·9	274
	BIKANER			
	1430 hrs.			
10·5	2	65·5	59·3	277
	CHIKALTHANA			
	1430 hrs.			
10·5	1	80·0	80·0	295
	COCHIN			
	0130 hrs.			
10·5	1	10·0	10·0	085
	0730 hrs.			
10.5	5	23·6	20·0	274
2 0	2	20·0	11·3	198
	1430 hrs.			
10 5	5	26·6	24·5	283
12·0	2	27·5	27·0	264
	DARJEELING			
	0730 hrs.			
10.5	1	43·0	43·0	325
	DUM DUM			
	0830 hr..*			
10.5	25659	7.7	.7	261
12.0	232.	568·8	6	263
14·1	7	6.30	54.8	284
	2330 hrs.*			
10·5	17	83.4	75·3	262
12·0	16	82.8	77·9	263
14·1	7	51.6	50·7	259
	GADAG			
	0730 hrs.			
10·5	2	48.5	47·4	280
	1430 hrs.			
10·5	2	45.0	40·5	271
12·0	2	51.5	49·7	265
	GAUHATI			
	0830 hrs. *			
10·5	17	81.7	75.6	268
12·0	16	98·3	91·8	264
14·1	5	97.0	94 0	267
16·2	2	98.5	98.5	280
	1430 hrs.			
10·5	1	51·0	51·0	335
	2030 hrs. *			
10 5	16	67.8	61·1	272
12·0	11	84.7	79·3	270
14·1	2	96.0	94·8	268
16.2	1	124.0	124·0	260
	GOPALPUR			
	0730 hrs.			
10·5	1	47·0	47.0	245
12·0	1	50·0	50.0	230
	1430 hrs.			
10 5	6	57·3	51.9	272
12·0	3	56·7	54.4	282
	GWALIOR			
	1430 hrs.			
10·5	3	50.3	48·3	267
12·0	2	76.5	70.9	264
	IMPHAL			
	1430 hrs.			
10.5	2	56.5	42.1	319
12.0	1	72.0	72.0	010
	JODHPUR			
	0830 hrs.*			
10.5	21	79.1	72.9	269
12.0	16	88.0	83.1	268
14.1	7	82.6	74.7	271
16.2	2	70.5	69.5	262
	2030 hrs.*			
10.5	16	81.4	72.8	271
12·0	9	95·0	85·5	280
14·1	5	112·8	96·0	276
16·2	1	85·0	85·0	280
18.0	1	90.0	90.0	295
	MADRAS			
	0830 hrs.*			
10.5	24	34.9	32.5	272
12.0	23	33·7	31.8	258
14.1	19	34.1	29.5	252
16.2	10	27.3	22.7	265
18·0	4	25·3	19·7	268
21·0	1	22·0	22·0	260
	1430 hrs.			
10.5	20	31.8	27.1	266
12.0	19	33.7	29.0	253
14.1	12	29.5	27.3	255
16.2	9	18.6	12.6	270
18.0	6	12.2	3.1	355
21·0	1	23·0	23·0	060
	2030 hrs.*			
10.5	29	35.8	31.0	264
12.0	28	35.8	30.9	255
14·1	19	30·0	27·5	245
16·2	6	28·0	17·3	253
18.0	1	17.0	17.0	290
	MANGALORE			
	0730 hrs.			
10.5	5	34·6	32·3	280
12.0	3	25.7	21.6	280
	1430 hrs.			
10.5	21	35.5	28.5	279
12.0	17	31.3	29.8	273
14.1	13	23.4	21.1	259
16.2	11	17.4	14.2	283
18·0	7	12·4	3·9	082
20.0	3	19.0	18.3	096
23.0	1	13.0	13.0	064
26.0	1	23.0	23.0	016
	MASULIPATNAM			
	1430 hrs.			
10·5	6	48·2	46.5	259
12·0	1	55·0	55·0	255
	MINICOY			
	0730 hrs.			
10.5	10	19.3	13.3	255
12.0	9	20.1	15.1	272
14·1	2	19·0	16·0	300
16·2	1	9·0	9·0	310
18.0	1	3.0	3.0	055
21.0	1	4.0	4.0	340
	1430 hrs.			
10·5	8	16·7	7·4	316
12·0	7	15·0	10·8	287
14.1	4	11.5	10.6	257
	MUSSOORIE			
	0730 hrs.			
10·5	2	33·0	32·7	272
12·0	1	43·0	43·0	280
	1430 hrs.			
10.5	1	60.0	60.0	250
	NAGPUR			
	0830 hrs.*			
10.5	20	59.0	53.6	268
12.0	16	65.4	61.4	258
14.1	9	52.5	49.0	264
16·2	5	39·8	36·6	251
18·0	1	40·0	40·0	260
21.0	1	27.0	27.0	260
	1430 hrs.			
10.5	9	78.4	76.1	290
12·0	1	67·0	67·0	305
	2030 hrs.*			
10.5	16	70.3	64.4	267
12.0	9	75.1	70.2	262
14.1	6	68.5	67.0	275
16·2	3	38·3	37·7	262

TABLE V— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level.

March 1957

Ht. in Km.	n	V	v	D
		NEW DELHI		
		0830 hrs.*		
10.5	30	59.8	55.1	273
12.0	28	65.3	61.2	273
14.1	20	53.8	51.5	271
16.2	9	45.4	43.5	261
18.0	3	33.3	32.5	265
20.0	2	24.5	18.9	292
		1430 hrs.		
10.5	16	64.1	60.0	278
12.0	14	72.1	68.0	277
14.1	6	65.8	62.8	267
16.2	3	56.3	56.3	252
18.0	2	18.5	16.9	243
		2030 hrs.*		
10.5	26	56.0	47.9	271
12.0	23	61.0	55.6	270
14.1	12	51.1	49.5	269
16.2	3	39.3	38.0	266
18.0	1	14.0	14.0	230
		POONA		
		0730 hrs.		
10.5	1	60.0	60.0	275
		1430 hrs.		
10.5	4	57.5	57.3	270
12.0	4	63.0	62.7	278
14.1	1	82.0	82.0	270
		PORT BLAIR		
		0730 hrs.		
10.5	7	22.7	22.4	235
12.0	6	28.0	26.4	212
14.1	4	33.0	32.2	180
		2030 hrs.*		
10.5	13	29.0	26.3	240
12.0	11	30.7	28.7	215
14.1	3	31.7	29.0	189
16.2	1	37.0	37.0	220
		RAIPUR		
		1430 hrs.		
10.5	5	66.2	58.0	270
12.0	2	81.0	80.4	258

Ht. in Km.	n	V	v	D
		SANTA CRUZ		
		0830 hrs.*		
10.5	24	67.7	64.0	280
12.0	22	71.4	66.6	275
14.1	11	78.3	76.2	273
16.2	1	90.0	90.0	290
		1430 hrs.		
10.5	21	63.5	57.6	269
12.0	8	66.9	63.9	276
14.1	1	54.0	54.0	275
		2030 hrs.*		
10.5	19	67.0	63.1	281
12.0	15	66.1	63.3	275
14.1	7	68.6	67.8	270
		TEZPUR		
		1430 hrs.		
10.5	4	61.5	58.1	292
		TIRUCHIRAPALLI		
		0730 hrs.		
10.5	12	16.1	11.3	280
12.0	12	14.6	6.2	265
14.1	5	15.8	10.4	262
16.2	1	51.0	51.0	080
		1430 hrs.		
10.5	21	23.4	16.0	260
12.0	18	23.3	16.3	252
14.1	9	23.8	17.4	270
16.2	3	43.3	21.4	270
18.0	1	11.0	11.0	310
20.0	1	13.0	13.0	260
23.0	1	55.0	55.0	240
26.0	1	74.0	74.0	250
		TRIVANDRUM		
		0830 hrs.*		
10.5	20	17.7	8.2	259
12.0	15	18.1	10.1	260
14.1	8	16.0	11.0	261
16.2	4	21.0	2.0	058
		1430 hrs.		
10.5	9	21.1	16.0	260
12.0	2	22.0	10.2	174

Ht. in Km.	n	V	v	D
		TRIVANDRUM		
		2030 hrs.*		
10.5	13	16.4	11.3	287
12.0	11	16.8	11.4	253
14.1	5	10.6	8.8	241
		UDAIPUR		
		1430 hrs.		
10.5	1	56.0	56.0	295
12.0	1	65.0	65.0	305
		VENGURLA		
		1430 hrs.		
10.5	5	38.0	36.6	271
12.0	1	31.0	31.0	275
		VERAVAL		
		1430 hrs.		
10.5	10	69.0	67.8	284
12.0	5	78.2	77.4	295
14.1	1	83.0	83.0	270
		VISAKHAPATNAM		
		1430 hrs.		
10.5	12	62.4	49.7	267
12.0	4	57.0	56.2	249
14.1	3	64.0	62.5	259

RADIOSONDE DATA

March 1957

During the month, observations of upper air temperature pressure and humidity were made at 12 stations in India as given in the list below. For a detailed description of the instruments used a reference may be made to the I. M. D. (Scientific Notes Nos. 112 and 113 Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

Serial No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad	Clock type	1st October, 1944	03 and 15	
2	Bombay	Clock type	7th September, 1954	03 and 15	
3	Calcutta	Clock type	13th December, 1946	03 and 15	Fan type used from 13th December 1946 to 30th November, 1947
4	Gauhati	Clock type	22nd July, 1955	03 and 15	
5	Jodhpur	Clock type	17th April, 1946	03 and 15	
6	Madras	Fan type	29th June, 1946	03 and 15	
7	Nagpur	Fan type	1st October, 1946	03 and 15	
8	New Delhi	Clock type	3rd December, 1943	03 and 15	
9	Port Blair	Fan type	4th December, 1949	15	
10	Trivandrum	Fan type	1st July, 1947	03 and 15	
11	Veraval	Fan type	3rd October, 1944	03 and 15	03 hrs. ascent started on 15th December 1956.
12	Visakhapatnam	Fan type	8th December, 1946	03 and 15	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 03 Hours G. M. T.

March 1957

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (1002 mb.)						BOMBAY (1011 mb.)						CALCUTTA (1013 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	294.6	298	289	286.1	31	13	295.0	297	292	292.4	31	6	295.6	304	294	290.6
1000	31	117	..	..	..	..	31	102	..	..	..	..	30	118	..	..	..	..
900	29	1027	291.4	299	279	275.0	30	1018	293.9	298	287	276.2	30	1034	291.8	300	288	279.2
850	29	1514	288.1	295	282	272.8	30	1510	291.5	297	284	269.8	30	1522	288.1	296	284	277.6
800	29	2024	284.0	289	275	267.6	30	2016	287.9	293	284	269.9	30	2033	284.1	291	278	274.4
700	29	3124	276.4	281	270	257.9	30	3130	279.3	285	275	263.7	30	3134	277.3	286	273	266.3
600	28	4359	268.1	272	262	248.5	30	4385	271.0	277	265	244.4	27	4364	269.3	274	264	242.9
500	28	5766	259.2	265	251	..	30	5811	262.3	269	252	..	26	5789	260.3	266	253	..
400	26	7427	248.2	255	238	..	30	7492	251.1	259	237	..	26	7449	249.4	257	240	..
300	23	9460	231.3	242	222	..	27	9550	237.0	244	225	..	25	9490	235.9	244	230	..
250	19	10721	227.8	238	218	..	25	10811	230.6	239	216	..	22	10735	230.4	240	225	..
200	17	12194	222.9	237	214	..	23	12309	222.0	230	213	..	18	12216	222.0	233	214	..
175	16	13059	219.9	233	209	..	19	13167	217.3	224	206	..	13	13137	217.4	227	209	..
150	13	14019	215.2	225	205	..	14	14120	212.1	218	201	..	11	14130	212.6	223	203	..
125	9	15201	214.0	220	202	..	9	15239	207.9	214	195	..	7	15224	209.2	218	194	..
100	5	16675	210.2	217	197	..							6	16557	204.3	214	194	..
80																		

	GAUHATI (1008 mb.)						JODHPUR (988 mb.)						MADRAS (1012 mb.)					
Surface	29	49	295.9	301	291	293.9	30	218	293.3	297	286	280.6	31	15	300.0	311	298	294.9
1000	29	122	..	..	..	..	30	113	..	..	..	..	30	118	..	..	..	..
900	29	1029	290.2	296	285	285.5	30	1022	292.6	297	284	274.9	30	1036	292.9	299	285	284.2
850	29	1514	286.6	293	282	282.3	30	1511	289.1	294	282	271.7	30	1528	292.1	296	285	277.2
800	29	2021	283.0	290	277	279.0	30	2021	284.7	289	279	269.3	30	2046	289.5	295	281	274.0
700	29	3118	276.2	287	268	269.9	30	3121	276.1	281	270	261.0	30	3169	282.8	288	276	268.3
600	29	4351	269.0	281	260	259.5	30	4350	267.9	273	261	258.7	30	4133	275.8	282	269	260.6
500	29	5765	260.2	271	250	..	30	5758	258.7	265	252	..	30	5888	267.5	274	263	..
400	27	7436	249.6	260	239	..	29	7419	247.5	255	238	..	30	7605	256.7	263	252	..
300	26	9491	236.3	244	226	..	28	9448	234.6	245	223	..	30	9720	243.8	253	239	..
250	23	10734	230.3	237	223	..	26	10683	226.7	236	214	..	26	10992	234.6	242	229	..
200	22	12233	225.5	233	215	..	25	12147	222.4	232	213	..	26	12495	224.1	231	217	..
175	17	13075	221.8	230	210	..	25	13009	220.0	234	208	..	24	13348	217.8	226	211	..
150	13	14136	219.3	226	210	..	22	13987	216.7	223	203	..	22	14324	210.8	221	205	..
125	9	15297	215.0	222	214	..	20	15089	214.1	220	199	..	15	15459	205.8	215	198	..
100	7	16558	210.4	219	198	..	10	16526	210.1	216	195	..	12	16774	199.3	210	191	..
80							5	17874	207.6	219	193		6	18128	198.2	208	195	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 03 Hours G. M. T.

March 1957

Standard Pressure Surface mbs.	NAGPUR Pr. Surf (979 mb.)						NEW DELHI (989 mb.)						TRIVANDRUM (1005 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	311	296.0	300	290	287.2	31	210	290.7	295	285	285.0	22	64	300.7	303	299	295.5
1000	29	120	..	..	..	..	31	117	..	..	..	..	22	110	..	..	..	..
900	29	1037	294.4	299	290	281.0	31	1022	291.2	297	284	275.9	22	1034	293.9	296	292	287.4
850	29	1528	291.2	296	286	277.5	31	1507	287.6	293	281	273.5	22	1526	291.4	293	289	282.3
800	29	2044	287.7	293	283	276.6	31	2015	283.7	289	277	269.7	22	2044	289.0	291	287	276.5
700	29	3157	279.9	293	276	270.9	31	3111	275.4	281	270	261.4	22	3167	283.6	287	278	256.6
600	29	4403	271.6	277	267	254.2	31	4334	266.2	272	261	..	22	4435	277.0	281	274	263.0
500	27	5834	263.2	269	259	..	31	5731	256.8	262	250	..	22	5891	268.2	273	265	..
400	27	7523	252.2	259	248	..	31	7374	245.4	254	238	..	22	7614	258.2	263	254	..
300	25	9594	238.4	243	234	..	30	9383	230.7	240	222	..	21	9730	242.8	249	231	..
250	22	10837	230.6	237	225	..	30	10601	223.9	234	216	..	21	11003	233.5	241	225	..
200	21	12324	223.1	229	213	..	30	12083	221.3	228	212	..	16	12499	222.7	231	215	..
175	20	13248	218.3	224	209	..	28	12988	219.5	229	212	..	11	13360	215.9	225	213	..
150	17	14284	214.1	220	208	..	27	13933	216.8	225	207	..	10	14311	208.0	217	203	..
125	15	15333	209.3	216	203	..	26	15081	212.8	223	203	..	5	15402	202.4	211	198	..
100	10	16667	204.8	213	198	..	19	16402	210.3	220	199	..						
80							13	17784	210.6	224	201	..						

	VERAVAL (10.2 mb.)						VISAKHAPATNAM (1008 mb.)					
Surface	28	8	296.3	300	293	292.8	25	48	300.8	303	299	297.1
1000	28	113	..	..	..	..	25	118	..	..	..	..
900	28	1029	293.9	297	289	279.5	25	1041	294.6	299	291	286.2
850	28	1522	291.3	295	287	276.6	25	1535	291.8	297	288	283.6
800	28	2038	288.0	291	284	274.7	25	2053	288.4	294	285	280.7
700	28	3154	281.5	285	276	268.4	25	3170	281.0	284	276	273.0
600	28	4409	272.7	277	268	261.6	25	4426	274.0	279	269	266.4
500	27	5845	264.8	283	260	..	24	5869	265.0	270	257	..
400	26	7533	252.9	265	247	..	24	7568	254.2	262	250	..
300	22	9598	238.9	249	231	..	18	9671	242.2	251	237	..
250	17	10840	229.1	241	223	..	15	10952	234.0	245	228	..
200	12	12316	22..3	231	212	..	11	12482	225.7	238	221	..
175	12	13151	216.3	224	206	..	7	13369	221.9	234	218	..
150	11	14141	211.3	219	205	..	7	14366	216.6	231	212	..
125	7	15256	210.7	218	205	..	6	15501	210.5	227	205	..
100												
80												

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 15 Hours G. M. T.

March 1957

Standard Pressure Surface mbs.	ALLAHABAD Surf Pr. (1000 mb.)						BOMBAY (1009 mb.)						CALCUTTA (1010 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	296.8	301	291	286.5	31	13	297.7	299	295	293.8	31	6	298.4	303	293	292.5
1000	31	98	..	..	..	..	30	93	..	..	..	..	29	94	..	..	..	..
900	31	1014	292.9	300	287	275.0	30	1013	296.4	300	289	278.0	29	1017	294.6	302	290	283.3
850	31	1502	288.7	297	283	271.6	30	1509	293.3	297	289	275.4	29	1509	290.4	298	286	279.8
800	31	2012	284.2	292	278	268.7	30	2028	289.5	293	286	274.5	29	2023	285.9	293	281	277.0
700	31	3110	276.2	281	269	258.5	30	3147	280.9	285	277	267.9	29	3131	278.4	285	272	266.3
600	31	4339	267.5	274	257	248.1	30	4399	272.4	276	268	253.7	29	4372	270.7	277	266	259.8
500	31	5744	258.1	265	249	..	30	5831	263 4	269	257	..	27	5798	261.6	268	256	..
400	31	7399	247.3	255	240	..	30	7519	252.4	259	243	..	27	7475	250.6	258	245	..
300	24	9407	232.1	241	222	..	26	9585	238.4	248	226	..	24	9517	236.5	243	229	..
250	23	10631	225.8	233	213	..	21	10824	229.0	238	217	..	17	10806	231.0	237	225	..
200	17	12102	221.4	234	210	..	16	12298	220.4	228	207	..	16	12298	223.7	232	215	..
175	13	12985	218.5	225	209	..	12	13199	216.6	225	209	..	11	13121	217.7	224	209	..
150	8	13896	212.2	219	205	..	10	14200	211.8	220	203	..	7	14137	210.6	216	205	..
125																		
100																		
80																		

	GAUHATI (1005 mb.)						JODHPUR (986 mb.)						MADRAS (1010 mb.)					
Surface	29	49	295.3	302	292	293.8	29	218	299.3	302	296	279.0	31	15	300.2	301	299	294.2
1000	28	95	..	..	..	..	29	91	..	..	..	..	31	102	..	..	..	..
900	28	1015	294.1	299	287	286.5	29	1017	296.0	301	289	275.3	31	1022	294.7	298	291	280.9
850	28	1505	289.8	295	283	283.6	29	1509	291.2	297	285	273.3	31	1515	292.2	294	290	276.5
800	28	2017	284.9	290	275	280.1	29	2024	286.4	293	282	272.9	31	2033	289.0	292	285	273.0
700	28	3117	276.6	283	267	271.8	28	3130	277.0	286	270	267.1	31	3153	282.2	285	278	267.0
600	28	4351	269.4	277	261	..	28	4363	268.3	273	263	..	31	4415	275.1	279	268	258.0
500	28	5768	260.5	268	248	..	27	5783	259.6	265	253	..	31	5863	266.3	270	262	..
400	27	7444	249.3	258	240	..	27	7783	249.3	256	241	..	31	7568	254.5	259	248	..
300	24	9484	235.5	247	223	..	26	9487	234.9	243	224	..	31	9656	240.1	245	233	..
250	23	10726	229.1	240	219	..	24	10711	228.4	238	218	..	30	10920	230.9	237	224	..
200	22	12310	223.8	235	212	..	22	12196	224.4	236	212	..	30	12400	219.4	226	211	..
175	15	13158	219.2	233	213	..	20	13108	221.9	234	210	..	26	13240	213.7	221	205	..
150	11	14106	214.8	229	207	..	17	14104	219.2	229	205	..	22	14200	206.8	215	200	..
125	6	15222	211.3	226	202	..	13	15321	217.5	226	200	..	16	15290	201.1	207	195	--
100							7	16705	212.7	222	200	..	9	16684	197.8	201	188	--
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 15 Hours G. M. T.

March 1957

Standard Pressure Surface mbs.	NAGPUR Surf. Pr. (975 mb.)						NEW DELHI (988 mb.)						PORT BLAIR (1002 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Mix.	Min.	Dew Point
Surface	29	311	299.3	305	293	285.1	30	210	293.0	298	287	286.7	23	79	299.8	302	298	296.3
1000	29	86	..	..	..	..	30	102	..	..	..	..	22	97	..	..	..	..
900	29	1013	297.4	303	289	279.7	30	1013	292.1	299	282	277.0	22	1018	292.6	296	289	288.0
850	29	1509	293.8	299	289	277.1	30	1500	287.9	294	279	273.7	22	1509	290.8	293	288	282.9
800	29	2028	289.6	294	285	275.2	30	2008	283.5	289	276	270.1	22	2027	288.0	291	286	276.4
700	29	3147	280.6	283	275	269.3	30	3102	274.9	280	270	261.9	22	3145	282.6	289	279	269.0
600	28	4397	271.6	277	269	258.9	30	4325	266.0	272	259	..	22	4408	275.6	281	273	262.6
500	28	5829	263.1	266	259	..	30	5722	256.4	260	247	..	22	5858	266.8	273	264	..
400	28	7516	251.5	256	247	..	29	7367	245.0	251	238	..	18	7573	256.8	266	251	..
300	24	9571	236.1	243	230	..	28	9375	230.3	236	221	..	17	9686	242.8	252	236	..
250	22	10814	227.8	237	221	..	27	10593	224.0	235	220	..	13	10935	231.8	236	226	..
200	18	12272	218.7	227	209	..	24	12023	219.7	227	211	..	12	12418	221.1	228	211	..
175	12	13154	214.9	221	205	..	22	12886	218.6	224	210	..	5	13212	213.4	218	206	..
150	11	14195	209.1	220	203	..	19	13863	215.6	222	207	..						
125	6	15190	204.3	213	199	..	14	14981	211.5	217	203	..						
100							7	16378	209.3	214	206	..						
80																		

	TRIVANDRUM (1003 mb.)						VERAVAL (1010 mb.)						VISAKHAPATNAM (1006 mb.)					
Surface	26	64	301.0	303	299	295.8	28	8	297.1	298	295	295.4	29	48	300.2	302	298	297.2
1000	26	92	..	..	..	..	28	100	..	..	..	..	29	102	..	..	..	..
900	26	1016	293.5	298	290	288.2	28	1018	294.0	299	291	278.9	29	1102	294.8	299	290	287.0
850	26	1508	290.4	295	285	286.0	28	1510	290.7	295	287	275.8	29	1519	291.2	296	286	283.8
800	26	2023	287.3	291	284	281.6	28	2025	287.0	292	283	273.1	29	2036	287.7	293	283	282.0
700	26	3142	282.9	287	279	269.1	28	3138	279.7	285	276	265.4	29	3151	280.2	284	277	275.9
600	26	4404	275.4	277	269	255.3	28	4388	272.2	276	267	..	29	4402	272.9	275	269	264.1
500	25	5852	266.5	269	261	..	25	5819	262.3	269	255	..	28	5840	264.5	268	260	..
400	23	7566	256.2	259	253	..	23	7502	253.8	255	245	..	28	7535	253.0	257	246	..
300	22	9667	242.3	249	236	..	19	9573	237.4	246	230	..	21	9610	239.9	245	233	..
250	14	10934	231.6	239	226	..	16	10828	228.5	241	216	..	16	10860	231.2	237	225	..
200	12	12416	220.6	231	214	..	12	12294	220.3	232	214	..	11	12333	220.5	227	214	..
175	11	13297	213.6	223	208	..	8	13316	214.6	217	213	..	5	13232	215.8	218	213	..
150	9	14221	206.3	219	199	..	6	14104	209.0	214	203	..	5	14196	209.0	212	205	..
125																		
100																		
80																		

NOTE.—Number of observations refer to those of dynamic hieght.
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273°A.
Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—S4—1 D. D. G. Obs P./62—11-5-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I. Met. D. MARCH 1957 Plate I

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots. RDGC/869: L.62

-------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

MARCH 1957

I. Met. D. Plate II

ogcc(2)-869:1:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

- - - - - - - - Isotherms in degrees absolute. ———— Contours in geopotential metres.

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INDIA WEATHER REVIEW, 1957.

Monthly Weather Report

APRIL

Published by authority of the Government of India

Chief features:

(1) Good rainfall in Jammu and Kashmir, Himachal Pradesh, the Punjab(I) and west Uttar Pradesh in association with the passage of nine western disturbances,

(2) Moderate thunderstorm activity in the central parts of the country, and

(3) General deficit of thuderstorm rain in northeast India.

Nine western disturbances passed across the northern parts of the country during the month. Two of these were feeble and did not cause any precipitation. The remaining seven disturbances were responsible for good rainfall in Jammu and Kashmir and Himachal Pradesh and three of them again caused some precipitation in the Punjab (I) and northwest Uttar Pradesh also. Details regarding the movement and activity of each of the nine western disturbances are given in the following table.

Statement showing the movement and activity of Western disturbances during the month of April 1957

S. No.	Period	Course	Region affected	Nature of precipitation	Period	Remarks
1	2	3	4	5	6	7
1	1st-3rd	North Baluchistan-Jammu and Kashmir.	...	...		Did not cause any precipitation
2	3rd-6th	North Baluchistan-Jammu and Kashmir.	Jammu and Kashmir.	Local thundershowers.	4th	
			Jammu and Kashmir and) Himachal Pradesh.	Fairly widespread thundershowers.	5th	
			Jammu and Kashmir and-Punjab-Kumaon hills.	Fairly widespread thundershowers.	6th	
2(a)	4th-7th	West Rajasthan-Punjab-Kumaon hills.	Plains of Punjab (I) and of west Uttar Pradesh.	Scattered thundershowers.	6th	Induced by western disturbance No. 2.
			Punjab (I) and west Uttar Pradesh.	Fairly widespread or local thundershowers.	7th	
3	6th-7th	Afghanistan-Jammu and Kashmir.	Jammu and Kashmir	Local thundershowers.	7th	
			In and near the Kumaon-hills.	Fairly widespread thundershowers.	8th	
			Himachal Pradesh & Punjab (I).	Scattered thundershowers.	8th	
4	9th-11th	North Baluchistan-Jammu and Kashmir.	...	...		Did not cause any precipitation.
5	13th-16th	Afghanistan-Jammu and Kashmir.	Jammu and Kashmir.	Local thundershowers.	14th to 16th	
			Himachal Pradesh.	Local thundershowers.	16th	
5(a)	14th-16th	Southwest Rajasthan-Punjab-Kumon hills.	Northwest Uttar Pradesh.	Scattered thundershowers.	16th	Induced western disturbance No.-5
6	19th-20th	Extreme north of the country.	Himachal Pradesh.	Fairly widespread or local thundershowers.	21st and 22nd	
6(a)	19th-21st	Punjab (I)-Western Himalayas.	Jammu and Kashmir	Local or scattered thundershowers.	21st and 22nd	
			Punjab (I).	Scattered thundershowers.	21st	Induced by western disturbance No. 6.

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1—147 D. D. G. Obs. Poona/62 Price:- Rs. 11.58

1	2	3	4	5	6	7
7	22nd-23rd	North Baluchistan-Jammu and Kashmir.	Jammu and Kashmir.	Local thundershowers.	23rd to 25th	
7(a)	23rd-24th	North Rajasthan and adjoining Punjab (I)—Western Himalayas.	Himachal Pradesh.	Scattered thundershowers.	23rd and 24th	Induced by western disturbance No. 7
8	26th-28th	North Baluchistan-Jammu and Kashmir.	Jammu and Kashmir	Fairly widespread thundershowers.	27th	
			Punjab (I).	Scattered thundershowers.	28th	Induced an upper air trough over Rajasthan on the 28th.
			Himachal Pradesh and west Rajasthan.	Scattered thundershowers.	27th and 28th	
9	29th April-2nd May	North Baluchistan—Jammu and Kashmir.	Jammu and Kashmir	Local thundershowers.	29th.	
			Himachal Pradesh.	Scattered thundeshowers.	29th	
			Jammu and Kashmir	Local or scattered thundershowers.	1st and 2nd.	Induced by western disturbance No. 9.
9(a)	1st May to 2nd May	Southwest Rajasthan—Punjab (I).	Himachal Pradesh.	Scattered thundershowers.	2nd	

Local or scattered thundershowers occurred in Madhya Pradesh from the 5th to 8th and in Vidarbha on the 4th, 6th and 7th. A shallow trough of low pressure formed over the Gulf of Cambay and neighbourhood on the 9th. It moved eastwards and lay over west Madhya Pradesh on the 10th. The trough became diffuse as it extended southwards the next day and lay over west Madhya Pradesh, Vidarbha and adjoining Maharashtra. It persisted over these areas for the next two days and became unimportant by the 14th. Under its influence, local or scattered thundershowers occurred in north Mysore and Telangana on the 9th, Maharashtra and Vidarbha on the 9th and 10th, Madhya Pradesh from the 10th to 14th and in the South Konkan on the 12th and 14th. In association with a feeble trough of low pressure which developed off the Malabar coast on the 13th and persisted there till the 15th, local or scattered thundershowers occurred in the south Madras State from the 13th to 16th and in Kerala from the 13th to 15th. An upper air trough which developed off the Konkan coast on the 18th and became unimportant on the next day was responsible for scattered thundershowers in Maharashtra on the 18th and 19th. Scattered thundershowers also occured over the region extending from east Madhya Pradesh to north Mysore on the 27th and 28th. According to newspaper reports some trees were uprooted and roofs of houses blown away in a hailstorm which occurred in Sangli (South Satara district) on the night of the 26th. Kerala experienced scattered or local thundershowers almost througout the latter half of the month. A few heavy falls were recorded on some days, Alleppey recording 12 cms of rain on the 23rd.

There was very little precipitation in northeast India during the first half of the month. A trough of low pressure which developed over Sub-Himalayan West Bengal and adjoining East Pakistan on the 18th moved slowly eastwards and filled up over northeast Assam on the 20th. In association with it, there was an incursion of maritime air into northeast India. Local or scattered thundershowers occured in Assam between the 18th and 24th, Gangetic West Bengal and Orissa on the 22nd and 23rd, Bihar on the 21st and Chota Nagpur on the 22nd. Cherrapunji recorded 16 cms of rain on the 18th. Another shallow low pressure area which formed over Gangetic West Bengal on the 26th and became unimportant on the next day, was responsible for fairly widespread or local thundershowers in Assam on the 26th and 27th. Cherrapunji recorded 9 cms on the 27th. There was scattered rainfall in upper Assam on the 28th and 30th and in Orissa on the 26th, 28th and 30th.

The total rainfall during the month was in large excess in Jammu and Kashmir, west Madhya Pradesh, Vidarbha, Rayalaseema and north Mysore, in moderate excess in west Uttar Pradesh and Telangana and in slight excess in east Madhya Pradesh and Maharashtra. It was normal in west Rajasthan, in slight defect in Assam, Chota Nagpur, the Punjab(I) and Kerala and in moderate defect in south Mysore. Over the rest of the country, it was in large defect.

The mean maximum temperature was above normal in the Bay Islands, Assam and Sub-Himalayan West Bengal. It was below normal in west Uttar Pradesh, northwest India, west Madhya Pradesh, Vidarbha, Telangana and the Madras State and normal elsewhere over the country. The mean minimum temperature was normal over the country except in the Punjab(I) and Jammu and Kashmir where it was below normal.

Mean relative humidity was in excess in west Uttar Pradesh, the Punjab(I), east Madhya Pradesh, Maharashtra, Vidarbha and Telangana. It was in defect in the Bay Islands, Assam, West Bengal and Bihar and normal elsewhere over the country.

Errata to M.W.R. for April 1957

Page No.	Station	Hour	Column	For	Read
159	Chief Features, Item No. 3	-	-	thuderstorm	thunderstorm
"	S.No.2(a)		Remark	Iduced	Induced
"	S.No. 5 and 5(a)		6	6th	16th
"	S.No. 5(a)		Remark	Induced	Induced by
"	S.No. 6		"	not clear	21st and 22nd
"	S.No. 6(a) for Jammu and Kashmir		6	21st & eend 22nd 21st	21st and 22nd
"	S.No. 6(a) for Punjab (I)		-	Blank	21st before Induced by...
160	Item 1 9(a)		4	Jammu & Kashmir Himachal Pradesh	Jammu and Kashmir Himachal Pradesh
			5	(Local or sca-) (ttered thunder) (showers) ( ) (Scattered thun-) (der showers)	(Local or sca-) (ttered thun-) (der showers) (Scattered thun-) (der showers)
"	2nd para 2nd line		-	13	14
"	2nd para 2nd line		-	28	29
Table 1					
162	Punjab (I) including Himachal Pradesh and Delhi		2	18.8	8.8
Table II					
163	Nancowry		1	Noncowry	Nancowry
"	Dhubri (Rupsi Aerodrome)		1	Rupri	Rupsi
"	Haflong		10	25.0	25.9
"	Gangetic West Bengal		1	Ganjetic West Begal	Gangetic West Bengal
164	Ranchi (C.W.O.)		1	Ranchi (C.W.O.)	Ranchi (C.W.O.)*
"	"		1	*	Data not available
"	Gaya		15	0	1
"	Jamui		15	1	0
"	Fatehpur		19	+1.1	-1.1
"	Kanpur		3	0.0	0
"	Lucknow (Amausi Aerodrome)		19	Blank	-
"	Aligarh		16	Blank	-1.0
165	Ferozepur		11	6.9	6.3
"	Srinagar		11	23.1	223.1
"	Srinagar		15	1	13
"	Dholpur		1	Dholpur	Dholpur*
"	Dholpur		Footnote	*	Data extracted from daily Telegrams
"	Footnote			Data not available	Data not reliable
166	Heading		10-15	Rainfall in mm.	Rainfall in millimetres
"	Neemuch		12	3.1	-3.1
"	Neemuch		19	+1.3	-1.3
"	Idar		13	.5	0.5

Page No.	Station	Hour	Column	For	Read
166	Broach		13	..	0
"	Surat		13	..	0
"	Saurashtra and Kutch		1	Surashtra	Saurashtra
"	Mandvi		24	0	2
"	Porbander Aerodrome		1	Porbandar Aerodrome	Porbander Aerodrome
"	Keshod		9	Blank	-
"	Keshod		1	0	-
"	Keshod		9	Blank	-
"	Keshod		1	0	-
"	Keshod		13	0	-
167	Poona		24	1	0
"	Baramati		9	7	3
"	Baramati		15	not clear	0
"	Jeur		17	.3	8.3
"	Sholapur		12	23.4	23.8
"	Coastal Andhra Pradesh		1	Pradesa	Pradesh
"	Anantapur		26	Blank	0
"	Anantapur		27	Blank	0
"	Palayamcottai		17	Blank	10.3
168	Tiruchirapalli		5	days 4	4 days
"	Coimbatore		6	24.7	23.7
"	Coimbatore		7	-0.6	+0.6
"	Madras (Numgambakkam)		17	8.2	..
"	Madras (Nungambakkam)		18	..	8.2
"	Karwar		2	31.8	31.3
"	Karwar		14	2	..
"	Honavar		4	1	..
"	Mangalore		14	1	16
"	Mangalore (Bajpe Aerodrome)		14	1	30
"	Belgaum		6	91.7	19.7
"	Belgaum (C.T.O.)		17	6.1	10.1
"	Chitaldrug		9	14,9	1,4,9
"	Shillong		12	-9.21	-92.1
"	Shillong		23	4	8
"	Cherrapunji		19	+0.4	+4.0
169	Rana		11	116.8	166.8
"	Gondla		11	123.6	233.6
"	Dharamshala		5	14.9	16
"	Abu		5	19.7	14
"	Mahabaleshwar		3	+1.5	+0.5
"	Mercara		4	31.7	31.8
"	Kodaikanal		18	12.0	12.1
"	Coonoor		5	1	21
"	Colombo		15	8 day	8 days
"	Mannar		23	6	16
"	Ramgarh		5	8	28
"	Hirakud		2	33.3	38.3
"	Sonepur		11	9.2	9.6
"	Punasa		5	1516	15,16
"	Punasa		16	Blank	"
"	Footnote	(R) - Register not received			
170	Heading - Year (Saka)		-	1817	1879
"	Bagra Tawa		23	4	0

Page No.	Station	Hour	Column	For	Read
170	Thikri		14	0	..
"	Nandurbar		20	..	0
"	Read Sabarmati Catchment in bold letters				
"	Kotra Cantonment		13	5.3	5.1
"	Tehri		24	0	1
"	Gorkha		6	19.2	19.2(b)
"	Pokhara		6	16.8(b)	16.8
"	Nawakot		6	19.7	19.7(d)
"	After Gogra Catchment (Trans Himalayan Region) insert Dunkokh and read data against Gogra Catchment.				
"	Katmandu		21	..	0
"	Katmandu		22	..	0
"	Chautara		9	5	4
"	Wallang Chung Gola (R)		7	..	Blank
"	Wallang Chung Gola (R)		12	..	Blank
"	Chainpur		14	0	..
"	Gangtok		21	1	0
"	Geyzing		15	18	8

Table III

171	Heading	-	(7,8,9)	Mean Temperature in °C	Mean temperature in °C
"	Heading	16	16	60 or more	62 or more
"	Port Blair	2330	17	1	0
"	Port Blair	2330	22	0	1
"	Port Blair	2330	23	1	0
"	Car Nicobar	1730	28	0	1
"	Nancowry	-	1	Noncowry	Nancowry
"	Digboi	0830	27	19	0
"	Digboi	1730	27	28	0
"	Dibrugarh	0830	28	1	0
"	Tezpur	1730	4	1010.5	1005.5
"	Majbat	0830	24	6	0
172	Rangiya	0830	3	'	delete
"	Rangiya	173008	3	'	delete
"	For values in column 13 shown against Rangiya 1730 to Malda 0830 read them as against Goalpara 0830 to Malda 1730 (i.e. the values in column 13 should be shifted down by one line and Rangiya 1730, column 13 should be blank).				
"	Bagdogra	-	2	2330	0230
"	Dum Dum	1730	18	26	20
"	Barrackpore	1130	27	0	2
173	Heading Nos.	-	After 24	Blank	25
"	Barrackpore	-	1	Barrac(pore	Barrackpore
"	Barrackpore	1730	21	0	1
"	Barrackpore	2330	4	1007.8	1007.3
"	Saugor Island	0830	6	+0.5	+0.4
"	Sandheads	0530	26	6	0
"	Asansol	0230	18	23	13
"	Asansol	0530	4	1008.9	1006.9
"	Asansol	0530	18	25	12
"	Asansol	1130	8	illegible	20.5
"	Asansol	1730	5	900.0	990.0

Page No.	Station	Hour	Column	For	Read
173	Berhampore	1730	10	4.4.	14.4
"	Baripada	1730	28	0	1
"	Chandbali	0830	22	28	2
"	Cuttack	0830	27	9	29
"	Bhubaneshwar	0830	11	27	67
"	Bhubaneshwar	1130	23	8	9
"	Bolangir	-	1	Bolangir*	Bolangir
"	Bolangir	1730	1	-	Insert *
"	Bolangir	1730	16	0	..
"	Bolangir	1730	17	0	..
"	Angul	0830	12	-2	-6
174	Heading	-	16,17,18	(Km.ph)	(Km.p.h.)
"	Heading	-	19 to 28	No.of obeservations	No.of observations
"	Sambalpur	1730	4	1095.1	1005.1
"	Jharsuguda	1130	4	1003.6	1008.6
"	Jharsuguda	1730	12	+7	delete
"	Jamshedpur	1730	5	989.3	989.8
"	Jamshedpur (P.B.O.)	2330	4	1017.1	1007.1
"	Ranchi (C.W.O.)	0530	28	0	delete
"	Ranchi	0830	28	0	delete
"	Purnea	0830	23	0	1
"	Purnea	1730	8	20.3	20.2
"	Forbesganj	1730	4	1003.7	1003.9
"	Bhagalpur	-	1	Bhaglpur	Bhagalpur
"	Footnote - (R) Register not received to be inserted.				
175	Bhagalpur	1730	5	993.3	998.3
"	Uttar Pradesh, East	-	1	U.P.,East	Uttar Pradesh, East
"	Ballia	0830	6	Blank	..
"	Varanasi * (Banaras)	-	1	Varanasi (Banaras)	Varanasi * (Banaras)
"	Varanasi *(Banaras)	0830	12	Blank	..
"	Varanasi (Banaras) (Babatpur Aerodrome)	-	1	Varanasi* (Banaras) (Babatpur Aerodrome)	Varanasi (Banaras) (Babatpur Aerodrome)
"	- do -	1130	6	Blank	..
"	Uttar Pradesh, West	-	1	U.P., West	Uttar Pradesh, West
"	Footnote - delete (R)- Register not received.				
176	Uttar Pradesh, West (contd.)	-	1	U.P.,West (contd.)	Uttar Pradesh, West (contd.)
"	Dehra Dun	1130	10	12.9	10.9
"	Karnal	0830	9	1.4	11.4
"	Patiala	0830	13	3.5	3.5
"	Patiala	1730	4	1006.0	1006.5
"	Chandigarh	1730	11	34	24
177	Srinagar	1130	6	Blank	..
"	Srinagar	1130	12	Blank	..
"	Srinagar	1730	12	Blank	..
"	Srinagar	1730	21	2	0

Page No.	Station	Hour	Column	For	Read
177	Leh	0530	8	-3.4	-3.5
"	Gilgit	0830	3	1490	1491
"	Jammu	0830	4	Blank	..
"	Jammu	0830	5	Blank	..
"	Jammu	0830	6	Blank	..
"	Churu	-	1	Churn	Churu
"	Churu	0830	6	+2 4	delete
"	Bikaner	0830	6	..	+2.4
"	Bikaner	1730	25	2	1
"	Bikaner (P.B.O.)	0530	4	100.4 1000.4	1008.4
"	Jaisalmer	0830	4	100;3 1000.3	1009.3
"	Jaisalmer	1730	5	987.1	979.1
"	Phalodi	0830	17	3	7
"	Jodhpur	1730	13	3.2	3.6
"	Barmer	1130	24	blank	5
178	Heading	-	3	Height of barometr (etc.)	Height of barometer (etc.)
"	Gwalior (P.B.O.).	2330	2	0230	2330
"	Ratlam	1730	14	+0.1	delete delete
"	Ratlam	1730	27	2	4
"	Alirajpur	0830	27	4	2
"	Indore	0830	26	1	0
"	Bhopal (Bairagarh)	-	1	Bhopal (Bariagarh)	Bhopal Bairagarh)
"	Hoshangabad	1730	28	0	1
"	Betul	0830	3	624	653
179	Madhya Pradesh, East	-	1	Madhya Pradesh EL Eest	Madhya Pradesh, East
"	Sutna	-	1	Sutna*	delete *
"	Sutna	0530	2	0530	0530*
"	Raigarh	0830	13	2 4	2.9
"	Raigarh	1730	13	5.4	2.4
"	Raipur	0530	13	3.1	3.4
"	Raipur	0830	13	2.3	3.1
"	Raipur	1130	13	3 9	2.3
"	Ahmedabad	1730	4	1005.2	1006.2
"	Dohad	0830	2	0850	0830
"	Dohad	1730	15	15.3	12.3
180	Heading - Date	-	-	Vaishakha	Vaisakha
"	Mandvi	1730	7	Blank	28.5
"	Bhavnagar	1730	4	1006.4	1006.7
181	Heading - Date	-	-	Vaishakha	Vaisakha
"	Saurashtra and Kutch (contd.) to be in bold letters. 1st two lines of data i.e. 1730 and 2330 are for Veraval (contd.)				
"	Dahanu	0830	24	0	1
"	Bombay (Santacruz Aerodrome)	2330	8	29.5	23.5
"	Harnai	0830	9	22.1	22.5
"	Aurangabad (Chikalthana Aerodrome)	-	1	Aurangabad (Chiklthana Aerodrome)	Aurangabad (Chikalthana (Aerodrome)
"	- do -	0230	3	51.9 519	579
"	- do -	0530	7	33.3	23.3

Page No.	Station	Hour	Column	For	Read
181	Parbhani	1730	23	0	6
"	Poona (Lohagaon Aerodrome)	1130	28	0	2
"	Baramati	1730	28	0	1
182	Heading - Date	-	-	Vaishakha	Vaisakha
"	Jeur - contd.	1730	3	"	521
"	Buldhana	1730	24	blank	2
"	Chanda	0830	14	+4.2	+1.2
"	Coastal Andra Pradesh	-	1	Coastal Andradesh	Coastal Andhra Pradesh
"	Ongole	1730	22	3	30
182	Masulipatam	0830	12	..	0
"	Kakinada	-	1	Kakinda	Kakinada
"	Kakinada	0830	5	1011.9	1011.0
183	Calingapatam	0830	13	3.8	2.8
"	Mahbubnagar	-	1	Mahabubnagar	Mahbubnagar.
"	Hyderabad (Begumpet Aerodrome)	-	1	Hyderabad (Begum-Aerodrome)	Hyderabad (Begumpet Aerodrome)
"	Hyderabad (Begumpet Aerodrome)	0530	5	948.0	948.4
"	Hanamkonda	1730	9	147	14.7
"	Kurnool	0830	3	181	281
185	Gadag (P.B.O.)	0830	4	1009.9	1009.8
"	Mysore	0830	2	8030	0830
"	Trivandrum	0230	3	Not clear	64
186	Abu	1730	5	380.4	880.4
"	Mahabaleshwar	0830	12	+	+1
"	Mahabaleshwar	1730	5	761.8	861.8
"	Kodaikanal	1730	10	13.0	13.9
"	Mannar	1730	18	2	24
"	Mannar	1730	2C	blank	3
187	Hirakud	0830	21	0	1
"	Tehri	0830	8	15.5	14.5
"	Butwal	-	1	Putwal	Butwal
188	Angbung	0830	11	56	66
190	Visakhapatnam	-	Height	not clear	1C

Table IV

		Ht.in km.				
191	Agartala	0.6	2330	D	288	208
"	Agartala	1.5	0530	n	not clear	24
"	Ambala	2.1	0530	D	not clear	309
"	Amausi	7.2	-	Ht.in km.	not clear	7.2
192	Anantapur	4.5	0530	D	not clear	058
"	Asansol		0530	n,v,V,D	Data shown against hts.0.6 to 7.2 kms.	As against for 0.3 to 6.0 kms.
"	Bagdogra	3.0	0530	D	not clear	280
"	Bagdogra	9.0	0530	D	not clear	240

Page No.	Station	Ht.in km.	Hour	Column	For	Read
193	Bamrauli	5.4	1130	v	not clear	30.9
"	Bamrauli	5.4	1730*	v	not clear	30.0
"	Bangalore	2.1	2330	D	not clear	105
"	Begumpet	3.6	2330	D	not clear	006
196	Gauhati	1.5	1130	V	not clear	18.0
"	Gauhati	2.1	1130	V	not clear	23.8
198	Jaipur	2.1	0530	n	33	30
199	Madras	0.9	2330	D	154	150
"	Mangalore	2.1	2330	D	9.3	093
"	Mangalore	3.0	0530	n	25	24
200	Mussoorie	7.2	0530	v	25.0	25.5
201	Poona	3.0	0530	v	9.3	3.9
"	Port Blair	0.3	1130	D	073	070
"	Port Blair	0.6	1130	D	040	048
202	Santacruz	1.5	1130	n	not clear	29
"	Raipur	4.5	1730	D	not clear	308
203	Tiruchirapalli	-	2330	-	2030	2330
"	Trivandrum	1.5	0530*	D	0 8	048
206	Nagpur	-	1130	-	1130	1130 hrs.
"	Tiruchirapalli	10.5	1730	V	14.7	12.7
"	Santacruz	10.5	1730*	v	42.2	45.2

Table VI

Page No.	Station	Standard Pressure	Column	For	Read
208	Bombay	-	Heading	Bombay (not clear)	Bombay (1007 mb.)
"	Allahabad	Surface	Max.	not clear	301
"	"	1000	Ht.gpm.	"	60
"	"	900	Max.	"	303
"	"	850	Min.	"	287
"	"	300	Min.	"	225
"	"	175	Max.	"	224
"	Bombay	Surface	Min.	"	294
"	"	900	Max.	"	304
"	"	850	Ht.gpm.	15-2	1502
"	"	700	"	not clear	3160
"	"	600	Max.	"	279
"	"	500	Ht.Gpm.	"	5873
"	"	500	Max.	"	270
"	"	500	Min.	"	260
"	"	400	Mean	"	255.8
"	"	400	Min.	"	246
"	"	250	Ht.gpm.	"	10984
"	"	175	"	133 6	13306
"	"	125	Mean	2 8.1	208.1
"	Calcutta	850	Ht.gpm.	not clear	1485
"	"	700	Dew point	"	271.3

Page No.	Station	Standard Pressure	Column	For	Read
208	Calcutta	400	Ht.gpm.	' not clear	9607
"	"	400	Min.	22	224
"	"	150	Max.	not clear	230
"	"	125	Min.	"	201
"	Gauhati	300	Ht.gpm.	"	9532
"	Jodhpur	500	Ht.gpm.	"	5808
"	"	250	Min.	"	220
"	"	100	Mean	"	210.1
"	"	80	Mean	"	209.3
"	Madras	400	Ht.gpm.	"	7586
209	Nagpur	Surface	Max.	3 0 3 2	302
"	"	1000	Ht.gpm.	not clear	70
"	"	900	Max.	3 4	304
"	"	850	Ht.gpm.	not clear	1499
"	"	850	Mean	"	296.0
"	"	700	Max.	"	285
"	"	600	Min.	"	270
"	"	500	Mean	"	264.9
"	"	400	Ht.gpm.	"	7544
"	"	300	Min.	"	234
"	"	250	Mean	"	230.2
"	"	175	Mean	"	215.4
"	"	150	Mean	"	209.5
"	"	150	Max.	"	220
"	"	150	Min.	"	204
"	New Delhi	900	Ht.gpm.	"	985
"	"	800	Max.	"	295
"	Port Blair	250	Ht.gpm.	"	1104
"	"	250	Min.	"	224
"	"	125	Min.	2 6	206
"	Trivandrum	700	dew point	not clear	270.5
"	"	125	Min.	"	203
"	Veraval	-	Heading	Veraval (not clear)	Veraval (1008 mb.)
"	"	900	Ht.gpm.	not clear	1006
"	"	900	Max.	3 2	302
"	"	900	dew point	not clear	280.8
"	Visakhapatnam	900	Max.	"	302
"	"	800	Ht.gpm.	2 23	2023
"	"	700	Min.	not clear	279
"	"	500	No.of obs.	"	20
"	"	300	Max.	"	254
210	Allahabad	900	Max.	not clear	307
"	"	850	Max.	"	303
"	"	850	dew point	"	267.1
"	Bombay	-	Heading	Bombay (not clear)	Bombay (1006 mb.)
"	"	900	Max.	not clear	305
"	"	850	dew point	"	276.1
"	"	700	Max.	"	290
"	"	500	Ht.gpm.	"	585.5

Page No.	Station	Standard Pressure	Column	For	Read
210	Bombay	500	Min.	not clear	253
"	"	400	Ht.gpm.	"	7557
"	Calcutta	-	Heading	Calcutta (not clear)	Calcutta 1004 mb.)
"	"	Surface	Mean	not clear	306.6
"	"	Surface	Max.	"	313
"	"	900	Min.	"	295
"	"	150	Min.	"	208
"	Gauhati	125	Ht.gpm.	not clear	15249
"	Jodhpur	150	Ht.gpm.	"	14026
"	"	80	Min.	"	200
"	Madras	Surface	Mean	3 3.6	303.6
"	"	125	Min.	not clear	195
"	"	900	Min.	"	294
211	Port Blair	125	Mean	"	208.0
"	Veraval	-	Heading	Veraval (not clear)	Veraval (1008 mb.)
"	"	900	Max.	3 2	302

vaz/-

Mean cloud amount was normal in the Bay Islands, Chota Nagpur, Bihar, the Konkan, coastal Andhra Pradesh, Rayalaseema and coastal and south Mysore and in defect in Assam, West Bengal, Orissa and Kerala. Over the rest of the country, it was in excess.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 13 chief political divisions and the 28 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. I. S. T. of the date noted in the succeeding column; Similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. I. S. T. of the date given in the succeeding column.

POONA 5,
The 14th August 1958.

S. S. LAL,
for *Director General of Observatories.*

Division	Rainfall (Millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity % 0830 hrs. I.S.T.	Relative humidity % 1730 hrs. I.S.T.	Cloud 0830 hrs. I.S.T.	Cloud 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
1. Assam (Including Manipur & Tripura).	177.2	88	31.8	19.6	68	56	3.4	3.8
	—24.3	..	+1.8	0	—7	..	—1.1	..
2. West Bengal .	6.7	13	37.1	23.7	54	36	1.4	2.1
	—46.2	..	+0.9	+0.2	—10	..	—1.4	..
3. Orissa . .	11.9	46	35.4	24.7	66	56	1.8	3.7
	—14.1	..	—0.5	—0.1	—2	..	—0.8	..
4. Bihar . .	1.2	8	37.7	21.7	38	24	1.6	1.9
	—14.6	..	+0.5	—0.5	—6	..	—0.1	..
5. Uttar Pradesh .	6.5	83	36.1	20.2	40	23	1.8	2.6
	—1.3	..	—1.2	—0.4	+3	..	+0.5	..
6. Punjab (I) (Including Himachal Pradesh and Delhi).*	18.8	87	34.6	18.3	50	28	2.9	3.5
	—1.3	..	—1.8	—1.6	+11	..	+1.3	..
7. Jammu & Kashmir	129.0	170	18.3	7.6	61	50	5.0	5.9
	+53.3	..	—3.2	—1.2	+3	..	+1.4	..
Sub-division								
1. Bay Islands. .	8.6	14	33.4	24.0	62	72	3.4	3.7
	—51.3	..	+1.7	+0.3	—11	..	—0.3	..
2. Assam (Including Manipur & Tripura)	177.2	88	31.8	19.6	68	56	3.4	3.8
	—24.3	..	+1.8	0	—7	..	—1.1	..
3. Sub-Himalayan West Bengal	3.8	4	35.3	21.3	51	28	1.5	1.3
	—85.2	..	+1.1	+0.3	—9	..	—0.7	..
4. Gangetic West Bengal	7.8	20	37.6	24.4	55	39	1.4	2.4
	—31.5	..	+0.9	+0.2	—11	..	—1.5	..
5. Orissa . .	11.9	46	35.4	24.7	66	56	1.8	3.7
	—14.1	..	—0.5	—0.1	—2	..	—0.8	..
6. Chota Nagpur .	1.7	79	37.5	22.1	39	26	1.6	2.6
	—19.9	..	+0.1	—0.7	—2	..	—0.2	..
7. Bihar . .	1.0	7	37.9	21.5	37	23	1.5	1.4
	—12.5	..	+0.8	—0.4	—8	..	—0.1	..
8. Uttar Pradesh, East. . .	1.4	20	37.1	20.9	36	21	1.7	2.2
	—5.5	..	—1.0	—0.3	0	..	+0.5	..
9. Uttar Pradesh, West . . .	12.3	140	35.0	19.3	44	25	1.9	3.2
	+3.4	..	—1.5	—0.6	+7	..	+0.5	..
10. Punjab (India) including Delhi	8.8	87	34.6	18.3	50	28	2.9	3.5
	—1.3	..	—1.8	—1.6	+11	..	+1.3	..
11. Himachal Pradesh	46.9	..	29.0	13.9	69	33	3.9	4.1
	..	..	..	..	..	..	..	..
12. Jammu & Kashmir	129.0	170	18.3	76	61	50	5.0	5.9
	+53.3	..	—3.2	—1.2	+3	..	+1.4	..
13. Rajasthan, West .	4.6	98	36.1	20.9	39	18	2.6	2.9
	—0.1	..	—1.1	—0.5	0	..	+1.1	..
14. Rajasthan, East	0.6	13	36.2	21.7	31	18	2.0	3.2
	—4.0	..	—1.1	—0.3	+1	..	+0.7	..

Division	Rainfall (Millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity % 0830 hrs. I.S.T.	Relative humidity % 1730 hrs. I.S.T.	Cloud 0830 hrs. I.S.T.	Cloud 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
8. Rajasthan . .	2.6	55	36.1	21.3	35	18	2.3	3.0
	—2.1	..	—1.1	—0.4	0	..	+0.9	..
9. Madhya Pradesh	15.3	131	36.9	21.9	39	23	2.3	3.7
	+3.6	..	—1.0	+0.1	+7	..	+0.8	..
10. Bombay . .	12.7	167	36.1	23.2	58	38	2.4	2.9
	+5.1	..	—0.7	+0.2	+4	..	+0.7	..
11. Andhra Pradesh .	18.0	92	36.5	25.2	62	47	3.2	3.3
	—1.6	..	—0.9	—0.3	0	..	+0.3	..
12. Madras . .	11.8	30	34.3	25.2	71	53	3.8	3.5
	—27.5	..	—1.2	0	—2	..	+0.7	..
13. Mysore . .	30.5	87	35.1	23.1	66	40	3.1	4.6
	—4.7		—0.7	+0.2	+3		+0.7	
14. Kerala . .	91.7	83	32.5	26.2	74	71	3.8	5.1
	—19.0	..	+0.4	+0.6	—3	..	—1.4	..
Mean of India (Excluding Jammu & Kashmir and Himachal Pradesh) .	20.6	80	35.7	22.3	52	34	2.5	3.2
	—5.1	..	—0.7	—0.1	+1	..	+0.4	..
Sub-division—*contd.*								
15. Madhya Pradesh, West . .	9.2	164	37.2	21.7	35	21	2.2	3.8
	+3.6	..	—1.1	—0.1	+5	..	+0.9	..
16. Madhya Pradesh, East . .	24.0	118	36.6	22.2	46	27	2.6	3.7
	+3.6	..	—0.9	+0.2	+10	..	+0.8	..
17. Gujarat . .	0.1	14	38.3	22.9	48	21	2.2	2.1
	—0.6	..	—0.7	+0.5	—1	..	+1.1	..
18. Saurashtra and Kutch.	0.1	10	35.7	22.4	65	46	2.4	1.9
	—0.9	..	—0.5	+0.1	0	..	+0.9	..
19. Konkan . .	1.7	24	31.1	24.4	73	67	2.7	2.5
	—5.4	..	—0.3	—0.1	—1	..	0	..
20. Maharashtra .	16.5	125	38.2	22.6	49	26	2.1	4.1
	+3.3	..	—0.3	+0.7	+7	..	+0.7	..
21. Vidarbha . .	54.6	448	38.5	23.8	49	26	2.5	4.1
	+42.4	..	—2.1	—0.5	+18	..	+0.9	..
22. Coastal Andhra Pradesh	7.3	38	35.3	25.3	69	63	3.8	3.7
	—11.7	..	—0.7	—0.3	—1	..	+0.3	..
23. Telangana . .	33.1	133	37.0	24.3	57	30	3.1	3.2
	+8.3	..	—1.3	—0.2	+6	..	+0.9	..
24. Rayalaseema .	24.5	154	39.3	26.2	49	24	1.9	2.7
	+8.6	..	—0.8	—0.5	—5	..	—0.2	..
25. Madras . .	11.8	30	34.3	25.2	71	53	3.8	3.5
	—27.5	..	—1.2	0	—2	..	+0.7	..
26. Coastal Mysore	1.0	4	32.3	25.9	73	67	3.7	4.3
	—21.9	..	—0.5	+0.3	0	..	—0.1	..
27. Mysore, North .	46.7	167	36.9	23.3	59	37	3.2	5.0
	+18.8	..	—0.9	—0.1	+4	..	+1.5	..
28. Mysore South .	29.0	60	34.1	21.9	70	34	2.8	4.4
	—19.6	..	—0.6	+0.5	+1	..	+0.1	..
29. Kerala (Including Laccadives)	91.7	83	32.5	26.2	74	71	3.8	5.1
	—19.0	..	+0.4	+0.6	—3	..	—1.4	..

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rain days (2.5mm or more)		Wind speed, kms per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean Minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mms or more)	Snow or sle ?	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	30·8	..	35·0	27	24·6	..	21·9	12	11·2	11·2	..	11·2	21	1	..	11·8	6·6	..	1	0	0	0	0	0	0	0	0	0
Long Island	32·8	..	33·9	28	24·1	..	21·2	8	0	0·5	..	0·5	20	0	..	3·9	1·8	..	1	0	0	4	0	0	0	0	0	0
Port Blair	33·4	+1·7	35·0	27	24·0	+0·3	21·4	4	0	8·6	−51·3	8·6	17	1	−4·1	12·1	6·6	−2·9	1	0	0	2	1	0	0	0	0	0
Car Nicobar	32·5	..	33·8	23	23·5	..	20·3	4	33·0	35·6	..	33·0	28	1	..	7·9	4·2	..	4	0	0	1	0	0	0	0	0	0
Noncowry	33·2	..	34·9	25	25·5	..	23·6	29	47·9	100·6	..	40·6	20	5	..	1·8	0·7	..	6	0	0	11	0	0	0	0	0	0
Kondul	30·9	..	32·2	27	25·2	..	23·3	3	10·4	41·1	..	16·8	29	4	..	5·7	3·0	..	5	0	0	7	0	0	0	0	0	0
Assam (Including Manipur & Tripura)																												
Pasighat	27·9	..	32·8	6	18·6	..	15·6	2	41·1	246·9	..	78·7	23	11	..	8·9	12·2	..	15	0	0	5	0	0	0	0	0	0
Digboi	29·9	..	33·5	30	17·6	..	13·8	7	71·6	399·4	..	48·3	19	17	..	..	5·6	..	19	0	1	2	0	0	0	0	0	0
Dibrugarh	28·0	+0·8	32·9	6	18·5	−0·3	15·6	2	20·6	228·8	−12·3	29·5	28	17	+3·4	4·7	3·7	+1·1	19	0	0	15	0	0	0	1	1	0
Dibrugarh (Mohanbari Aerodrome)	27·7	..	32·8	6	17·9	..	14·9	2	18·4	216·4	..	26·2	21	16	..	9·0	6·6	..	20	0	0	17	0	0	0	0	1	0
North Lakhimpur	27·7	..	32·3	6	17·9	..	14·4	4	26·3	174·7	..	25·9	30	12	..	..	..	..	17	0	1	11	0	0	0	0	1	0
Sibsagar	28·8	+1·2	34·4	11	18·8	−0·1	15·4	2	42·5	267·8	+10·7	98·3	18	11	−3·1	7·9	6·3	+2·0	22	0	0	20	0	0	0	0	0	0
Jorhat	29·1	..	34·5	11	18·5	..	15·0	3	25·8	150·6	..	36·2	17	11	..	..	..	..	16	0	1	19	0	0	0	0	1	0
Golaghat	29·8	..	34·4	6,9	18·7	..	17·2	3,4,12	5·6	102·3	..	45·7	26	10	..	..	..	..	11	0	0	0	0	0	0	0	0	0
Gohpur (R)																												
Tezpur	31·6	+2·1	35·6	11	18·0	−1·1	14·7	2,3	4·3	125·5	−27·2	30·0	16	9	−1·7	..	..	..	14	0	1	11	0	0	0	0	1	0
Tezpur (P.B.O.)	31·0	..	35·4	11	19·9	..	16·2	3	4·1	134·8	..	33·5	16	8	..	..	..	..	14	0	0	13	0	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	20·3	127·0	..	55·1	26	7	..	..	..	..	9	0	0	13	0	2	0	0	0	0
Chaparmukh (R)																												
Tangla	..	..	..	..	..	..	..	..	0	163·6	..	59·4	17	6	..	..	..	..	7	0	0	4	0	0	0	0	0	0
Gauhati	33·4	+2·5	36·7	22	20·7	+0·8	17·4	10	37·9	86·5	−58·5	35·6	30	6	−4·0	7·2	4·6	+1·4	10	0	2	5	0	3	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	33·9	..	38·9	22	19·9	..	14·7	10	35·6	83·1	..	30·7	30		..	9·0	9·0	..	7	0	0	10	0	0	0	0	1	0
Rangiya (R)																												
Goalpara	34·1	..	38·2	22	20·2	..	14·6	10	0	65·3	..	35·6	26	3	..	5·8	4·2	..	4	0	0	2	0	0	0	0	0	0
Dhubri	34·4	+3·2	40·0	30	22·5	+1·3	18·4	10	0	4·3	−138·4	4·3	16	1	−7·1	8·8	8·5	−1·6	1	0	0	2	0	0	0	0	0	0
Dhubri (Rupri Aerodrome)	35·3	..	40·2	30	20·5	..	15·0	10	0	20·3	..	20·3	16	1	..	11·0	7·4	..	1	0	1	1	0	0	0	0	0	0
Tura	33·4	..	36·7	30	23·0	..	16·7	1	9·1	46·4	..	24·6	16	3	..	10·6	10·6	..	4	0	0	0	0	0	0	0	0	0
Agartala	36·4	..	39·4	13	22·8	..	17·4	1	13·2	35·1	..	17·8	23	4	..	17·1	14·1	..	5	0	1	11	1	0	0	0	3	0
Silchar	32·1	+1·0	36·2	13	19·6	−0·8	16·5	11	91·0	498·3	+113·0	125·0	17	12	−2·3	3·0	2·3	−1·2	12	0	0	13	0	0	0	0	0	0
Imphal	28·9	..	31·8	15,30	15·2	..	9·2	11	27·3	130·4	..	45·5	21	5	..	14·9	9·6	..	15	0	0	18	0	0	0	0	0	0
Haflong	27·9	..	31·6	13	18·0	..	12·9	2	25·0	234·4	..	51·1	21	10	..	..	..	..	14	0	0	16	0	0	0	0	0	0
Lumding	35·1	+3·0	39·6	30	19·1	0	13·8	11	4·6	29·3	−62·4	9·4	1	6	−1·2	10·8	7·5	..	7	0	0	6	0	0	0	0	0	0
Sub-Himalayan **West Bengal**																												
Cooch Behar (C.W.O)	34·8	..	38·7	30	19·4	..	14·4	10	0	10·5	−133·0	9·7	16	1	−6·3	9·4	6·9	..	2	0	0	3	1	0	0	0	0	0
Jalpaiguri	32·7	+0·8	37·1	22,30	20·6	+0·5	16·2	1	0	1·0	−92·7	1·0	1	0	−5·5	12·0	8·3	+4·4	1	0	0	1	0	0	0	0	0	0
Bagdogra	34·0	..	38·9	22	18·1	..	12·6	1	0	0·8	..	0·8	17	0	..	10·3	6·6	..	1	0	0	2	1	0	0	0	1	0
Malda	37·9	+1·5	41·2	30	21·9	+0·1	16·7	10	0	0	−30·0	0	..	0	−2·0	11·7	7·6	−0·4	0	0	0	0	0	0	0	0	0	0
Gangetic west Bengal																												
Dum Dum	37·0	..	41·7	27	24·2	..	18·1	4	19·7	25·6	..	12·9	4	3	..	9·9	9·0	..	5	0	0	3	1	0	0	0	2	0
Calcutta	37·1	+1·1	41·6	27	24·9	+0·7	19·7	4	28·7	41·9	−2·6	18·0	8	3	0	8·4	7·6	−0·3	5	0	0	6	0	0	0	0	6	0
Barrackpore	37·3	..	40·8	27	23·8	..	17·3	4	12·0	36·2	..	16·8	23	4	..	..	..	..	5	0	0	7	1	0	0	0	4	0
Saugor Island	31·2	−0·9	33·7	9	26·9	+0·6	21·9	4	0	9·4	−20·3	9·4	22	1	−1·1	..	..	..	1	0	0	2	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	0	0	−14·7	0	..	0	−1·1	..	..	..	0	0	0	1	0	0	0	0	0	0
Contai	34·1	..	36·1	19	25·5	..	21·8	1	22·9	22·9	..	22·9	22	1	..	18.8 (b)	12·8 (c)	..	1	0	0	1	0	0	0	0	0	0
Midnapore	40·0	+1·7	43·4	18,27	24·5	−0·1	20·2	1,4	0	0·5	−42·7	0·5	18	0	−3·1	7·5	7·0	+1·0	1	0	0	0	0	0	0	0	0	0
Purulia	38·4	..	42·4	18	24·3	..	19·4	2	7·6	7·6	..	5·1	23	2	..	8·0	5·1	..	2	0	0	1	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	0	−31·7	0	..	0	−2·7	..	..	..	0	0	0	0	0	0	0	0	0	0
Burdwan	37·7	+0·1	41·6	27	23·9	0	18·8	10	0	0	−49·3	0	..	0	−3·2	..	..	..	0	0	0	0	0	0	0	0	0	0
Krishnagar	39·8	+2·6	43·2	28	23·1	−0·3	16·8	5	0	0	−57·9	0	..	0	−3·7	6·9	6·4	−1·8	0	0	0	1	0	0	0	0	0	0
Asansol	38·8	0	43·3	26	24·0	+0·6	18·6	2	8·6	10·9	−10·2	8·6	22	1	−0·8	14·7	8·9	+1·0	2	0	0	1	0	0	0	0	1	0
Suri	39·3	..	43·6	28	23·5	..	18·9	10	0	0	..	0	..	0	..	16·5	10·9	..	0	0	0	0	1	0	0	0	0	0
Berhampore	38·8	+1·6	43·1	28	23·3	0	17·8	10	0	0	−37·6	0	..	0	−2·7	4·8	3·5	−2·1	0	0	0	0	0	0	0	0	0	0
Orissa																												
Baripada	40·7	..	44·6	27	..	..	..	..	0·5	0·5	..	0·5	22	0	..	5·1	3·8	..	1	0	0	5	4	0	0	0	0	0
Balasore	36·8	+0·7	40·9	18	24·9	+0·5	20·6	1	7·4	12·0	−32·5	5·1	22	3	−0·5	17·7	11·3	+2·6	5	0	0	8	0	0	0	0	0	0

(b) Mean of 29 days.

(c) Mean of 28 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No.of rainy days(2.5mms or more)		Wind speed kms per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orissa (*Contd.*)																												
Chandbali	33·2	−3·8	36·9	21	24·9	+0·1	21·1	1,4	0	29·2	−7·4	14·0	8	4	+1·1	15·9	13·5	−0·5	4	0	0	3	0	0	0	0	0	0
Cuttack	39·1	+0·7	42·8	30	25·2	−0·1	21·1	1	0	1·3	−25·9	1·3	22	0	−1·7	8·2	6·8	+1·0	1	0	0	2	1	0	0	0	0	0
Bhubaneswar	38·1	..	41·4	30	25·1	..	21·3	1	0	2·0	..	1·5	22	0	..	25·0	22·9	..	2	0	0	2	0	0	0	0	0	0
Puri	30·8	−0·1	33·8	4	26·2	0	23·0	3	0	0	−14·7	0	..	0	−1·0	22·4	21·8	+1·7	0	0	0	1	0	0	0	0	0	0
Gopalpur	31·2	0	34·2	4,5	24·5	−0·6	21·5	3	0	0	−17·8	0	..	0	−1·4	25·5	22·8	+2·8	0	0	0	6	0	0	0	0	0	0
Koraput	33·0	..	35·6	27,28,29	20·5	..	16·9	3	32·5	34·3	..	16·5	16	3	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Titilagarh	37·3	..	41·2	20,28	24·7	..	18·6	1	0	4·0	..	2·0	20	0	..	4·9	3·3	..	3	0	0	3	0	0	0	0	0	0
Bolangir (R)	..	..	..	..	..	..	..	..	..	..	..	—	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angul	38·4	−0·5	42·4	19	23·6	−0·5	19.1	1	19·6	35·6	+9·4	26·2	22	3	+0·8	10·2	7·7	+0·1	3	0	0	7	0	0	0	0	0	0
Sambalpur	38·6	−0·8	42·3	28	23·7	−0·1	18·2	1	5·3	5·3	−9.7	5·3	23	1	−0·6	5·4	3·4	−1·3	1	0	0	2	1	0	0	0	0	0
Jharsuguda	38·6	..	42·8	26	22·3	..	15·8	1	0	0	..	0	..	0	..	9·6	7·2	..	0	0	0	2	0	1	0	0	0	0
Chota Nagpur																												
Jamshedpur	38·8	−0·1	42·8	28	23·1	−0·1	18·3	10	0	0	−22·9	0	..	0	−2·1	8·6	5·4	+0·1	0	0	0	2	0	0	0	0	0	0
Jamshedpur (P.B.O.)	39·4	..	43·4	28	23·3	..	18·2	1	0	0	..	0	..	0	..	..	..	..	0	0	0	3	0	0	0	0	1	0
Chaibasa	39·0	+0.1	42·8	28	23·9	+0·2	18·9	2	0	9	−26·9	0	..	0	−2·2	5·3	3·2	−0·8	0	0	0	0	0	0	0	0	0	0
Ranchi	36·7	+1·3	40·1	7 days	20·2	−1·6	10·7	1	5·1	5·1	−17·5	3·8	22	1	−1·4	3·7	2·8	−5·1	2	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)																												
Daltonganj	38·1	−0·5	42·7	26	21·6	+0·5	17·0	1,10	1·5	1·5	−8·9	1·5	8	0	−0·8	9·2	4·8	−0·8	1	0	0	0	0	0	0	0	0	0
Hazaribagh	35·4	−0·8	40·4	26	21·0	−1·1	15·6	2	1·3	1·8	−12·2	1·3	8	0	−1·5	14·3	10·2	−0·3	2	0	0	1	0	0	0	0	0	0
Dhanbad	38·3	..	42·9	26	24·5	..	19.7	2	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Bihar.																												
Purnea	37·7	+2·0	41·3	30	19·2	−1·5	15·0	1	0	0	−32·5	0	..	0	−1·8	10·3	5·3	−0·2	0	0	0	0	0	0	0	0	0	0
Forbesganj	37·4	..	40·7	22,28,30	18·9	..	14·4	1,9	0	0	..	0	..	0	..	14·7	9·3	..	0	0	0	0	0	0	0	0	0	0
Darbhanga	36·8	+0·7	39·9	28	21·2	+0·2	16·7	10	1·0	1·0	−16·3	1·0	8	0	−1·3	6·0	3·0	−3·1	1	0	0	0	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	0	−12·2	0	..	0	−0·9	..	..	..	0	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	0	−8·1	0	..	0	−0·7	..	..	..	0	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	0	−6·3	0	..	0	−0·5	..	..	..	0	..	..	..	..	..	..	..	..	..
Patna	37·9	+0·7	42·6	26	23·8	+0·7	18·3	1,10	0	1·3	−5·6	1·3	7	0	−0·6	11·5	9·6	+2·7	1	0	0	1	0	0	0	0	0	0
Patna (Aerodrome)	37·9	..	41·7	28	21·5	..	16·2	1,4	0	0	..	0	..	0	..	14·4	7·5	..	0	0	0	0	0	0	0	0	0	0
Dehri	38·4	..	43·3	27	24·4	..	18·0	1	0	0·8	−5·0	0·8	29	0	−0·6	12·9	7·8	..	1	0	0	2	0	0	0	0	0	0
Gaya	38·4	− 4	42·9	26	22·0	−0·6	16·1	1	0	6·4	+0·3	5·9	21	0	+0·4	10·5	5·4	−3·9	2	0	0	1	0	0	0	0	2	0
Jamui	38·7	..	42·7	26,28	22·9	..	16·8	2	0	0	..	0	..	1	..	13·2	7·0	..	0	0	0	0	0	0	0	0	0	0
Dumka	38·9	+1·2	43·3	28	22·9	−0·3	18·2	1,2	0	0	−21·3	0	..	0	−1·9	..	..	..	0	0	0	0	0	0	0	0	0	0
Bhagalpur	37·7	..	41·3	26	23·7	..	19·4	4,10	0	0	..	0	..	0	..	17·2	10·9	..	0	0	0	1	0	0	0	0	0	0
Sabour	37·8	+0·5	40·7	17,25,26	20·1	−0·8	13·3	10	0·3	0·3	−18·0	0·3	8	0	−1·3	15·3	8·1	−1·6	1	0	0	0	0	0	0	0	0	0
U. P., East																												
Gonda	37·2	−0·5	41·1	17,25	19·6	−0·7	15·1	2	0	0	− 8·9	0	..	0	−0·1	7·8	7·3	−0·4	0	0	0	0	0	0	0	0	0	0
Nautanwa	38·0	..	41·8	17	18·6	..	15·0	1	0	0	..	0	..	0	..	10·3	6·9	..	0	0	0	0	0	0	0	0	0	0
Gorakhpur	37·1	−0·3	40·8	26,28	22·1	+0·3	15·5	25	0	0	−9.4	0	..	0	−0·7	12·1	5·6	+1·1	0	0	0	0	0	0	0	0	0	0
Azamgarh	38·3	..	42·8	25	21·4	..	17·2	4	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ballia	38·5	..	42·2	26	18·8	..	13·9	4	0	0	..	0	..	0	..	12·4	7·5	..	0	0	0	0	0	0	0	0	0	0
Varanasi *Banaras	37·2	−1·6	42·0	16,26	22·5	+0·5	18·0	1,4,9	0	0	−5·1	0	..	0	−0·4	..	..	..	0	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome).	37·4	..	41·6	25	21·3	..	17·2	10	0	5·1	..	5·1	7	1	..	21·9	13·2	..	1	0	0	1	0	1	0	0	0	0
Allahabad (Bamrauli).	38·2	−1·0	42·4	25	22·3	+0·4	17·4	1	0	1·6	−2·7	1·6	7	0	−0·4	10·7	6·0	−0·6	1	0	0	2	0	2	0	0	2	0
Banda	38·7	..	42·8	16,17,25	22·3	..	17·8	1	0	0	..	0	..	0	..	6·0	2·8	..	0	0	0	0	0	0	0	0	0	0
Fatehpur	36·6	−1·7	41·7	25	20·5	−0·6	16·7	2,9	0	2·5	−5·9	2·5	7	1	+0·4	9·6	4·5	+1·1	1	0	0	0	0	1	0	0	0	0
Kanpur	37·4	0·0	41·6	17	21·6	+0·2	18·4	10	0	4·8	−0·8	4·8	7	1	+0·4	20·9	13·7	+2·0	1	0	0	0	0	0	0	0	0	0
Lucknow	36·7	−1·9	41·2	17,25	21·0	−0·6	17·3	1	0	2·0	−4·3	2·0	6	0	−0·6	..	..	..	1	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	37·0	−1·3	41·2	25	19·1	−1·2	14·1	1	0	1·8	−4·5	1·8	7	0	−0·6	18·6	10·7		1	0	0	0	0	0	0	1	0	0
Hardoi	36·2	..	40·5	16	19·6	..	15·3	1	0	3·1	..	3·1	7	1	..	12·2	5·7	..	1	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri	36·3	..	40·8	17	20·1	..	15·8	1,9	0	0·8	..	0·8	7	0	..	8·5	4·6	..	1	0	0	2	0	1	0	0	0	0
Bahraich*	36·9	−0·3	42·0	17	19·6	−1·1	15·0	4 days		0	−8·1	0	..	0	−0·6	..	..	..	0	0	0	2	0	0	0	0	0	0
U. P., West																												
Orai	38·0	..	42·2	17,25	20·4	..	16·7	2,9	0	2·3	..	2·3	7	0	..	11·2	8·6	..	1	0	0	0	0	0	0	0	0	0
Jhansi	37·5	−1·7	41·4	25	22·8	+0·5	17·8	1,2,9	0	0·5	−3·1	0·5	7	0	−0·5	7·2	5·3	−0·5	1	0	0	0	0	0	0	0	0	0
Agra	35·9	−1·9	40·7	25	20·6	−0·3	16·2	1,2		10·2	+4·9	10.2	7	1	+0·4	6·1	5·1	−1·2	1	0	0	0	0	0	0	0	0	0
Mainpuri	37·3	−1·1	41·7	16,25	20·1	−0·6	15·3	2	0	0	−5·8	0	..	0	−0·7	8·2	5·5	+1·8	0	0	0	0	0	0	0	0	0	0
Aligarh	36·0	+0·1	40·0	16	16·5	−3·6	10·9	9	0	0	−12·5	0	..	0		10·6	6·2	+0·2	0	0	0	2	0	2	0	0	0	0

(K) Mean of 20 days. (R) Register not received. *Data extracted from daily telegrams.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm or more)		Wind speed, kms per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
U.P. (West) *Contd.*																												
Bareilly	35·5	—1·1	40·0	16	20·5	+0·1	15·8	1	0	0·3	−6·6	0·3	6	0	−0·6	12·1	7·1	+2·9	1	0	0	1	0	0	0	0	0	0
Meerut	34·0	—2·5	38·9	25	19·3	—0·3	15·1	9	..	24·2	+14·8	17·8	7	2	+1·2	..	7·8	..	3	0	0	0	0	0	0	0	0	0
Najibabad	33·9	..	38·4	16	17·5	..	12·8	3	0	28·4	..	17·5	7	2	..	3·7	2·1	..	3	0	0	0	0	0	0	0	0	0
Roorkee	33·5	—1·9	38·6	16	18·1	—0·2	13·6	1	0·8	20·9	+9·5	17·5	7	2	+0·9	10·0	6·5	+2·0	2	0	0	5	0	0	0	0	0	0
Dehra Dun	30·3	—1·9	34·9	16	16·5	—0·4	9·6	5	17·6	42·4	+25·9	22·3	7	3	+1·3	5·6	4·0	+0·1	3	0	0	5	0	0	0	0	0	0
Punjab (India) (including Delhi)																												
New Delhi	34·5	—2·6	39·3	25	20·3	—1·1	15·2	9	0.3	2·6	−5·8	2·0	16	0	−0·9	18·6	12·8	+2·2	3	0	0	3	0	1	0	0	4	0
Hissar	35·5	−1·1	40·3	15	17·7	−1·6	12·4	9	0	0	−6·6	0	..	0	−0·9	9·5	8·3	+1·4	0	0	0	0	0	2	0	0	0	0
Karnal	33·3	..	39·0	16	17·2	..	11·2	1	21·6	23·7	..	23·7	7	1	..	1·0	0·7	..	1	0	0	2	0	1	0	0	0	0
Patiala	33·6	..	38·6	16	18·7	..	14·3	7,9	0·6	14·5	+11·4	11·4	7	2	+1·7	13·8 (g)	11·3 (e)	..	3	0	0	5	0	0	0	0	0	0
Ambala	..	..	..	..	..	..	..	..	1·5	11·7	−4·6	10·4	7	1	−0·6	8·4	7·4	+1·6	2	0	0	0	0	0	0	0	0	0
Ambala (Aerodrome) (R)																												
Chandigarh	32·2	..	36·9	16	18·6	..	13·7	7	1·0	29·4	..	21·8	7	2	..	..	..	..	4	0	0	1	0	1	0	0	0	0
Ludhiana	33·7	—1·7	38·4	16	17·0	−2·2	11·8	8	0	15·4	−1·1	12·9	7	2	+0·7	8·5	5·7	+2·5	2	0	0	0	0	0	0	0	0	0
Ferozepur	32·0	..	35·6	14,20,21	16·6	..	12·8	7	0	6·9	..	6·3	7	1	..	6·3	3·6	..	1	0	0		0	1	0	0	0	0
Amritsar	31·1	..	35·1	14	15·7	..	8·8	8	0·3	9·0	..	6·1	7	1	..	12·2	10·0	..	4		0	6		0	0	0	0	0
Pathankot	30·5	..	34·3	25	16·9	..	12·9	10	0·3	23·8	..	13·8	7	3	..	5·0	3·7	..	7	0	0	4	0	0	0	0		0
Himachal Pradesh																												
Bilaspur	30·2	..	35·0	16	15·1	..	11·3	1	1·3	26·7	..	23·9	7	1	..	8·3	6·5	..	3	0	0		0		0	0	0	0
Mandi	27·8	..	32·8	16	12·8	..	8·2	8	27·5	67·0	..	25·1	7	8	..	4·5	3·6	..	11	0	1	5	0	0	0	0	0	0
Jammu & Kashmir																												
Banihal (R)																												
Srinagar	14·9	—4·4	22·2	19	6·7	−0·3	0·3	7	78·7	23·1	+130·4	65·3	7	1	+5·2	5·6	4·5	−0·6	18	0	0	8	0	0	0	0	0	0
Gulmarg	Closed during winter months																											
Sonamarg *																												
Dras*																												
Kargil (R)																												
Leh	9·6	−3·4	14·3	15	−1·3	−0·4	−4·2	8	1·9	9·8	+4·0	5·6	5	1	+0·2	10·0	7·7	+3·4	4	0	0	0	0	0	0	0	0	0
Skardu (R)																												
Gurez	..	..	..	..	..	..	..	..	..	204·9	+33·4	31·5	16	16	+4·3	..	..	..	16		..	..	..	..	..	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	30·4	−1·8	33·9	18,26	17·5	−3·0	12·2	7	..	78·3	+45·5	45·7	7	5	+2·4	..	..	..	6	0	3	0	0	0	0	0	0	0
Gund	..	..	..	..	..	..	..	..	..	232·4	..	35·8	5	14	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	39·9	..	7·1	5	7	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	15·6	..	2·5	10,26	2	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Kangral	..	..	..	..	..	..	..	..	..	6·5		2·0	7	0	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	15·2	..	12·7	24	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	1·0	..	1·0	24	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	69·9	..	20·3	7	7	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Rajasthan West																												
Sri Ganganagar	33·5	—1·7	38·1	20	18·0	−1·3	13·3		0	20·6	+13·0	9·4	9	3	+2·1	5·6	5·3	−3.6	4	0	0	3	0	3	0	0	0	0
Churu	35·1	..	39·8	15	18·2	..	11·5	7	0	0	..	0	..	0	..	12·0	8·6	..	0	0	0	1	0	4	0	0	0	0
Bikaner	35·3	—2·6	40·4	15	19·5	−1·8	13·9	1	0	0	−4·8	0	..	0	−0·5	9·3	6·8	−0·8	0	0	0	0	0	1	0	0	0	0
Jaisalmer	36·4	..	40·3	14	20·8	..	14·5	7	0	0	..	0	..	0	..	15·2	15·0	..	0	0	0	0	0	1	0	0	0	0
Phalodi	35·3	..	39·4	24	21·3	..	14·2	7	0	2·5	−0·6	2·5	26	1	+0·7	16·8	13·8	..	1	0	0	1	0	0	0	0	0	0
Jodhpur	37·6	+0.2	41·2	14	22·3	+0·7	17·7	8	0	0	−3·3	0	..	0	−0·5	12·5	9·6	−1·3	0	0	0	0	0	0	0	0	0	0
Barmer	37·8	−0·1	42·1	14	24·0	+0·5	17·2	13	0	0	−4·8	0	..	0	−0·4	11·7	11·9	+2·6	0	0	0	0	0	0	0	0	0	0
Rajasthan, East								7																				
Alwar	35·4	..	39·8	15	..	..	..	..	0	1·8	..	1·8	16	0	..	..	..	..	1	0	0	2	0	0	0	0	0	0
Sikar	34·8	..	38·3	15,24	18·2	..	13·3	..	0	0	..	0	..	0	..	13·0	8·6	..	0	0	0	0	0	0	0	0	0	0
Jaipur	35·3	−1·5	39·6	15	20·7	+0·3	16·7	1	0	1·3	−3·0	0·8	6	0	−0·5	11·1	6·8	−0·6	2	0	0	1	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	35·2	..	39·6	15	20·5	..	16·1	9	0	1·0	..	1·0	7	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Dholpur	36·8	...	42·8	26	20·5	..	15·0	9	0	5·6	..	5·6	7	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Ajmer	34·6	—1·7	38·3	15	21·4	−0·5	17·4	9	0	0	−3·8	0	..	0	−0·4	10·7	8·6	+1·4	0	0	0	0	0	0	0	0	0	0
Kotah	38·2	—0·5	41·0	25	23·9	−0·4	20·0	8	0·8	0·8	−4·5	0·8	3	0	−0·5	9·9	6·0	+1·7	1	0	0	3	0	1	0	0	0	0
Chambal	37·0	..	40·9	15	19·0	...	14·6	9	0	0	..	0	..	0	..	11·2	7·0	..	0	0	0	0	0	0	0	0	0	0
Jhalawar	37·6	−0·5	41·8	16	22·4	+1·2	16·7	23	0	0	−6·9	0	..	0	−0·5	6·6	4·7	−0·9	0	0	0	0	0	0	0	0	0	0
Udaipur	35·3	−1·2	38·9	15	19·9	−1·9	13·2	1	0·8	0·8	−2·0	0·8	7	0	−0·2	6·3	4·2	..	1	0	0	0	0	0	0	0	0	0
								7																				

(R) Register not received. (g) Mean of 24 days. (e) Mean of 26 days. *Data not available.

Division and station	Air temperature in °C								Rainfall in mm.					No. of rainy days 2.5mm or more)		Wind speed, kms per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan East— *Contd.*																												
Erinpura (Jawai Dam)	36·1	..	38.9	15	24·3	..	19·1	7	0	0	..	0	..	0	..	8·1	7·9	..	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh, West																												
Gwalior (P.B.O.)	37·3	—1·8	41.9	25	22·0	—1·3	16·8	1	1·8	2·3	—2·8	1·8	5	0	—0·6	11.9	8·3	..	2	0	0	1	0	0	0	0	0	0
Sheopurkalan	37·3	..	40.8	25	20·9	..	17·2	1	0	0	..	0	..	0	..	11·6	8·4	..	0	0	0	2	0	4	0	0	0	0
Guna	37·2	—0·4	40·1	25,27	20·7	+1·3	15·2	1	0	0·8	—6·6	0·8	3	0	—0·5	12·1	7·3	+1·5	1	0	0	2	0	0	0	0	0	0
Rajgarh	38·5	..	41·7	25	21·9	..	17·1	1	0	1·0	..	1·0	3	0	..	12·1	9·1	..	1	0	0	1	0	0	0	0	0	0
Neemuch	36·3	—1·0	39·6	15	22·0	+0·4	17·1	1	0	0	3·1	0	..	0	—0·3	10·8	8·2	+1·3	0	0	0	0	0	0	0	0	0	0
Ratlam	37·6	..	40.7	15	22·9	..	18·9	1	10·2	10·2	..	10·2	7	1	..	9·8	8·0	..	1	0	0	1	0	0	0	0	0	0
Alirajpur	38·6	..	41·8	15	22·9	..	18·2	3	0	0	..	0	..	0	..	9·3	7·7	..	0	0	0	0	0	0	0	0	0	0
Indore	37·2	—1·1	40·1	16	21·0	+1·0	17·3	7	0	1·0	—2·3	1·0	9	0	—0·3	18·0	13·5	..	1	0	0	1	0	0	0	0	0	0
Bhopal(Bairagarh)	36·7	—0·6	39·5	16	21·2	—0.4	17·6	7	2·3	4·8	—0·8	2·3	3	0	—0·7	13·2	10·9	0	3	0	0	5	0	0	0	0	1	0
Khandwa	39·7	—0·5	43·1	16	23·7	0	19·3	3	7·9	10·7	+7·9	5·3	3	2	+1·7	9·7	6·1	—2·3	3	0	0	0	0	0	0	0	0	0
Hoshangabad	38·1	—0·7	41·1	26	23·6	+0·5	18·4	1	0	1·3	—2·0	1·3	5	0	—0·3	4·2	3·1	—0·9	1	0	0	1	0	0	0	0	0	0
Betul	35·2	..	38·8	27,28	20·4	..	16·2	1	51·4	56·2	..	23·1	3	5	..	7·1	5·0	..	9	0	1	13	0	0	0	0	0	0
Chhindwara	34·5	..	39·1	27	20·5	..	16·2	1	12·2	40·6	..	15·2	3	3	..	9·6	6·4	..	4	0	0	5	0	0	0	0	0	0
Seoni	35·7	—1·8	39·5	28	21·2	—0·2	16·5	1	5·7	67·7	+52·5	22·1	11	5	+3·3	8·5	6·4	+0·9	12	0	0	13	0	0	0	0	0	0
Sagar	36·1	—1·6	39·5	16,27	23·1	+0·3	18·2	3	0	2·1	—3·2	1·3	3	0	—0·5	8·0	6·5	..	2	0	0	4	0	0	0	0	0	0
Nowgong	37·7	—1·1	41·7	25	19·0	—2·2	13·9	1	0	1·0	—3·3	1·0	5	0	—0·3	8·7	5·0	+1·3	1	0	0	2	0	0	0	0	0	0
Madhya Pradesh, East																												
Sutna	37·1	—1·0	40·9	25	21·3	—0·6	16·7	1	0·5	4·6	—2·5	3·3	6	1	+0·3	9·4	5·5	—0·5	2	0	0	5	0	0	0	0	0	0
Umaria	36·4	—0·8	40·8	28	20·8	+0·4	17·4	3,4,9	2·3	37·9	+26·2	17·8	6	4	+3·1	7·6	4·9	—0·7	5	0	0	5	0	0	0	0	0	0
Jabalpur	37·0	—1·1	40·3	27	20·6	+0·4	16·6	1	2·3	20·8	+12·7	13·7	7	2	+1·2	6·9	4·7	+0·8	5	0	0	4	0	0	0	0	0	0
Mandla	36·0	..	39·7	28	18·8	..	14·9	1	4·3	7·3	..	4·3	16	2	..	5·1	3·1	..	3	0	0	6	0	0	0	0	0	0
Pendra	34·7	—0.5	38·5	25	21·9	+0·2	17·2	1	25·1	37·6	+13·0	24·6	8	3	+0·9	10·5	7·8	..	7	0	1	10	0	0	0	0	1	0
Ambikapur	35·5	..	39·4	18	19·2	..	13·4	1	0	4·1	..	3.3	3	1	..	12·2	8·7	..	2	0	0	2	0	0	0	0	0	0
Champa	38·9	..	43·1	26	24·3	..	18·3	1	0	4·7	..	3·1	1	1	..	5·5	3·3	..	3	0	0	5	0	4	0	0	0	0
Raigarh	39·3	..	42·8	28	24·9	..	19·2	1	0	6·7	..	3·1	23	1	..	5·8	3·8	..	3	0	0	0	0	2	0	0	0	0
Raipur	38·1	—1·2	41·8	26	25·1	+0·5	19·4	3	1·0	7·6	—8·7	6·6	3	1	—0·7	8·7	8·0	—0·2	2	0	0	4	0	0	0	0	0	0
Kanker	36·7	—0·9	40·4	27	23·5	+0·6	18·3	1	0	15·0	—14·7	8·9	20	2	—0·3	5·5	4·0	—1·6	2	0	0	5	0	0	0	0	0	0
Jagdalpur (P.B.O.)	36·1	—1·0	39·3	27	22·1	0	18·0	1	9·7	44·6	—0·6	25·7	14	4	+0·5	6·8	5·0	..	8	0	1	10	0	0	0	0	0	0
Gujarat																												
Deesa.	38·3	..	41·4	15	22·3	..	18·3	7	0	0	..	0	..	0	..	10·6	8·1	..	0	0	0	0	0	0	0	0	0	0
Idar	37·8	..	41·1	15	23·3	..	17·9	3	5	0·5	..	5	20	0	..	10·6	8·4	..	1	0	0	0	0	0	0	0	0	0
Ahmedabad	38·7	—2·1	41·6	27	22·7	0	18·6	7	0	0·3	—1·0	0·3	19	0	—0.1	11.3	7·7	—0.2	1	0	0	2	0	0	0	0	0	0
Dohad	37·9	—0·7	41·1	15	24·1	+0·7	18·8	3	0	0	—0·5	0	..	0	0	13.5	14·0	+4·8	0	0	0	0	0	0	0	0	0	0
Baroda	39·6	+0·2	43·0	13	21·4	+1·0	17·7	1	0	0	0	0	..	0	0	5.8	4·1	—1·2	0	0	0	0	0	0	0	0	0	0
Baroda (Aerodrome)	39·1	..	42·8	13	22·5	...	18·3	3	0	0·3	..	0.3	19	0	..	8·2	6·3	..	1	0	0	0	0	0	0	0	0	0
Broach	39·5	..	42·8	19	23·7	..	19·9	3	0	0	..	..	..	0	..	8·2	7·1	..	0	0	0	0	0	0	0	0	0	0
Surat	37·1	—0·2	41·6	9	23·6	+0·4	19·5	3	0	0	—0·8	..	..	0	—0·1	8·0	7·1	+0·3	0	0	0	0	1	0	0	0	0	0
Surashtra & Kutch																												
Bhuj	37·5	—0·2	40.6	14	21·7	—0·1	19·4	3	0	0	—1·8	0	..	0	—0·1	9·7	7·8	—4·1	0	0	0	0	0	0	0	0	0	0
Bhuj (P.B.O.)	..	..	..	..	..	..	..	..	0	0	..	0	..	0	..	8·1	6·0	..	0	0	0	0	0	0	0	0	0	0
Bhuj (Aerodrome)	37·5	..	40.1	25	22·2	..	19·4	3	0	0	..	0	..	0	..	(f) 11·6	10·6	..	0	0	0	0	0	1	0	0	0	0
Kandla	34·9	..	40.3	13	22·9	..	20·4	7	0	0	..	0	..	0	..	17·7	16·2	..	0	0	0	0	0	0	0	0	0	0
Mandvi	31·3	..	38.5	13,14	21·7	..	18·2	9	0	0	..	0	..	0	..	28·3	22·7	..	0	0	0	0	0	0	0	0	0	0
Dwarka	29·1	—0·4	5·4	9	23·9	—0·8	21·1	7	0	0	—0·8	0	..	0	0	15·5	14·6	—0·8	0	0	0	0	0	0	0	0	0	0
Porbander	31.6	..	39·4	13	22·2	..	19·4	1,24	0	2·0	..	2·0	18	0	..	16·9	15·1	..	1	0	0	0	1	0	0	0	0	0
Porbandar (Aerodome).	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	1	2	0	0	0	0	0
Jamnagar	..	..	..	..	21·6	+0·9	18·3	7	0	0	—0·5	0	..	0	0	..	..	..	0	0	0	0	2	0	0	0	0	0
Rajkot (Aerodrome)	38·1	—0·7	41·9	13	21·1	+0·3	16·6	21	0	0·8	0	0·8	18	0	—0·1	19·4	18·8	+5·8	1	0	0	1	0	0	0	0	0	0
Surendranagar	38·8	..	41·7	14,27	23·7	..	19·6	7	0	0	..	0	..	0	..	13·8	13·2	..	0	0	0	0	0	0	0	0	0	0
Bhavnagar	38·3	—0·6	41·2	28	23·5	+0·4	19·7	7	0	0	—2·5	0	..	0	—0·3	10·4	9·9	+0·7	0	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome.)	37·2	...	40·7	10	24·2	..	20·5	3	..	0	..	0	..	0	..	..	17·0	..	0	0	0	0	0	0	0	0	0	0
Mahuva	35·2	..	40·1	9	22·8	..	17·3	3	0	0	..	0	..	0	..	(c) 15·7	(c) 12·5	..	0	0	0	0	0	0	0	0	0	0
Keshod	...	..	...	...	...	...	...		..	0	..	0	..	..	..	17·9	14·7	..	..	0	0	0	8	0	0	0	0	0
Veraval	31·8	...	39·8	14	21·3	...	18·6	10	0	0	0	0	..	0	0	22·9	18·5	..	0	0	0	0	1	0	0	0	0	0

(c) Mean of 28 days.

(f) Mean of 25 days.

TABLE II.—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER—APRIL, 1957 (Chaitra 11—Vaisakha 10, 1879 Saka)

Division and station	Air temperature in °C								Rainfall in Millimetres					No. of rainy days (2.5mm or more)		Wind speed kms. per hour.			Weather phenomena—No. of days with									
	Mean Maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours.	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan																												
Dahanu	30·9	−0·9	34·2	13	23·1	−0·8	19·3	3	0	0	−24·4	0	..	0	−1·0	20·2	14·1	+0·3	0	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	32·2	+0·5	34·6	9	24·7	+0·2	22·1	3	0	0	−0·8	0	..	0	0	14·1	10·4	−1·0	0	0	0	0	0	0	0	0	0	0
Bombay (Santacruz Aerodrome)	32·5	+0·4	37·3	9	23·2	+0·8	18·8	3	0	0	−0·8	0	..	0	0	17·3	11·1	..	0	0	0	0	0	0	0	0	0	0
Alibag	30·4	−0·5	34·4	22	23·8	−0·3	20·4	3	..	0	−0·3	0	..	0	0	..	11·3	+0·4	0	0	0	0	0	0	0	0	0	0
Harnai	29·3	−0·9	33·2	13	25·5	+0·2	22·1	3	0	0·5	−12·2	0·5	19	0	−1·0	18·6	15·4	+0·4	1	0	0	2	0	0	0	0	0	0
Ratnagiri	31·5	..	34·2	12	25·3	..	21·6	3	0	10·7	+8·2	9·1	14	1	+0·7	..	..	..	4	0	0	1	0	0	0	0	0	0
Devgad	31·5	−0·7	33·9	30	25·9	−0·5	22·3	3	0	0·8	−7·8	0·5	12	0	−0·6	18·8	15·1	−1·0	2	0	0	2	0	0	0	0	0	0
Venguria	31·9	..	36·3	23	24·6	..	20·7	3	0	13·2	..	12·9	12	1	..	..	..	..	2	0	0	6	0	0	0	1	0	0
Maharashtra																												
Jalgaon	41·4	..	45·0	15	25·0	..	21·6	1	0	4·6	+2·8	4·6	19	1	+0·8	13·5	12·7	..	1	0	0	0	0	0	0	0	0	0
Malegaon	39·4	−0·2	42·3	15	22·7	+1·1	18·6	5	4·3	4·3	+1·2	4·3	10	1	+0·7	9·3	8·7	−1·4	1	0	0	1	0	0	0	0	0	0
Deolali	37·5	..	40·2	13	20·6	..	16·2	3	1·0	5·1	..	3·3	19	1	..	9·5	8·7	..	3	0	0	4	0	0	0	0	0	0
Aurangabad	38·3	−0·2	40·9	15,30	23·5	+0·3	20·0	9	0	25·7	+19 6	21·8	9	2	+1·4	10·0	10·0	−2·1	3	0	0	2	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	37·8	..	40·4	30	22·0	..	18·3	22	1·5	12·4	..	7·8	9	2	..	10·9	9·9	..	2	0	0	4	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	0	−7·9	0	..	0	−0·7	..	..	..	0	..	..	..	..	..	..	..	..	..
Ahmednagar	37·7	−0·2	40·4	15	21·8	+0·8	18·8	2	0	20·6	+10·4	19·1	9	1	−0·1	8·7	7·1	−2·7	3	0	0	0	0	0	0	0	0	0
Parbhani	38·9	..	41·9	27	23·7	..	19·2	2	0	10·4	−0·3	3·6	2	2	+0·8	9·7	8 4	..	7	0	0	12	0	2	0	0	0	0
Poona	38·2	−0·1	41·2	30	21·0	+0·8	17·2	3	15·3	21·1	+6·1	14·0	9	1	−0·3	5·3	3·9	−6·4	6	0	0	8	1	0	0	0	0	0
Poona (Lohagaon Aerodrome)	37·5	..	39·6	27	21·3	..	16·5	7	0·5	13·1	..	3·1	18,28	3	..	..	..	..	7	0	0	7	0	0	0	0	0	0
Baramati	38·3	..	40·7	30	22·9	..	19·2	7	0	0	..	0	..	0	..	10·3	9·9	..	0	0	0	5	0	3	0	0	1	0
Jeur	38·3	..	41·0	26	23·0	..	19·6	3	0	64·7	..	23·6	9	4	..	·3	8·3	..	4	0	0	0	0	4	0	0	0	0
Sholapur	38·4	−1·3	41·7	26	24·3	+0·2	20·8	2	0	37·3	+23·4	20·8	28	2	+0·8	8·8	9·1	−1·2	10	0	0	12	0	0	0	0	0	0
Miraj	37·4	+0·1	39·7	26	22·1	+1·0	17·8	3	1·0	24·2	−26·3	15·5	17	2	−1·1	9·3	10·8	+1·1	6	0	0	12	0	0	0	0	0	0
Kolhapur	37·0	..	39·6	30	21·2	..	17·3	3	6·8	25·2	..	8·6	13	4	..	11·9	11·8	..	7	0	0	10	0	0	0	0	0	0
Vidarbha																												
Buldhana	36·5	..	40·3	15	24·2	..	18·4	2	5·8	14·2	..	5·8	4,9	2	..	10·3	9·7	..	4	0	0	0	0	0	0	0	0	0
Akola	39·7	−1·1	43·1	27	24·0	+0·2	18·7	13	0	27·9	+22·8	11·4	3	4	+3·5	8·4	7·4	+0·2	6	0	0	8	0	0	0	0	0	0
Amravati	38·6	−1·6	42·2	27	24·4	−0·4	15·6	3	0	53·1	+44·5	38·1	3	3	+2·2	9·6	9·0	+1·6	6	0	0	15	0	0	0	0	0	0
Yeotmal	37·7	..	41·6	28	23·8	..	18·1	4	2·0	59·1	..	31·2	3	4	..	7·1	6·6	..	6	0	1	12	0	0	0	0	0	0
Nagpur	37·4	−2·8	40·9	30	23·1	−1·0	17·9	1	7·9	92·6	+77·4	28·7	10	8	+6·7	9·1	8·5	..	11	0	0	15	0	0	0	0	8	0
Gondia	37·4	−2·8	40·9	30	23·1	−1·0	17·9	1	0	18·8	..	5·6	7	4	..	6·1	4·4	..	6	0	0	7	0	0	0	0	0	0
Brahmapuri	37·5	..	41·1	28	24·0	..	18·3	1	3·8	45·0	..	17·0	27	3	..	7·0	5·7	..	7	0	1	2	0	2	0	0	0	0
Chanda	37·7	..	41·6	26	22·5	..	18·6	11	0	44·7	+24·9	15·5	2	4	+2·2	7·1	5·4	+0·7	7	0	0	11	0	0	0	0	0	0
Sironcha	38·1	−2·7	41·8	27	23·7	−0·7	20·3	1	0	19·3	..	17·5	2	1	..	6·2	4·4	..	2	0	0	4	0	0	0	0	0	0
Coastal Andhra-Pradesa	39·4	..	42·3	21	26·1	..	21·1	2	0	0	−12·2	0	..	0	−0·6	13·9	10·9	+1·9	0	0	0	0	0	0	0	0	0	0
Nellore	36·2	−1·2	39.5	20	24·8	−0·4	22·8	8	0	4·8	..	4·8	22	1	..	13·7	9·9	..	1	0	0	1	0	0	0	0	0	0
Ongole	32·3	..	35·6	25	25·3	..	23·9	5,10	0	35·8	+5·6	34·0	22	1	−1·7	7·4	7·6	−3·0	3	0	0	1	0	0	0	0	0	0
Rentachintala	39·1	+0·5	41·4	20	25 2	−1·0	22·3	9,22	1·0	1·0	..	1·0	22	0	..	17·5	12·7	..	1	0	0	1	0	0	0	0	0	0
Gannavaram	36·7	..	39·9	29	24·9	..	22·6	1	0	1·8	−15·7	1·8	22	0	−0·9	16·9	11·5	+2·2	1	0	0	2	0	0	0	0	0	0
Masulipatam	33·4	−1·2	38·4	29	25·0	−0·4	22·8	4,9	0	1·5	..	1·5	24	0	..	8·7	5·5	..	1	0	0	1	0	0	0	0	0	0
Nidadavolu	35·5	..	41·1	29	25·2	..	22·8	1,3	4·6	4·6	−11·7	4·6	24	1	0	14·3	10·3	+2·1	1	0	0	0	0	0	0	0	0	0
Kakinada	35·4	−0·2	39·8	29	25·4	−0·4	23·7	1,4	0	1·3	−16·7	1·3	2	0	−1·3	23 6	14·9	+1·2	1	0	0	5	0	0	0	0	0	0
Visakhapatnam	34·8	−1·1	38·7	29	25·7	+0·4	21·3	3	0	0	−19·3	0	..	0	−1·5	23·6	16·4	+3·0	0	0	0	2	0	0	0	0	0	0
Calingapatam	32·6	−1·0	35·6	29	25·7	0	21·4	2	1	..	..	17·8	28	1	..	8·1	7·1	..	3	0	0	4	0	0	0	0	0	0
Telangana																												
Ramagundam	39·6	..	43·1	19	26·4	..	21·7	28	0	20·8	..	17·8	28	1	..	8·1	7·1	..	3	0	0	4	0	0	0	0	0	0
Nizamabad	37·7	−2·1	40·6	4 days	25·0	+0·4	20·6	9	1·5	31·2	+9·6	24·9	9	2	0	5·2	5·1	0	3	0	0	3	0	0	0	0	0	0
Mahbubnagar	36·6	..	38·8	30	24·0	..	20·0	3	0	85·8	..	65·5	22	2	..	9·5	8·1	..	3	0	0	5	0	2	0	0	0	0
Hyderabad (Begumpet Aerodrome)	35·7	−1·4	39·2	27	23·4	−0·3	19·3	2	12·2	38·9	+9·2	22·3	2	3	+1·1	10·6	9·0	−1·5	5	0	0	4	0	0	0	0	3	0
Hakimpet	..	..	..	..	23·3	..	18·4	2	6·1	25·9	..	16·5	2	2	..	..	..	..	3	0	0	6	0	0	0	0	0	0
Hanamkonda	37·7	−0·5	41·1	19	24·5	−0·6	17·8	2	14·5	29·2	+6·1	19·6	22	3	+1·4	9·7	10·2	+0·7	3	0	0	3	0	1	0	0	0	0
Badhrachallam	38·6	..	40·8	30	24·7	..	21 3	4	0	38·6	..	29·2	22	2	..	8·6	9·2	..	3	0	0	2	0	0	0	0	0	0
Khammameth	38·5	..	41·0	27	25·0	..	21·2	2	0	8·1	..	5·6	22	2	..	7·6	8·3	..	2	0	0	0	0	3	0	0	0	0
Rayalaseema																												
Arogyavaram	34·2	..	36·7	25	21·1	..	18·3	12	16·5	18·3	..	14·0	4	2	..	9·5	8·0	..	3	0	0	4	0	0	0	0	0	0
Cuddapah	39·4	−1·0	41·4	21	26·3	−0·9	23·9	8,12	0	15·2	+0·7	15·2	22	1	−0·1	11·1	8·5	−2·8	1	0	0	0	0	0	0	0	0	0
Anantapur	38·1	..	40·0	24	25·2	..	21·9	13	0·5	3·9	−12·4	3·6	22	1	−0·3	9·3	8·8	..	2	0	0	2	0	0	(	0	0	0
Kurnool	39·2	−0·6	41·1	30	26·1	0	21·9	22	32·8	54·4	+37·4	42·2	22	2	+0·5	8·6	7·9	+0·3	2	0	0	2	0	0	0	0	0	0
Madras																												
Palayam Cottai	36·8	..	38·7	24	26·0	..	23·8	1	17·5	22·1	−40·9	17·5	24	2	−1·7		8·7	..	2	0	0	2	0	0	0	0	0	0

Division and station	Air temperature in °C.								Rainfall in Millimetres					No. of rainy day 2.5mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum.	Departure from normal.	Highest.	Date	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830-1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date	Total in the month.	Departure from normal.	Mean between 0830-1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0.3mm or more).	Snow or sleet.	Hail.	Thunder heard.	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras—*Contd.*																												
Tuticorin	31·1	..	34·1	24	26·3	..	24·4	8,18	0	26·7	..	19·1	3	2	..	21·4	15·0	..	2	0	0	0	0	0	0	0	0	0
Pamban	30·6	−2·2	32·2	19	26·3	−0·2	23·8	7,8	2·5	4·0	−42·7	2·5	8	1	−2·2	8·9	8·5	−1·3	2	0	0	0	0	0	0	0	0	0
Mathurai	37·1	+0·5	38·9	24	25·7	+0·9	23·3	8	0	12·9	−42·0	7·6	24	2	−1·1	6·3	5·4	+0·7	2	0	0	0	0	0	0	0	0	0
Nagapattinam	31·4	−1·9	36·3	24	26·5	0	23·9	6	0	0	−28·2	0	—	0	−1·3	18·1	16·6	+6·5	0	0	0	0	0	0	0	0	0	0
Tiruchirapalli	36·0	−1·8	37·2	days 4	25·3	−0·3	22·1	11	36·6	49·8	+4·1	40·1	18	2	0	9·0	9·9	+1·0	3	0	0	4	0	0	0	0	0	0
Coimbatore	34·4	−1·4	37·0	30	24·7	−0·6	21·7	6	3·8	3·8	−36·3	2·8	23	1	−2·2	8·8	6·9	+2·7	3	0	0	2	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	36·0	..	37·5	29	23·5	..	21·5	8	7·6	9·6	..	5·3	24	2	..	12·5	13·5	..	2	0	0	3	0	0	0	0	0	0
Salem	36·7	−1·2	38·5	29	24·6	−0·1	21·6	8	5·3	23·1	−25·9	17·0	21	2	−1·6	8·2	9·9	+3·6	3	0	0	4	0	0	0	0	0	0
Kallakurichi	37·4	..	39·3	21,25	24·9	..	21·7	9	0	0	..	0	22	0	..	..	..	..	0	0	0	2	0	0	0	0	0	0
Cuddalore	32·2	−1·2	33·9	24,25	25·1	−0·3	21·9	9	0	0	−24·9	0	..	0	−1·1	14·1	10·2	+2·0	0	0	0	0	0	0	0	0	0	0
Vellore	36·1	−1·0	38·7	25	24·2	−0·4	21·8	10	0	2·5	−22·9	2·5	22	1	−0·5	8·9	9·0	+3·0	1	0	0	1	0	0	0	0	0	0
Madras	34·3	−1·0	36·2	25	25·4	−0·2	23·1	9	0	0	−15·5	0	..	0	−0·9	14·1	9·8	−1·6	0	0	0	0	0	0	0	0	0	0
Madras (Nungambakkam)	32·4	..	34·1	25	25.1	..	22·7	9	..	0	..	0	..	0	..	8·2	..	..	0	0	0	1	0	0	0	0	0	0
Coastal Mysore																												
Karwar	31·8	..	33·2	17,19	25·3	..	21·0	3	0	0	−13·2	0	2	0	−0·9	..	..	..	0	0	0	0	0	0	0	0	0	0
Honavar	32·2	−0·5	33·6	30	25·1	−0·2	22·5	2	0	0	−16·8	0	1	0	−1·2	9·5	7·4	+2·1	0	0	0	0	0	0	0	0	0	0
Mangalore	32·5	−0·4	33·9	30	26·6	+0·8	24·4	3	0·1	3·1	−35·8	2·8	1	1	−1·3	12·4	9·5	+1·5	2	0	0	2	0	0	0	0	0	0
Mangalore (Bajpe Aerodrome)	33·5	..	35·0	23	25·1	..	22·2	16	2·8	3·6	..	3·3	1	1	..	..	..	..	2	0	0	6	0	0	0	0	0	0
Mysore North																												
Bidar	35·4	−1·7	38·6	25	23·3	−1·1	17·8	2	21·3	58·7	+31·5	35·8	2	4	+1·5	10·9	11·3	+1·0	6	0	0	0	0	0	0	0	0	0
Gulbarga	38·4	−1·3	40.7	20	24·3	−0·3	19·7	2	3·8	56·1	+35·0	48·0	9	2	−0·1	12·8	11·5	+1·2	2	0	0	8	0	0	0	0	0	0
Bijapur	37·2	−1·0	39·6	26	23·1	−0·5	20·9	5	0	33·0	+11·4	9·1	4,5	5	+3·2	6·5	6.6	−0·8	7	0	0	3	0	0	0	0	0	0
Belgaum	35·0	−0·4	39·5	28	91·7	+0·1	16·2	5	14·6	25·1	−19·4	10·7	20	3	−0·3	8·7	6·0	+0·2	7	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	35·7	−0·6	38·0	27	20·6	+1·0	17·5	5	5·9	7·5	−37·0	3·1	15	1	−2·3	6·1	8·0	+0·2	5	0	0	9	0	0	0	0	0	0
Belgaum (Sambre Aerodrome)	35·5	..	39·2	13	20·3	..	16·9	3	12·9	51·9	..	29·0	18	3	..	16·8	14·4	..	4	0	0	8	4	0	0	0	0	0
Gadag	37·4	+0·3	39·5	24	23·0	+0·6	21·1	16	46·3	59·9	+22·8	53·3	7	2	−0·8	7·4	8·3	−1·5	4	0	0	6	0	0	0	0	0	0
Raichur	37·7	−1·5	40·1	26	26·3	+0·3	22·2	4	0	47·7	+31·4	36·8	4	2	+0·6	8·7	10·2	+0·5	2	0	0	2	0	0	0	0	0	0
Mysore (South)																												
Bellary	37·9	−1·4	40·1	27	25·5	+0·3	22·8	15	1·8	12·3	−9·0	6·1	15	2	+0·1	6·1	5·1	−1·2	4	0	0	3	0	0	0	0	0	0
Chitaldrug	35·6	−0·7	37·3	27	23·1	+0·4	21·7	14,9	0	5·1	−19·5	5·1	16	1	−1·0	7·5	6·8	−0·1	1	0	0	1	0	0	0	0	0	0
Shimoga	36·2	..	38·3	27	22·4	..	19·5	2	0	15·7	..	12·9	16	1	..	6·2	4·6	..	3	0	0	4	0	0	0	0	0	0
Balehonnur	31·9	+1·2	34·2	13	19·6	+0·7	17·5	24	..	84·8	−5·4	27·4	28	5	−1·5	..	..	..	8	0	0	0	0	0	0	0	0	0
Hassan	32·8	−0·8	34·6	15	20·3	+0·7	18·7	4	2·3	29·2	−26·7	19.8	22	3	−1·2	6·7	6·7	+0·4	4	0	0	2	0	0	0	0	0	0
Mysore	33·8	−1·0	35·1	15	21·8	+0·5	21·1	6 days	3·1	19·6	−38·8	18·3	22	1	−3·6	9·4	8·2	+0·5	2	0	0	5	0	0	0	0	0	0
Bangalore (Central Observatory)	32·9	−0·7	34·7	15	21·0	+0·4	18·4	8	5·9	22·9	−18·0	16·3	21	2	−0·6	9·2	8·7	+1·8	3	0	0	4	0	0	0	0	0	0
Bangalore (Aerodrome)	33·4	..	35·0	27	20·4	..	18·4	10	25·1	28·2	..	12·7	22	4	..	..	..	..	4	0	0	2	0	0	0	0	3	0
Kerala (Including Laccadives)																												
Kozhikode	33·2	+0·4	34·9	22	26·3	+0·5	24·5	3	9·7	10·2	−80·7	9·7	24	1	−3·2	13·2	13·9	+3·1	2	0	0	3	0	0	0	0	0	0
Palghat	37·5	..	40·1	11	25·6	..	22·2	23	31·5	32·3	..	27·2	23	2	..	10·4	9·0	..	3	0	0	2	0	0	0	0	0	0
Fort Cochin	31·5	+0·1	33·9	23	27·0	+1·1	25·2	18	0·3	151·7	+26·2	81·3	1	5	−1·7	13·2	7·2	−1·3	8	0	0	8	0	0	0	0	0	0
Cochin (Naval Air Station)	32·5	..	34·0	22	25·6	..	22·0	14	0·5	110·5	..	51·3	1	6	..	10·3	6·5	..	8	0	0	19	0	0	0	0	2	0
Alleppey	32·4	..	33·4	29	25·4	..	23·2	23	0	218·7	..	118·1	23	10	..	17·7	12·3	..	12	0	0	12	0	0	0	0	0	0
Punalur	35·6	..	37·7	12	23·7	..	20·2	9	130·5	319·9	..	61·0	24	15	..	6·7	4·0	..	15	0	0	0	0	0	0	0	0	0
Trivandrum	32·9	+0·6	34·5	9	25·3	+0·2	23·4	2	68·5	113·2	−2·4	43·7	20	6	−0·9	10·5	7·1	+0·2	10	0	0	18	0	0	0	0	0	0
Trivandrum (Aerodrome)	32·6	..	33·8	29	24·8	..	23·1	2	..	134·9	..	41·9	23	8	..	..	7·9	..	11	0	0	11	0	0	0	0	0	0
Hill Stations (excluding Kashmir																												
Walong (R)																												
Kohima	24·9	..	28·9	29,30	16·8	..	9·4	1	0	22·1	..	13·5	1	2	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Aijal*																												
Shillong	24·7	+1·3	28·9	30	14·7	+0·8	8·4	10	23·3	37·4	−9·21	23·4	6	3	−6·2	6·7	6·3	−2·1	11	0	0	4	0	0	0	0	0	0
Cherrapunji	22·9	+1·1	25·8	13	15·0	+0·1	10·2	1	66·6	726·0	+59·8	162·6	18	14	−2·0	15·7	14·6	+0·4	15	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	249·0	..	34·5	17	13	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan)	18·7	+1·4	22·7	29	11·0	+0·7	5·3	1	2·3	30·1	−75·1	17·3	1	2	−5·5	4·2	4·6	+1·1	4	0	0	3	2	0	0	0	0	0
Kalimpong	23·9	+0·5	26·9	28	15·7	+0·4	11·2	1,2,6	0	24·2	−45·1	19·1	1	2	−3·8	6·3	4·7	−8·0	2	0	0	0	0	0	0	0	0	0
Katmandu	30·3	+1·5	34·4	19	10·1	−1·3	5·7	1	1·0	8·4	−17·3	4·3	1	2	−1·2	1·7	0·6	−1·5	2	0	0	0	4	0	0	0	0	0
Mukteswar (Kumaon)	19·4	−0·5	22·9	13,17	10·0	−0·2	4·4	7	17·5	45·4	+9·6	39·1	7	3	−0·3	16·7	15·5	+4·7	4	0	0	7	0	0	0	0	0	0
Nainital	20·1	..	23·9	15,16,17	10·7	..	3·9	8	13·7	33·6	..	30·5	7	2	..	9·4	7·2	..	2	0	0	0	0	0	0	0	0	0

*Temporarily closed.

(R) Register not received.

Division and station	Air temperature in °C.								Rainfall in Millimetres					No. of rainy days(2.5mm or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal.	Highest.	Date	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830-1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830-1730 hours.	Mean 24 hours.	Departure from normal.	Precipitations (0.3mm or more).	Snow or sleet.	Hail.	Thunder heard.	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Station excluding Kashmir—(*Contd.*)																												
Tapoban	19·2	..	26·7	19	7·8	..	0·6	16	..	81.8	..	27·9	7	9	..	..	..	..	12	0	0	0	0	0	0	0	0	0
Badrinath							Closed	during	winter	months																		
Lokpal	−3·9	..	0	29	−8·6	..	−11·1	1	..	118·1	..	34·3	6	5	..	..	..	..	11	3	0	0	0	0	0	0	0	0
Jamuna Chetty	..	..	..	..	..	..	..	..	..	85·4	..	38·1	7	6	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Mussooree	20·1	−0·6	26·1	16	10.8	−0·8	4·0	8	45·2	72·4	+38·6	30·0	7	4	+0·2	9·5	8·6	+0·2	6	0	1	6	0	0	0	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	192·3	..	67·3	7	12	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	116·8	..	62·2	7	13	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Simla	17·5	−1·3	22·7	15	9·5	−0·8	2·3	7	14·4	38·5	−7·5	14·5	7	5	+0·9	6·3	5·5	−0·8	11	0	0	8	0	0	0	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	102·5	+67·4	78·7	7	6	+3·3	..	..	..	7	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	165·1	+80·5	36·1	6	10	+3·6	..	..	..	10	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	123·6	..	61·7	6	11	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	507·5	..	74·2	5	15	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Koksar	..	..	..	..	..	..	..	..	..	300·2	..	56·1	7	14	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Dalhousie	19·2	..	24·0	12,18	9·4	..	2·8	8	15·6	160·8	+84·9	88·9	7	10	+4·3	5.0	6·6	..	11	0	2	0	0	0	0	0	0	0
Dharamshala	23·8	..	27·9	14·9	14.9	..	8·8	7	9·9	119.9	..	52·8	7	5	..	8 9	7·5	..	8	0	1	4	0	0	0	0	0	0
Abu	29·1	0	31·7	19·7	19·7	−0·5	14·9	7	0	0	−2·8	0	..	0	−0·3	9·2	7·7	−1·8	0	0	0	0	0	0	0	0	0	0
Pachmarhi	31·8	−1·5	35·4	27	18·8	−1·6	12·5	1	12·2	18·5	+9·1	7·6	10	3	+2·1	5·9	4·4	−2·4	5	0	0	8	0	0	0	0	0	0
Mahabaleshwar	30·2	1.5	34·4	30	17·9	−1·0	14·3	10	20·3	24·4	−5·6	16·5	10	2	+0·5	10·4	10·5	−0·8	2	0	1	5	1	0	0	0	0	0
Nandi Hills	28·6	..	29·8	20	16·7	..	15·1	1	..	64·9	..	26·7	23	3	..	..	..	..	3	0	0	0	6	0	0	0	0	0
Mercara	28·7	0	31·7	13	18·0	+0·3	15·7	10	13·2	26·6	−38·4	16·5	22	3	−2·1	10·0	8.0	+2·9	4	0	0	0	0	0	0	0	0	0
Kodai kanal	19·7	−0·4	22·2	13	10·9	−0·8	8·9	1	17·6	160·2	+37·8	86·4	21	7	−0·7	12·6	12·0	0	9	0	1	9	2	0	0	0	0	0
Ootacamund	21·5	−0·4	23·3	13,15, 28	9·8	−1·0	6·7	2	30·7	43·2	−34·0	9·4	2	7	+0·5	4·1	2·8	−2·5	13	0	0	0	0	0	0	0	0	0
Coonoor	23·4	−0·3	25·4	1	13·3	−0·3	9·7	9	..	72·7	−76·4	35·3	6	3	−3·9	..	5·6	+0·5	5	0	0	6	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	2·3	..	0·8	26	0	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	295·4	..	59·7	4	15	..	..	..	..	18	..	..	..	..	..	..	..	..	..
Lachen	17·5	..	18·9	13	1·9	..	0·6	1,26	..	75·4	..	15·2	6	13	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung (Chumbi)	16·2	+2·3	19·5	28	−0·8	+0·8	−4·8	1	..	68·6	−30·7	20·3	29	7	−3·4	..	..	..	7	0	0	0	0	0	0	0	0	0
Lhasa	15·0	..	17·2	12	−1·0	..	4·4	3	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ceylon																												
Colombo	31·8	+0·2	33·0	2,9,12	24·2	−0·2	23·0	7days	63·7	125·2	−114·3	65·8	13	8day	−2·9	..	..	..	15	0	0	12	0	0	0	0	0	0
Trincomalee	32·2	−1·0	34·0	21,26 28	25·8	+0·5	23·0	7	0	0	−51·3	0	..	0	−3·3	..	..	..	0	0	0	0	0	0	0	0	0	0
Batticoloa	30·8	..	34·0	21,24	24·8	..	22·0	7	10·4	22·6	..	11·7	14	2	..	..	..	..	4	0	0	1	0	0	0	0	0	0
Hambantota	31·0	0	32·0	6days	24·4	−0·1	23·0	4,8,15	0·8	19·1	−76·7	16·3	24	1	−5·2	..	..	..	4	0	0	3	0	0	0	0	0	0
Mannar	33·4	..	35·0	19	25·4	..	23·0	7,8	0·5	2·1	..	1·0	13	0	..	..	..	..	3	0	0	6	0	0	0	0	0	0
HYDROMETEOROLOGICAL OBSERVATORIES—																												
Damodar Catchment																												
Bokaro	37·9	..	42·4	26	20·5	..	14·3	10	0	0·3	..	0·3	1	0	..	12·5	7·5	..	1	0	0	0	0	1	0	0	0	0
Hazaribagh (R)															..													
Tilaiya	36·4	..	41·0	26	23·7	..	17·5	1	0	0	..	0	..	0	..	..	..	..	0	0	0	2	0	0	0	0	0	0
Ramgarh	38·7	..	43·0	8	19·7	..	14·1	1	0	0	..	0	..	0	..	9·2	4·6	..	0	0	0	3	1	0	0	0	0	0
Panchet Hills	39.3	..	43·8	26	22·6	..	16·4	1	2·5	2·5	..	2·5	22	1	..	15·3	9·5	..	1	0	0	1	0	0	0	0	0	0
Durgapur	40·6	..	43·6	29,30	27·3	..	25·4	1	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	10·9	..	8·6	22	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	4·5	..	2·0	7,23	0	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Baramul	39·6	..	42·9	19	20·9	..	15·8	2	2·3	2·8	..	2·3	22	0	..	5·0	3·0	..	2	0	1	6	0	0	0	0	0	0
Hirakud	33·3	..	41·9	26,28	24·7	..	18·7	1	9·7	21·6	..	10·4	23	2	..	3·9	4·0	..	2	0	0	3	0	0	0	0	0	0
Khijrawan	36·7	..	39·9	30	..	..	..	..	0	45·2	..	34·3	2	2	..	8·2	5·6	..	2	0	1	8	0	0	0	0	0	0
Sonepur	38·9	..	42·8	27	24·5	..	19·0	1	..	9·2	..	8·1	1	1	..	..	5·5	..	2	..	..	..	..	..	..	..	..	..
Ginabahar	35·5	..	41·8	18	20·8	..	14·4	1	..	6·3	..	6·3	22	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Narbada Catchment																												
Punasa	40·5	..	43.3	15 16	23·4	..	18·9	2	0	9·7	..	9·7	8	1		7·8	5·4	..	1	0	0	4	0	2	0	0	0	0

Division and Station.	Air temperature in °C.								Rainfall in Millimetres					No. of rainy days (2·5 mm or more)		Wind speed kms. per hour.			Weather phenomena—No. of days with.									
	Mean maximum.	Departure from normal.	Highest.	Date.	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830–1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830–1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0·3 mm.)	Snow or Sleet.	Hail.	Thunder heard	Fog.	Dust-strom.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Narbada Cachment —(Contd.)																												
Bagra Tawa	38·0	..	42·2	16	22·7	..	16·2	11	12·0	22·4	..	10·4	17	3	..	8·6	5·5	..	3	0	0	4	0	0	0	0	0	0
Thikri	40·5	..	43·4	15,16	24·5	..	20·1	1	..	0	..	0	0	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Tapti Catchment																												
Nandurbar	39·8	..	42·9	19	24·5	..	20·1	27,29	..	0	..	0	..	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																												
Jhadol	34·9	..	38·6	15	18.2	..	12·7	6	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Sainwara	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	43·2	..	43·2	20	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	1·8	..	1·3	3	0	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	5·1	..	5·3	20	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Dharoi	38·0	..	41·8	15	22·3	..	17·7	7	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ganga Catchment																												
Mukhim	20·0	..	23·9	17, 18	9·3	..	5·0	2	25·1	73·9	..	39·4	7	5	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Tehri	30·2	..	35·4	21	14·6	..	9·8	8	23·7	62·9	..	24·6	7	5	..	..	..	..	6	0	0	0	0	0	0	0	0	0
Gandak Catchment																												
Gorkha	30·0	..	34·2	29	19·2	..	11·4	1	..	1·8	..	1·0	1	0	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Pokhara	30·4	..	34·1	22	16·8 (b)	..	10·6	1	..	35·4	..	14·7	15	4	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Nawakot	30·2 (q)	..	35·1	29	19.7	..	13·2	1	..	7·4	..	7·4	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalaya Regions)																												
Gogra Catchment	26·3	..	30·3	17	..	..	..	..	10·7	18·2	..	11·5	7	3	..	..	..	..	3	...	..	..	..	..	..	..	..	..
Dandeldhura	21·4	..	25·6	16	12·6	..	6·7	7	22·4	39·7	..	18·0	7	3	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Munsiyari	20.7	..	25·5	18	10·9	..	5·8	7	57·5	107·3	..	52·1	7	8	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Sallyana	26·2 (n)	..	30·6	18	..	..	..	..	4·6	7·1	..	7·1	7	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Butwal	35·8 (i)	..	40·8	29	20·9	..	16·3	27,28	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmanalu	28·6	..	32·4	27	9.6	..	5·9	1	0.8	10·2	..	6·3	1	2	..	1·4	0·6	..	3	..	..	4	1	0	0	0	0	0
Kosi Catchment																												
Chautara	27·8	..	32·6	20	15·8 (d)	..	8·3	5	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Okhaldhunga	23·6	..	26·7	29	13·9	..	5·8	1	7·4	31·8	..	24·1	1	2	..	14·9	6·6	..	4	0	0	4	0	0	0	0	0	0
Barahkshetra	35·9	..	40·2	28	22·0	..	18·8	2	0·3	10·5	..	9·9	4	1	..	13·4	8·2	..	3	0	0	1	0	0	0	0	0	0
Angbung	28·5	..	32·2	28	17·1	..	10·0	1	..	54·6	..	26·7	17	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Taplejung	23·0	..	27·8	28	13·1	..	6·1	1	11·5	46·9	..	21·8	1	5	..	..	..	..	5	0	2	4	0	0	0	0	0	0
Taplethok	25·2	..	30·7	30	13·4	..	8·7	2	..	51·4	..	14·2	1	5	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Wallang ChungGola(R		..				..					..																	..
Bhojpur	24·0 (i)	..	27·7	26	15·9 (f)	..	8·7	1	6·9	13·2	..	6·9	6	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Chainpur	27·9	..	32·5	28	15·9	..	9·3	1	..	0	..	0	0	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	20·9	..	16·4	1	11·9	..	5·9	1	73·1	198·5	..	38·3	18	10	..	..	..	..	15	1	1	12	0	0	0	0	0	0
Geyzing	24·8	..	28·8	30	13·3	..	7·3	1	15·2	53·3	..	11·9	1	18	..	..	..	..	10	..	..	..	..	..	..	..	..	..

(n) Mean of 17 days. (f) Mean of 25 days. (i) Mean of 22 days. (q) Mean of 24 days. (b) Mean of 29 days. (d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs	Relative humidity%	Departure from normal.	Cloud amount (Oktas).		Mean wind speed kms. per hour.	Wind speed (kms.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		60 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar .	0830	23	1011·9	1009·3	..	29·8	25·3	23·3	28·7	67	..	4·0	..	2·0	0	0	17	1	5	2	0	0	1	1	7	13	0
	1730	,,	1008·7	1006·1	..	29·3	25·4	23·8	29·3	71	..	4·6	..	3·7	0	0	20	2	7	3	0	0	0	3	5	10	0
Long Islands .	0830	33	1012·9	1009·2	..	29·8	25·5	23·5	29·5	69	..	4·1	..	2·6	0	0	21	0	1	0	3	1	3	1	12	9	0
	1730	,,	1009·8	1006·2	..	29·9	25·6	23·6	28·9	69	..	4·6	..	0·4	0	0	4	0	0	1	1	1	0	0	1	26	0
Port Blair . .	0530	79	1010·4	1001·4	..	24·5	23·5	23·1	27·9	92	..	3·0	..	1·3	0	0	10	1	0	1	0	0	2	3	3	20	0
	0830	,,	1012·0	1003·2	+1·3	31·1	25·6	23·1	28·1	62	—11	3·4	—0·3	6·3	0	0	29	5	12	7	1	0	0	1	3	1	0
	1130	,,	1010·7	1002·0	..	32·4	25·9	23·0	28·4	57	..	3·2	..	9·9	0	0	30	0	13	14	1	2	0	0	0	0	0
	1730	,,	1008·9	1000·1	..	28·6	24·9	23·1	28·6	72	..	3·7	..	5·1	0	0	25	1	6	12	1	1	1	2	1	5	0
	2330	,,	1010·4	1001·5	..	26·1	24·3	23·5	29·2	86	..	2·7	..	2·7	0	1	14	1	0	4	0	1	2	2	4	16	0
Car Nicobar .	0830	10	1011·6	1010·4	..	30·8	25·7	23·6	29·1	65	..	4·2	..	4·6	0	0	28	1	15	8	3	0	0	0	0	2	1
	1730	,,	1008·6	1007·4	..	29·3	25·4	23·6	29·3	71	..	4·1	..	1·5	0	0	13	0	9	3	0	0	0	0	0	17	0
Nancowry . .	0830	26	1011·5	1008·6	..	30·4	26·5	24·9	31·3	73	..	4·3	..	0·6	0	0	3	0	0	0	2	0	1	0	0	27	0
	1730	,,	1008·5	1005.5	..	29·0	26·2	25·1	31·8	79	..	4·1	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Kondul . .	0830	8	1011·5	1010·5	..	29·4	27·8	27·3	35·9	88	..	3·9	..	2·3	0	0	10	0	6	4	0	0	0	0	0	20	0
	1730	,,	1008·4	1007·5	..	28·6	27·8	27·5	36·6	94	..	4·5	..	3·3	0	0	17	2	12	2	1	0	0	0	0	13	0
ASSAM (Including Manipur & Tripura)																											
Pasighat . .	0830	..	..	..	..	22·1	18·6	16·6	18·7	72	..	6·0	..	14·1	0	14	8	7	0	0	1	1	0	0	13	8	0
	1730	..	..	..	..	24·0	20·1	17·5	20·4	69	..	6·5	..	9·1	0	7	14	6	0	0	0	1	1	1	12	9	0
Digboi . .	0830	..	..	..	..	21·4	19·2	18·1	20·4	81	..	6·1	..	..	0	0	30	4	19	1	1	1	1	0	3	19	0
	1730	..	..	..	..	26·2	21·1	18·2	21·0	63	..	6·3	..	..	0	0	30	4	15	0	2	1	3	3	2	28	0
Dibrugarh . .	0830	106	1010.6	998·5	—0.2	23·1	19·8	18·0	20·3	74	—5	5·2	+0·1	3·7	0	0	24	8	8	8	0	0	0	0	0	6	1
	1730	,,	1006·0	993·9	..	24·7	21·0	18·9	21·9	72	..	4·9	..	2·5	0	0	17	3	9	4	0	1	0	0	0	13	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1007·7	994.8	..	18.7	17.9	17.3	20.0	92	..	5.7	..	5.0	0	0	17	3	11	2	1	0	0	0	0	13	0
	0530	,,	1009·2	996·3	..	18·6	17·7	17·0	19·5	91	..	6·7	..	4·1	0	0	14	0	12	2	0	0	0	0	0	16	0
	0830	,,	1010·9	998·2	..	23·0	19·5	17·4	20·0	70	..	5·5	..	6·7	0	2	23	2	20	3	0	0	0	0	0	5	0
	1130	,,	1009·5	996·9	..	25·7	20·5	17·3	19·7	61	..	5·3	..	6·9	0	0	26	2	21	2	1	0	0	0	0	4	0
	1730	,,	1006·2	993·6	..	24·5	20·8	18·6	21·7	71	..	5·8	..	4·0	0	1	14	2	11	1	1	0	0	0	0	15	0
	2330	,,	1008·6	995·8	..	19·6	18·4	17·7	20·3	89	..	5·2	..	5.5	0	1	13	0	12	1	0	0	0	0	1	16	0
North Lakhimpur .	0830	102	1010·6	998·9	..	22·9	19·8	17·8	20·4	75	..	6·3	..	..	0	0	27	10	11	4	0	1	0	1	0	3	0
	1130	,,	1009·3	997·8	..	26·0	20·9	17·8	20·9	62	..	6·1	..	..	0	0	26	8	5	11	2	0	0	0	0	4	0
	1730	,,	1006·1	994·6	..	24·8	21·4	19·5	22·9	73	..	6·3	..	..	0	1	23	11	9	4	0	0	0	0	0	6	0
Sibsagar .	0830	97	1011·1	1000·1	+0.7	23·9	20·7	18·8	21·9	75	—6	4·7	—1·3	0·4	0	0	28	9	13	0	1	2	2	1	0	2	0
	1730	,,	1006·6	995·7	..	25·6	21·6	19·6	22·6	70	..	5·4	..	4·2	0	0	24	11	10	0	1	0	1	0	1	6	0
Jorhat . .	0530	90	1008·4	998·0	..	18·8	18·4	18·0	21·0	97	..	4·0	..	6·1	0	0	20	11	6	0	1	2	0	0	0	10	0
	0830	,,	1010·2	999·9	..	23·6	20·9	19·5	22·2	78	..	4·5	..	11·0	0	2	26	14	12	0	0	0	0	0	2	2	0
	1130	,,	1008·7	998.6	..	27·3	22·2	19·3	22·7	64	..	4·1	..	15·9	0	7	23	12	15	0	0	1	0	1	1	0	0
	1730	,,	1005·3	995.2	..	25·7	21·5	18·7	22·3	69	..	4·4	..	11·1	0	4	24	14	11	2	1	0	0	0	0	2	0
Golaghat . .	0830	..	..	..	..	23·2	19·9	17·4	20·5	73	..	5·4	..	..	0	0	6	0	0	0	5	0	0	0	1	24	0
	1730	..	..	..	..	28·1	21·4	16·7	20·0	55	..	5·9	..	..	0	0	16	0	0	0	11	0	0	0	5	14	0
Gohpur (R) .	0830	..																									
(R)	1730	..																									
Tezpur . .	0830	79	1010·5	1001·5	—0·2	24·4	20·6	18·5	21·1	71	—3	3·8	—0·3	..	0	0	28	0	4	24	0	0	0	0	0	2	0
	1730	,,	1010·5	996·6	..	27·6	21·8	18·5	21·2	59	..	3·6	..	..	0	0	22	2	4	15	0	0	0	1	0	8	0
Tezpur (P.B.O.) .	0230	78	1007·3	998·2	..	21·0	19·3	18·2	21·2	85	..	3·1	..	7·3	0	1	19	3	4	12	0	1	0	0	0	10	0
	0530	,,	1008·7	999·6	..	20·3	18·6	17·4	20·0	84	..	3·8	..	7·5	0	2	22	3	9	12	0	0	0	0	0	6	0
	0830	,,	1010·4	1001·4	..	24·9	20·5	18·0	20·5	67	..	3·5	..	11·1	0	1	27	1	11	16	0	0	0	0	0	2	0
	1130	,,	1008·7	999·9	..	28·6	21·7	17·5	20·2	53	..	2·6	..	13·8	0	1	29	2	6	18	1	0	2	1	0	0	0
	1730	,,	1005·4	996.5	..	27·2	21·4	18·2	20·6	59	..	3·9	..	8·0	0	1	22	0	4	15	1	0	1	2	0	7	0
	2330	,,	1008·0	998.9	..	22·4	19·7	18·0	20·7	75	..	3·9	..	9·0	0	2	23	2	10	11	0	1	0	1	0	5	0
Majbat . .	0830	..	..	..	..	..	..	..	..	..	..	4·1	..	..	0	4	26	0	3	27	0	0	6	0	0	0	0
	1730	..	..	..	..	..	..	..	..	..	..	5·4	..	..	0	1	23	0	2	17	1	1	1	2	0	6	0
Chaparmukh (R) .	0830	66																									
(R)	1730	,,																									
Tangla	0830	78	..	..	..	..	..	..	..	..	..	3·1	..	..	..	..	..	4	12	12	1	0	1	0	0	0	0
	1730	,,	..	..	..	..	..	..	..	..	..	3·6	..	..	..	..	..	5	4	2	0	1	2	10	0	6	0
Gauhati . .	0830	55	1009·6	1003·3	—0·2	25·7	21·1	18·1	21·3	64	—9	1·8	—2·0	3·5	0	0	29	4	14	5	3	0	0	0	3	1	0
	1730	,,	1004·6	998·4	..	30·2	22·3	17·5	20·7	50	..	3·2	..	2·2	0	0	18	0	6	2	3	1	2	3	1	12	0
Gauhati (Kaikuchi Aerodrome)	0230	49	1006·4	1000·7	..	21·4	19·0	17·5	20·1	80	..	1·8	..	6·2	0	0	20	1	11	3	1	0	4	0	0	10	0
	0530	,,	1007·6	1001·9	..	20·2	18·6	17·5	20·0	85	..	1·8	..	5·7	0	0	19	2	14	1	0	0	1	0	1	11	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity%	Departure from normal.	Cloud amount (Oktas)		Mean wind speed kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in gpm of the nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam—including Manipur & Tripura—*(Contd.*																											
Gauhati (Kaikuchi Aerodrome)—*(contd.)*	0830	49	1009·2	1003·6	..	26·3	20·9	17·3	20·5	60	..	2·2	..	7·6	0	0	25	5	16	1	0	0	3	0	0	5	0
	1130	,,	1008·0	1002·5	..	31·2	21·8	15·8	18·3	43	..	2·6	..	11·3	0	1	29	16	6	1	0	0	0	2	5	0	0
	1730	,,	1004·4	998·9	..	30·4	21·7	16·0	18·9	46	..	3·3	..	9·4	0	2	24	8	8	0	0	0	6	1	3	4	0
	2330	,,	1007·2	1001·5	..	23·5	19·8	17·3	20·1	70	..	2·3	..	10·5	0	5	22	1	18	2	0	1	5	0	0	3	0
Rangiya (R)	0830	,,										2·2															
(R)	1730	,,																									
Goalpara	0830	38	1009·4	1004·9	..	24·7	20·6	18·1	20·8	66	..	2·2	..	2·6	0	0	19	1	12	1	3	0	0	0	2	11	0
	1730	,,	1004·0	1000·3	..	32·6	22·3	16·9	18·5	43	..	1·6	..	4·6	0	0	25	0	6	2	2	1	9	4	1	5	0
Dhubri	0830	35	1009·0	1005·1	−0·3	26·6	21·9	18·9	22·4	64	−7	1·7	−2·2	8·2	0	0	29	0	24	0	0	2	3	0	0	1	0
	1730	,,	1004·2	1000·3	..	31·1	21·5	15·2	17·9	41	..	2·8	..	4·5	0	0	26	3	4	1	1	1	15	1	0	4	0
Dubri (Rupsi Aerodrome)	0830	36	..	..	..	27·9	21·4	17·0	20·3	53	..	2·4	..	5·8	0	0	28	0	4	11	9	1	3	0	0	2	0
	1130	,,	..	..	..	32·4	21·9	15·2	17·8	38	..	1·3	..	8·9	0	3	26	0	0	2	12	6	8	1	0	1	0
	1730	,,	..	..	..	31·3	21·6	15·0	18·1	39	..	2·1	..	2·8	0	0	16	3	2	1	2	1	4	2	1	14	0
Tura	0830	370	1009·8	968·5	..	26·3	21·5	18·8	21·8	65	..	4·0	..	7·6	0	0	25	1	0	7	5	7	3	1	1	5	0
	1730	,,	1005·1	964·7	..	31·8	24·1	19·0	23·7	52	..	3·2	..	5·8	0	0	30	0	0	0	7	9	12	0	2	0	0
Agartala	0230	16	1006·4	1004·6	..	24·3	22·3	21·2	25·4	83	..	3·7	..	10·2	0	5	20	0	0	1	9	14	0	0	1	5	0
	0530	,,	1007·6	1005·8	..	23·8	22·4	21·8	26·0	89	..	3·7	..	8·7	0	2	25	0	1	0	12	13	1	0	0	3	0
	0830	,,	1009·4	1007·6	..	29·6	24·4	21·7	26·4	63	..	3·1	..	13·8	0	8	20	0	0	0	5	19	3	0	1	2	0
	1130	,,	1008·1	1006·4	..	34·6	23·9	17·7	21·1	39	..	4·5	..	16·0	0	9	21	0	1	0	0	13	10	4	2	0	0
	1730	,,	1004·6	1002·9	..	31·8	23·2	17·9	21·5	47	..	2·7	..	16·2	0	13	16	2	0	0	1	16	7	2	1	1	0
	2330	,,	1007·1	1005·3	..	25·7	22·4	20·5	24·3	74	..	3·3	.	13·5	0	8	20	0	0	1	6	18	3	0	0	2	0
Silchar	0830	29	1011·1	1007·6	+0·1	26·0	21·6	19·2	22·3	67	−8	4·1	−0·9	2·0	0	0	20	1	5	11	1	0	0	1	1	10	0
	1730	,,	1005·6	1002·4	..	29·6	23·0	19·1	22·7	57	..	4·0	..	1·6	0	0	12	3	2	0	2	2	1	2	0	18	0
Imphal	0530	801	1011·2	921·6	..	16·8	15·1	13·9	15·8	85	..	3·0	.	6·0	0	1	18	1	0	2	3	2	5	5	1	11	0
	0830	,,	1011·2	923·2	..	22·5	17·7	14·4	16·8	62	..	3·2	..	9·6	0	3	20	1	0	2	3	6	7	3	1	7	0
	1130	,,	1008·1	921·8	..	27·5	19·3	13·9	16·4	46	..	3·7	..	16·8	0	7	23	0	1	0	0	4	15	10	0	0	0
	1730	,,	1005·7	919·1	..	25·7	18·7	14·1	16·5	51	..	2·9	..	11·2	0	4	26	0	0	1	0	1	11	17	0	0	0
	2330	,,	1009·6	921·0	..	19·4	16·1	14·1	15·9	72	..	2·7	..	7·3	0	2	23	0	1	2	1	5	8	3	5	5	0
Haflong	0830	682	1009·3	934·2	..	23·4	18·6	15·5	17·5	64	..	4·0	..	..	0	0	30	0	3	0	2	14	11	0	0	0	0
	1730	,,	1004·8	930·6	..	25·7	19·3	15·0	17·3	54	..	1·6	..	..	0	0	30	0	0	0	1	14	15	0	0	0	0
Lumding	0830	149	1009·5	992·7	..	27·1	21·3	17·9	20·5	58	−13	4·9	..	8·2	0	2	24	1	3	10	3	4	3	1	1	4	0
	1730	,,	1004·4	987·9	..	31·3	22·0	16·2	19·0	42	..	2·8	..	8·7	0	2	24	1	0	1	4	7	9	3	1	4	0
Sub-Himalayan West Bengal																											
Cooch Behar (C.W.O.)	0830	43	1009·4	1004·5	..	27·4	21·0	17·1	19·7	54	..	2·1	..	15·0	0	6	23	0	7	17	4	0	1	0	0	1	0
	1130	,,	1008·0	1003·2	..	32·5	22·7	16·7	19·8	40	..	2·4	..	13·2	0	1	29	0	1	10	6	1	6	2	0	0	4
	1730	,,	1003·6	999·0	..	31·2	22·2	17·0	19·7	44	..	1·2	..	4·9	0	0	16	5	6	2	0	0	2	1	0	14	0
Jalpaiguri	0830	83	1009·3	999·8	+0·2	24·3	19·7	16·8	18·9	63	−7	1·0	−1·4	12·6	0	4	23	6	4	17	0	0	0	0	0	3	0
	1730	,,	1003·6	994·5	..	32·7	21·2	12·7	16·0	33	..	1·4	..	8·1	0	3	23	4	6	4	1	1	3	7	0	4	0
Bagdogra	2330	131	1005·6	990·3	..	22·0	18·9	16·8	19·4	73	..	1·9	..	5·3	0	0	22	7	7	5	1	0	0	0	2	8	0
	0530	,,	1006·7	991·6	..	19·9	17·5	15·5	17·9	79	..	1·9	..	4·3	0	0	25	8	6	8	1	0	0	2	0	5	0
	0830	,,	1008·5	993·7	..	27·8	20·3	15·3	17·7	48	..	2·5	..	12·2	0	1	28	0	6	20	2	0	1	0	0	1	0
	1130	,,	1007·3	992·8	..	31·5	21·4	15·0	17·4	39	..	3·0	..	14·0	0	2	28	0	2	15	8	1	1	2	1	0	0
	1730	,,	1003·0	998·4	..	31·3	21·2	14·0	17·2	33	..	1·3	..	7·8	0	2	23	7	4	2	2	0	4	6	0	5	0
	2330	,,	..	..	..	24·1	19·8	17·9	19·8	67	..	1·8	..	5·8	0	0	28	10	10	3	0	1	1	1	2	2	0
Malda	0830	31	1008·2	1005·0	+0·6	30·4	20·5	13·5	15·9	39	−11	1·7	−0·1	9·2	0	0	30	2	0	3	1	3	12	6	3	0	0
	1730	,,	1003·8	1000·3	..	35·1	20·6	10·0	12·7	23	..	..	..	8·4	0	0	29	4	0	1	0	0	4	10	10	1	0
Gangetic WestBengal																											
Dum Dum	0230	6	1006·2	1005·5	..	25·6	24·5	23·9	29·7	91	..	0·5	..	6·9	0	0	26	0	0	0	1	11	11	3	0	4	0
	0530	,,	1007·2	1006·4	..	24·7	23·8	23·4	28·9	93	..	2·1	..	5·5	0	0	22	0	0	1	0	11	8	2	0	8	0
	0830	,,	1009·2	1008·5	..	29·8	25·6	23·7	29·5	71	..	1·8	..	10·1	0	1	27	0	0	0	0	10	13	3	2	2	0
	1130	,,	1008·5	1007·8	..	35·0	25·5	20·3	25·0	44	..	1·1	..	9·1	0	1	29	1	2	0	2	10	9	4	2	0	0
	1730	,,	1004·9	1004·2	..	33·4	25·3	21·2	25·7	51	..	2·5	..	10·6	0	4	26	0	0	0	1	19	3	1	0	6	0
	2330	,,	1007·3	1006·6	..	26·7	25·0	24·2	30·3	86	..	1·0	..	9·5	0	0	28	0	0	0	1	16	9	1	1	2	0
Calcutta	0830	6	1009·4	1008·7	+1·0	30·4	25·4	23·1	28·4	65	−8	1·7	−1·3	7·6	0	0	27	0	0	0	0	4	18	4	1	3	0
	1130	,,	1008·4	1007·7	..	35·6	25·0	19·1	23·0	40	..	1·4	..	8·3	0	0	27	1	0	0	0	4	12	4	6	3	0
	1730	,,	1005·0	1004·3	..	33·0	25·3	21·2	25·7	53	..	2·8	..	7·7	0	0	27	0	0	0	2	12	10	2	1	3	0
Barrackpore	0530	7	1007·2	1006·4	..	24·1	23·5	23·0	28·5	94	..	1·9	..	5·6	0	0	22	0	0	0	0	11	10	1	0	8	0
	0830	,,	1009·3	1008·6	..	30·1	25·3	23·1	28·4	67	..	1·5	..	10·3	0	1	29	0	0	0	0	3	14	9	4	0	0
	1130	,,	1008·4	1007·7	..	35·3	24·6	18·5	22·5	39	..	1·4	..	9·8	0	1	27	1	0	0	0	7	12	5	3	0	0

(R)Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations.										
			At mean sea level or height in gpm of the nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61	1 to 19.	Wind direction.										
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
GANGETIC West Bengal—*Contd.*																											
Barrac(pore	1730	7	1004·7	1004·0	..	33·0	23·9	19·2	22·1	46	..	3·8	..	8·3	0	2	21	0	0	0	0	14	5	2	1	7	0
	2330	,,	1007·8	1006·6	..	26·3	24·5	23·6	29·6	86	..	0·6	..	8·8	0	1	24	0	0	0	1	9	13	1	1	5	0
Saugor Island	0830	3	1009·0	1008·7	+0·5	28·7	26·1	25·1	32·4	78	+4	3·5	−0·9	33·4	0	23	7	1	0	0	0	7	19	2	1	0	0
	1730	,,	1005·5	1005·2	..	29·2	26·2	25·0	31·9	78	..	3·6	..	30·9	0	23	7	2	0	0	2	14	11	1	0	0	0
Sandheads	0530	10	1008·0	1006·9	..	27·6	25·9	25·3	32·1	87	..	2·9	..	..	0	4	26	0	0	0	0	3	22	5	6	0	0
	0830	,,	1010·0	1008·9	+0·5	28·6	26·3	25·4	32·5	82	+4	3·2	+0·1	..	0	3	27	0	1	0	0	2	23	4	0	0	0
	1130	,,	1009·7	1008·6	..	29·1	26·5	25·4	32·5	81	..	1·7	..	..	0	4	24	0	0	0	0	3	24	1	0	2	0
	1730	,,	1006·5	1005·3	..	28·4	26·2	25·1	32·2	82	..	3·1	..	..	0	5	25	1	0	0	0	9	20	0	0	0	0
	2330	,,	1007·9	1006·7	..	27·9	26·1	25·5	32·7	87	..	0·3	..	..	0	9	21	0	0	0	1	6	23	0	0	0	0
Contai	0830	11	1009·5	1008·3	..	30·3	26·6	24·6	32·0	74	..	1·9 (b)	..	4·8 (b)	0	0	25	2	0	0	0	2	20	1	0	4	0
	1730	,,	1006·2	1005·0	..	29·0	26·1	24·7	31·8	79	..	3·0 (b)	..	8·8 (b)	0	0	29	0	0	0	3	11	14	1	0	0	0
Midnapore	0830	45	1009·1	1004·1	+1·0	32·4	23·1	17·6	20·3	44	−20	0·7	−1·4	3·4	0	0	23	2	3	0	0	5	11	1	1	7	0
	1730	,,	1004·4	999·4	..	36·3	22·7	13·7	16·5	29	..	2·7	..	8·4	0	0	25	0	4	0	3	5	10	1	2	5	0
Purulia	0830	255	1009·2	981·2	..	30·4	18·7	9·8	12·1	29	..	2·1	..	3·4	0	0	30	0	0	0	1	5	8	2	14	0	0
	1730	,,	1003·6	976·4	..	35·8	20·1	7·5	10·6	19	..	2·4	..	1·9	0	0	16	2	1	0	0	0	2	6	5	14	0
Burdwan	0830	32	1008·6	1005·1	+0·7	31·5	..	..	..	..	..	0·4	−2·5	0·4	0	0	4	0	1	0	0	0	2	1	0	26	0
	1730	,,	1004·8	1001·3	..	35·6	..	..	..	..	..	1·7	..	2·4	0	0	8	0	0	0	1	3	2	1	1	22	0
Krishnagar	0830	15	1009·3	1007·7	+1·2	30·9	24·2	21·3	24·8	57	−8	0·8	−2·0	4·4	0	0	28	0	0	0	1	18	3	5	1	2	0
	1730	,,	1004·6	1003·0	..	36·1	22·7	14·7	16·8	29	..	1·5	..	3·4	0	0	29	0	0	0	1	12	0	16	0	1	0
Asansol	0230	126	1005·8	991·6	..	26·0	18·6	12·9	15·2	47	..	0·5	..	2·9	0	0	23	0	0	0	0	2	2	5	4	17	0
	0530	,,	1008·9	992·6	..	24·5	17·8	12·7	15·1	50	..	1·2	..	2·1	0	0	25	0	0	0	0	1	2	4	5	18	0
	0830	,,	1008·7	994·7	+1·1	31·6	19·7	10·5	13·1	29	−21	1·6	−0·6	7·0	0	0	27	0	0	0	1	0	3	10	13	3	0
	1130	,,	1007·6	993·8	..	36·9	20·5	7·4	10·8	18	..	2·0	..	10·2	0	3	26	2	1	0	1	0	5	13	7	1	0
	1730	,,	1003·7	900·0	..	36·1	20·5	8·6	11·5	20	..	2·5	..	7·8	0	1	25	0	0	1	0	0	2	8	15	4	0
	2330	,,	1006·6	992·5	..	28·1	19·2	12·5	15·0	40	..	0·5	..	5·4	0	1	21	0	0	0	3	3	2	6	8	8	0
Suri	0830	77	1008·8	1000·3	..	31·2	20·1	11·6	14·5	33	..	1·7	..	8·2	0	1	27	1	0	1	0	6	9	7	4	2	0
	1730	,,	1004·4	996·0	..	37·0	19·7	3·3	9·1	15	..	2·7	..	13·6	0	7	22	3	0	1	1	2	5	11	6	1	0
Berhampore	0830	19	1008·3	1006·2	+0·1	29·3	22·9	19·2	22·4	54	−10	1·1	−2·1	3·9	0	0	25	2	0	0	0	18	3	2	0	5	0
	1730	,,	1004·0	1001·9	..	35·9	21·8	11·9	4·4	25	..	1·7	..	2·0	0	0	11	1	0	0	0	1	4	5	0	19	0
Orissa																											
Baripada	0830	54	1009·8	1003·8	..	30·4	23·9	20·3	24·6	55	..	1·3	..	1·8	0	0	17	1	1	0	2	2	7	0	4	13	0
	1730	,,	1005·3	999·3	..	35·2	25·0	19·2	23·0	41	..	3·7	..	6·2	0	0	28	3	2	2	5	8	7	0	0	2	0
Balasore	0830	20	1009·3	1007·0	+0·9	30·4	24·2	21·1	25·4	59	−10	2·0	−0·6	12·4	0	8	20	2	2	0	1	9	12	0	2	2	0
	1730	,,	1005·3	1003·1	..	30·9	25·4	22·7	27·8	63	..	4·9	..	17·3	0	12	17	0	0	0	13	12	4	0	0	1	0
Chandbali	0830	6	1009·7	1009·0	+0·7	29·1	25·9	25·0	30·4	77	+5	2·1	−1·1	5·9	0	0	30	0	0	0	28	2	18	0	8	0	0
	1730	,,	1005·8	1005·1	..	32·2	25·7	23·0	28·0	60	...	3·0	..	16·7	0	8	22	1	0	3	23	0	2	0	1	0	0
Cuttack	0830	27	1009·5	1006·5	+0·5	28·8	25·1	23·4	29·1	73	+3	1·3	−1·8	0·3	0	0	1	0	0	0	0	1	0	0	0	9	0
	1730	,,	1005·2	1002·3	..	34·5	24·9	19·6	23·3	43	..	3·2	..	6·8	0	0	24	0	1	0	1	17	4	0	1	6	0
Bhubaneswar	0230	46	1006·9	1001·7	..	26·1	24·4	23·7	28·5	87	..	2·5	..	17·3	0	11	18	0	0	0	1	11	15	1	1	1	0
	0530	,,	1007·7	1002·5	..	25·4	24·2	23·7	29·4	90	..	3·3	..	12·3	0	8	19	0	0	0	0	12	12	1	2	3	0
	0830	,,	1009·8	1004·6	..	30·2	25·4	23·1	28·6	27	..	2·2	..	17·7	0	13	15	1	1	0	0	10	13	2	1	2	0
	1130	,,	1008·9	1003·8	..	36·0	24·8	18·7	22·4	37	..	1·8	..	16·6	0	10	17	1	2	0	0	8	12	2	1	3	0
	1730	,,	1006·0	1000·8	..	32·0	25·3	22·1	26·9	57	..	4·6	..	24·3	0	23	7	0	0	0	1	17	10	0	2	0	0
	2330	,,	1008·2	1003·0	..	27·3	24·9	23·7	29·2	81	..	2·7	..	21·8	0	14	16	1	0	0	2	15	11	1	0	0	0
Puri	0830	6	1010·4	1009·7	+1·4	28·6	26·1	24·8	31·7	80	0	2·3	−0·9	18·9	0	11	19	1	0	0	0	0	25	4	0	0	0
	1730	,,	1006·7	1006·0	..	28·3	26·5	25·5	33·5	85	..	4·6	..	24·8	0	20	10	0	0	0	0	3	26	1	0	0	0
Gopalpur	0530	17	1008·1	1006·2	..	25·0	23·9	23·3	28·7	91	..	1·3	..	10·9	0	5	22	0	0	0	0	5	18	1	3	3	0
	0830	,,	1010·2	1008·3	+1·4	27·9	25·0	23·7	29·6	79	+1	1·7	+0·1	13·9	0	9	17	0	1	0	1	9	14	0	1	4	0
	1130	,,	1009·9	1008·0	..	30·3	26·3	24·5	31·2	72	..	1·2	..	19·9	0	13	17	0	0	0	0	1	16	13	0	0	0
	1730	,,	1006·8	1004·9	..	27·9	25·8	24·9	31·1	84	..	4·6	..	24·2	0	20	9	0	0	0	0	0	11	17	1	0	1	0
	2330	,,	1008·7	1006·8	..	26·4	25·7	24·3	30·5	89	..	1·6	..	20·4	0	15	14	0	0	0	0	0	6	22	0	1	1	0
Koraput	0830	913	1529·9	912·5	..	23·6	19·1	16·3	18·9	65	..	3·0	..	..	0	0	30	2	0	0	0	0	17	9	2	0	0	0
	1730	,,	1511·3	909·5	..	28·5	18·6	12·1	14·0	38	..	5·1	..	..	0	0	30	5	1	6	6	3	0	5	4	0	0
Titilagarh	0830	211	1010·0	986·5	..	29·4	21·4	16·6	18·8	48	..	2·2	..	3·3	0	0	29	1	0	0	4	8	13	2	1	1	0
	1730	,,	1004·5	981·8	..	37·2 (1)	22·5 (1)	12·9 (1)	15·2 (1)	26	..	1·4	..	2·0 (1)	0	0	20	3	8	1	1	3	3	0	1	10	0
Tolangi*	0830	...	..	..	..	29·9	24·4	21·1	12·7	58	..	..	..	3·0	0	0	19	0	0	0	2	4	5	4	4	0	0
	1730	..	..	..	..	..	..	..	..	..	..	...	..	..	0	0	..	..	..	..	..	..	..	..	..	..	..	..
Angul	0830	139	1009·9	994·5	+1·5	28·8	22·4	18·6	21·9	55	−2	1·6	−1·2	3·6	0	0	26	7	4	2	2	1	3	4	3	4	0
	1730	,,	1005·2	989·9	..	36·3	21·6	11·3	13·7	25	..	4·0	..	7·4	0	3	22	3	3	1	2	3	4	4	5	5	0

(b) Mean of 29 days.

(l) Mean of 19 days.

(*) Data not available.

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (Km. ph.)			No. of obeservations.									
			At mean sea level or height in g p m of the nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—(Contd.)																											
Sambalpur . .	0830	148	1009·9	993·5	+1·7	31·6	22·4	16·3	19·6	41	—7	1·9	0	2·4	0	0	21	3	3	1	0	4	6	2	2	9	0
	1730	,,	1095·1	988·9	..	35·7	22·9	15·3	17·9	32	..	1·9	..	1·7	0	0	16	4	1	0	1	2	3	2	3	14	0
Jharsuguda . .	0230	230	1006·7	980·9	..	25·3	18·8	14·0	16·6	51	..	1·9	..	3·9	0	0	22	7	5	1	2	3	3	1	0	8	0
	0530	,,	1007·8	981·8	..	23·9	18·3	14·3	16·6	57	..	2·5	..	2·1	0	0	14	4	3	1	2	2	1	1	0	16	0
	0830	,,	1009·6	984·1	..	30·2	20·6	14·3	16·1	39	..	2·2	..	4·2	0	0	25	8	3	1	2	5	3	3	0	5	0
	1130	,,	1003·6	983·5	..	35·6	21·3	11·2	13·9	24	..	2·0	..	5·6	0	0	28	5	3	0	1	3	12	3	1	2	0
	1730	,,	1004·2	979·3	..	36·0	20·6	9·1	11·3	21	+7	2·5	..	6·7	0	1	25	2	3	1	1	7	7	3	2	4	0
	2330	,,	1007·3	981·6	..	27·9	19·4	13·6	15·4	43	..	1·6	..	4·3	0	0	20	6	5	0	3	2	3	0	1	10	0
Chota Nagpur—																											
Jamshedpur . .	0830	129	1009·3	994·9	+1·1	29 7	20·4	14·0	16·7	40	—6	1·5	—0·3	4·9	0	0	26	0	0	0	0	0	2	17	7	4	0
	1730	,,	1003·8	989·3	..	37·2	21·1	8·9	11·8	20	..	2·8	..	6·1	0	2	26	2	0	2	0	0	4	11	9	2	0
Jamshedpur (P.B.O.)	0530	145	1007·6	991·0	..	24.0	18.2	14·0	16·1	54	..	1·8	..	..	0	0	12	1	0	0	1	1	1	2	6	18	0
	0830	,,	1009·3	993·1	..	29·8	20·1	13·3	15·6	38	..	1·8	..	..	0	0	26	0	0	0	0	0	11	7	8	4	0
	1130	,,	1008·0	992·2	..	36·8	20·5	7·6	10·7	18	..	2·2	..	..	0	0	28	0	1	0	2	4	7	5	9	2	0
	1730	,,	1003·9	988·1	..	37·3	20·5	6·9	10·7	17	..	3·6	..	..	0	0	23	1	1	0	0	0	5	6	10	7	0
	2330	,,	1017·1	990·9	..	29·1	19·6	12·9	15·1	39	..	1·1	..	..	0	0	19	1	4	2	3	3	5	1	0	11	0
Chaibasa . .	0830	226	1009·0	984·0	+1·3	31·1	23·5	19·2	22·9	50	—3	1·9	+0·1	1·7	0	0	15	0	1	0	0	0	12	0	2	15	0
	1730	,,	1004·0	979·5	..	36·2	24·2	17·7	20·4	34	..	3·8	..	1·6	0	0	15	1	1	0	0	0	4	1	8	15	0
Ranchi . . .	0830	655	1008·1	937·1	+1·1	29·9	20·3	14·1	16·5	39	+3	0·9	—0·9	0·3	0	0	3	1	0	1	0	0	0	1	0	27	0
	1730	,,	1004·6	934·4	..	31·8	19·8	11·1	14.5	32	..	1·7	..	0·4	0	0	3	0	0	0	0	1	0	2	0	27	0
Ranchi (C.W.O.) *	0530	652																									0
*	0830	,,																									0
	1130	,,	1007·2	937·6	..	32·9	18·1	7·5	8·9	22	..	2·2	..	14·1	0	5	24	2	0	1	0	2	7	9	8	1	0
	1730	,,	1003·7	934·4	..	33·6	18·7	7·5	10·4	21	..	2·7	..	9·6	0	4	24	0	0	0	0	0	5	15	8	2	0
Daltonganj . .	0830	221	1009·4	984·8	+1·6	29·6	19·4	11·9	14·4	36	—3	2·2	+0·9	3·4	0	0	16	1	2	2	3	0	0	4	4	14	0
	1730	,,	1004·2	980·2	..	35·9	20·1	7·4	10·8	18	..	2·7	..	9·5	0	0	29	1	1	0	1	0	1	3	22	1	0
Hazaribagh . .	0830	611	1008·5	942·1	+1·1	29·1	16·8	6·9	10·3	27	—1	2·2	+0·4	9·3	0	3	24	5	0	0	0	0	4	4	14	3	0
	1730	,,	1003.6	938·4	..	33·0	17.8	5·5	9·2	19	..	2·1	..	13·2	0	2	27	6	0	0	0	0	1	2	20	1	0
Dhanbad . .	0830	257	1008·2	979·9	..	31.6	19·7	10·3	13.1	28	..	1·5	..	..	0	0	30	4	0	0	1	1	3	14	7	0	0
	1730	,,	1003·7	975·8	..	35·6	20·5	8·6	12·0	21	..	2·4	..	..	0	0	30	9	0	0	0	1	2	4	14	0	0
Bihar																											
Purnea . . .	0830	38	1008·4	1004·2	+0·4	29·1	20·0	13·4	15·7	41	—19	1·2	—1·0	5·0	0	0	21	0	1	7	0	0	1	11	0	9	0
	1730	,,	1003·5	999·3	..	34·0	20·3	9·8	12·3	24	..	1·4	..	3·2	0	0	16	0	0	0	0	0	4	12	0	14	0
Forbesganj . .	0830	61	1008·2	1001·4	..	28·3	20·2	14·3	17·1	45	..	1·6	..	8·7	0	0	30	2	1	17	1	0	2	4	3	0	0
	1730	,,	1003·7	996·3	..	35·2	20·9	11·0	13·3	24	..	3·0	..	10·5	0	3	25	1	1	1	0	0	0	25	0	2	0
Darbhanga . .	0830	49	1008·4	1002·9	+0·8	27·9	20·4	15·6	17·9	49	—7	1·2	—0·2	2·8	0	0	28	0	4	3	5	0	3	13	0	2	0
	1730	,,	1003·7	998·3	..	35·2	22·4	14·2	16·7	31	..	1·0	..	2·9	0	0	24	0	0	0	1	0	1	20	2	6	0
Motihari (R) .	0830	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Patna . . .	0830	53	1008·3	1002·4	+0·9	31·0	18·9	9·2	11·8	28	—16	1·8	+0·5	10·2	0	0	28	2	2	0	0	0	8	11	5	2	0
	1730	,,	1003·9	998·1	..	35·7	19·6	6·1	9·7	17	..	1·4	..	12·6	0	0	29	1	1	0	0	0	3	18	6	1	0
Patna (Aerodrome)	0530	60	1005·9	999·0	..	22·4	15·8	10·4	12·5	49	..	2·5	..	5·1	0	0	21	1	0	0	0	1	5	11	3	9	0
	0830	,,	1007·8	1001·1	..	30·3	18·1	9·7	12·0	29	..	1·7	..	10·2	0	2	25	2	1	0	0	0	3	17	4	3	0
	1130	,,	1006·9	1000·3	..	35·5	19·8	7·0	10·0	19	..	1·8	..	18·5	0	13	17	0	2	2	0	0	3	13	10	0	0
	1730	,,	1003·1	996·6	..	38·2	19·3	4·1	8·6	14	..	1·4	..	17·8	0	10	20	1	0	0	0	0	0	11	18	0	0
	2330	52	1006·1	1000·3	..	28·1	18·1	9·9	12·6	34	..	0·4	..	0·6	0	0	3	0	0	0	0	0	0	0	3	27	0
Delhri . . .	0830	107	1008·8	996·8	..	31·7	19·4	10·1	12·7	28	..	1·5	..	3·6	0	0	30	1	0	0	1	2	20	2	4	0	0
	1730	,,	1003·8	992·1	..	37·0	20·2	6·2	9·7	16	..	1·5	..	4·6	0	0	30	1	1	0	0	0	3	11	14	0	0
Gaya . . .	0230	116	1006·3	993·1	..	24·1	16·5	10·1	12·8	44	..	0·8	..	2·5	0	0	12	0	0	0	0	0	1	5	4	2	18	0
	0530	,,	1007·3	993·9	..	22·7	16·1	10·5	12·8	50	..	1·9	..	3·9	0	3	8	1	0	0	0	0	1	5	2	2	19	0
	0830	,,	1009·0	996·0	+1·7	31·1	19·7	11·0	13·7	32	+10	2·1	+0·8	6·3	0	3	18	0	0	0	0	0	7	12	2	9	0	0
	1130	,,	1008·3	995·5	..	36·4	20·9	9·3	12·0	21	..	1·6	..	16·1	0	11	16	2	1	0	0	0	1	9	14	3	0
	1730	,,	1004·2	991·5	..	36·9	20·7	8·4	11·4	18	..	1·3	..	15·8	0	9	19	2	0	0	0	0	0	6	20	2	0
	2330	,,	1007·1	993·9	..	26·4	17·4	9·8	12·8	37	..	0·8	..	2·9	0	1	9	1	0	0	0	1	4	1	3	20	0
Jamui . . .	0830	82	1008·3	999·1	..	32·5	24·6	20·5	24·1	50	..	1·9	..	6·3	0	1	27	1	0	6	0	0	0	6	15	2	0
	1730	,,	1003·8	994·7	..	36·0	27·3	23·0	29·5	48	..	1·6	..	7·3	0	0	29	0	0	1	1	0	0	10	17	1	0
Dumka . . .	0830	149	1008·7	992·1	+1·0	31·4	20·0	11·7	14·1	31	—16	1·0	—0·6	..	0	0	30	2	1	0	5	0	9	5	8	0	0
	1730	,,	1003·7	987·5	..	36·0	20·4	8·4	11·3	21	..	1·4	..	..	0	0	29	1	0	1	1	0	3	14	9	1	0
Bhaglpur .	0530	49	1006.1	1000.5	..	24·8	17·0	10·4	13·1	44	..	1·0	..	5·9	0	1	20	0	0	2	1	1	10	7	0	9	0
	0830	,,	1008·4	1003·0	..	29·8	19·7	12·3	15·0	37	..	1·3	..	7·8	0	2	19	0	0	2	2	1	1	12	3	9	0

* Data not available.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean Temperature in °C			Vapour pressure in mbs.	Relative humidity %.		Cloud amount (Oktas).		Mean wind speed, kms per hour.	Wind speed (kms.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*(Contd.)*																											
Bhagalpur	1130	49	1007·7	1002·4	..	35·7	21·0	9·8	12·8	23	..	1·8	..	12·7	0	9	12	0	0	2	0	0	0	17	2	9	0
	1730	,,	1003·7	993·3	..	34·8	21·0	10·7	13·4	26	..	1·2	..	9·4	0	3	24	0	0	0	0	0	1	21	5	3	0
	2330	,,	1006·1	1000·6	..	28·3	18·2	9·7	12·9	35	..	0·4	..	4·1	0	0	20	0	0	1	1	3	3	11	1	10	0
Sabour	0830	37	1008·3	1004·1	+0·6	29·7	21·0	15·2	18·0	43	−1	2·0	+0·1	8·2	0	0	27	1	3	1	0	0	4	11	7	3	0
	1730	,,	1003·5	999·4	..	35·9	22·2	13·1	15·8	27	..	1·7	..	9·2	0	0	28	1	0	0	0	0	0	9	18	2	0
U. P., East—																											
Gonda	0830	110	1008·4	996·1	..	28·7	18·2	10·7	12·5	34	+2	1·0	−0·4	4·8	0	1	19	1	0	0	0	0	0	10	9	10	0
	1730	,,	1004·0	992·2	..	35·5	18·9	5·6	8·3	17	..	1·5	..	11·4	0	3	22	1	0	0	0	0	0	1	23	5	0
Nautanwa	0830	99	1007·8	996·5	..	27·2	17·6	11·1	12·1	38	..	1·2	..	5·0	0	0	27	3	1	2	6	2	2	5	6	3	0
	1730	,,	1003·0	992·4	..	34·6	19·1	3·9	9·2	19	..	1·1	..	11·8	0	4	25	1	1	1	0	0	5	16	5	1	0
Gorakhpur	0830	77	1007·8	999·0	+0·4	28·6	18·0	9·7	12·5	33	−13	1·5	+0.4	3·4	0	0	24	0	1	0	0	0	1	21	1	6	0
	1730	,,	1003·6	996·3	..	35·6	20·5	9·3	12·0	21	..	2·0	..	5·0	0	0	29	0	0	0	0	0	0	29	0	1	0
Gorakhpur (P.B.O.)	0230	78	1005·1	996·2	..	25·1	16·7	9·6	12·2	41	..	1·2	..	3·8	0	0	19	0	0	0	0	1	1	16	1	11	0
	0530	,,	1005·9	996·9	..	23·1	16·0	10·0	12·5	46	..	1·7	..	3·2	0	0	19	1	0	0	0	0	7	10	1	11	0
	1130	,,	1007·4	998·8	..	35·4	19·5	6·5	9·3	19		1·1	..	7·7	0	1	27	0	1	0	0	3	2	15	7	2	0
	2330	,,	1006·0	997·1	..	27·3	18·4	10·9	13·9	39	..	1·1	..	4·5	0	0	21	0	0	0	0	0	4	14	3	9	0
Azamgarh	0830	78	1007·6	999·1	..	28·9	20·5	14·5	17·4	42	..	0·9	..	..	0	0	21	0	0	0	0	0	1	20	0	9	0
	1730	,,	1003·7	995·2	..	35·3	22·6	14·0	17·3	29	..	1·0	..	..	0	0	14	0	0	0	0	0	0	14	0	16	0
Ballia	0830	64	1007·5	1000·3		27·8	18·3	11·1	13·4	36	−1	2·2	..	5·5	0	0	28	0	0	1	0	1	10	15	1	2	0
	1730	,,	1003·4	996·5	..	36·9	20·7	8·1	11·1	18	..	2·1	..	11·1	0	1	29	0	0	0	0	0	8	21	1	0	0
Varanasi (Banaras)	0830	76	1008·9	1000·4	+1·6	31·0	20·8	14·9	16·3	38		1·6	+0·3	7·6	0	0	21	1	1	0	2	4	9	2	2	9	0
	1730	,,	1004·7	996·3	..	35·8	21·7	11·9	14·6	25	..	1·7	..	9·0	0	0	29	2	1	0	0	0	6	15	5	1	0
Varanasi *(Banaras) (Babatpur Aerodrome)	0530	85	1007·5	997·7	..	21·9	16·5	12·5	13·8	56	..	1·9	..	5·0	0	0	26	0	0	0	0	3	12	9	2	4	0
	0830	,,	1009·5	999·9	..	29·8	20·6	13·9	17·2	39	..	1·9	..	12·5	0	2	28	0	0	1	0	1	12	12	4	0	0
	1130	,,	1009·2	999·8		35·3	21·6	13·3	15·3	28	..	1·6	..	20·0	0	11	19	2	0	0	0	1	5	12	10	0	0
	1730	,,	1005·1	995·8	..	35·9	21·6	12·0	14·1	24	..	1·9	..	17·1	0	7	23	1	0	0	0	0	1	12	16	0	0
	2330	,,	1007·6	997·9	..	26 3	18·3	12·3	15·4	43	..	1·1	..	6·3	0	0	26	1	2	0	0	2	5	9	7	4	0
Allahabad (Bamrauli)	0230	98	1006·6	995·5	..	25·3	16·6	9·3	12·3	39	..	1·6	..	4·7	0	0	22	1	0	0	1	2	4	8	6	8	0
	0530	,,	1007·2	995·9	..	23·1	16·7	11·3	14·1	46	..	2·2	..	3·4	0	0	20	0	1	0	1	2	5	11	0	10	0
	0830	,,	1009·3	998·2	+1·7	29·4	18·2	10·0	12·1	30	−2	2·1	+0·7	7·9	0	1	25	1	0	0	0	0	7	15	3	4	0
	1130	,,	1008·9	998·1	..	35·9	19·6	6·7	9·6	18	..	1·8	..	13·4	0	3	25	2	0	1	0	1	3	13	8	2	0
	1730	,,	1004·8	994·1	..	36·7	19·6	4·8	8·6	15	..	2·5	..	15·6	0	8	22	2	1	0	0	0	1	12	14	0	0
	2330	,,	1007·4	996·3	..	27·4	17·8	10·2	12·1	36	..	1·6	..	4·5	0	0	21	2	1	0	0	0	5	4	9	9	0
Banda	0830	121	1009·8	996·2	..	30·3	20·4	13·9	15·3	38	..	1·9	..	0·6	0	0	5	0	0	0	0	0	1	2	2	25	0
	1730	,,	1005·3	992·1	..	37·5	23·2	14·5	16·5	26	..	1·9	..	3·5	0	0	22	0	0	0	1	0	7	0	14	8	0
Fatehpur	0830	114	1008·9	996·4	..	29·8	18·9	10·7	13·7	31	−6	1·6	+0·3	1·2	0	0	5	1	0	0	0	1	0	2	1	25	0
	1730	,,	1005·1	993·8	..	35·7	21·6	10·7	13·9	23	..	2·7	..	2·5	0	0	7	0	0	0	0	0	0	5	2	23	0
Kanpur	0830	126	1009·5	995·4	+2·3	28·5	19·6	12·8	15·4	41	+8	2·3	+1·7	11·0	0	3	25	4	0	0	1	3	3	10	7	2	0
	1730	,,	1005·4	991·6	..	35·9	21·9	12·5	15·5	26	..	3·2	..	15·6	0	8	22	4	0	0	0	1	0	14	11	0	0
Lucknow	0830	113	1009·1	996·4	+2·0	27·5	18·4	11·6	13·3	39	+3	1·2	0	..	0	0	30	1	0	0	1	0	7	14	7	0	0
	1730	,,	1005·2	992·7	..	35·6	19·3	5·6	9·5	16	..	1·1	..	..	0	0	30	1	1	1	0	0	12	8	7	0	0
Lucknow (Amausi Aerodrome)	0230	128	1006·5	991·8	..	22·7	15·1	8·1	11·3	42	..	1·5	..	6·3	0	1	22	2	1	0	0	1	3	8	8	7	0
	0530	,,	1006·8	992·0	..	20·1	14·2	8·6	11·5	49	..	2·0	..	4·7	0	0	22	1	0	0	1	0	4	8	8	8	0
	0830	,,	1008·8	994·3	+1·5	29·2	17·7	8·8	11·5	31	+6	1·9	+0·7	11·2	0	2	27	4	0	0	1	0	4	9	11	1	0
	1130	,,	1008·3	994·2	.	34·8	19·0	4·9	9·3	17	..	1·7	..	18·1	0	8	22	0	0	0	0	2	2	10	16	0	0
	1730	,,	1004·6	990·6	..	34·9	18·6	4·4	8·1	16	..	2·5	..	19·9	0	12	18	2	1	1	0	0	1	6	19	0	0
	2330	,,	1007·1	992·7	..	24·9	16·5	8·6	12·2	37	..	1·5	..	6·8	0	0	26	2	0	1	0	1	2	9	11	4	0
Hardoi	0830	142	1008·5	992·4	..	26·9	18·8	12·8	14·9	44	..	0·7	..	6·1	0	0	23	5	1	1	0	0	0	7	9	7	0
	1730	,,	1004·8	989·2	..	34·5	21·0	11·6	14·2	26	..	1·3	..	9·0	0	1	24	3	0	2	0	0	1	5	14	5	0
Lakhimpur Kheri	0830	147	1008·0	991·3	..	25·5	19·1	14·6	17·0	52	..	0·9	..	3·1	0	0	23	0	0	0	0	0	0	21	2	7	0
	1730	,,	1004·4	988·3	..	34·4	22·0	14·3	16·2	31	..	1·1	..	2·7	0	0	24	0	0	0	0	0	0	24	0	6	0
Bahraich	0830	124	1007·5	993·6	+0·6	27·7	20·2	15·5	17·7	48	+3	2·0	+1·0	3·8	0	0	18	0	0	0	1	0	8	0	9	12	0
	1730	,,	1003·9	990·3	..	34·8	22·4	14·6	17·1	31	..	2·3	..	5·4	0	0	27	1	0	0	0	0	8	1	17	3	0
U.P., West—																											
Orai	0830	141	1011·0	995·2	..	29·0	19·9	13·5	15·5	40	..	1·1	..	4·7	0	0	30	3	2	0	1	1	5	2	16	0	0
	1730	,,	1006·0	990·6	..	35·9	23·2	15·0	18·2	30	..	1·4	..	4·0	0	0	30	7	1	1	1	1	3	5	11	0	0
Jhansi	0830	251	1009·8	981·7	+1·5	28·1	18·4	11·9	12·8	37	+8	1·6	+0·5	2·4	0	0	19	2	2	1	1	5	4	0	4	11	0
	1730	,,	1004·9	978·1	..	36·4	21·7	11·6	13·5	23	..	3·5	..	4·4	0	0	29	5	4	0	1	0	0	1	18	1	0
Agra	0830	169	1010·1	991·1	+2·4	27·8	18·0	10·3	12·8	35	+7	1·6	+0·3	2·5	0	0	18	1	0	0	1	1	6	3	6	12	0
	1730	,,	1005·5	987·1	..	35·4	19·5	6·4	9.5	18	[illegible]	2·5	..	2·6	0	0	21	0	1	0	1	2	2	1	14	9	0

*Data extracted from daily telegrams.

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in meters.	Mean pressure in millibars.			Mean Temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
U. P. West—*(Contd.)*																											
Mainpuri	0830	157	1009·9	992·9	+3·2	27·6	19·7	14·0	17·1	44	+8	0·8	−0·6	2·4	0	0	21	0	0	0	0	3	4	10	4	9	0
	1730	„	1005·3	988·8	..	33·4	21·7	13·6	16·4	32	..	2·0	..	1·9	0	0	18	0	0	0	0	0	1	12	5	12	0
Aligarh	0830	187	1009·3	988·1	..	25·4	19·1	14·7	17·0	51	+22	2·4	+1·4	3·0	0	0	24	2	1	2	0	1	0	10	8	6	0
	1730	„	1005·8	985·2	..	34·3	22·3	14·9	17·5	31	..	3·7	..	2·4	0	0	20	3	0	1	0	0	0	5	11	10	0
Bareilly	0830	173	1008·3	988·8	+1·3	26·8	17·7	10·3	13·2	38	−6	2·3	+0·7	7·3	0	2	24	1	0	0	1	1	1	15	7	4	0
	1730	„	1004·6	985·7	..	33·9	18·7	5·6	9·1	19	..	3·7	..	6·2	0	0	26	0	0	1	0	0	1	23	1	4	0
Bareilly (P.B.O.)	0230	172	1006·4	986·5	..	23·4	16·3	10·2	12·5	46	..	1·3	..	6·1	0	2	21	2	2	2	0	1	0	8	8	7	0
	0530	„	1006·6	986·0	..	21·8	15·8	11·7	12·7	54	..	1·9	..	3·9	0	1	15	1	0	1	0	0	0	7	7	14	0
	1130	„	1008·3	989·2	..	32·1	19·6	9·6	12·8	28	..	2·0	..	11·4	0	3	27	1	0	2	1	0	0	12	13	0	1
	2330	„	1007·3	987·8	..	26·0	17·2	11·4	12·5	42	..	1·2	..	5·6	0	0	23	1	1	3	0	0	0	7	11	7	0
Meerut	0830	222	1008·8	983·8	+1·8	25·1	18·7	14·1	16·3	51	+10	0·6	−0·9	7·3	0	0	23	3	0	4	0	0	1	11	4	7	0
Najibabad	0830	270	1009·2	978·7	..	23·5	16·7	10·8	13·5	49	..	1·5	..	3·1	0	0	15	4	3	1	1	0	0	0	6	15	0
	1730	„	1006·1	976·9	..	32·6	19·3	8·8	11·8	25	..	1·3	..	4·6	0	0	23	6	3	0	1	0	0	0	13	7	0
Roorkee	0830	274	1009·0	978·0	+1·5	23·9	17·1	11·8	14·3	49	+8	3·7	+2·2	2·0	0	0	19	0	1	0	2	0	0	0	16	11	0
	1730	„	1005·5	975·4	..	31·8	18·8	8·5	10·9	24	..	4·0	..	2·9	0	0	28	0	1	0	2	0	0	0	25	2	0
Dehra Dun	0530	682	1008·1	931·5	..	17·9	13·1	8·9	11·6	57	..	2·3	..	2·1	0	0	13	5	7	0	0	0	0	0	1	17	0
	0830	„	1008·8	933·5	+1·5	22·8	15·5	10·0	12·4	45	+1	2·5	+0·2	2·4	0	0	18	2	2	1	3	3	6	1	0	12	0
	1130	„	1008·1	934·1	..	27·9	16·8	8·3	12·9	31	..	3·6	..	2·4	0	0	20	1	4	1	2	1	5	5	1	10	0
	1730	„	1005·4	931·6	..	28·1	17·0	8·2	11·6	30	..	2·8	..	3·3	0	0	22	1	2	0	0	2	5	9	3	8	0
	2330	„	1008·7	932·8	..	20·8	14·5	9·5	11·5	50	..	1·6	..	1·7	0	0	14	6	7	0	0	0	0	0	1	16	0
Punjab (India) (Including Delhi)																											
New Delhi	0230	216	1007·5	982·9	..	23·4	16·0	9·3	11·9	43	..	1·5	..	9·7	0	2	23	7	1	1	1	1	2	2	10	5	0
	0530	„	1007·8	983·0	..	21·2	15·2	9·9	12·1	48	..	2·8	..	7·9	0	2	23	5	0	1	1	1	1	9	7	5	0
	0830	„	1009·5	984·9	+1·7	25·3	17·2	10·6	12·8	42	+10	2·9	+1·4	14·7	0	6	23	2	1	3	2	1	1	8	11	1	0
	1130	„	1009·3	985·3	..	31·5	18·7	8·5	12·7	25	..	2·8	..	19·7	0	9	20	3	2	0	2	1	2	6	13	1	0
	1730	„	1005·6	981·8	..	33·5	18·5	4·5	8·9	18	..	3·6	..	16·2	0	8	21	4	0	2	0	0	2	1	20	1	0
	2330	„	1008·2	983·7	..	25·2	16·7	9·3	11·7	39	..	1·6	..	10·6	0	2	24	7	1	3	1	1	1	2	10	4	0
Hissar	0530	221	1008 7	983·2	..	18·7	14·1	9·8	12·9	56	..	2·7	..	6·0	0	1	25	5	2	1	1	4	3	6	4	4	0
	0830	„	1010·0	984·8	+1·9	22·6	16·1	10·6	13·5	49	+8	2·1	+0·7	5·2	0	0	26	4	2	1	4	3	2	2	8	4	0
	1130	„	1009·6	985·2	..	32·9	18·7	7·3	10·0	22	..	2·6	..	7·7	0	0	28	4	1	1	4	2	4	4	8	2	0
	1730	„	1006·1	982·1	..	33·6	18·4	5·1	8·9	18	..	2·6	..	8·4	0	0	29	5	1	0	1	1	2	5	14	1	0
	2330	„	1008·7	983·6	..	24·0	15·6	8·4	10·9	38	..	2·3	..	5·4	0	2	17	2	5	1	1	1	4	0	5	11	0
Karnal	0830	249	1009·2	980·6	..	23·5	16·4	1·4	13·0	49	..	3·1	..	0·6	0	0	3	0	1	0	0	0	0	1	1	27	0
	1730	„	1006·3	978·6	..	32·4	19·1	8·5	11·0	25	..	4·3	..	1·2	0	0	8	0	0	0	1	0	0	3	4	22	0
Patiala	0830	251	1009·0	980·7	..	24·0	16·9	11·2	13·7	47	..	5·5	..	8·6	0	1	26	10	0	0	5	0	0	0	12	3	0
	1730	„	1006·0	978·9	..	31·6	18·4	7·2	10·3	23	..	4·0	..	10·7	0	2	26	6	3	0	3	0	1	2	13	2	0
Ambala	0830	272	1008·2	977·6	+1·1	23·4	17·4	12·7	14·7	53	+16	3·6	+1·8	3·4	0	0	22	0	2	0	4	0	0	0	16	8	0
	1730	„	1005·5	975·5	..	31·4	20·0	11·8	13·7	32	..	4·2	..	4·3	0	0	25	0	1	0	4	0	0	0	20	5	0
Ambala (P.B.O.)	0230	278	1007·1	975·7	..	22·0	15·7	11·5	13·4	54	..	1·8	..	11·8	0	2	26	4	0	4	4	0	0	2	14	2	0
	0530	„	1007·1	975·6	..	20·8	15·4	11·5	13·1	58	..	3·5	..	11·5	0	1	28	3	2	1	8	0	1	2	12	1	0
	1130	„	1008·5	977·9	..	30·4	19·0	11·3	13.0	33	..	3·8	..	12·4	0	4	25	5	2	3	3	1	2	2	11	1	0
	2330	„	1007·8	976·6	..	24·5	16·6	11·3	12·7	45	..	2·0	..	10·2	0	3	25	2	2	1	5	1	1	1	15	2	0
Chandigarh	0830	347	1008·5	969·5	..	24·4	16·7	10·2	13·3	49	..	1·5	..	..	0	0	25	3	5	5	3	0	0	0	9	5	0
	1730	„	1006·3	968·2	..	30·7	18·1	7·4	11·6	34	..	0·7	..	..	0	0	26	2	2	0	6	0	3	0	13	4	0
Ludhiana	0830	247	1009·2	981·2	+1·7	24·0	17·8	13·5	15·5	55	+9	2·9	+1·1	4·8	0	0	24	1	8	3	1	0	0	8	3	6	0
	1730	„	1006·9	979·5	..	30·9	20·9	14·4	16·3	37	..	3·4	..	6·6	0	0	28	1	3	1	4	4	1	7	7	2	0
Ferozepur	0830	200	1009.7	986·6	..	21·8	18·2	15·0	17·8	65	..	2·9	..	2·8	0	0	22	2	9	0	0	1	2	0	8	8	0
	1730	„	1006·7	984·5	..	29·9	20·8	13·9	17·2	36	..	3·1	..	2·9	0	0	24	4	6	0	0	0	1	1	12	6	0
Amritsar	0530	234	1008·9	981·7	..	16·9	14·6	12·8	14·7	77	..	4·4	..	9·1	0	3	24	3	5	2	1	0	2	4	10	3	0
	0830	„	1010·0	983·3	..	21·7	16·9	13·3	15·5	60	..	4·0	..	11·2	0	4	26	2	6	1	1	0	1	5	14	0	0
	1130	„	1010·0	983·8	..	27·8	18·8	12·3	14·6	40	..	3·7	..	11·0	0	3	26	3	4	5	1	1	0	6	9	1	0
	1730	„	1007·0	981·0	..	29·7	19·0	11·0	13·3	33	..	4·2	..	11·0	0	3	26	2	1	1	3	1	2	12	7	1	0
Pathankot	0830	344	1010·1	971·1	..	21·6	16·8	12·7	15·5	58	..	4·4	..	3·0	0	0	14	0	4	7	2	0	0	1	0	16	0
	1730	„	1007·7	969·6	..	28·5	19·1	11·9	14·2	36	..	5·6	..	4·3	0	0	24	0	3	2	1	0	2	16	0	6	0
Himachal Pradesh																											
Bilaspur	0830	493	1010·7	954·7	..	19·3	15·1	11·8	14·0	64	..	4·1	..	4·5	0	1	22	3	3	3	1	3	1	2	4	7	3
	1730	„	1006·0	952·2	..	29·2	17·1	7·5	9·8	27	..	4·6	..	6·9	0	1	28	3	1	1	1	0	4	3	12	1	4
Mandi	0830	761	1011·2	926·0	..	16·8	13·8	11·4	13·4	78	..	3·7	..	0·7	0	0	7	1	0	1	0	2	1	0	2	23	0
	1730	„	1005·7	923·2	..	25·8	16·7	9·4	12·0	38	..	3·7	..	3·5	0	0	20	1	0	1	0	1	2	7	8	10	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean Temperature in °C			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61	1 to 19	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Jammu & Kashmir																											
Srinagar . .	0830	1587	1521·0	843·4	+1·3	9·3	7·8	6·5	9·9	83	—2	5·7	+1·6	1·4	0	0	13	1	0	0	7	0	1	0	4	17	0
	1130	,,	1521·3	843·5		12·4	9·3	6·7	9·7	70		5·7	..	1·4	0	0	14	2	0	0	3	0	0	2	7	16	0
	1730	,,	1500·4	841·5	..	13·9	9·7	5·9	9·4	63		6·4	..	2·3	0	0	16	1	2	2	0	1	1	0	11	14	0
Gulmarg . .	0830	2655	Closed during winter months																								
	1730	,,																									
Leh * . .	0530	3514	3073·3	663·3	..	−0·4	−3·4	−8·9	3·0	52	..	3·8	..	6·5	0	0	19	4	13	0	0	0	1	1	0	10	0
	0830	,,	3077·7	663·8	−2·7	3·0	−0·9	−7·8	3·5	46	−4	4·4	+0·2	1·4	0	0	6	0	0	0	1	0	5	0	0	24	0
	1730	,,	3037·7	661·3	..	7·8	2·1	−6·0	3·5	37	..	5·5	..	10·9	0	1	29	4	2	1	0	3	6	13	1	0	0
Skardu (R) .	0830	2288																									
(R) .	1730	,,																									
Gilgit (R) . .	0830	1490																									
(R) .	1730	,,																									
Misgar (R) . .	0830	3106																									
(R) .	1730	,,																									
Jammu . . .	0830	..				20·7	15·3	11·0	13·0	55	+15	4·8	+2·3	12·8	0	2	28	0	28	0	0	0	2	0	0	0	0
Rajasthan West																											
Sri Ganganagar .	0530	177	1009·3	988·8	..	19·1	15·4	12·3	14·5	56	..	1·9	..	3·5	0	0	22	6	2	6	2	2	1	1	2	8	0
	0830	,,	1009·8	989·6	..	22·5	16·5	11·9	14·0	52	+10	2·4	+0·9	2·7	0	0	21	6	2	3	4	4	0	1	1	9	0
	1130	,,	1010·1	990·4	..	29·9	18·6	9·3	12·2	30	..	2·5	..	4·6	0	0	27	4	5	2	3	1	6	0	6	3	0
	1730	,,	1006·3	986·7	..	32·1	19·0	8·5	11·0	25	..	2·2	..	5·0	0	0	28	8	0	1	0	1	2	7	9	2	0
	2330	,,	1009·1	988·8	..	23·0	17·1	12·6	14·6	54	..	1·0	..	2·5	0	0	11	5	1	2	0	0	2	1	0	19	0
Churu . . .	0830	291	1010·9	977·2	+2·4	23·8	16·6	11·0	13·1	46	..	3·0	..	6·2	0	3	23	6	2	5	4	3	5	1	0	4	0
	1730	,,	1006·0	974·2	..	34·2	20·2	9·5	12·1	24	..	3·3	..	14·2	0	7	23	10	0	1	0	1	3	9	6	0	0
Bikaner . .	0830	224	1010·1	984·7	..	23·6	14·7	6·2	9·6	35	+7	1·7	+0·3	3·9	0	0	30	0	8	2	12	1	6	1	0	0	0
	1730	,,	1006·1	981·6	..	34·6	18·8	6·2	8·6	18	..	2·4	..	8·2	0	3	27	3	4	0	1	1	10	2	10	0	0
Bikaner (P.B.O.) .	0530	224	1000·4	982·7	..	21·1	17·4	14·5	17·1	68	..	2·2	..	6·5	0	2	15	3	4	0	0	0	7	3	0	13	0
	1130	,,	1009·5	984·7	..	32·6	23·5	17·5	22·4	45	..	2·5	..	7·6	0	0	28	1	6	0	6	2	2	7	4	2	0
	2330	,,	1008·1	982·9	..	26·1	20·2	16·2	19·9	56	..	2·3	..	5·0	0	1	17	4	5	2	0	1	2	1	3	12	0
Jaisalmer . .	0830	242	1000·3	982·3	..	24·8	17·8	11·4	15·1	46	..	2·2	..	13·4	0	7	20	0	10	0	4	0	12	0	1	3	0
	1730	,,	1005·6	987·1	..	33·1	21·2	11·5	14·9	28	..	2·4	..	14·2	0	6	24	0	6	0	3	0	16	1	4	0	0
Phalodi . .	0830	234	1010·3	983·8	..	24·9	15·5	7·3	11·1	34	..	2·7	..	14·0	0	3	23	2	7	8	3	1	8	0	1	0	0
	1730	,,	1006·3	980·6	..	35·2	18·5	4·7	7·6	14	..	3·9	..	16·6	0	9	20	2	2	0	2	1	10	4	8	1	0
Jodhpur . .	0230	224	1008·1	982·8	..	26·4	15·8	5·7	9·1	28	..	2·3	..	11·1	0	3	23	3	10	0	0	1	4	6	2	4	0
	0530	,,	1008·4	982·9	..	24·0	15·3	7·3	10·4	35	..	2·0	..	8·8	0	0	27	7	10	0	1	0	4	3	2	3	0
	0830	,,	1010·2	984·9	+3·0	26·8	16·5	7·2	10·3	30	−2	2·9	+1·2	10·7	0	1	25	1	11	1	3	0	7	3	0	4	0
	1130	,,	1009·9	985·2	..	33·5	18·6	5·2	9·5	18	..	2·8	..	12·6	0	3	27	0	5	5	3	4	8	4	1	0	0
	1730	,,	1005·8	981·3	..	36·3	19·1	3·7	7·9	14	..	3·2	..	13·8	0	5	22	2	1	1	1	0	9	10	3	3	0
	2330	,,	1008·5	983·4	..	28·9	16·8	5·9	9·1	25	..	2·3	..	11·2	0	2	25	5	8	0	0	0	8	5	1	3	0
Barmer . .	0530	194	1007·9	985·9	..	25·3	16·8	9·8	11·2	39	..	1·7	..	13·2	0	1	29	0	1	1	0	0	6	8	14	0	0
	0830	,,	1010·0	988·1	+1·7	27·0	17·8	10·4	13·3	37	−16	3·5	+2·2	10·0	0	1	27	1	4	0	3	0	4	5	11	2	0
	1130	,,	1010·0	988·6	..	34·2	19·5	7·5	11·0	20	..	2·1	..	10·0	0	0	28	1	4	5	6	2		5	0	2	0
	1730	,,	1006·0	984·9	..	36·8	19·8	5·4	9·2	15	..	3·2	..	11·3	0	2	24	2	1	0	2	1	12	3	5	4	0
	2330	,,	1008·5	986·9	..	30·4	18·2	8·1	11·2	26	..	1·9	..	11·5	0	3	25	0	0	0	0	0	11	6	11	2	0
Rajasthan-East—																											
Alwar . .	0830	271	1009·6	979·2	..	26·9	17·6	8·9	12·0	36	..	1·6	..	..	0	0	14	3	1	1	1	1	1	4	2	16	0
	1730	,,	1005·6	976·1	..	34·8	18·5	3·9	8·1	16	..	3·5	..	5·2	0	0	22	6	0	0	0	4	4	6	1	8	1
Sikar . . .	0830	433	1009·1	960·0	..	25·7	18·6	12·2	15·2	47	..	2·1	..	3·4	0	0	27	2	2	3	9	2	5	3	1	3	0
	1730	,,	1006·0	959·1	..	33·3	21·2	12·8	15·1	31	..	3·2	..	3·2	0	0	30	2	3	0	0	0	5	10	10	0	0
Jaipur . .	0830	436	1009·8	961·5	+1·4	27·7	17·1	8·0	11·1	31	+3	1·9	+0·5	4·9	0	0	24	3	4	5	2	2	0	4	4	6	0
	1130	,,	1009·2	961·8	..	33·1	18·3	5·9	9·1	19	..	2·0	..	7·4	0	0	29	2	1	2	2	2	5	8	7	1	0
	1730	,,	1005·5	958·4	..	33·9	18·6	5·1	9·1	18	..	2·6	..	9·8	0	0	29	1	0	1	1	1	3	11	11	1	0
Jaipur . . .	0230	390	1007·5	963·7	..	24·3	16·7	11·0	12·7	45	..	2·2	..	..	0	2	25	6	8	5	1	0	0	4	3	3	0
(Sanganer Aerodrome)	0530	,,	1008·2	964·0	..	21·9	15·8	11·8	12·7	50	..	2·6	..	..	0	0	23	5	5	6	1	0	0	1	5	7	0
	0830	,,	1009·1	966·0	..	27·2	18·8	12·6	15·1	43	..	2·3	..	..	0	0	26	2	2	10	3	0	1	3	5	4	0
	1130	,,	1009·1	966·4	..	32·1	20·9	12·8	16·0	33	..	2·4	..	..	0	2	26	2	1	4	1	3	3	6	8	2	0
	1730	,,	1005·3	963·4	..	33·7	21·1	12·4	14·5	29	..	3·6	..	..	0	5	24	0	0	0	0	0	1	11	17	4	0
	2330	,,	1008·4	964·7	..	25·8	17·7	11·0	13·5	42	..	2·0	..	..	0	1	27	10	8	4	0	2	1	3	0	2	0
Dholpur† . .	0830	176	..	..	..	28·7	..	17·3	20·7	52	..	1·5	..	5·5	0	0	22	1	1	0	2	0	4	1	13	7	0
	1730	,,	..	..	..	34·7	..	18·3	21·7	40	..	2·0 (b)	..	6·0 (b)	0	0	23	3	1	0	1	0	0	5	13	4	0

†Data extracted from daily telegrams. (b) Mean of 29 days *Data for 29 days. (R) Register not received

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean Temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas.)		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East — Contd.												(d)		(d)													
Ajmer	0830	486	1009·9	956·2	+1·3	26·5	15·9	7·4	9·8	31	+1	2·9	+1·5	7·1	0	1	27	0	6	2	3	2	8	7	0	2	0
	1730	„	1005·8	953·4	..	33·7	17·5	3·7	7·3	17	..	3·6	..	9·1	0	1	29	3	2	2	1	0	4	14	4	0	0
Kotah	0530	257	1008·0	979·0	..	24·5	16·6	10·1	12·1	42	..	1·8	..	2·0	0	0	10	1	1	0	1	0	2	5	0	20	0
	0830	„	1009·7	981·0	+1·4	29·1	17·7	8·0	10·8	27	+2	1·8	+0·4	3·2	0	0	14	0	0	0	2	0	0	4	8	16	0
	1130	„	1009·2	981·1	..	35·5	19·7	6·6	10·1	18	..	1·6	..	5·1	0	0	26	1	3	6	1	0	0	9	6	4	0
	1730	„	1005·4	977·6	..	35·7	19·2	6·4	8·9	16	..	3·3	..	6·5	0	0	24	2	0	1	0	0	0	0	21	6	0
	2330	„	1008·1	979·5	..	28·6	18·1	9·2	11·8	31	..	2·4	..	2·4	0	0	14	1	1	1	1	0	3	5	2	16	0
Chambal	0830	351	1009·8	970·8	..	28·1	18·4	10·6	13·4	36	..	1·8	..	3·0	0	0	15	0	3	0	1	1	0	3	7	15	0
	1730	„	1004·9	967·1	..	35·6	21·3	10·6	13·9	24	..	2·8	..	6·5	0	1	28	0	2	0	0	0	0	7	20	1	0
Jhalawar	0830	321	1009·8	974·0	+1·0	27·4	17·2	8·3	11·0	31	+2	1·4	+0·3	2·3	0	0	13	2	2	2	1	0	0	2	4	17	0
	1730	„	1004·7	970·3	..	36·9	19·9	5·6	9·2	15	..	2·8	..	5·3	0	0	28	3	1	1	0	0	2	9	12	2	0
Udaipur	0230	582	1009·1	944·2	..	22·3	15·7	10·9	13·1	51	..	1·5	..	1·5	0	0	7	0	0	0	0	0	0	5	2	23	0
	0530	„	1009·6	944·3	..	20·7	15·0	10·7	13·0	55	..	1·4	..	2·7	0	0	11	2	0	0	0	0	0	6	3	19	0
	0830	„	1010·1	946·2	+1·6	27·4	17·6	10·7	12·9	37	−3	1·8	+0·8	2·3	0	0	10	1	2	0	0	0	1	1	5	20	0
	1130	„	1009·1	946·5	..	32·9	19·6	10·6	12·9	27	..	2·4	..	5·9	0	0	26	2	3	5	1	4	4	5	2	4	0
	1730	„	1005·2	942·8	..	33·5	19·7	10·1	12·4	25	..	3·7	..	7·2	0	0	24	2	2	0	0	2	8	9	1	6	0
	2330	„	1009·5	945·2	..	25·2	16·9	10·7	13·4	42	..	1·8	..	3·2	0	0	12	0	1	0	0	0	3	6	2	18	0
Erinpura (Jawai Dam)	0830	295	1010·1	977·1	..	27·3	20·2	15·6	17·5	50	..	2·6	..	6·1	0	0	22	2	0	1	1	10	7	1	0	8	0
	1730	„	1005·7	973·6	..	35·2	23·1	15·6	17·7	34	..	3·7	..	8·5	0	1	24	4	1	0	0	1	4	10	5	5	0
Madhya Pradesh, West																											
Gwalior (P.B.O.)	0230	210	1007·4	983·7	..	24·4	15·8	7·5	11·3	37	..	1·6	..	3·7	0	0	18	0	0	0	1	2	3	2	10	12	0
	0530	„	1007·9	984·0	..	23·1	15·3	7·7	11·1	41	..	2·0	..	3·7	0	0	18	0	0	0	1	3	6	0	8	12	0
	0830	„	1009·5	986·1	+1·9	28·9	17·3	6·8	10·3	27	+1	1·7	+0·5	6·6	0	0	27	6	0	0	2	5	4	2	8	3	0
	1130	„	1009·0	986·1	..	34·8	18·7	3·8	8·4	16	..	2·1	..	9·1	0	0	28	5	1	0	2	4	2	3	11	2	0
	1730	„	1005·1	982·4	..	35·5	18·5	2·3	7·5	14	..	3·6	..	10·0	0	0	30	4	0	0	0	1	1	6	18	0	0
	0230	„	1008·0	984·5	..	27·2	16·8	7·7	10·6	31	..	2·3	..	3·7	0	0	18	3	1	0	0	2	2	3	7	12	0
Sheopur Kalan	0830	235	1009·8	983·4	..	27·3	17·4	9·2	11·9	33	..	3·3	..	4·4	0	0	21	3	4	1	2	6	3	1	1	9	0
	1730	„	1003·2	977·6	..	35·9	19·6	5·3	9·5	16	..	4·3	..	14·4	0	6	24	7	2	0	2	1	1	8	9	0	0
Guna	0530	479	1008·7	954·9	..	21·9	13·9	6·4	10·0	39	..	2·1	..	1·5	0	0	11	1	1	5	2	1	0	0	1	19	0
	0830	„	1009·7	956·9	+1·2	27·5	16·1	6·5	10·0	28	+2	2·1	+1·3	2·4	0	0	22	5	0	11	0	4	1	1	0	8	0
	1130	„	1008·6	957·0	..	34·6	18·2	4·8	8·9	17	..	2·0	..	7·5	0	1	27	2	5	8	1	1	4	3	4	2	0
	1730	„	1004·4	953·2	..	35·8	18·2	3·4	8·1	14	..	3·6	..	9·5	0	0	30	5	1	1	2	0	2	9	10	0	0
	2330	„	1008·6	955·7	..	26·4	15·9	7·2	10·4	31	..	2·6	..	1·4	0	0	11	2	3	4	0	0	1	1	0	19	0
Rajgarh	0830	382	1009·7	967·2	..	27·4	16·6	6·4	10·1	29	..	2·1	..	6·8	0	0	28	5	4	1	7	3	2	5	1	2	0
	1730	„	1004·2	963·2	..	36·8	18·8	1·2	7·0	11	..	4·1	..	10·2	0	1	28	7	3	0	1	2	2	10	4	1	0
Neemuch	0830	496	1010·5	955·9	+1·8	27·9	19·5	13·9	16·5	47	+13	3·1	+2·0	5·9	0	0	28	0	9	3	5	1	3	6	1	2	0
	1730	„	1005·2	952·1	..	35·1	22·8	14·5	18·5	36	..	3·9	..	9·7	0	2	24	1	3	0	1	0	6	8	7	4	0
Ratlam	0830	486	1010·1	956·3	..	27·1	16·6	8·4	11·2	32	..	2·3	..	8·4	0	0	26	1	7	4	2	0	6	6	0	4	0
	1730	„	1004·5	952·5	..	36·0	19·7	7·3	10·8	19	..	4·2	+0·1	9·9	0	0	26	4	3	0	1	0	5	8	5	2	0
Alirajpur	0830	293	1010·7	978·0	..	27·4	20·1	15·1	17·5	48	..	2·2	..	7·6	0	1	27	0	3	2	0	0	9	14	0	4	0
	1730	„	1005·1	973·6	..	37·5	22·3	11·7	14·5	23	..	3·3	..	12·4	0	4	26	2	0	0	2	3	13	2	8	0	0
Indore	0530	567	1008·8	945·5	..	22·3	13·5	5·6	9·1	35	..	2·2	..	7·2	0	2	26	3	7	4	1	2	3	6	2	2	0
	0830	„	1009·7	947·5	+0·9	27·9	16·2	6·2	9·9	27	−10	1·7	+0·3	12·8	0	6	23	3	6	3	4	3	4	6	1	1	0
	1130	„	1008·1	947·3	..	34·2	18·1	4·9	8·9	18	..	2·2	..	13·4	0	5	24	5	4	4	3	2	3	5	3	1	0
	1730	„	1003·7	943·5	..	35·8	18·2	3·3	8·0	14	..	3·8	..	17·3	0	6	24	5	0	1	0	1	6	9	8	0	0
	2330	„	1008·3	946·1	..	27·5	15·3	4·1	8·5	23	..	2·2	..	10·9	0	3	26	4	1	3	1	2	2	7	9	1	0
Bhopal (Bariagarh)	0230	523	1007·7	949·6	..	24·1	15·2	7·4	10·8	37	..	1·8	..	7·9	0	0	24	4	4	6	2	1	1	2	4	6	0
	0530	„	1008·4	950·1	..	22·7	14·7	7·6	10·8	41	..	2·0	..	6·7	0	0	26	5	4	3	4	2	7	0	1	4	0
	0830	„	1009·6	952·3	+1·3	28·2	17·0	7·9	11·3	31	+7	1·5	+0·1	12·0	0	3	25	0	7	5	3	4	6	2	1	2	0
	1130	„	1008·2	951·9	..	34·2	18·8	6·9	10·4	20	..	1·1	..	13·2	0	4	26	1	7	1	7	5	2	6	1	0	0
	1730	„	1003·8	948·1	..	35·7	18·7	5·1	9·2	17	..	3·1	..	12·0	0	4	25	4	5	0	2	3	2	7	6	1	0
	2330	„	1008·2	950·6	..	26·7	16·0	6·9	10·4	31	..	2·2	..	7·9	0	1	26	7	7	0	2	4	2	3	2	3	0
Khandwa	0830	318	1009·8	974·6	+1·3	29·5	19·5	12·3	14·6	36	+8	2·2	+1·0	6·5	0	1	23	0	4	1	2	3	1	12	1	6	0
	1730	„	1003·8	969·7	..	38·1	22·5	11·0	14·5	23	..	4·3	..	9·2	0	1	27	1	3	0	1	2	3	6	12	2	0
Hoshangabad	0830	302	1010·1	976·5	+1·4	28·7	18·9	11·3	14·0	37	+9	1·9	+0·6	2·6	0	0	14	1	2	5	1	4	0	1	0	16	0
	1730	„	1004·1	971·6	..	36·6	20·7	8·1	11·5	18	..	3·6	..	2·8	0	0	14	5	0	0	0	4	1	2	1	16	0
Betul	0830	624	1010·1	938·7	..	27·1	18·9	13·3	15·8	45	..	2·4	..	5·0	0	0	26	1	1	4	6	3	4	4	3	4	0
	1730	„	1004·5	934·6	..	31·7	19·5	10·7	14·8	32	..	5·2	..	7·7	0	0	29	4	4	4	4	2	0	5	6	1	0

(d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm.	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh West—(*contd.*)																											
Chhindwara	0830	685	1010·4	935·0	..	25·5	18·6	14·1	16·4	51	..	1·5	..	5·4	0	0	27	1	4	6	2	0	3	6	5	3	0
	1730	,,	1003·7	930·9	..	32·7	22·5	16·9	19·7	39	..	4·0	..	6·6	0	0	28	2	6	0	1	1	5	3	10	2	0
Seoni	0830	618	1009·7	942·0	+1·4	27·1	19·2	14·4	16·6	48	+13	3·7	+2·2	3·2	0	0	21	2	2	1	3	3	7	2	1	9	0
	1730	,,	1004·4	938·3	..	32·1	20·9	14·1	16·7	36	..	5·5	..	6·0	0	0	28	3	1	3	4	4	6	2	5	2	0
Sagar	0830	551	1009·4	948·9	+1·4	27·6	17·0	8·6	11·7	33	+7	2·0	+0·6	6·0	0	0	26	0	5	7	2	0	3	6	3	4	0
	1730	,,	1003·8	945·0	..	34·7	18·5	5·7	9·5	17	..	3·3	..	5·7	0	0	26	2	2	1	1	0	2	9	9	4	0
Nowgong	0830	229	1010·2	984·5	+2·1	28·0	17·8	9·2	12·1	33	—1	1·8	+0·1	3·6	0	0	25	4	4	0	1	4	7	3	2	5	0
	1730	,,	1005·1	980·3	..	36·5	19·7	5·0	9·2	16	..	2·9	..	4·9	0	0	29	4	4	0	1	1	7	2	10	1	0
Madhya Pradesh Eest																											
Sutna *	0530	317	1008·2	972·2	..	21·9	16·2	11·5	13·9	54	..	2·8	..	2·1	0	0	13	0	0	0	0	1	1	9	2	16	0
	0830	,,	1009·3	974·0	+1·7	28·0	18·0	9·9	12·6	34	+5	2·9	+1·4	2·4	0	0	20	1	1	1	4	3	5	4	1	10	0
	1130	,,	1008·4	973·9	..	34·8	19·5	6·9	10·2	19	..	1·8	..	7·3	0	0	27	1	0	1	2	0	6	7	10	3	0
	1730	,	1004·4	970·1	..	35·5	19·8	6·9	10·3	18	..	3·1	..	4·6	0	0	29	2	0	0	0	0	3	8	16	1	0
	2330	,,	1008·0	972·6	..	26·9	17·8	10·7	12·9	39	..	2·2	..	3·3	0	0	16	1	0	0	2	4	3	3	3	14	0
Umaria	0830	459	1009·5	958·9	..	28·1	19·9	15·3	17·4	47	+19	2·1	+0·2	3·0	0	0	15	1	1	3	2	0	2	5	1	15	0
	1730	,,	1004·5	955·2	..	34·5	22·1	14·7	17·5	32	..	2·8	..	3·0	0	0	13	0	1	0	1	0	2	3	6	17	0
Jabalpur	0530	393	1008·6	964·2	..	21·3	17·6	15·6	17·2	71	..	2·7	..	1·8	0	0	17	0	2	0	9	4	1	1	0	13	0
	0830	,,	1009·9	966·3	+1·8	27·6	19·5	13·8	16·1	44	+13	2·2	+0·9	3·3	0	0	22	1	2	3	10	5	1	0	0	8	0
	1130	,,	1008·6	966·0	..	34·1	21·1	11·9	14·5	28	..	1·6	..	3·7	0	0	24	2	3	6	5	2	5	1	0	6	0
	1730	,,	1004·2	961·9	..	35·0	20·9	10·8	13·2	25	..	3·4	..	4·3	0	0	25	3	4	0	4	5	3	2	4	5	0
	2330	,,	1008·6	964·7	..	24·9	19·2	15·6	17·5	55	..	2·1	..	1·9	0	0	15	1	1	2	7	4	0	0	0	15	0
Mandla	0830	443	1010·5	961·3	..	25·7	20·0	16·3	18·8	58	..	2·4	..	2·8	0	0	15	3	3	0	2	5	0	0	1	15	1
	1730	,,	1004·3	956·7	..	33·9	21·1	12·0	15·7	29	..	3·7	..	3·7	0	0	21	5	1	1	1	4	0	3	5	9	1
Pendra	0530	625	1008·5	939·4	..	22·7	15·7	10·1	12·8	48	..	3·3	..	6·4	0	0	28	8	1	0	1	2	2	6	8	2	0
	0830	,,	1009·8	941·7	+1·7	27·7	17·9	11·0	13·5	38	+7	2·5	+0·5	6·9	0	0	30	13	3	0	3	4	3	1	3	0	0
	1130	,,	1008·4	941·4	..	32·3	18·6	8·3	11·4	24	..	2·3	..	9·3	0	0	30	7	5	1	2	2	5	5	3	0	0
	1730	,,	1004·7	937·9	...	32·3	18·5	7·9	11·2	25	..	3·3	..	12·7	0	3	27	14	2	0	2	3	2	2	5	0	0
	2330	,,	1008·8	940·1	..	25·0	16·7	10·4	12·9	43	..	2·7	..	7·6	0	1	26	4	0	2	0	1	6	7	6	3	1
Ambikapur	0830	611	1009·7	942·9	..	27·5	18·0	11·4	13·7	39	..	1·7	..	6·0	0	0	25	4	3	4	1	3	7	1	2	5	0
	1730	,,	1004·1	938·9	..	33·8	18·6	6·8	10·3	20	..	2·4	..	7·6	0	0	29	8	2	1	0	0	3	3	12	1	0
Champa	0830	245	1009·9	982·6	..	28·9	19·8	13·4	15·6	40	..	3·1	..	3·7	0	1	11	3	1	0	0	0	1	6	1	18	0
	1730	,,	1004·3	977·8	..	37·4	21·2	9·1	11·9	19	..	2·9	..	4·3	0	0	20	5	1	0	0	0	1	9	4	10	0
Raigarh	0830	220	1009·8	985·3	..	30·8	20·5	13·4	15·8	37	..	2·4	..	3·4	0	0	20	1	1	1	4	2	5	3	3	10	0
	1730	,,	1004·0	980·3	..	37·1	21·0	8·9	11·7	19	..	3·4	..	2·5	0	1	16	5	1	0	1	2	4	1	3	13	0
Raipur	0530	298	1007·9	974·5	..	25·5	19·0	14·4	16·7	52	..	3·1	..	5·7	0	1	20	2	1	0	1	8	4	4	1	9	0
	0830	,,	1009·9	976·8	+1·6	29·4	20·6	14·9	17·0	43	+9	2·3	+1·4	6·4	0	1	26	1	1	2	2	2	6	9	4	3	0
	1130	,,	1008·9	976·4	..	35·0	21·4	12·3	14·4	27	..	3·9	..	9·9	0	0	30	3	2	2	0	4	5	7	7	0	0
	1730	,,	1004·0	971·9	..	36·7	21·2	9·9	12·5	21	..	3·9	..	7·5	0	0	28	4	1	0	1	4	4	9	5	2	0
	2330	,,	1007·6	974·6	..	29·7	19·9	13·0	15·3	38	..	2·6	..	9·6	0	1	25	1	1	0	1	6	7	6	4	4	0
Kanker	0830	402	1009·8	965·5	+1·3	28·8	22·5	18·8	22·1	57	+13	2·7	+0·3	0·6	0	0	6	0	0	0	0	0	6	0	0	24	0
	1730	,,	1004·8	961·5	..	34·9	23·5	16·7	19·7	35	..	3·9	..	1·1	0	0	8	0	0	0	2	0	2	0	4	22	0
Jagdalpur (P.B.O.)	0530	533	1009·2	947·7	..	22·5	19·7	18·3	21·0	77	..	3·1	..	0·7	0	0	5	0	0	1	0	2	1	1	0	25	0
	0830	,,	1010·5	949·8	+1·2	26·7	21·3	18·5	21·4	61	+5	2·6	+0·8	2·4	0	0	17	1	1	0	1	6	5	2	1	13	0
	1130	,,	1008·7	949·2	..	32·7	21·8	15·8	18·3	37	..	2·7	..	3·8	0	0	24	4	2	0	1	5	9	2	1	6	0
	1730	,,	1004·8	945·4	..	32·3	21·3	14·8	16·4	36	..	5·3	..	3·5	0	0	21	1	2	3	4	6	4	1	0	9	0
	2330	,,	1008·9	948·0	..	25·6	20·1	17·1	19·4	60	..	2·9	..	0·9	0	0	5	0	0	0	0	4	1	0	0	25	0
Gujarat																											
Deesa	0830	136	1010·4	995·0	+1·1	27·7	19·9	14·2	17·0	46	..	2·9	...	6·5	0	0	29	4	5	2	2	1	4	6	5	1	0
	1730	,,	1006·0	991·2	..	36·9	21·4	10·7	12·8	21	..	3·6	..	8·6	0	0	30	1	1	0	0	2	1	15	10	0	0
Idar	0830	229	1009·9	985·3	..	28·4	..	..	..	..	..	2·6	..	5·7	0	0	28	3	2	5	5	1	6	3	3	2	0
	1730	,,	1005·9	982·2	..	36·2	..	..	..	..	..	3·3	..	6·8	0	0	30	2	2	1	1	4	7	6	7	0	0
Ahmedabad	0230	55	1008·0	1001·8	..	26·4	17·3	9·9	12·3	37	..	1·5	..	8·4	0	0	23	2	0	0	0	2	5	10	4	7	0
	0530	,,	1008·2	1001·9	..	23·9	17·2	11·8	14·3	48	..	1·6	..	7·2	0	0	25	1	3	1	0	0	5	10	5	5	0
	0830	,,	1010·2	1003·9	+0·4	27·3	19·5	13·8	16·4	45	—3	2·8	+1·7	12·7	0	3	25	0	4	2	0	1	2	11	8	2	0
	1130	,,	1010·3	1004·2	..	34·6	20·6	10·3	12·8	25	..	2·5	..	14·2	0	5	23	2	3	2	3	1	0	11	6	2	0
	1730	,,	1005·2	1000·1	..	37·7	20·5	6·8	10 ?	16	..	2·8	..	13·2	0	2	28	0	0	0	1	2	5	14	8	0	0
	2330	,,	1008·7	1002·6	..	29·1	18·4	9·8	12·6	31	..	1·8	..	7·5	0	0	23	2	0	0	0	4	5	8	4	7	0
Dohad	0850	333	1010·0	973·0	..	28·3	18·1	9·7	12·5	33	—6	1·7	+0·4	11·1	0	6	20	1	4	3	2	1	4	9	2	4	0
	1730	,,	1005·8	970·0	..	36·9	19·8	5·4	9·2	15	..	1·6	..	15·3	0	1	29	3	2	1	0	0	10	13	1	0	0

(*) Observations for 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat—*contd.*																											
Baroda	0530	35	1008·3	1004·3	..	22·6	18·1	14·9	17·1	63	..	1·4	..	1·9	0	0	17	0	5	2	0	0	8	1	1	13	0
	0830	„	1010·4	1006·5	..	27·6	20·3	15·5	17·9	50	+3	2·0	+1·3	3·1	0	0	21	0	3	1	1	1	10	1	4	9	0
	1130	„	1010·4	1006·5	..	35·0	21·9	13·3	15·6	29	..	1·9	..	4·2	0	0	23	2	4	2	2	0	6	2	5	7	0
	1730	„	1006·0	1002·2	..	38·5	22·0	10·5	13·0	19	..	1·8	..	6·9	0	0	30	3	2	1	0	0	5	3	16	0	0
	2330	„	1008·8	1004·9	..	27·5	19·6	14·2	16·3	45	..	1·0	..	3·2	0	0	21	0	3	0	0	0	13	1	4	9	0
Baroda (Aerodrome)	0830	38	1010·6	1006·4	..	28·3	20·8	16·0	18·4	49	..	2·4	..	7·7	0	1	26	4	1	0	0	3	11	5	3	3	0
	1130	„	1010·4	1006·2	..	34·8	22·0	13·7	16·0	29	..	2·3	..	6·2	0	0	27	4	3	1	1	2	6	5	4	3	1
	1730	„	1006·1	1001·9	..	38·1	22·1	11·1	13·5	21	..	2·1	..	6·3	0	0	25	4	0	0	0	0	5	7	8	5	1
Broach	0830	17	1010·4	1008·4	..	26·9	21·1	17·4	20·3	57	..	2·4	..	6·1	0	0	29	1	2	0	4	5	14	0	3	1	0
	1730	„	1006·1	1004·2	..	37·8	22·1	11·3	13·8	22	..	1·4	..	11·8	0	2	28	0	0	0	0	1	19	5	5	0	0
Surat	0530	12	1008·7	1007·4	..	24·0	21·1	19·2	22·7	76	..	2·5	..	5·7	0	0	28	3	0	1	15	6	2	0	1	2	0
	0830	„	1010·7	1009·4	+0·9	27·1	22·3	19·4	23·0	65	+3	2·4	+0·9	4·4	0	0	28	0	4	0	5	5	10	2	2	2	0
	1130	„	1010·9	1009·6	..	33·7	22·8	16·3	18·8	37	..	2·3	..	6·7	0	0	28	2	2	0	0	4	5	6	9	2	0
	1730	„	1006·7	1005·4	..	35·6	23·5	16·1	19·1	34	..	2·1	..	4·8	0	0	30	1	0	0	0	1	17	4	7	0	0
	2330	„	1009·4	1008·0	..	27·3	22·9	20·5	24·3	68	..	(b) 1·9	..	(b) 6·3	0	0	26	2	0	0	1	7	11	2	3	3	0
Saurashtra & Kutch																											
Bhuj	0830	105	1010·9	999·0	+1·5	25·7	19·9	15·9	18·5	57	+2	2·6	+1·6	4·8	0	0	19	1	0	0	0	0	3	9	6	11	0
	1730	„	1007·1	995·6	..	36·1	20·8	9·3	12·1	21	..	2·8	..	11·6	0	1	29	2	2	0	0	2	6	14	4	0	0
Bhuj (P.B.O.)	0230	106	1009·1	997·1	..	24·6	20·0	17·1	19·7	66	..	1·5	..	4·4	0	1	14	2	0	0	0	0	6	5	2	15	0
	0530	„	1009·2	997·1	..	22·9	19·1	15·0	19·7	71	..	1·4	..	3·2	0	0	15	3	0	0	0	2	4	5	1	15	0
	0830	„	1010·5	998·5	..	26·4	21·2	18·6	20·9	64	..	2·9	..	4·5	0	0	22	2	0	0	0	0	3	7	10	8	0
	1130	„	1010·5	998·8	..	33·1	19·9	9·6	12·5	25	..	2·1	..	9·3	0	0	28	4	2	1	0	0	0	9	12	2	0
	1730	„	1007·1	995·5	..	35·5	23·1	16·8	18·0	35	..	3·0	..	8·7	0	0	27	3	1	0	0	0	9	8	5	3	1
	2330	„	1009·9	998·0	..	26·4	20·1	16·0	18·3	55	..	1·4	..	6·5	0	0	22	1	0	0	0	0	9	9	3	8	0
Bhuj (Aerodrome)	0830	80	1009·9	1000·7	..	26·5	..	..	..	..	..	2·7	..	10·3	0	0	28	2	0	0	0	1	2	9	14	2	0
	1130	„	1009·8	1000·8	..	33·2	..	..	..	..	..	2·2	..	13·7	0	2	27	3	5	1	0	0	1	5	14	1	0
	1730	„	1005·6	996·7	..	36·3	..	..	..	..	..	(f) 2·8	..	(f) 16·6	0	5	20	3	3	0	1	0	7	7	4	0	0
Kandla	0830	5	1010·9	1010·3	..	25·3	20·7	17·7	20·6	65	..	3·3	..	10·8	0	2	26	0	1	0	1	0	11	7	8	2	0
	1730	„	1007·6	1007·0	..	32·9	23·3	17·4	20·7	44	..	3·4	..	27·2	0	20	10	1	1	0	1	0	22	4	1	0	0
Mandvi	0830	9	1010·8	1009·8	..	25·7	22·5	20·3	24·7	76	..	2·6	..	15·8	0	8	21	4	2	0	0	0	0	3	15	1	5
	1730	„	1008·0	1007·0	..		25·2	23·7	29·3	76	..	2·0	..	38·5	0	30	0	0	0	0	0	0	3	24	0	0	3
Dwarka	0830	11	1011·4	1010·1	+1·2	25·6	23·1	21·9	26·2	81	—2	2·7	+0·8	11·8	0	1	27	7	0	1	0	0	0	10	10	2	0
	1730	„	1009·1	1007·8	..	27·4	24·1	22·5	27·5	75	..	2·2	..	15·6	0	5	25	0	0	0	0	0	0	13	17	0	0
Porbander	0830	7	1011·1	1010·3	..	25·1	22·5	21·0	25·1	79	..	2·0	..	9·1	0	0	28	5	2	0	0	0	0	3	18	2	0
	1730	„	1008·5	1007·7	..	28·6	24·3	22·2	26·8	69	..	3·2	..	22·9	0	20	10	0	0	0	0	0	1	18	11	0	0
Porbander (Aerodrome)	0830	7	1011·2	1010·4	..	26·5	22·4	20·5	23·7	70	..	(f) 2·9	..	(f) 10·8	0	4	20	14	0	1	0	0	0	1	8	1	0
	1130	„	1011·5	1010·7	..	31·9	23·0	18·6	20·9	48	..	(f) 2·2	..	(f) 15·0	0	7	18	10	0	0	0	0	2	13	0	0	0
Jamnagar	0530	23	1009·0	1006·4	..	22·3	20·8	20·0	23·4	87	..	2·5	..	10·5	0	2	28	0	1	0	2	4	8	14	1	0	0
	0830	„	1010·9	1008·3	+0·8	26·1	22·3	20·2	23·7	71	+5	3·2	+1·9	11·9	0	2	27	0	0	2	0	0	6	16	5	1	0
	1130	„	1011·2	1008·7	..	31·9	22·8	17·3	20·3	44	..	2·3	..	17·4	0	10	20	4	2	0	1	0	0	16	7	0	0
	1730	„	1007·9	1005·4	..	31·5	23·0	18·2	21·2	47	..	2·5	..	27·3	0	24	6	0	0	0	0	0	0	23	7	0	0
Rajkot (Aerodrome)	0830	134	1011·0	995·9	+1·3	25·7	20·5	17·1	19·7	61	—2	1·4	—0·4	13·3	0	2	28	3	2	0	0	0	4	11	10	0	0
	1130	„	1010·7	995·9	..	33·6	20·4	10·7	13·2	27	..	1·5	..	16·8	0	9	21	5	3	1	0	0	1	6	14	0	0
	1730	„	1006·6	992·0	..	36·8	19·9	5·3	9·6	16	..	1·3	..	17·4	0	9	21	1	1	0	0	0	3	14	11	0	0
Surendranagar	0830	74	1010·4	1002·0	..	27·7	20·9	16·5	19·3	52	..	2·7	..	12·4	0	3	27	5	1	1	0	0	0	7	15	0	1
	1730	„	1006·2	998·2	..	38·0	22·4	11·9	14·5	22	..	2·7	..	9·5	0	1	26	2	1	0	1	0	3	10	10	3	0
Bhavnagar	0830	17	1011·0	1009·1	+1·2	27·1	20·4	16·0	18·6	53	+3	1·7	+0·4	5·8	0	8	26	2	1	0	2	1	4	7	12	1	0
	1730	„	1006·4	1004·9	..	37·2	25·3	19·1	22·4	36	..	1·0	..	4·0	0	0	30	0	8	3	14	0	5	0	0	0	0
Bhavnagar (Aerodrome)	0830	11	1010·6	1009·4	..	28·2	19·3	13·0	15·2	41	..	1·9	..	12·1	0	0	26	10	0	0	0	0	2	7	7	4	0
	1130	„	1011·0	1009·8	..	32·9	21·5	14·2	16·4	33	..	(c) 1·5	..	(c) 5·8	0	1	18	1	7	2	0	0	1	1	7	9	0
Mahuva	0830	16	1010·6	1008·8	..	27·4	22·8	20·3	24·0	66	..	1·9	..	5·8	0	16	13	0	0	1	2	12	14	0	0	0	0
	1730	„	1007·6	1005·8	..	32·0	27·8	26·0	33·9	71	..	(b) 1·1	..	(b) 21·9	0	1	28	10	3	0	0	0	1	10	5	1	0
Keshod	0830	51	1011·3	1005·5	..	25·6	21·2	18·7	21·5	68	..	3·5	..	11·2	0	7	22	11	2	0	0	0	0	11	5	1	0
	1130	„	1011·6	1005·9	..	32·0	21·9	16·5	18·0	42	..	3·0	..	15·3	0	30	0	0	0	0	0	0	2	28	0	0	0
	1730	„	1007·8	1002·2	..	34·6	23·0	16·9	18·7	37	..	2·5	..	37·6	0	2	28	7	0	0	0	0	0	3	20	0	0
Veraval	0230	8	1009·3	1008·5	..	23·3	21·6	20·6	24·5	86	..	1·7	..	14·3	0	3	27	8	1	0	0	0	0	3	18	0	0
	0530	„	1009·1	1008·2	..	22·3	20·6	19·4	22·9	85	..	2·5	..	14·0	0	4	26	4	3	0	0	0	0	1	22	0	0
	0830	„	1011·1	1010·2	+1·0	25·5	21·6	19·1	22·5	70	—4	3·0	+1·3	15·2	0	11	19	1	2	0	0	0	0	17	10	0	0
	1130	„	1011·4	1010·5	..	30·0	23·9	20·3	24·7	62	..	2·4	..	19·2													

(b) Mean of 29 days. (c) Mean of 28 days. (f) Mean of 25 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch (*contd.*)																											
Veraval (contd.)	1730	8	1008·5	1007·6	..	27·4	24·8	23·6	29·1	80	..	1·9	..	22·5	0	19	11	1	0	0	0	1	2	20	6	0	0
Konkan	2330	,,	1010·5	1009·6	..	24·7	23·0	22·3	26·8	86	..	1·6	..	16·2	0	4	26	0	0	0	0	0	0	11	19	0	0
Dahanu	0830	5	1010·7	1010·2	+1·3	26·8	22·7	20·4	24·2	69	−8	1·0	−1·8	9·8	0	1	29	2	2	10	11	2	0	2	0	0	0
	1730	,,	1007·6	1007.1	..	29·5	24·4	21·9	26·5	64	..	2·0	..	18·9	0	8	22	12	0	0	0	0	0	9	9	0	0
Bombay (Colaba)	0830	11	1011·0	1009.8	+0·6	27·9	23·9	21·7	26·4	70	−5	2·7	+0·4	6·6	0	1	25	7	2	4	3	5	0	1	4	4	0
	1130	,,	1011·0	1009·8	..	30.8	25.0	22·1	26.9	60	..	1.3	..	8.8	0	0	28	2	0	0	0	0	5	10	11	2	0
	1730	,,	1007·7	1006·5	..	30·0	24·9	22·5	27·3	64	..	2·1	..	17·7	0	8	22	2	0	0	0	0	0	8	20	0	0
Bombay (Santacruz Aerodrome)	0230	8	1009·4	1008·5	..	25·3	22·8	21·4	25·7	80	..	2·3	..	1·2	0	0	6	3	0	0	0	0	0	0	3	24	0
	0530	,,	1009.2	1008·3	..	24·1	22·0	20.5	24·8	82	..	1·7	..	0·9	0	0	7	1	3	1	0	1	1	0	0	23	0
	0830	,,	1011·2	1010·3	+0·8	28·3	23·3	20·9	24·7	66	−4	3·1	+0·8	2·6	0	0	16	4	5	0	0	4	2	1	0	14	0
	1130	,,	1011·0	1010·1	..	31·6	24·4	20·8	25·1	55	..	2·2	..	13·0	0	1	29	1	0	1	0	0	3	10	15	0	0
	1730	,,	1007·6	1006·7	..	30·6	24·1	20·7	24·7	57	..	2·4	..	20·0	0	11	19	1	0	0	0	0	0	5	24	0	0
	2330	,,	1010·5	1009·6	..	26·7	28·5	21·7	26·4	75	..	1·8	..	2·9	0	0	14	0	0	0	1	2	1	1	9	16	0
Alibag	0830	7	1011·0	1010·2	+0·4	27·8	24·9	23·5	29·1	78	+9	2·4	+0·1	5·8	0	1	27	7	3	6	3	5	1	0	3	2	0
Harnai	0830	20	1010·4	1008·1	+1·2	26·9	24·0	22·1	27·5	78	+3	2.9	..	8·8	0	1	25	8	3	2	4	2	0	3	4	4	0
	1730	,,	1007·5	1005·2	..	28·0	25·6	24·6	30·7	79	..	2·5	..	27·2	0	21	9	1	0	0	0	0	1	12	16	0	0
Ratnagiri	0830	35	1010·7	1006·7	+0·5	27·5	24·1	22·4	27·1	74	..	3·2	..	..	0	0	30	0	0	27	0	0	0	3	0	0	0
	1730	,,	1008·3	1004·3	..	29·8	25·6	23·7	29·3	70	..	2·7	..	..	0	3	27	0	0	0	0	0	2	28	0	0	0
Devgad	0830	36	1011·0	1006·9	+1·1	27·9	24·7	23·1	28·6	76	+1	4·1	+0.5	8·1	0	0	27	6	3	3	1	3	2	3	6	3	0
	1730	,,	1007·8	1003·8	..	30·2	26·0	24·1	30·2	70	..	3·3	..	23·3	0	18	12	1	0	0	0	0	1	16	12	0	0
Vengurla	0230	9	1009·3	1008·3	..	26·0	23·6	22·5	27·0	81	..	2·5	..	..	0	0	8	7	0	0	0	0	0	0	1	22	0
	0530	,,	1009.1	1008.1	..	25.2	23.4	22.6	27.2	85	..	2.4	..	..	0	0	3	2	0	1	0	0	0	0	0	27	0
	0830	,,	1011·2	1010·2	..	28·1	24·4	22·6	27·6	72	..	2·9	..	..	0	0	14	2	2	4	0	1	1	2	2	16	0
	1130	,,	1011·1	1010·1	..	31·1	25·4	22·7	27·8	62	..	2·0	..	..	0	5	23	0	0	0	0	2	3	23	0	2	0
	1730	,,	1008·1	1007·1	..	30·3	25·3	22·8	28·1	66	..	3·3	..	..	0	2	26	0	0	0	0	1	3	21	3	2	0
	2330	,,	1010·6	1009·6	..	27·4	24·2	22·7	27·5	76	..	2·8	..	..	0	1	6	2	1	1	0	0	0	1	2	23	0
Maharashtra																											
Jalgaon	0830	201	1010·4	987·9	..	29·2	19·1	11·4	13·9	35	..	1·6	..	13·8	0	5	23	1	0	3	3	3	4	11	3	2	0
	1730	,,	1004·0	982·4	..	40·2	21·3	6·2	9·9	14	..	2·8	..	14·0	0	5	25	5	1	0	1	2	1	13	7	0	0
Malegaon	0830	437	1010.1	962.1	+1.1	29.6	18.9	10.7	13.2	33	−5	1.6	+0.5	4.6	0	0	26	3	1	1	0	1	2	8	10	4	0
	1730	,,	1003·8	957·4	..	37·4	21·6	10·1	12·8	20	..	3·6	..	7·1	0	1	25	9	2	1	0	1	1	5	7	4	0
Deolali	0830	571	1010·9	947·9	..	26·5	18·6	13·2	15·5	47	..	2·2	..	4·8	0	0	23	3	0	0	1	1	10	6	2	7	0
	1730	,,	1005·1	944·3	..	35·3	19·6	8·5	11·2	20	..	3·8	..	13·7	0	1	29	3	1	1	1	1	4	12	7	0	0
Aurangabad	0830	581	1010·0	946·3	+0·4	27·1	19·0	13·8	16·1	44	+13	1·6	+0·2	6·3	0	0	25	1	5	6	1	1	1	9	1	5	0
	1730	,,	1003.5	942·0	..	36·9	21·7	12·5	14·7	24	..	4·6	..	11·1	0	2	27	1	5	3	0	0	2	11	7	1	0
Aurangabad (Chikalthana Aerodrome)	0230	519	1007·8	944·2	..	25·7	17·8	12·2	14·6	44	..	(b) 2·2	..	(b) 5·8	0	0	18	2	1	1	2	0	1	4	7	11	0
	0530	,,	1008·7	944·4	..	33·3	16·8	12·3	14·3	51	..	1·3	..	5·2	0	0	19	3	1	2	1	0	2	4	6	11	0
	0830	,,	1009·4	946·3	..	28·9	19·5	13·7	15·8	41	..	1·1	..	9·6	0	1	26	5	4	4	2	0	2	5	5	3	0
	1130	,,	1007·9	946·0	..	34·4	21·2	13·1	15·4	29	..	1·0	..	8·7	0	0	27	5	3	7	4	2	1	1	4	3	0
	1730	,,	1003·3	941·9	..	36·0	21·6	13·3	15·1	27	..	4·0	..	8·7	0	1	20	4	5	2	2	0	1	3	4	9	0
	2330	,,	1008·2	945·1	..	28·7	18·6	11·7	14·0	37	..	3·0	..	7·8	0	1	22	8	0	2	2	0	3	3	5	7	0
Ahmednagar	0830	657	1009·9	938·2	+0.6	27·2	18·9	14·2	15·7	47	+16	1·5	+0·3	3·2	0	0	25	2	4	0	4	0	0	0	15	5	0
	1730	,,	1003·5	933·5	..	36·4	21·3	11·4	14·3	24	..	3·2	..	2·5	0	0	24	0	7	0	1	0	2	0	14	6	0
Parbhani	0830	423	1010·4	963·7	..	29·4	20·8	15·0	17·5	45	..	1·9	..	9·0	0	0	28	2	4	6	3	2	2	4	5	2	0
	1730	,,	1003·8	958·6	..	37·4	21·5	10·7	12·7	21	..	3·9	..	8·0	0	1	28	2	7	1	5	0	0	4	4	1	0
Poona	0530	559	1009·4	947·0	..	22·1	18·3	16·0	18·2	69	..	1·5	..	0·4	0	0	3	0	0	0	0	0	2	0	1	27	0
	0830	,,	1010·5	948·8	+0·6	26·2	19·7	15·8	18·2	54	+4	2·1	+0·7	0·9	0	0	7	0	0	0	1	2	2	1	1	23	0
	1130	,,	1008·4	948·4	..	34·2	20·3	11·2	13 6	26	..	1·1	..	1·8	0	0	12	1	4	2	0	2	0	2	1	18	0
	1730	,,	1004·1	944·5	..	34·5	21·6	13·8	16·2	31	..	3·5	..	7·2	0	0	24	3	0	0	1	2	6	6	6	6	0
	2330	,,	1009·6	948·0	..	26·1	20·0	16·5	18·9	57	..	1·4	..	2·9	0	0	17	0	0	1	2	5	2	4	3	13	0
Poona (Lohagaon Aerodrome)	0230	593	1009·0	943·2	..	23·5	18·2	14·5	17·0	60	..	2·7	..	6·7	0	0	23	0	0	3	1	0	0	14	5	7	0
	0530	,,	1009·5	943·4	..	22·1	17·6	14·6	16·8	64	..	2·7	..	5·5	0	1	17	0	0	1	0	0	0	11	6	12	0
	0830	,,	1010·5	945·2	..	26·0	18·7	14·0	16·2	49	..	2·7	..	9·9	0	2	25	0	0	2	3	0	0	15	7	3	0
	1130	,,	1008·5	944·8	..	33·4	19·2	9·0	11·9	23	..	2·1	..	11·2	0	1	29	3	6	5	4	1	0	3	6	0	0
	1730	,,	1004·2	940·9	..	34·1	20·2	10·8	13·4	27	..	4·0	..	22·8	0	19	9	1	1	2	1	2	1	8	12	2	0
	2330	,,	1009·8	944·4	..	25·4	19·0	14·8	17·3	54	..	2·2	..	11·9	0	0	28	0	0	0	1	2	0	18	7	2	0
Baramati	0830	551	1010·0	949·4	..	27·0	19·7	15·3	17·6	50	..	1·6	..	6·6	0	0	23	3	0	1	0	1	2	4	12	7	0
	1730	,,	1003·0	944·7	..	36·7	22·1	13·4	15·8	26	..	4·1	..	8·4	0	0	28	3	2	1	4	2	6	7	2	2	0
Jeur	0830	521	1009·5	952·5	..	27·8	19·4	14·2	16·5	45	..	1·6	..	4·3	0	0	23	3	0	3	0	0	0	7	10	7	0

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas.)		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of the nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra—*contd.*																											
Jeur—*contd.*	1730	„	1002·7	947·6	..	37·1	20·9	10·2	12·9	20	..	3·9	..	3·6	0	0	28	2	2	5	2	0	4	8	5	2	0
Sholapur	0530	479	1008·3	955·3	..	25·3	19·6	16·2	18·7	58	..	3·9	..	5·0	0	0	23	3	9	0	3	1	1	3	3	7	0
	0830	„	1009·8	957·2	+0·8	28·0	20·6	16·2	18·0	50	+12	2·6	+1·0	7·1	0	0	28	5	5	3	5	1	2	1	6	2	0
	1130	„	1008·4	956·5	..	34·6	21·7	14·2	16·5	31	..	1·7	..	8·7	0	3	25	4	4	3	3	7	2	0	5	2	0
	1730	„	1002·8	952·2	..	37·3	22·5	14·4	16·5	26	..	4·2	..	7·6	0	2	21	4	3	1	8	0	5	1	1	7	0
	2330	„	1008·6	956·2	..	29·3	20·3	14·6	17·3	44	..	4·8	..	10·9	0	5	23	0	2	6	8	1	8	1	2	2	0
Miraj	0830	554	1010·5	949·3	+0·5	25·4	20·8	18·3	21·2	66	+4	3·5	+1·7	4·5	0	0	25	2	0	1	3	1	2	8	8	5	0
	1730	„	1003·4	944·0	..	35·2	22·4	15·4	17·7	32	..	5·5	..	11·0	0	4	26	0	3	5	2	1	5	9	5	0	0
Kolhapur	0530	570	1009·0	945·6	..	22·5	19·6	17·9	20·6	76	..	2·2	..	6·9	0	0	27	1	2	3	0	0	2	17	2	3	0
	0830	„	1010·4	947·5	..	25·1	20·4	17·5	20·5	65	..	2·6	..	7·3	0	0	25	1	1	5	0	1	1	14	2	5	0
	1130	„	1008·5	947·2	..	32·8	21·1	14·1	16·5	34	..	1·4	..	9·7	0	2	28	2	10	5	1	0	1	6	5	0	0
	1730	„	1004·2	943·3	..	33·9	22·7	16·6	19·3	38	..	3·4	..	24·6	0	20	10	1	2	3	2	0	3	18	1	0	0
Vidarbha																											
Buldhana	0830	650	1009·3	938·4	..	27·5	18·1	11·5	13·9	40	..	1·3	..	3·2	0	0	28	0	3	0	3	0	5	0	17	2	0
	1730	„	1003·5	934·6	..	34·8	19·5	8·6	11·5	23	..	3·0	..	2·0	0	0	19	0	5	0	2	0		0	10	11	0
Akola	0830	282	1009·6	978·3	+1·1	29·9	20·0	12·6	15·3	39	+11	2·0	+0·5	6·6	0	0	29	0	1	5	3	3	5	9	3	1	0
	1130	„	1008·1	977·5	..	35·8	21·3	10·5	13·6	25	..	1·6	..	5·7	0	0	27	1	3	0	6	5	3	4	5	3	0
	1730	„	1003·0	972·8	..	38·8	22·0	9·0	12·7	18	..	3·8	..	3·3	0	0	29	2	1	2	2	1	4	8	9	1	0
Akola (Aerodrome)	0530	309	1007·9	973·2	..	25·1	18·8	13·9	16·7	54	..	3·2	..	5·6	0	0	26	0	1	5	4	4	5	6	1	4	0
	2330	„	1007·8	973·7	..	30·1	19·7	12·1	15·5	36	..	3·5	..	8·0	0	1	24	0	2	5	7	2	5	0	4	5	0
Amravati	0830	370	1010·1	969·1	+1·7	28·5	20·5	15·1	17·6	47	+19	2·1	+0·6	5·4	0	0	24	4	3	3	2	5	4	2	1	6	0
	1730	„	1003·3	963·7	..	37·2	22·1	11·7	14·3	23	..	5·4	..	7·0	0	0	29	0	6	0	11	0	6	2	4	1	0
Yeotmal	0830	451	1009·8	960·1	..	28·4	20·7	15·4	18·1	49	..	2·3	..	9·5	0	3	19	1	1	2	5	5	5	0	3	8	0
	1730	„	1003·5	955·3	..	36·2	21·9	12·1	14·7	26	..	3·5	..	3·4	0	0	15	4	2	1	2	2	1	2	1	15	0
Nagpur	0230	310	1007·8	972·9	..	24·9	20·4	17·8	20·4	66	..	4·4	..	7·9	0	2	20	3	3	2	3	3	2	1	5	8	0
	0530	„	1008·4	973·4	..	23·8	20·0	17·8	20·3	70	..	3·7	..	6·6	0	1	24	3	4	4	1	2	2	3	6	5	0
	0830	„	1010·3	975·7	+1·7	28·1	22·0	18·3	21·4	57	+24	3·1	+1·3	7·9	0	2	19	3	4	2	1	5	2	1	3	9	0
	1130	„	1008·9	975·1	..	34·3	23·4	16·9	20·0	38	..	2·2	..	9·4	0	0	29	3	2	3	4	5	4	5	3	1	0
	1730	„	1004·2	970·7	..	35·9	23·4	16·1	18·5	33	..	3·3	..	5·0	0	0	20	2	2	1	4	3	4	1	3	10	0
	2330	„	1008·3	973·7	..	27·1	20·9	17·0	19·8	56	..	3·4	..	8·5	0	0	25	6	1	4	1	3	3	2	5	5	0
Gondia	0830	313	1010·5	975·7	..	28·1	20·4	15·3	17·7	48	..	2·9	..	3·3	0	0	24	4	4	1	1	4	4	0	3	6	3
	1730	„	1004·6	970·9	..	36·5	21·3	10·3	13·1	22	..	3·1	..	4·2	0	0	26	5	2	0	0	1	10	0	3	4	5
Brahmapuri	0830	229	1010·4	984·9	..	28·5	22·1	18·7	21·4	56	..	2·8	..	7·5	0	0	29	2	4	3	4	8	7	1	0	1	0
	1730	„	1004·7	980·0	..	36·8	22·9	14·3	16·6	27	..	2·8	..	4·3	0	0	26	3	3	2	4	5	3	4	2	4	0
Chanda	0830	193	1010·2	988·6	+1·5	28·9	22·1	18·3	21·0	54	+17	2·9	+4·2	5·6	0	0	27	1	1	4	6	8	1	3	3	3	0
	1730	„	1004·5	983·5	..	36·4	23·1	15·4	17·3	31	..	3·8	..	5·0	0	0	27	1	5	4	9	6	0	1	1	3	0
Sironcha	0830	123	1010·9	997·0	..	29·5	23·2	19·9	23·2	57	..	3·3	..	6·7	0	0	28	0	1	6	10	8	2	1	0	2	0
	1730	„	1004·6	991·2	..	38·1	24·4	16·9	19·5	30	..	4·0	..	5·0	0	0	26	3	2	0	2	7	6	3	3	4	0
Coastal Andradesh																											
Nellore	0530	20	1008·7	1006·4	..	25·1	23·8	23·2	28·5	89	..	3·1	..	3·6	0	0	27	0	0	1	17	6	2	0	1	3	0
	0830	„	1010·9	1008·8	+1·6	29·8	25·1	23·0	27·9	67	−4	4·4	+1·4	8·1	0	0	30	1	0	0	20	9	0	0	0	0	0
	1130	„	1010·2	1008·0	..	34·6	25·3	20·8	24·1	45	..	2·6	..	6·9	0	0	30	0	0	3	15	10	2	0	0	0	0
	1730	„	1006·9	1004·7	..	31·3	25·7	23·2	28·5	62	..	2·5	..	14·8	0	2	28	0	0	14	16	0	0	0	0	0	0
	2330	„	1009·9	1007·6	..	27·1	25·0	24·1	30·1	84	..	1·0	..	4·8	0	0	24	0	0	7	16	1	0	0	0	6	0
Ongole	0830	12	1011·1	1009·9	..	29·1	27·4	26·7	35·2	87	..	3·0	..	6·9	0	0	29	1	1	0	24	3	0	0	0	1	0
	1730	„	1006·9	1005·7	..	30·8	29·4	28·7	39·7	89	..	1·7	..	10·0	0	0	30	0	0	0	3	0	0	0	0	0	0
Pentachintala	0830	106	1010·3	998·4	..	29·3	23·2	21·3	23·4	63	+6	4·0	−0·4	5·1	0	0	29	3	0	3	4	17	0	2	0	1	0
	1730	„	1005·3	993·8	..	37·0	24·0	16·7	19·2	31	..	4·2	..	5·4	0	0	30	1	0	17	0	11	0	1	0	0	0
Gannavaram	0230	23	1008·1	1005·5	..	25·9	24·0	23·1	28·7	85	..	(b) 1·6	..	(b) 2·6	0	0	15	0	0	2	3	4	3	3	0	14	0
	0530	„	1008·7	1006·1	..	25·4	23·9	23·1	28·5	88	..	3·5	..	3·8	0	0	20	0	2	10	4	2	2	0	0	10	0
	0830	„	1011·0	1008·4	..	29·0	25·1	23·3	28·5	71	..	4·4	..	7·0	0	0	29	1	1	2	6	14	3	1	1	1	0
	1130	„	1010·3	1007·7	..	34·0	24·6	19·8	22·9	44	..	2·2	..	10·1	0	0	30	1	1	2	11	12	3	0	0	0	0
	1730	„	1006·5	1003·9	..	34·1	24·0	18·9	20·0	40	..	2·2	..	14·6	0	1	29	0	0	0	11	17	2	0	0	0	0
	2330	„	1009·5	1006·9	..	26·7	23·7	22·9	26·7	76	..	0·7	..	4·4	0	0	25	0	0	2	5	15	3	0	0	5	0
Masulipatam	0830	3	1011·2	1010·9	+1·0	29·6	26·4	25·0	31·8	76	..	5·1	+1·7	8·6	0	0	30	3	0	1	1	19	4	1	1	0	0
	1730	„	1007·3	1007·0	..	30·2	26·7	25·2	32·0	75	..	2·1	..	11·3	0	0	30	0	0	0	0	30	0	0	0	0	0
Nidadavolu	0830	12	1011·4	1010·0	..	28·9	25·5	24·1	30·0	75	..	5·1	..	4·5	0	0	18	0	1	0	1	3	7	5	1	12	0
	1730	„	1007·0	1005·6	..	33·0	25·8	22·4	27·2	55	..	2·5	..	9·8	0	0	28	0	0	2	0	26	0	0	0	2	0
Kakinda	0830	8	1011·9	1011·9	+1·8	30·3	25·3	23·1	28·1	65	−8	3·6	−0·5	9·5	0	0	30	0	0	1	7	1	18	1	2	0	0
	1730	„	1007·4	1006·5	..	31·7	25·4	22·4	27·3	58	..	2·8	..	14·4	0	1	29	0	0	0	13	9	8	0	0	0	0

(b) Mean of 29 days

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—APRIL, 1957 (Chaitra 11-Vaisakha 10, 1879 Saka)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh *contd.*																											
Vishakhapatnam	0230	3	1008·4	1008·0	..	26·7	25·4	24·8	31·4	90	..	2·9	..	6·2	0	1	19	0	0	0	0	0	12	4	4	10	0
	0530	,,	1009·1	1008·7	..	26·0	24·8	24·5	30·6	92	..	3·0	..	4·5	0	0	16	0	0	0	0	0	9	4	3	14	0
	0830	,,	1011·0	1010·7	+1·3	29·7	26·1	24·5	30·8	74	+2	2·7	−0·8	12·9	0	8	20	0	1	0	0	1	20	4	1	2	1
	1130	,,	1010·4	1010·0	..	33·8	27·7	25·0	32·0	62	..	1·6	..	20·6	0	19	11	0	1	0	3	4	20	0	2	0	0
	1730	,,	1007·4	1007·0	..	30·0	27·1	25·9	32·6	80	..	4·8	..	18·8	0	16	14	0	0	0	0	7	25	0	0	0	0
	2330	,,	1009·6	1009·2	..	27·5	26·0	25·4	32·4	88	..	3·1	..	9·1	0	4	21	0	0	0	2	0	20	1	2	5	0
Calingapatam	0830	6	1011·1	1010·4	+1·6	29·9	25·7	23·7	29·5	70	−2	3·8	+0·2	9·7	0	0	30	0	0	0	0	10	15	4	1	0	0
	1730	,,	1007·3	1006·6	..	29·4	26·0	24·5	30·9	75	..	5·5	..	12·3	0	0	30	0	0	0	0	15	15	0	0	0	0
Telangana—Ramagundam	0830	156	1010·2	992·8	..	30·1	23·0	19·1	22·3	53	..	3·5	..	5·3	0	0	28	1	2	3	8	4	10	0	0	2	0
	1730	,,	1004·6	987·7	..	38·3	23·5	14·8	17·5	25	..	4·4	..	4·7	0	0	27	3	2	2	15	2	1	2	0	3	0
Nizamabad	0830	381	1010·1	968·0	+1·3	29·0	21·7	17·2	19·9	51	+9	3·0	+1·1	2·2	0	0	21	1	2	2	4	2	3	5	2	9	0
	1730	,,	1004·0	963·3	..	36·9	22·9	14·1	16·3	27	..	3·0	..	2·7	0	0	22	1	3	7	6	1	1	2	1	8	0
Mahabubnagar	0830	505	1009·7	954·4	..	28·9	21·4	17·0	20·0	51	..	2·6	..	8·4	0	1	26	0	4	1	3	4	13	1	1	3	0
	1730	,,	1003·8	950·0	..	35·5	21·4	13·2	15·1	28	..	2·5	..	6·7	0	0	29	0	3	9	8	4	5	0	0	1	0
Hyderbad (Begum-Aerodrome)	0230	545	1007·9	948·0	..	26·0	20·3	18·3	19·8	61	..	3·6	..	5·3	0	3	13	0	1	1	10	3	0	0	1	14	0
	0530	,,	1008 7	948·0	..	24·3	20·5	18·3	21·1	69	..	4·8	..	3·0	0	1	13	2	2	4	3	1	0	1	1	16	0
	0830	,,	1010·2	950·6	+1·8	27·9	21·3	17·8	20·5	54	−1	3·5	+1·4	6·2	0	0	22	0	1	5	5	4	3	4	0	8	0
	1130	,,	1008·7	950·0	..	32·8	21·7	15·6	17·8	35	..	2·9		8·0	0	0	28	0	1	0	13	7	2	5	0	2	0
	1730	,,	1001·7	946·4	..	33·5	21·5	14·4	16·9	33	..	4·2	..	8·6	0	1	23	2	2	4	13	3	0	0	0	6	0
	2330	,,	1008·5	949·1	..	28·4	20·8	16·7	19·0	49	..	3·1	..	6·1	0	1	21	0	0	4	15	2	0	0	1	8	0
Hakimpet	0830	613	1009·3	942·7	..	27·5	21·3	18·0	20·7	58	..	3·6	..	11·5	0	4	26	0	3	2	10	5	6	2	2	0	0
	1730	,,	1004·7	939·3	..	33·1	22·1	15·8	18·5	39	..	3·8	..	11·4	0	2	28	2	2	10	12	2	2	0	0	0	0
Hanamkonda	0830	269	1010·9	980·9	+1·5	27·6	23·1	20·8	24·6	67	+9	2·7	+0·1	10·6	0	1	29	1	0	5	10	14	0	0	0	0	0
	1730	,,	1005·7	976·7	..	36·1	22·9	14 7	17·1	30	..	2·4	..	4·3	0	0	30	0	1	4	14	9	1	0	1	0	0
Bhadrachallam	0830	111	1011·4	998·9	..	28·8	24·1	21·9	26·1	67	..	3·6	..	8·0	0	1	28	1	2	2	4	10	7	2	1	1	0
	1730	,,	1005·6	993·5	..	37·0	24·0	16·7	19·2	31	..	3·5	..	7·1	0	0	30	1	2	0	7	10	5	2	3	0	0
Khammameth	0830	112	1011·1	998·5	..	28·1	24·1	22·2	26·7	70	..	3·8	..	5·8	0	0	27	1	2	1	21	1	1	0	0	3	0
	1730	,,	1005·4	993·2	..	37·2	24·3	16·9	19·8	31	..	3·3	..	4·6	0	0	27	0	0	5	14	4	2	1	1	3	0
Rayalaseema—Arogyavaram	0830	701	1011·1	934·2	..	25·1	21·4	19·7	22·8	73	..	3·3	..	4·6	0	0	30	0	0	0	18	9	3	0	0	0	0
	1730	,,	1004·6	930·1	..	32·4	21·3	15·0	16·9	37	..	4·5	..	5·7	0	0	30	0	1	12	13	2	1	0	1	0	0
Guddapah	0830	130	1010·8	996·3	+1·6	31·9	23·5	18·7	22·2	46	−9	1·1	−1·1	3·3	0	0	15	0	2	11	2	0	0	0	0	15	0
	1730	,,	1004·9	990·8	..	37·9	23·3	14·3	16·8	26	..	1·6	..	9·7	0	0	30	0	0	29	0	0	0	1	0	0	0
Anantapur	0530	350	1007·9	968·9	..	25·9	20·5	17·2	19·8	60	..	2·0	..	3·9	0	0	20	0	0	2	5	1	7	5	0	10	0
	0830	,,	1009·6	971·0	..	29·2	21·9	17·6	20·5	50	..	1·7	..	5·9	0	0	28	1	1	2	3	6	7	6	2	2	0
	1130	,,	1008·3	970·2	..	34·3	22·3	15·0	17.0	32	..	1·4	..	6·9	0	0	27	3	5	1	5	6	3	1	3	3	0
	1730	,,	1003·5	966·1	..	36·7	22·1	12·0	14·6	25	..	2·3	..	7·9	0	0	29	1	10	14	4	0	0	0	0	1	0
	2330	,,	1007·7	969·3	..	30·4	20·4	13·3	15·8	38	..	2·1		8·2	0	0	27	0	2	16	5	2	1	1	0	3	0
Kurnool	0830	181	1010·1	978·9	+1·3	29·5	22·2	18·0	20·9	51	0	2·6	+0·7	6·0	0	0	22	0	1	5	5	5	3	3	0	8	0
	1730	,,	1003·9	973·7	..	37·6	22·3	12·2	14·4	22	..	3·7	..	7·6	0	1	19	0	0	11	7	2	0	0	0	10	0
Madras Palayamcottai	0830	51	1010·9	1005 2	..	29·6	24·6	22·2	26·8	64	..	4·5	..	3·9	0	0	27	14	0	1	0	0	0	6	6	3	0
	1730	,,	1006·6	1001·0	..	33·1	24·5	20·5	23·7	49	..	5·0	..	16·3	0	7	23	1	0	7	10	10	1	1	0	0	0
Tuticorin	0830	4	1011·5	1011·1	..	29·2	25·5	23·7	29·7	73	..	2·5	..	10·3	0	2	28	5	9	3	1	1	6	4	1	0	0
	1730	,,	1007·5	1007·1	..	30·3	25·7	23·9	29·1	69	..	2·0	..	23·4	0	19	11	0	0	9	11	10	0	0	0	0	0
Pamban	0830	11	1011·3	1010·1	+1·6	29·7	26·3	24·8	31·6	75	−1	3·8	+1·0	8·9	0	0	27	0	4	6	7	6	4	0	0	3	0
	1730	,,	1007·3	1006·0	..	30·2	26·6	25·1	31·9	74	..	4·0	..	10·1	0	2	26	5	8	1	2	8	4	0	0	2	0
Mathurai	0830	133	1011·1	996·2	+1·1	29·3	24·7	22·5	27·3	67	−1	4·8	+0·7	2·8	0	0	24	5	5	5	4	3	2	0	0	6	0
	1730	,,	1005·5	991·2	..	35·4	23·9	17·2	19·6	35	..	4·9	..	3·1	0	0	30	0	10	3	10	7	0	0	0	0	0
Nagapattinam	0830	9	1011·7	1010·6	+1·6	29·6	25·5	23·5	29·3	70	−3	3·7	−0·1	8·9	0	2	25	0	2	7	15	2	1	0	0	3	0
	1730	,,	1007·8	1006·7	..	29·7	26·1	24·5	31·0	73	..	2·9	..	15·8	0	3	27	0	0	14	15	1	0	0	0	0	0
Tiruchirapalli	0230	88	1009·1	999·1	..	26·7	24·0	22·7	27·9	79	..	2·7	..	4·5	0	0	17	0	1	9	2	5	0	0	0	13	0
	0530	,,	1009·5	999·5	..	25·9	23·9	23·0	28·2	84	..	4·1	..	1·7	0	0	7	0	0	2	0	3	0	1	1	23	0
	0830	,,	1011·3	1001·4	+1·0	28·6	24·9	23·0	28·7	72	−1	4·2	+1·2	3·4	0	0	12	0	0	3	2	5	1	1	0	18	0
	1130	,,	1010·5	1000·7	..	33·0	24·7	20·6	24·2	49	..	4·4	..	6·3	0	0	20	0	3	6	2	5	2	2	0	10	0
	1730	,,	1006·2	996·5	..	34·6	24·4	18·9	22·5	41	..	4·2	..	13·6	0	6	20	0	3	12	7	3	0	0	0	4	1
	2330	,,	1010·4	1000·4	..	27·9	24·3	22·7	27·4	74	..	1·9	..	11·1	0	2	25	0	1	12	9	5	0	0	0	3	0
Coimbatore	0830	409	1011·2	965·9	+1·4	27·2	22·8	20·5	24·1	67	−10	3·3	+0·2	6·6	0	0	30	0	0	0	5	14	10	1	0	0	0
	1730	,,	1005·1	961·1	..	34·1	22·5	15·2	17·7	34	..	4·1	..	10·3	0	2	28	0	0	2	2	7	11	6	2	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, kms per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*contd.*																											
Coimbatore (Peelamedu Aerodrome).	0530	398	1009·3	964·8	..	24·0	21·9	20·7	24·1	82	..	3·2	..	10·3	0	1	27	0	5	3	1	7	8	2	2	2	0
	0830	,	1011·0	966·8	..	26·9	22·7	20·6	24·3	69	..	3·4	..	8·6	0	0	29	1	11	4	1	4	5	1	2	1	0
	1130	„	1009·5	966·0	..	31·6	23·3	18·7	21·9	47	..	4·4	..	10·8	0	0	30	1	8	8	5	2	1	2	3	0	0
	1730	„	1005·0	962·0	..	34·3	21·8	13·9	15·9	32	..	4·0	..	17·8	0	11	19	0	6	14	1	1	5	2	1	0	0
	2330	„	1009·7	965·5	..	26·4	22·9	21·2	25·1	73	..	2·2	..	19·1	0	13	17	0	1	1	3	15	10	0	0	0	0
Salem . . .	0530	278	1009·3	978·0	..	25·0	23·4	22·7	27·4	87	..	2·3	..	3·3	0	0	24	1	9	5	4	2	2	1	0	6	0
	0830	„	1011·0	980·0	+1·1	28·1	24·5	22·9	27·8	73	+2	2·7	0	6·7	0	0	29	1	18	3	5	1	1	0	0	1	0
	1130	„	1009·9	979·4	..	32·5	24·7	20·9	24·8	51	..	3·0	..	4·0	0	0	25	0	9	2	2	6	2	3	1	5	0
	1730	„	1004·9	974·8	..	35·0	26·4	22·5	27·3	49	..	3·5	..	5·0	0	0	24	1	3	13	6	1	0	0	0	6	0
	2330	„	1009·6	978·7	..	28·5	25·4	24·0	30·0	77	..	2·6	..	5.2	0	0	25	0	5	11	6	0	1	2	0	5	0
Kallakurichi .	0830	127	1011·3	997·1	..	28·8	24·3	22·1	26·9	67	..	2·7	..	0·9	0	0	9	1	0	7	1	0	0	0	0	21	0
	1730	„	1005·7	991·9	..	35·7	23·5	16·5	18·8	33	..	3·0	..	3·0	0	0	24	0	0	6	16	2	0	0	0	6	0
Cuddalore . .	0530	12	1009·4	1008·1	..	25·2	24·0	23·5	28·6	90	..	4·8	..	1·1	0	0	10	0	0	2	1	3	0	0	4	20	0
	0830	„	1011·6	1010·2	+1·4	28·9	25·5	24·1	29·9	75	0	4·2	+0·8	2·7	0	0	13	0	0	0	4	8	1	0	0	17	0
	1130	„	1011·1	1009·8	..	31·6	26·1	23·7	29·4	62	..	4·2	..	10·0	0	0	30	0	0	6	24	0	0	0	0	0	0
	1730	„	1007·4	1006·1	..	29·8	26·1	24·6	30·0	74	..	2·7	..	8·8	0	0	30	0	0	8	22	0	0	0	0	0	0
	2330	„	1010·4	1009·0	..	27·8	25·4	24·5	29·4	82	..	2·7	..	8·6	0	0	28	0	0	4	23	0	1	0	0	2	0
Vellore . .	0530	214	1009·4	985·2	..	24·3	22·4	21·5	25·5	84	..	4·8	..	2·3	0	0	14	0	2	0	4	8	0	0	0	16	0
	0830	„	1011·2	987·2	+1·5	27·0	23·3	21·2	25·5	68	−2	3·7	+1·5	3·7	0	0	22	1	3	1	1	8	4	3	1	8	0
	1130	„	1010·0	986·4	..	33·0	23·4	18·1	21·0	42	..	3·7	..	5·0	0	0	28	0	2	2	4	10	5	3	2	2	0
	1730	„	1005·9	982·6	..	34·4	22·5	15·4	17·5	33	..	3·2	..	4·8	0	0	28	0	0	11	15	2	0	0	0	2	0
	2330	„	1010·3	986·3	..	27·5	23·1	20·8	24·6	67	..	2·2	..	10·5	0	2	26	0	0	4	11	13	0	0	0	2	0
Madras . .	0230	16	1009·1	1007·4	..	26·3	24·7	24·0	29·6	87	..	2·4	..	3·5	0	0	19	0	0	1	2	7	6	2	1	11	0
	0530	„	1009·3	1007·6	..	25·7	24·3	23·7	29·2	89	..	3·2	..	4·2	0	0	24	0	0	0	1	8	7	8	0	6	0
	0830	„	1011·6	1009·9	+1·8	29·0	25·2	23·5	28·7	73	+2	4·0	+0·6	9·5	0	0	30	0	0	0	5	11	13	1	0	0	0
	1130	„	1010·8	1009·0	..	33·4	25·7	22·1	26·7	52	..	3·3	..	11·8	0	1	28	0	0	1	15	11	2	0	0	1	0
	1730	„	1007·5	1005·8	..	30·7	25·6	23·3	27·8	65	..	2·1	..	16·0	0	5	25	0	0	7	19	3	1	0	0	0	0
	2330	„	1010·3	1008·6	..	27·2	25·1	24·1	30·1	84	..	1·3	..	7·4	0	0	27	0	0	3	14	10	0	0	0	3	0
Madras (Nungambakkam).	0830	6	1011·2	1010·5	..	29·2	25·4	23·8	29·3	72	..	6·0	..	4·9	0	0	29	0	1	0	1	13	13	1	0	1	0
Coastal Mysore—																											
Karwar . .	0830	4	1010·7	1010·3	+0·6	28·1	24·7	23·0	28·3	74	..	2·3	..	0.3	0	0	3	0	0	0	1	0	1	0	1	27	0
	1730	„	1007·6	1007·2	..	30·1	25·8	23·8	28·7	69	..	2·7	..	3·4	0	0	30	0	0	0	0	0	5	22	3	0	0
Honavar . .	0330	26	1011·0	1008·2	0	27·4	24·5	23·0	28·5	77	+1	4·3	+0·1	2·9	0	0	25	3	0	19	3	0	0	0	0	5	0
	1730	„	1007·9	1005·0	..	30·7	26·1	24·1	30·2	68	..	4·6	..	13·4	0	0	30	0	0	0	0	1	12	7	10	0	0
Mangalore . .	0230	22	1009·0	1006·5	..	27·8	24·8	23·5	28·8	77	..	3·6	..	4·1	0	0	17	5	5	3	0	0	0	0	4	13	0
	0530	„	1009·4	1006·6	..	27·1	24·7	23·5	29·6	81	..	3·2	..	6·2	0	0	27	2	9	11	1	0	0	1	3	3	0
	0830	„	1011·1	1008·6	−0·7	29·3	25·1	23·4	27·3	70	−1	3·2	−0·3	6·2	0	0	28	13	7	1	3	1	0	1	2	2	0
	1130	„	1010·9	1008·4	..	31·2	25·8	23·4	28·9	63	..	2·1	..	10·9	0	1	29	1	2	0	0	0	4	8	15	0	0
	1730	„	1007·5	1005·5	..	30·6	25·8	23·6	29·4	67	..	4·0	..	13·5	0	3	26	2	2	0	0	0	2	7	16	1	0
	2330	„	1010·4	1007·9	..	28·7	25·2	23·8	29·3	74	..	3·3	..	9·2	0	1	28	7	0	2	0	0	0	3	17	1	0
Mangalore (Bajpe Aerodrome)	0530	103	1009·6	998·0	..	25·4	23·7	22·9	25·3	86	..	4·6	..	1·9	0	0	8	1	3	3	1	0	0	0	0	22	0
	0830	„	1011·3	999·7	..	29·1	24·9	23·1	28·1	70	..	3·4	..	4·3	0	0	16	3	4	5	3	1	0	0	0	14	0
	1730	„	1007·7	996·2	..	30·0	26·3	23·3	28·3	66	..	3·6	..	15·1	0	3	27	1	0	0	0	0	0	18	11	0	0
Mysore (North)																											
Bidar . . .	0830	664	1009·9	937·5	..	27·3	20·2	16·0	18·3	52	+7	4·2	+2·4	11·3	0	0	30	1	5	4	0	2	8	7	3	0	0
	1730	„	1004·0	933·0	..	32·9	20·5	12·4	15·0	33	..	5·8	..	12·8	0	1	29	1	10	10	4	1	0	3	1	0	0
Gulbarga . .	0330	458	1009·7	959·5	+1·3	29·2	20·7	15·7	19·8	46	+1	3·7	+2·3	8·4	0	0	30	3	7	5	11	1	1	0	2	0	0
	1730	„	1003·4	954·4	..	36·2	20·9	10·9	13·5	24	..	5·7	..	14·2	0	4	26	4	3	7	4	5	4	0	3	0	0
Bijapur . .	0830	594	1009·9	944·7	+0·7	27·2	20·3	16·9	18·7	55	+4	3·5	+1·9	5·6	0	0	25	5	3	0	1	2	2	4	8	5	0
	1730	„	1002·7	939·8	..	35·9	21·4	12·8	14·9	27	..	5·4	..	4·2	0	0	21	0	5	1	3	3	1	3	5	9	0
Belgaum . .	0830	781	1010·9	925·5	+1·0	23·7	19·3	16·5	19·0	66	+2	..	..	1·6	0	0	15	0	0	0	2	3	5	4	1	15	0
	1730	„	1006·3	923·1	..	30·2	22·2	18·0	21·0	49	..	..	..	7·4	0	0	30	2	1	1	1	2	8	8	7	0	0
Belgaum (C.T.O.)	0830	753	1010·8	928·6	+1·0	25·3	19·5	15·8	18·4	58	−9	2·5	+0·7	4·0	0	0	27	3	4	3	3	3	2	7	2	3	0
	1730	„	1004·9	924·7	..	30·7	22·5	18·2	21·4	48	..	4·5	..	13·7	0	0	30	0	2	0	0	2	3	20	3	0	0
Belgaum (Sambre Aerodrome)	0530	761	1009·7	925·7	..	21·2	18·3	16·6	19·1	77	..	2·8	..	3·6	0	0	17	2	3	0	1	1	2	8	0	13	0
	0830	„	1010·3	927·4	..	25.4	19·6	16·0	18·5	58	..	2·4	..	6·0	0	0	23	1	9	0	1	2	1	7	2	7	0
	1130	„	1008·1	927·1	..	31·7	20·3	13·1	15·2	33	..	1·3	..	8·1	0	1	25	2	6	5	2	1	1	4	5	4	0
	1730	„	1004·3	923·6	..	31·5	22·0	17·1	19·5	44	..	4·2	..	14·9	0	5	25	0	1	3	2	1	5	16	2	0	0
Gadag . .	0830	650	1010·3	939·4	+0·8	27·0	23·4	21·6	26·1	73	+3	1·9	+0·1	5·6	0	0	30	0	2	4	0	0	4	16	4	0	0
	1730	„	1003·5	934·8	..	35·1	26·8	23·5	28·8	54	..	4·7	..	6·3	0	0	30	0	5	9	2	2	2	7	3	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars. At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars. At station level	Mean pressure in millibars. Departure from normal	Mean temperature in °C. Dry bulb	Mean temperature in °C. Wet bulb	Mean temperature in °C. Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (0 ktas) Mean amount	Cloud amount (0 ktas) Departure from normal	Mean wind speed, kms. per hour	Wind speed (kms.p.h.) 62 or more	Wind speed (kms.p.h.) 20 to 61	Wind speed (kms.p.h.) 1 to 19	No. of observations Wind direction N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (North) *contd.*																											
Gadag (P.B.O.)	0530	661	1008·7	936·1	..	24·2	20·6	18·3	21·6	73	..	1·5	..	6·3	0	0	19	0	0	1	0	1	9	8	0	11	0
	0830	,,	1009·9	937·6	..	27·0	21·7	19·1	22·6	64	..	1·3	..	7·0	0	0	22	0	0	3	2	0	9	7	1	8	0
	1130	,,	1008·3	937·6	..	32·4	22·0	16·8	18·8	41	..	0·9	..	8·3	0	1	20	2	4	2	6	1	0	6	0	9	0
	1730	,,	1003·5	933·5	..	34·0	21·7	15·0	15·9	32	..	4·8	..	8·4	0	1	19	0	1	8	4	1	1	4	1	10	0
	2330	,,	1009·0	937·0	..	26·6	21·6	19·4	22·2	64	..	2·5	..	13·6	0	0	30	0	0	4	1	0	10	13	2	0	0
Raichur	0830	400	1010·2	966·1	+1·4	29·1	23·2	21·4	23·7	60	+9	2·7	+1·0	8·0	0	0	30	0	2	4	3	6	6	3	1	0	0
	1730	,,	1004·1	962·3	..	36·7	24·6	17·2	21·2	33	..	3·3	..	6·6	0	1	29	0	6	10	8	4	1	1	0	0	0
Mysore (South)																											
Bellary	0830	449	1009·7	960·5	+1·1	28·8	23·0	19·8	23·2	59	+9	2·7	+0·6	5·0	0	0	24	1	2	4	4	0	3	0	10	6	0
	1730	,,	1003·3	955·4	..	36·6	24·4	17·6	20·5	34	..	4·3	..	6·1	0	0	28	0	1	2	12	1	5	2	5	2	0
Chitaldrug	0830	733	1010·0	930·1	+0·6	25·6	20·7	17·9	20·6	63	+1	2·9	+0·5	4·0	0	0	24	0	0	1	0	1	9	12	1	6	0
	1730	,,	1003·1	925·9	..	34·6	21·5	14·4	15·9	29	..	4·2	..	6·6	0	0	26	0	0	18	1	0	0	4	3	4	0
Shimoga	0830	571	1010·7	947·8	..	25·5	21·9	20·0	23·6	72	..	3·1	..	1·4	0	0	12	0	0	0	1	3	4	3	1	18	0
	1730	,,	1004·0	943·0	..	33·4	21·9	14·9	17·7	36	..	5·6	..	7·4	0	0	27	0	5	3	1	2	11	4	1	3	0
Balehonnur	0830	..	..	..	..	21·6	20·1	19·1	22·4	87	+1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1522·4	906·9	..	23·3	20·2	18·7	21·1	75	+4	2·0	−0·7	4·4	0	0	20	0	1	5	1	1	1	11	0	10	0
	1730	,,	1499·3	903·3	..	30·2	20·5	14·7	16·3	42	..	4·8	..	7·3	0	0	25	2	0	9	4	0	3	3	4	5	0
Mysore	0830	767	1010·9	927·1	+0·7	24·8	21·1	19·3	22·4	71	−1	2·5	−0·9	6·8	0	0	30	0	2	0	1	8	10	0	9	0	0
	1730	,,	1004·5	923·1	..	32·1	19·8	11·3	14·2	31	..	4·4	..	13·5	0	3	27	4	16	4	2	1	2	1	0	0	0
Bangalore (Central Observatory)	0230	921	1499·3	908·7	..	22·8	19·0	16·6	19·2	69	..	1·5	..	7·6	0	0	28	0	0	7	9	3	6	1	2	2	0
	0830	,,	1524·3	911·0	+1·0	24·8	20·2	17·4	20·2	64	−5	3·7	+1·1	10·1	0	0	29	0	0	3	3	4	6	10	3	1	0
	1130	,,	1531·1	910·6	..	29·7	20·1	14·1	16·3	39	..	3·4	..	7·7	0	0	26	1	0	5	4	3	5	5	3	4	0
	1730	,,	1499·4	907·2	..	30·7	19·1	11·0	13·1	32	..	4·1	..	10·5	0	0	29	1	2	16	5	2	1	2	0	1	0
Bangalore (Aerodrome)	0530	897	1499·4	911·6	..	21·5	19·1	17·6	20·3	79	..	1·9	..	4·0	0	2	14	0	0	3	3	7	3	0	0	14	0
	0830	,,	1525·5	913·6	..	24·9	20·2	17·4	20·1	65	..	3·2	..	11·9	0	0	29	1	0	3	3	6	5	10	1	1	0
	1130	,,	1532·0	913·2	..	29·8	20·4	14·9	16·9	41	..	3·2	..	10·6	0	2	20	2	0	6	4	2	2	5	1	8	0
	1730	,,	1500·6	909·6	..	31·4	19·5	11·3	14·0	32	..	4·1	..	14·6	0	7	21	1	3	13	6	1	0	3	1	2	0
	2330	,,	1517·3	912·7	..	25·0	18·8	14·9	17·2	55	..	2·1	..	8·7	0	0	24	0	0	12	8	3	1	0	0	6	0
Kerala (including Laccadives)																											
Kozhikode	0530	5	1009·3	1008·8	..	26·9	24·6	23·5	28·9	82	..	4·0	..	9·3	0	0	29	4	15	9	0	0	0	0	1	1	0
	0830	,,	1011·3	1010·8	+1·1	29·9	25·6	23·7	29·2	70	−7	2·1	−1·8	7·8	0	0	30	1	7	19	0	0	0	1	2	0	0
	1130	,,	1011·0	1010·5	..	32·4	26·7	24·1	30·2	62	..	4·0	..	14·2	0	1	29	0	0	0	0	0	4	20	6	0	0
	1730	,,	1008·2	1007·7	..	32·7	26·9	24·8	30·6	67	..	3·6	..	17·0	0	2	28	1	0	0	0	0	0	16	13	0	0
	2330	,,	1010·5	1010·0	..	29·2	25·9	24·4	30·7	76	..	3·2	..	14·7	0	2	28	4	1	1	0	0	0	1	23	0	0
Palghat	0830	97	1011·3	1000·4	..	28·6	25·0	23·3	28·8	74	..	4·9	..	7·2	0	0	26	0	0	4	4	0	2	15	1	4	0
	1730	,,	1006·2	995·5	..	33·8	24·6	19·7	23·3	47	..	4·5	..	15·5	0	4	26	0	0	5	1	0	1	22	1	0	0
Fort Cochin	0830	3	1011·2	1010·9	+0·8	29·1	25·8	24·0	30·2	72	−3	5·7	−1·9	2·3	0	0	12	2	8	0	1	0	0	0	1	18	0
	1730	,,	1007·5	1007·2	..	30·2	26·4	24·8	31·3	73	..	5·9	..	12·8	0	2	25	0	0	0	0	0	3	12	12	3	0
Cochin (Naval Air Station)	0230	3	1009·9	1009·6	..	26·8	25·0	24·2	30·2	86	..	4·5	..	2·1	0	0	15	1	3	7	0	0	1	1	2	15	0
	0530	,,	1009·9	1009·6	..	26·1	24·7	24·1	30·0	89	..	4·5	..	2·7	0	0	18	2	4	8	1	0	1	1	1	12	0
	0830	,,	1011·1	1010·8	..	28·7	25·6	24·2	30·4	75	..	3·8	..	5·4	0	0	28	6	13	6	2	1	0	0	0	2	0
	1130	,,	1010·9	1010·6	..	31·3	26·2	24·0	29·6	65	..	4·0	..	15·2	0	0	30	0	0	0	0	0	1	13	16	0	0
	1730	,,	1008·1	1007·8	..	30·5	26·1	24·0	30·0	69	..	4·4	..	14·3	0	1	29	1	0	0	0	0	0	14	15	0	0
	2330	,,	1010·6	1010·3	..	28·0	25·3	24·0	29·8	80	..	4·9	..	4·2	0	0	22	3	1	5	5	0	0	4	4	8	0
Alleppey	0830	4	1010·8	1010·4	..	29·8	26·5	25·2	31·9	76	..	5·1	..	7·1	0	0	30	2	11	12	4	0	0	0	1	0	0
	1730	,,	1007·4	1007·0	..	31·3	27·0	25·3	32·3	72	..	5·2	..	22·4	0	22	8	1	0	0	0	0	2	12	15	0	0
Punalur	0830	34	1011·0	1007·2	..	26·6	24·6	23·6	29·2	84	..	2·9	..	2·5	0	0	25	9	5	2	3	4	0	1	1	5	0
	1730		1007·3	1006·5	..	31·1	26·0	23·9	29·5	66	..	5·0	..	4·2	0	0	28	3	1	0	2	7	10	2	3	2	0
Trivandrum	0230	34	1009·0	1001·7	..	26·1	24·8	24·2	30·2	89	..	4·1	..	4·2	0	0	27	9	13	1	1	1	0	0	2	3	0
	0530	,,	1009·1	1001·8	..	25·5	24·4	23·9	31·8	91	..	3·2	..	4·2	0	0	28	9	10	5	1	0	0	0	3	2	0
	0830	,,	1011·0	1003·8	+0·9	27·9	25·4	24·3	30·4	81	+2	3·5	−0·4	3·6	0	0	25	4	10	1	3	0	0	0	7	5	0
	1130	,,	1010·5	1003·3	..	31·7	25·7	22·9	28·0	61	..	4·5	..	5·3	0	0	29	2	1	0	1	1	14	1	9	1	0
	1730	,,	1007·7	1000·5	..	29·6	26·0	24·3	30·6	73	..	5·7	..	7·3	0	0	30	0	4	1	1	3	9	7	5	0	0
	2330	,,	1010·7	1 003·4	..	27·1	25·3	24·5	30·8	86	..	4·7	..	3·3	0	0	25	10	11	1	0	1	0	0	2	5	0
Trivandrum (Aerodrome)	0830	8	1011·0	1010·2	..	29·0	25·7	24·1	30·2	75	..	3·3	..	5·6	0	0	20	9	5	0	0	0	2	0	4	10	0
Hill Stations (excluding Kashmir)																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0330	1406	1528·8	862·2	..	21·8	15·1	9·7	12·3	48	..	1·6	..	..	0	0	30	3	0	4	7	0	5	2	8	0	1
	1730	,,	1499·4	859·8	..	21·9	15·9	10·9	13·8	54	..	4·1	..	..	0	0	30	1	0	0	0	0	4	4	21	0	0

(R) Register not received.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C.			Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed kms. per hour	Wind speed (Kms. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations, (exclusive of Kashmir) *contd.*																											
Aijal*	0830	1097																									
	1730	„																									
Shillong	0830	1500	1499·2	850·1	+0·6	21·6	14·1	8·1	11·2	42	−12	1·1	−2·1	5·3	0	0	20	0	0	0	0	2	15	3	0	10	0
	1730	„	1453·8	846·9	..	20·4	14·9	10·6	13·1	55	..	3·1	..	3·6	0	0	15	0	0	0	0	0	13	2	0	15	0
Cherrapunji	0830	1313	1501·6	869·0	+0·3	19·2	17·8	16·6	19·3	83	+9	2·9	−1·9	4·3	0	0	30	0	5	0	1	1	23	0	0	0	0
	1730	„	1476·7	866·4	..	20·4	18·2	17·0	19·2	81	..	1·1	..	3·6	0	0	30	0	0	0	0	0	30	0	0	0	0
Darjiling (Raj-Bhawan)	0830	2127	1519·3	792·1	+3·8	16·2	13·1	10·7	13·2	71	+6	2·3	−1·6	2·1	0	0	16	3	2	0	2	0	3	4	2	14	0
	1730	„	1489·2	789·2	..	15·2	12·3	10·1	12·6	73	..	4·5	..	4·7	0	0	18	0	0	0	0	0	12	6	0	12	0
Kalimpong	0830	1209	1473·8	876·7	−2·0	19·8	17·8	16·5	19·0	83	+18	1·2	−1·3	3·0	0	0	30	0	0	0	0	0	0	0	30	0	0
	1730	„	1459·6	875·2	..	20·4	18·2	16·9	19·3	82	..	2·2	..	3·0	0	0	30	0	0	0	30	0	0	0	0	0	0
Katmandu	0830	1337	1509·9	867·3	..	19·7	13·8	9·0	11·6	53	−2	1·5	+0·2	0·1	0	0	1	0	1	0	0	0	0	0	0	29	0
	1730	„	1479·3	864·0	..	25·3	16·1	9·2	11·6	38	..	2·9	..	0·4	0	0	3	1	0	0	1	0	0	1	0	27	0
Mukteswar(Kumaon)	0830	2311	3144·5	773·4	+0·7	13·9	7·4	−0·5	6·3	41	+4	2·4	+0·2	10·5	0	2	27	0	7	5	0	0	2	8	7	1	0
	1730	„	3137·7	772·3	..	15·9	9·4	3·0	7·5	44	..	3·1	..	19·2	0	11	19	1	2	2	0	0	5	12	8	0	0
Nainital	0830	1953	1483·1	805·0	..	17·1	9·2	0·9	6·9	37	..	3·3	..	3·2	0	0	13	4	0	2	1	0	0	3	3	17	0
	1730	„	1471·1	803·8	..	17·8	10·0	3·3	7·3	40	..	3·0	..	6·8	0	0	29	8	1	6	0	0	1	13	0	1	0
Tapoban	0830	..	..	..	..	11·8	5·5	−1·1	5·3	41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath	0830	..							Closed during winter months																		
Lokpal	0830	..	..	..	..	−7·7	−9·2	−12·8	2·0	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mussoorie	0830	2042	1484·6	796·5	−0·7	14·7	9·4	4·7	8·2	50	+6	3·8	+1·5	3·3	0	0	19	7	4	0	0	2	2	0	4	11	0
	1730	„	1474·5	796·0	..	16·5	11·8	8·2	10·9	63	..	5·0	..	4·0	0	0	27	2	0	0	5	9	8	0	3	3	0
Simla	0830	2202	1492·4	781·9	+0·6	13·8	6·9	−2·2	5·5	38	+5	4·4	+1·7	2·8	0	0	24	3	2	3	8	7	1	0	0	6	0
	1730	„	1481·4	781·4	..	15·0	8·3	1·0	6·7	41	..	4·8	..	5·1	0	0	30	3	2	0	4	10	8	1	2	0	0
Dulhousie	0830	1959	1439·1	799·1	..	12·7	6·9	0·6	6·6	42	..	2·7	..	1·9	0	0	9	1	8	0	0	0	0	0	0	21	0
	1730	„	1442·1	800·4	..	16·8	11·1	6·8	9·7	53	..	2·8	..	1·3	0	0	5	0	3	1	1	0	0	0	0	25	0
Dharamshala	0830	1211	1536·7	882·8	..	19·1	12·9	6·7	10·3	47	..	4·3	..	1·9	0	0	23	4	11	0	0	2	0	2	4	7	0
	1730	„	1536·2	882·1	..	22·9	14·9	8·0	10·9	40	..	4·2	..	2·5	0	0	28	0	2	2	2	1	20	1	0	2	0
Abu	0830	1195	1521·7	881·7	−0·6	23·2	13·6	5·3	9·0	32	+4	2·1	+0·9	3·5	0	0	17	2	1	4	1	0	2	4	3	13	0
	1730	„	1512·9	880·4	..	26·6	15·0	3·9	8·6	22	..	3·4	..	4·8	0	0	20	0	0	0	0	3	6	8	3	10	0
Pachmarhi	0830	1075	1525·1	895·0	+1·2	25·4	16·6	10·3	12·4	39	+10	2·2	+0·4	4·2	0	0	25	1	3	4	2	4	4	3	4	5	0
	1730	„	1502·7	892·0	..	30·0	18·8	11·1	13·6	34	..	3·6	..	5·1	0	0	24	4	2	1	1	1	1	7	7	6	0
Mahabaleshwar	0830	1382	1523·7	864·1	+0·4	24·1	15·3	7·6	10·6	37	+	2·1	+0·4	9·7	0	1	28	3	13	5	2	2	0	2	2	1	0
	1730	„	1502·0	761·8	..	26·3	19·4	15·1	17·4	53	..	3·1	..	9·9	0	0	30	0	2	1	0	0	5	0	22	0	0
Nandi Hills	0830	..	..	..	..	22·7	17·9	14·8	17·0	61	..	5·7	..	26·5	0	26	4	6	8	2	0	0	0	3	11	0	0
Mercara	0830	1152	1514·1	886·6	+0·6	20·2	19·2	18·6	21·3	91	+14	2·9	−0·8	5·7	0	0	29	0	6	7	0	0	0	8	8	1	0
	1730	„	1498·9	881·2	..	26·0	24·0	23·1	28·5	87	..	4·1	..	7·3	0	0	30	0	3	4	1	0	0	11	11	0	0
Kodaikanal	0830	2343	3170·9	772·8	+1·1	15·2	10·7	5·2	10·0	59	+1	2·8	+0·2	7·8	0	0	28	3	17	2	6	0	0	0	0	2	0
	1130	„	3184·9	773·1	..	18·7	13·4	9·4	12·0	56	..	3·7	..	8·2	0	1	29	3	15	3	9	0	0	0	0	0	0
	1730	„	3157·4	771·3	..	16·0	13·5	11·7	13·0	77	..	5·0	..	5·4	0	0	23	4	6	2	8	2	0	0	1	7	0
Ootacamund	0830	2249	1516·5	780·9	+0·7	15·6	11·3	8·0	10·3	64	+7	2·7	−0·3	1·5	0	0	13	0	7	5	1	0	0	0	0	17	0
	1730	„	1494·5	779·7	..	17·9	14·2	11·9	13·5	71	..	4·6	..	0·8	0	0	6	1	2	2	1	0	0	0	0	24	0
Coonoor	0830	1747	1519·7	828·3	..	18·8	15·2	12·9	15·0	69	+6	2·7	−1·1	1·1	0	0	9	1	0	2	3	3	0	0	0	21	0
Sikkim																											
Lachen	0830	..	..	..	..	7·5	6·4	5·0	9·0	87	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (Chumbi)	0830	..	..	..	..	8·9	8·1	7·4	10·3	91	+9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa	0830	3685	3092·8	652·6	..	9·1	5·0	0·4	6·2	53	..	3·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ceylon—																											
Colombo	0830	7	1011·4	1010·6	+0·9	27·5	25·3	24·0	30·4	82	−5	3·9	−1·0	6·1	0	0	27	1	4	10	11	1	0	0	0	3	0
	1730	„	1008·2	1007·4	..	29·5	25·6	23·8	29·7	73	..	6·3	..	11·5	0	0	28	0	1	0	1	1	13	11	1	2	0
Trincomalee	0830	3	1011·4	1011·0	+2·0	29·0	25·7	24·0	30·1	75	−7	3·4	+0·3	6·7	0	0	23	2	1	3	2	7	8	0	0	7	0
	1730	„	1008·0	1007·6	..	29·8	25·6	23·9	29·9	71	..	3·2	..	13·4	0	2	28	0	10	15	4	1	0	0	0	0	0
Batticoloa	0830	3	1011·5	1011·2	..	27·8	24·2	22·7	27·2	73	..	3·0	..	6·0	0	0	24	0	0	1	2	5	2	6	8	6	0
	1730	„	1008·2	1007·9	..	29·0	24·6	22·3	27·0	67	..	3·3	..	18·7	0	12	18	0	5	15	8	2	0	0	0	0	0
Hambantota	0830	15	1011·5	1009·8	+1·8	27·9	25·1	24·0	29·2	79	−7	3·1	−0·4	12·2	0	5	23	6	12	0	0	0	2	4	3	2	1
	1730	„	1008·0	1006·6	..	29·3	25·9	24·4	30·7	76	..	5·1	..	23·3	0	21	9	1	1	9	5	3	11	0	0	0	0
Mannar	0830	4	1011·5	1011·1	..	28·3	25·4	24·2	32·8	82	..	3·6	..	11·0	0	0	29	0	3	4	12	6	4	0	0	1	0
	1730	„	1007·6	1007·2	..	31·1	26·2	24·1	30·5	67	..	4·8	..	15·0	0	6	2	11		0	1	2	6	4	3	0	0

* Temporarily closed.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.		Cloud amount (Oktas).		Mean wind speed, kms per hour.	Wind Speed (kms.p.h.).			No. of observations.								
			At mean sea level in g.p.m. of height of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES																											
Damodar Catchment																											
Bokaro	0830	239	1009·0	982·6	..	30·4	18·2	7·7	11·1	26	..	2·3	..	6·2	0	2	20	1	0	0	0	0	6	8	6	8	1
	1730	,,	1003·8	977·9	..	35·3	18·7	2·8	8·1	15	..	2·7	..	12·2	0	1	28	1	0	0	1	0	3	2	22	1	0
Hazaribagh (R)	0830	615	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tilaiya	0830	..	..	..	..	30·1	20·1	12·8	15·4	38	..	2·0	..	6·9	0	0	25	1	0	0	0	0	2	20	1	5	1
	1730	..	..	..	..	35·1	19·4	6·1	9·9	18	..	3·1	..	6·5	0	0	27	0	0	0	1	0	4	7	15	3	0
Ramgarh	0830	..	..	..	..	30·3	18·7	9·5	12·2	29	..	2·5	..	4.8	0	0	27	0	0	0	0	0	10	14	3	3	0
	1730	..	..	..	..	35·1	19·4	6·1	9·9	18	..	3·1	..	6·5	0	0	27	0	0	0	1	0	4	7	15	3	0
Panchet Hills	0830	..	..	..	..	32·1	18·9	8·2	11·2	24	..	2·3	..	5·0	0	0	30	1	0	0	0	1	18	9	1	0	0
	1730	..	..	..	..	36·1	19·5	4·9	9·2	16	..	2·9	..	5·0	0	1	29	9	1	1	1	0	5	3	10	0	0
Durgapur	0830	..	..	..	..	33·2	22·8	16·4	18·0	38	..	1·0	..	8·7	0	0	30	0	3	3	0	1	3	19	1	0	0
	1730	..	..	..	..	37·1	22·4	12·9	15·1	25	..	2·3	..	7·3	0	0	27	0	2	0	0	0	2	23	0	3	0
Mahanadi Catchment																											
Baramul	0830	64	1009·9	1002·7	..	29·7	22·9	19·1	22·3	54	..	1·1	..	3·0	0	0	26	1	14	1	2	5	3	0	0	4	0
	1730	,,	1005·4	998·2	..	35·2	22·1	13 6	15·5	29	..	3·0	..	3·0	0	0	15	0	5	0	0	4	5	0	1	15	0
Hirakud	0830	159	1009·9	992·1	..	30·8	21·5	15·3	18·0	41	..	1·8	..	3·4	0	1	19	1	0	0	0	0	10	6	1	10	1
	1730	,,	1004·7	987·4	..	36·2	22·1	12·8	14·8	25	..	1·5	..	2·7	0	1	13	0	1	0	0	1	3	8	1	16	0
Khijrawan	0830	..	..	..	..	27·4	20·9	16·5	19·4	55	..	2·6	..	5·4	0	0	23	1	1	3	3	4	4	6	1	7	0
	1730	..	..	..	.	34·2	21·9	13 9	16·3	32	..	3·0	..	5·3	0	0	24	3	1	1	1	2	1	10	5	6	0
Sonepur	0830	..	..	..	..	33·9	24·7	20·0	23·5	46	..	..	..	6·0	0	1	15	2	0	1	3	3	7	0	0	14	0
Ginabahar	0830	..	..	..	..	30·1	18·5	9·0	11·6	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Narbada Catchment																											
Panasa	0830	..	..	..	..	30·8	19·7	11·6	14·0	32	..	2·2	..	5·6	0	0	24	3	4	4	1	2	5	5	0	6	0
	1730	..	..	..	..	38·9	22·1 (c)	10·1 (c)	12·8 (c)	19 (c)	..	3·9 (b)	..	7·0	0	1	25	3	0	0	1	2	4	11	4	4	1
Bagra Tawa	0830	..	..	..	..	29·9	19·5 (c)	11·8 (c)	14·0 (c)	34 (c)	..	1·1	..	8·3	0	0	27	2	6	0	4	2	11	1	1	3	0
	1730	..	..	..	..	35·6	21·1	9·6	13·3	23	..	2·0	..	6·1	0	0	23	0	4	0	2	4	6	4	3	7	0
Thikri	0830	..	..	..	..	29·6	21·3	15·1	19·2	48	..	0·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapti Catchment																											
Nandurbar	0830	..	..	..	..	29·5	19·9	13·3	15·6	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	26·2	21·5	17·7	21·6	67	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dharoi	0830	..	..	..	..	27·7	18·3	10·4	13·3	38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	36·1	19·6	5·4	9·9	16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim	0830	..	..	..	..	14·2	8·7	3·3	7·8	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·9	10·0	4.6	8·5	47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri	0830	..	..	..	..	19·7	15·5	10·6	12·7	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	27·1	17·2	9·5	12·4	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha	0830	..	..	..	..	22·7	(b) 14·7	(c) 8·3	10·9	(c) 39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·2	(b) 15·0	(b) 5·3	8·9	(b) 26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara	0830	..	..	..	..	23·4	16·8	12·2	14·3	49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·1	17·1	10·6	12·9	38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	23·2	16·2	11·9	13·8	48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	27·6	(c) 15·8	(c) 6·0	9·4	(c) 25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh	0830	..	..	..	..	19.9	13·2	7·4	10·3	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·2	13·6	6·0	9·3	35	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura	0830	..	..	..	..	16·1	11·6	8·3	10·9	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·5	13·3	9·7	11·9	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari	0830	..	..	..	..	17·1	10·7	5·2	8·8	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·9	10·6	4·9	8·4	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sallyana	0830	..	..	..	..	(b) 21·7	13·9	(b) 7·3	10·3	(b) 39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·0	12·8	4·0	8·2	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Putwal	0830	..	..	..	..	26·8	18·2	11·8	13·9	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	34·0	20·3	10·5	12·6	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1494·9	867·0	..	17·8	13·1	9·1	11·6	58	..	1·3	..	0·1	0	0	1	0	1	0	0	0	0	0	0	29	0
	1130	,,	1491·5	866·5	..	26·5	15·1	4·2	8·8	26	..	1·7	..	1·4	0	0	11	0	0	1	1	1	2	4	2	19	0
	1730	,,	1465·1	864·6	..	23·9	14·7	6·7	10·0	34	..	2·4	..	0·7	0	0	5	1	0	0	1	0	2	0	1	25	0

(b) Mean of 29 days. R—Register not received (c) Mean of 28 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Kms. per hour.	Wind Speed (kms.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g. p. m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61	1 to 19	N	NE	E	SE	S	SW	W	NW	Calm	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES—*(contd.)*																											
Kosi Catchment																											
Chautra . .	0830	..	..	..	..	19·0	13·1	8·8	11·2	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	23·4	14·5	7·8	10·6	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldhunga .	0830	..	..	..	..	19·2	12·1	6·0	9·6	45	..	2·4	..	3·6	0	0	18	0	1	0	0	4	7	5	1	12	0
	1130	..	..	..	..	20·8	12·4	4·4	9·1	37	..	3·3	..	6·6	0	0	27	0	1	1	0	4	13	5	3	3	0
	1730	..	..	..	..	18·9	11·4	4·1	8·7	41	..	4·1	..	9·0	0	0	30	1	0	0	0	2	10	14	3	0	0
Barahkshetra .	0830	146	1008·5	992·0	..	27·1	18·5	12·2	14·4	40	..	0·8	..	4·0	0	0	15	2	1	0	0	3	2	5	2	15	0
	1130	„	1006·9	990·8	..	32·4	21·0	13·5	15·6	31	..	2·1	..	15·8	0	6	24	0	0	0	1	0	6	23	0	0	0
	1730	„	1002·7	986·4	..	33·1	19·7	9·8	12·0	24	..	2·7	..	4·8	0	1	12	0	2	1	0	2	2	5	1	17	0
Angbung . .	0830	..	..	..	..	20·1	16·2	13·4	15·6	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung . .	0830	..	..	..	..	18·4	12·5	7·8	10·7	51	..	2·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	21·3	13·1	6·6	9·8	41	..	3·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·4	12·7	7·7	10·4	49	..	5·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok . .	0830	..	..	..	..	16·6	12·5	8·9	11·5	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallang Chung Gola (R)	0830																										
(R)	1730																										
Bhojpur . .	0830	..	..	..	..	20·5	13·8 (c)	8·8 (c)	11·5 (c)	48 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·4	12·8 (c)	6·9 (c)	9·9	42 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur . .	0830	..	..	..	..	22·3	15·0	9·3	13·0	44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	*1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tista Catchment																											
Gangtok . .	0830	1812	1492·5	818·7	..	15·7	12·2	9·7	12·0	67	..	1·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	„	1484·6	818·6	..	19·6	14·4	10·4	12·5	57	..	3·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	„	1464·4	816·4	..	16·1	13·0	11·0	13·0	71	..	6·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gevzing . .	0830	..	..	..	..	18·4	15·1	12·8	15·0	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·8	15·8	13·9	16·0	74	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

*Data rejected. R—Register not received. (c) Mean of 28 days.

MONTHLY MEANS OF UPPER WINDS, APRIL 1957

During the month, observations of velocity and direction of upper winds were made at 53 stations in India. Out of these, 43 stations recorded observations by means of pilot balloons only and the remaining 10 stations made some observations by means of radiowind method and the other observations by the pilot balloon method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. With effect from 1st April 1957 the standard times of observations were changed to 00, 06, 12 and 18 hours G.M.T. equivalent to 0530, 1130, 1730 and 2330 hours I.S.T. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data up to 9·0 km. a.m.s.l. are given under Table IV and data above 9·0 km. a.m.s.l. under Table V.

In Tables IV and V :

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0·15 km. a.g., 0·3, 0·6, 0·9, 1·5, 2·1, 3·0, 3.6, 4·5, 5·4, 6·0, 7·2, 9·0, 10·5, 12·0, 14·1, 16·2, 18·0, 21·0, 24·0, 27·0, 30·0, 33.0 and 36·0 km. a.m.s.l. Of these the levels 1·5, 3·0, 5·4, 7·2, 9·0, 12·0, 14·1 and 16·2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

	Station	Lat. N.	Long. E.	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST).			
1	Agartala	23°53′	91°15′	17	28th November 1951	0530	1730	2330	
2	Ahmedabad	23°04′	72°38′	60	19th May 1928	0530	1730	2330	
3	Amausi	26°45′	80°53′	132	20th November 1950	0530	1730	2330	
4	Ambala	30°23′	76°46′	283	1st April 1941	0530	1730	2330	
5	Anantapur	14°41′	77°37′	364	12th February 1946	0530	1730	2330	
6	Asansol	23°41′	86°59′	136	29th May 1942	0530	1730	2330	
7	Baghdogra	26°38′	88°19′	140	7th June 1953	0530	1730	2330	
8	Bairagarh	23°17′	77°21′	532	26th February 1943	0530	1730	2330	
9	Bamrauli	25°27′	81°44′	103	20th February 1930	0530*	1130	1730*	2030
10	Bangalore	12°58′	77°35′	936	19th May 1915	0530	1730	2330	
11	Bareilly	28°22′	79°24′	180	12th January 1943	0530	1730		
12	Begumpet	17°27′	78°28′	553	1st September 1929	0530	1730	2330	
13	Bhagalpur	25°14′	86°57′	61	19th May 1950	0530	1730		
14	Bhubaneshwar	20°15′	85°50′	55	5th December 1942	0530	1730	2330	
15	Bhuj	23°15′	69°48′	111	14th September 1937	0530	1730	2330	
16	Bikaner	28°00′	73°18′	229	18th October 1946	0530	1730	2330	
17	Chikalthana	19°51′	75°24′	583	7th October 1951	0530	1730	2330	
18	Cochin†	09°56	76°14′	3	16th March 1942	0530	1730	2330	
19	Darjeeling	27°03′	88°16′	2115	21st May 1956	0530	1730		
20	Dum Dum	22°39′	88°27′	19	14th May 1921	0530*	1130	1730*	2330
21	Gadag	15°25′	75°38′	650	3rd May 1943	0530	1730	2330	
22	Gannavaram	16°32′	80°48′	24	8th April 1942	0530	1730	2330	
23	Gauhati	26°05′	91°43′	51	12th March 1955	0530*	1130	1730*	2330
24	Gaya	24°45′	84°57′	119	19th March 1937	0530	1730	2330	
25	Gopalpur	19°16′	84°53′	24	15th February 1946	0530	1730	2330	
26	Gorakhpur	26°45′	83°22′	83	5th January 1943	0530	1730		
27	Gwalior	26°14′	78°15′	219	7th May 1938	0530	1730	2330	
28	Imphal	24°51′	93°58′	805	8th March 1952	0530	1730	2330	
29	Jabalpur	23°10′	79°57′	402	30th July 1928	0530	1730	2330	
30	Jagdalpur	19°05′	82°02′	562	25th March 1948	0530	1730	2330	
31	Jaipur	26°49′	75°48′	404	6th June 1953	0530	1730		
32	Jamshedpur	22°49′	86°11′	147	23rd July 1942	0530	1730		
33	Jharsuguda	21°55′	84°05′	234	1st May 1944	0530	1730	2330	
34	Jodhpur	26°18′	73°01′	229	15th October 1934	0530*	1130	1730*	2330
35	Madras	13°00′	80°11′	29	8th April 1926	0530*	1130	1730*	2330
36	Mangalore	12°52′	74°51′	40	4th June 1928	0530	1730	2330	
37	Minicoy	08°18′	73°00′	16	14th April 1941	0530	1730	2330	
38	Mohanbari	26°29′	95°01′	110	1st June 1948	0530	1730	2330	
39	Mussoorie	30°27′	78°05′	2050	3rd November 1955	0530	1730		
40	Nagpur	21°06′	79°03′	316	23rd April 1943	0530*	1130	1730*	2330
41	Nanpara	27°53′	81°30′	141	23rd April 1957	0530	1730		
42	New Delhi	28°35′	77°12′	227	20th October 1936	0530*	1130	1730*	2330
43	Poona	18°32′	73°51′	593	5th January 1925	0530	1730	2330	
44	Port Blair	11°40′	92°43′	93	29th October 1945	0530*	1130	1730*	2330
45	Raipur	21°14′	81°39′	308	15th July 1944	0530	1730	2330	
46	Santacruz	19°07′	72°51′	12	14th May 1933	0530*	1130	1730*	2330
47	Tezpur	26°37′	92°47′	79	12th August 1932	0530	1730	2330	
48	Tiruchirapalli	10°46′	78°43′	96	22nd June 1936	0530	1730	2330	
49	Trivandrum	08°29′	76°57′	73	8th December 1928	0530*	1130	1730*	2330
50	Udaipur	24°35′	73°42′	587	24th June 1947	0530	1730	2330	
51	Vengurla	15°52′	73°38′	8	22nd November 1941	0530	1730	2330	
52	Veraval	20°54′	70°22′	17	13th October 1941	0530	1730	2330	
53	Visakhapatnam	17°43′	83°14′	10	24th September 1928	0530	1730	2330	

*Radiowind ascents.

†Naval Meteorological Office.

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

April 1957

Station	AGARTALA												AHMEDABAD											
Time in I.S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5.7	5.1	168	30	9.1	6.8	190	30	7.4	6.6	180	30	4.1	2.8	306	30	5.8	4.1	277	30	4.6	2.1	283
0.15 a.g.	30	12.5	10.6	174	30	15.5	12.0	190	30	15.6	13.0	191	30	18.2	12.3	323	30	8.3	6.2	284	30	16.2	10.8	296
0.3 a.m.s.l.	30	15.2	13.0	199	30	17.1	14.3	190	30	16.7	14.4	198	30	19.1	12.9	325	30	8.1	5.8	280	30	17.7	11.7	297
0.6 „	29	15.6	13.5	210	30	18.2	16.1	197	30	18.9	17.2	288	30	17.8	12.1	329	30	8.1	6.0	279	30	14.9	10.5	303
0.9 „	29	16.1	13.6	237	30	17.7	15.9	210	29	17.9	15.5	223	30	13.5	8.6	322	30	8.4	6.5	281	30	12.4	9.0	299
1.5 „	28	14.7	13.7	270	27	16.0	14.6	238	26	14.8	13.3	256	30	9.3	5.1	279	30	9.7	7.9	278	30	9.8	7.1	281
2.1 „	19	15.6	15.2	280	27	18.4	17.2	271	23	15.2	14.6	269	28	10.0	7.3	258	30	11.0	9.4	271	29	10.2	7.4	263
3.0 „	17	21.1	20.5	283	23	23.5	22.6	279	15	16.0	14.8	290	23	14.1	11.2	242	30	15.0	13.6	256	27	13.9	10.6	251
3.6 „	13	29.9	29.2	287	18	27.0	25.3	286	4	12.7	12.2	297	18	17.5	14.9	241	30	17.9	16.5	259	2	26.0	26.0	220
4.5 „	7	18.3	17.1	277	12	27.3	24.6	289					7	16.4	14.9	256	27	22.0	20.4	258				
5.4 „	6	22.5	21.0	268	10	29.9	26.8	290					2	8.5	8.5	312	23	23.9	22.3	262				
6.0 „	5	21.0	19.9	270	8	31.1	26.6	289					1	16.0	16.0	290	22	26.5	24.5	267				
7.2 „	3	21.6	15.3	278	3	26.3	25.4	272					1	27.0	27.0	275	15	37.8	35.7	277				
9.0 „													1	27.0	27.0	305	11	44.9	41.8	282				

Station	AMAUSI												AMBALA											
Time in I.S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.0	3.4	287	30	11.4	10.3	305	30	4.9	4.4	300	30	6.6	3.1	328	30	7.5	5.3	308	30	6.5	3.3	330
0.15 a.g.	30	14.6	12.4	306	30	16.2	14.0	302	30	16.9	13.4	314	30	18.3	8.6	350	30	14.9	9.1	311	30	18.8	12.5	347
0.3 a.m.s.l.	30	14.9	12.7	316	30	16.9	15.1	299	30	17.0	14.0	317	30	9.9	4.0	342	30	9.4	6.5	310	30	9.2	5.5	346
0.6 „	30	16.8	17.6	321	30	16.7	14.9	295	30	16.5	14.5	315	30	19.2	9.0	345	30	16.8	9.7	317	30	19.2	12·3	345
0.9 „	30	17.4	15.9	304	30	17.1	16.3	295	30	16.0	15.1	310	30	17.4	8.6	334	30	17.2	10.9	310	30	17.9	10.6	343
1.5 „	30	19.3	18·6	294	28	17.8	17.6	293	30	16.5	16.1	296	30	15.8	7.9	307	30	16.7	10.5	305	28	13.8	9.5	324
2.1 „	29	20.8	20.1	287	26	17.3	17.2	293	26	17.4	16.1	282	27	15.4	12.6	3.9	30	14.6	10.8	301	28	14.4	9.6	294
3.0 „	26	24.2	23.1	285	19	20.1	18.9	277	16	18.5	17.2	275	26	17.7	14.3	299	29	15.4	10.8	295	25	17.0	13.4	268
3.6 „	15	18.8	22.2	284	18	23.1	21.6	275	4	22.4	18.3	271	14	16.6	10.0	279	26	14.8	11.4	285	10	19.3	15.3	259
4.5 „	4	23.2	22.5	295	14	28.5	26.8	280	1	27.0	27.0	335	8	23.7	20.1	264	21	16.2	14.0	276	4	17.0	13.7	250
5.4 „	1	27.0	27.0	290	13	31.0	30.2	278	1	33.0	33.0	355	4	29.5	29.5	274	19	22.7	19.9	276	1	27.0	27.0	255
6.0 „					13	32.3	31.7	279					2	31.5	30.0	277	19	27.2	25.3	276	1	7.0	7.0	270
7.2 „					7	36.0	32.2	289									15	34.8	32.1	273				
9.0 „																	7	38.3	36.2	281				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

April 1957

Station	ANANTAPUR												ASANSOL											
Time in I.S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3.1	2.2	226	30	5.0	4.3	087	27	6.8	5.6	110	30	2.3	1.9	265	30	4.9	4.2	299	30	3.8	2.2	253
0.15 a.g.	30	10.2	6.5	227	30	8.3	6.8	085	27	14.7	12.4	130	30	9.6	7.4	280	30	10.8	8.8	295	30	12.7	6.7	280
0.3 a.m.s.l.																								
0.6 „	30	11.2	6.6	236	30	8.5	7.1	091	27	15.8	13.3	132	30	9.9	7.5	287	30	11.1	9.1	295	30	12.9	6.7	285
0.9 „	30	10.2	4.6	223	30	8.9	7.6	096	27	15.7	13.8	137	30	11.9	9.8	312	30	13.5	11.6	295	30	15.5	10.9	303
1.5 „	30	10.3	4.3	167	30	9.2	7.0	095	27	10.3	7.7	132	30	13.6	11.9	314	30	14.1	12.7	293	30	16.5	13.5	307
2.1 „	30	10.0	5.8	103	30	8.8	6.3	095	26	9.1	5.1	104	30	16.2	15.1	304	30	14.0	13.3	291	29	16.5	14.8	297
3.0 „	29	11.7	10.2	063	29	10.5	7.8	082	26	11.0	7.6	061	29	20.1	18.6	298	28	15.1	14.5	289	27	17.5	16.3	292
3.6 „	29	14.3	12.5	047	29	12.9	9.5	063	22	11.6	9.3	039	19	20.7	19.1	292	25	17.9	17.1	291	13	16.7	16.0	283
4.5 „	25	14.0	9.9	058	27	10.9	6.2	054	18	11.1	9.2	047	8	20.7	19.4	295	21	21.4	20.4	292	3	17.3	17.0	293
5.4 „	22	10.8	2.4	103	27	9.6	3.3	034	8	10.3	9.0	046	3	18.7	17.7	314	17	26.8	25.4	291				
6.0 „	22	10.2	1.6	353	26	10.2	3.1	030	5	13.0	11.0	057	1	15.0	15.0	305	9	31.0	29.1	302				
7.2 „	17	10.6	4.5	262	26	11.5	5.0	017					1	24.0	24.0	305	3	30.3	29.5	310				
9.0 „	12	13.4	10.5	277	22	13.7	10.5	280																

Station	BAGHDOGRA												BAIRAGARH											
Time in I.S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.8	4.1	057	30	5.5	1.9	287	30	5.1	3.7	033	30	3.6	0.8	105	30	5.1	3.7	295	30	4.5	2.1	359
0.15 a. g.	30	12.7	12·0	074	30	8.4	3.3	266	30	10.3	7·0	060	30	14.2	1.9	025	30	8.9	5.7	296	30	16.2	5.9	011
0.3 a.m.s.l.	30	13.1	12.0	074	30	8.4	3.5	266	30	10.4	7.1	064												
0.6 „	30	16.1	15.2	082	29	8.4	4.5	258	30	10.3	6.3	079	30	12.5	1.2	060	30	8.5	4.9	297	30	15.1	5.5	010
0.9 „	30	15.4	13.3	082	29	9.3	6.9	254	30	9.8	3.0	075	30	14.6	2.5	030	30	8.9	5.9	296	30	16.0	7.6	005
1.5 „	30	11.5	5.8	047	29	12.8	12.1	252	29	9.4	7.4	279	30	10.2	2.7	317	30	9.0	6.8	295	30	12.3	5.9	342
2.1 „	30	12.4	9.3	089	28	16.4	15.9	260	28	13.2	12.8	275	30	8.9	5.3	078	30	10.7	8.8	289	30	9.3	5.6	292
3.0 „	25	17.8	17.0	281	24	20.8	20.0	274	20	12.0	11.3	277	30	13.0	10.1	260	30	11.9	10.1	281	27	10.8	9.2	262
3.6 „	20	20.3	19.7	282	19	21.0	20.0	284	8	10.5	9.4	279	28	17.2	14.9	255	26	13.4	12.1	271	10	15.0	14.3	251
4.5 „	15	25.3	23.9	284	11	28.8	28.8	281	1	30.0	30.0	250	22	20.5	19.4	269	23	17.7	16.6	266				
5.4 „	11	26.8	25.9	292	8	35.6	35.2	284					17	24.8	22.8	275	12	20.7	19.6	274				
6.0 „	7	21.9	20.0	292	6	40.5	39.9	286					15	26.3	24.5	276	9	20.8	19.5	276				
7.2 „	3	16.7	16.0	275	3	36.3	35.6	298					8	29.5	27.8	275	8	27.5	26.9	279				
9.0 „	1	9.0	9.0	240	1	35.0	35.0	310					4	38.0	32.5	272	6	29.0	26.3	269				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

April 1957

Station	BAMRAULI												BANGALORE							
Time in I.S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	2.4	1.6	256	30	8.8	7.2	283	30	9.1	8.1	297	30	2.9	1.7	295	30	5.4	2.5	176	30	6.9	4.6	082
0.15 a.g. . .	30	6.9	5.2	299	29	10.6	9.2	285	29	10.4	9.6	297	30	16.4	12.0	312	30	10.6	6.1	201	30	10.2	6.5	087
0.3 a. m. s. l. .	30	8.3	6.4	299	29	10.7	9.4	284	29	11.0	10.1	297	30	17.7	13.4	314								
0.6 „ .	30	12.3	10.1	307	30	10.1	9.3	280	29	13.1	12.3	295	30	17.9	14.4	309								
0.9 „ .	30	14.3	12.1	302	30	11.6	9.8	284	29	15.1	14.3	292	30	15.7	11.0	299								
1.5 „ .	30	17.0	15.3	292	29	14.8	13.7	273	28	16.7	16.0	285	26	16.4	15.0	277	30	12.1	5.1	183	30	9.8	7.4	088
2.1 „ .	30	20.4	19.8	282	26	18.3	19.0	302	28	17.0	16.5	283	14	18.9	18.1	263	27	10.4	6.8	080	29	10.1	9.0	084
3.0 „ .	29	23.4	22.7	279	25	26.0	24.0	284	28	20.3	19.6	279	7	24.5	24.1	257	21	14.7	13.6	063	28	11.4	10.6	071
3.6 „ .	28	24.8	24.3	279	24	29.3	27.8	287	28	24.1	23.4	277	1	28.0	28.0	285	12	13.6	12.5	065	28	12.3	11.1	066
4.5 „ .	26	27.1	25.6	278	23	30.2	28.9	283	28	28.5	27.8	278					9	13.1	10.1	069	23	11.6	9.4	072
5.4 „ .	24	29.4	28.1	272	22	32.1	31.9	280	27	31.0	30.0	279					6	9.2	4.5	130	19	11.6	7.5	074
6.0 „ .	24	31.6	30.6	271	18	34.6	33.5	279	26	33.5	32.2	280					5	12.4	6.1	120	16	10.7	6.4	065
7.2 „ .	21	37.2	36.3	271	12	43.3	41.3	285	23	39.3	36.4	279					2	7.5	4.8	147	8	11.4	6.1	352
9.0 „ .	16	53.3	51.6	268	2	62.0	62.0	280	16	52.7	50.5	272					1	18.0	18.0	259	2	16.0	14.1	288

Station	BANGALORE				BAREILLY								BEGUMPET											
Time in I.S.T.	2330				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	5.6	4.8	127	30	3.4	2.5	303	30	6.8	5.5	295	30	3.2	1.1	103	30	6.1	3.0	085	30	4.2	3.6	138
0.15 a.g. . .	30	16.2	14.3	135	30	15.2	12.4	310	30	14.2	12.3	296	30	10.8	5.7	169	29	8.2	6.7	105	28	13.3	12.0	138
0·3 a. m. s. l. .					30	13.8	11.4	314	30	13.5	11.7	297												
0.6 „ .					30	20.0	17.1	309	30	17.7	15.3	296	30	7.2	3.4	148	29	7.8	6.1	102	28	8.9	8.0	129
0.9 „ .					30	19.7	17.1	302	30	17.6	15.6	294	30	13.0	6.7	172	29	9.0	7.7	100	28	14.7	13.6	143
1.5 „ .	30	16.2	12.8	134	30	21.2	19.4	297	30	17.2	16.2	293	30	9.5	5.1	159	29	7.7	6.2	102	28	10.0	8.5	134
2.1 „ .	30	9.9	5.5	105	29	21.1	19.8	292	29	19.0	18.0	291	30	7.5	1.4	137	29	7.2	4.8	103	28	6.7	1.6	106
3.0 „ .	28	11.3	9.4	046	25	20.3	21.5	284	28	20.9	18.1	287	29	9.6	4.5	015	27	6.9	1.8	003	28	9.1	4.2	350
3.6 „ .	25	13.0	11.1	055	21	20.8	20.0	280	28	22.3	20.6	283	28	9.9	5.2	004	26	9.5	4.4	347	17	12.0	7.8	006
4.5 „ .	18	12.9	10.2	064	16	22.7	21.8	277	25	26.2	24.0	282	21	10.2	4.2	002	22	12.0	9.3	337	2	6.0	3.7	330
5.4 „ .	11	11.8	7.5	094	9	22.5	21.7	265	19	29.0	27.8	278	17	12.1	4.7	280	21	11.6	8.2	332				
6.0 „ .	5	12.4	7.8	136	3	19.7	19.4	257	13	33.8	32.0	276	16	13.8	7.5	255	19	11.1	7.6	327				
7.2 „ .	2	3.0	1.5	273	1	17.0	17.0	265	6	36.5	34.9	284	3	17.3	12.9	276	11	13.8	9.1	299				
9.0 „ .	1	21.0	21.0	230	1	25.0	25.0	290	1	61.0	61.0	280	1	23.0	23.0	275	5	24.2	23.3	275				

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

April 1957

Station	BHAGALPUR								BHUBANESHWAR												BHUJ			
Time in I. S. T.	0530				1730				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	4.6	3.4	248	30	7.3	7.0	276	30	6.9	6.0	214	30	13.5	12.0	195	30	11.6	10.6	201	30	1.6	1.5	260
0.15 a.g. .	30	13.2	9.0	264	30	16.0	15.5	288	30	14.2	12.5	218	28	16.5	15.4	197	28	15.2	14.0	205	30	14.3	12.6	296
0.3 a.m.s.l. .	30	15.1	11.5	281	30	16.7	16.2	289	30	13.8	12.7	241	28	16.6	15.4	201	28	16.4	15.2	214	30	16.1	14.2	300
0.6 „ .	30	18.0	16.4	293	29	17.7	17.3	287	30	12.2	10.5	250	28	15.1	13.1	206	28	15.6	14.5	221	30	19.5	17.6	300
0.9 „ .	30	19.6	18.6	293	27	18.9	18.5	284	29	11.6	7.9	261	28	9.9	5.8	222	28	12.5	10.6	224	30	13.6	10.5	296
1.5 „ .	28	20.5	20.1	292	24	19.2	18.9	281	29	8.4	5.4	300	28	7.4	4.1	293	27	8.5	6.1	281	30	11.1	6.8	264
2.1 „ .	25	21.8	21.2	292	20	22.5	21.9	278	29	9.9	7.5	317	28	9.0	7.8	316	25	9.6	8.4	310	30	12.5	9.2	248
3.0 „ .	18	27.2	26.7	288	13	24.6	24.1	286	27	11.1	9.4	331	27	13.3	11.9	319	19	12.9	11.1	328	30	14.3	11.5	250
3·6 „ .	7	26.9	25.9	294	10	22.0	21.3	298	21	12.5	11.4	326	25	14.6	12.9	316	7	13.6	13.1	319	20	15.7	14.0	252
4.5 „ .	1	19.0	19.0	300	7	22.1	21.8	291	19	15.6	13.8	299	14	17.4	15.1	307	1	17.0	17.0	330	14	17.9	16.1	259
5.4 „ .					4	23.5	22.8	300	9	19.0	17.3	309	8	19.1	16.9	305					2	13.0	9.7	250
6.0 „ .					3	32.0	29.7	303	6	17.5	16.8	292	7	24.7	23.3	302					2	14.5	13.2	243
7.2 „ .					1	13.0	13.0	330	2	19.0	17.3	323	2	25.0	25.0	291					1	33.0	33.0	265
9.0 „ .													2	32.5	32.5	283					1	37.0	37.0	280

Station	BHUJ								BIKANER												CHIKALTHANA			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	5.6	4.3	257	30	2.8	2.5	259	30	3.4	1.4	342	30	4.3	2.9	267	30	2.7	1.5	013	30	4.0	1.8	303
0.15 a.g. .	30	10.1	7.5	268	30	13.4	12.1	284	30	16.8	4.2	034	30	8.5	5.7	272	30	14.9	7.8	005	30	8.6	3.9	328
0.3 a.m.s.l. .	30	10.3	7.9	268	30	14.7	13.0	287	30	12.8	3.6	049	30	7.7	4.9	275	30	11.7	6.1	014				
0.6 „ .	30	10.5	8.6	275	30	16.3	14.3	293	30	15.0	4.0	019	30	9.4	6.2	269	30	15.0	6.0	014				
0.9 „ .	30	10.3	8.7	278	30	10.7	8.1	297	30	12.6	3.8	325	30	9.8	6.9	265	30	12.7	2.8	335	30	10.3	5.6	359
1.5 „ .	30	8.0	5.9	285	30	8.7	4.8	266	30	12.1	9.4	277	29	9.9	6.7	265	29	10.8	8.1	252	30	11.5	8.0	009
2.1 „ .	30	9.4	6.9	259	30	13.0	7.5	245	28	15.3	12.6	268	28	11.1	8.2	259	26	15.3	13.7	240	30	9.9	5.1	031
3.0 „ .	30	15.9	13.6	249	27	13.4	10.0	251	22	15.8	12.8	266	27	14.2	11.8	261	24	19.1	17.5	244	30	8.9	1.4	141
3·6 „ .	29	19.7	17.3	251	18	15.4	14.1	256	12	15.1	12.0	256	24	18.1	16.3	266	14	22.6	19.7	253	28	8.9	4.2	223
4.5 „ .	24	22.3	20.6	255	10	16.4	14.3	270	3	18.7	17.6	254	23	24.0	22.4	267	4	13.3	13.3	299	9	9.6	6.7	260
5.4 „ .	23	25.1	24.1	260	8	17.5	15.3	261	1	26.0	26·0	270	17	27.9	25.3	276					4	15.7	14.7	329
6.0 „ .	23	28.8	27.2	260	8	20.7	19.5	260	1	31.0	31.0	260	14	33.0	29·8	278					2	12.0	11.5	345
7.2 „ .	16	32.0	30.1	259	3	20.7	19.8	249					6	44.9	42.4	268								
9.0 „ .	8	45.3	43.1	265	1	2.0	2.0	315					1	49.0	49.0	255								

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

April 1957

Station	CHIKALTHANA								COCHIN												DARJEELING			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.4	1.3	346	30	6.0	3.8	315	30	1.9	1.2	053	30	6.1	5.5	284	30	2.4	0.2	078	30	0.7	0.3	100
0.15 a.g.	30	8.6	1.1	333	29	14.2	8.7	330	28	6.5	5.1	046	27	10.4	9.6	282	20	5.3	2.1	359	29	3.4	0.9	181
0.3 a.m.s.l.									28	6.4	4.5	358	27	11.4	10.6	284	20	5.3	2.3	347				
0.6 „									28	6.9	5.6	330	27	9.6	8.3	284	20	6.5	5.5	312				
0.9 „	30	7.7	2.6	318	29	15.5	10.8	339	28	5.9	4.8	304	27	5.7	3.4	286	20	5.9	3.9	309				
1.5 „	30	6.9	3.7	324	29	13.8	10.8	344	28	3.9	2.1	056	27	8.0	6.9	061	20	5.4	2.7	052				
2.1 „	30	6.3	3.3	306	29	9.8	6.9	002	27	9.4	8.7	068	24	16.0	15.7	063	17	10.5	8.9	073				
3.0 „	28	7.6	3.6	300	26	9.5	1.3	078	25	14.6	13.1	071	24	18.4	17.2	079	11	17.0	15.9	060	28	10.3	9.5	282
3.6 „	27	8.3	4.1	288	16	9.6	4.9	140	21	13.8	11.6	078	24	13.3	12.4	084	6	14.2	12.3	076	27	19.2	18.4	283
4.5 „	16	10.4	8.3	281	6	11.7	4.4	238	19	14.5	13.0	084	17	10.7	8.1	098	3	7.3	5.3	107	20	26.7	24.9	286
5.4 „	10	17.8	16.7	281	2	13.0	13.0	295	9	10.8	9.1	091	13	10.4	8.5	084	1	1.0	1.0	046	12	29.8	28.8	285
6.0 „	8	19.7	18.4	285	1	13.0	13.0	290	6	12.8	11.0	360	10	12.0	10.2	074	1	3.0	3.0	070	9	27.8	26.2	287
7.2 „	6	26.8	26.2	279					4	6.8	6.1	101	7	16.0	13.7	026					5	20.6	19.0	284
9.0 „	1	32.0	32.0	260					2	16.5	2.1	247	4	15.5	12.9	032					3	33.7	20.9	318

Station	DARJEELING				DUM DUM												GADAG			
Time in I. S. T.	1730				0530*				1130				1730*				2330				0530			
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.0	3.9	228	30	3.9	3.3	206	30	4.7	3.3	207	30	6.8	6.5	186	30	5.0	4.4	208	30	6.1	4.5	239
0.15 a.g.	24	8.5	8.3	235	30	13.4	12.1	230	30	7.3	5.2	226	30	13.4	11.5	197	30	15.8	15.5	214	30	13.4	8.0	264
0.3 a.m.s.l.					30	13.8	12.3	240	30	7.9	5.3	238	30	12.5	10.6	203	30	18.5	18.2	218				
0.6 „					30	12.5	10.7	255	30	7.2	5.3	260	30	10.6	8.6	214	30	17.3	17.0	225				
0.9 „					30	11.8	9.4	273	30	7.6	5.9	271	30	9.3	7.1	235	30	14.1	13.2	237	30	13.5	6.7	306
1.5 „					30	10.1	8.1	291	30	9.0	7.1	290	30	10.2	8.8	286	30	12.1	9.6	280	30	11.3	3.0	011
2.1 „					30	11.9	10.5	296	30	13·3	11·5	287	30	13.6	12.8	298	28	14.1	12.6	300	30	8.9	3.2	093
3.0 „	23	13.8	13.2	269	30	17.2	16.2	295	29	19.6	18.5	294	30	20.7	20.0	303	21	17.0	16.6	308	30	10.1	6.6	097
3.6 „	16	16·6	15·7	289					28	21·7	20.8	295					1	23.0	23.0	269	30	11.1	7.3	082
4.5 „	10	28.3	26.4	288	30	22.9	22.0	245	26	23.6	23.1	293	30	26·4	25.3	296					12	10.4	7.9	077
5.4 „	8	34.3	32.2	285	30	26.7	26.3	289	26	26.4	25.4	291	30	27.1	25.8	288					2	9.0	7.8	236
6.0 „	3	45.3	45.2	291	30	27.0	26.3	285	25	28.6	27.4	289	30	30.0	28.3	286					2	9.0	8.7	253
7.2 „	2	89.5	89.5	293	30	32.6	31.2	279	16	33.3	32.6	280	30	35.4	33.3	283								
9.0 „					28	47.3	44.2	278	4	33.8	32.4	284	30	46.2	43.3	280								

Table IV—Monthly Mean Direction and Velocities of Upper Winds

Winds up to 9·0 Km. above mean sea level

April 1957

Station	GADAG								GANNAVARAM												GAUHATI			
Time in I. S. T.	1730				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	5.2	1.6	125	30	8.1	5.2	245	30	2.4	1.8	109	30	9.0	8.5	177	30	4.3	3.4	171	30	3.2	2.5	065
0.15 a. g. . .	30	9.4	2.2	113	29	16.8	10.5	255	30	8.0	6.3	183	30	11.0	10.5	165	30	11.2	10.0	173	30	5.9	3.2	074
0.3 a.m.s.l. .									30	11.3	10.1	191	30	11.4	11.0	166	30	13.7	12.4	176	30	6.5	2.8	074
0.6 „ .									30	13.3	12.2	189	30	9.7	9.3	167	30	12.6	10.9	167	30	8.6	1.9	231
0.9 „ .	30	9.1	2.9	120	29	17.4	7.6	265	30	10.3	8.9	171	30	6.0	4.6	162	30	8.5	6.9	148	30	11.6	8.0	244
1.5 „ .	30	7.6	3.1	091	29	12.0	0.1	254	29	6.6	4.7	124	30	6.2	3.7	072	29	7.3	5.2	106	30	18.5	17.3	254
2.1 „ .	30	8.6	4.7	087	29	10.9	7.4	110	29	8.8	5.5	066	30	8.8	6.7	067	29	8.3	5.8	076	30	23.3	22.7	266
3.0 „ .	27	9.7	7.2	078	28	10.3	9.0	098	28	11.6	5.7	040	30	11.3	8.5	051	29	10.5	7.3	057	29	29.1	28.7	269
3.6 „ .	24	9.1	7.1	065	24	11.5	9.7	077	21	11.1	6.2	011	30	11.5	8.3	035	25	10.9	6.5	036	29	32.2	31.4	272
4.5 „ .	13	9.8	5.2	047	9	15.4	13.5	057	18	12.9	8.6	327	30	11.2	5.5	330	19	10.0	5.3	011	28	36.4	35.4	278
5.4 „ .	9	9.9	4.3	056	1	13.0	13.0	070	14	11.6	3.3	349	30	11.1	6.0	324	12	8.7	4.7	321	27	35.9	34.9	280
6.0 „ .	6	12.0	3.4	027					12	9.0	3.5	340	30	13.3	8.4	318	10	8.9	4.5	287	27	38.0	37.0	279
7.2 „ .	1	6.0	6.0	090					3	16.3	15.5	315	27	14.3	10.5	299	1	13.0	13.0	295	23	45.0	43.7	279
9.0 „ .	1	8.0	8.0	250					2	27.5	27.4	302	20	22.3	19.6	284					19	59.1	55.3	278

Station	GAUHATI												GAYA											
Time in I.S.T.	1130				1730*				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	6.3	4.0	009	30	5.6	0.3	007	30	7.0	3.5	048	30	3.0	2.2	245	30	8.8	8.3	302	30	2.3	1.8	264
0.15 a. g. . .	30	7.6	5.0	024	29	8.5	1.3	035	29	11.9	5.3	081	30	15.0	12.9	256	30	14.4	12.8	292	30	15.8	12.9	293
0.3 a.m.s.l. .	30	7.7	4.7	021	29	9.4	0.9	354	29	10.4	2.6	124	30	15.4	12.7	270	30	14.8	14.3	249	30	16.5	14.0	294
0.6 „ .	30	7.1	2.4	323	29	10.8	3.2	260	29	10.0	3.5	193	30	18.5	15.0	285	30	17.1	17.0	295	30	19.0	16.3	296
0.9 „ .	30	8.9	6.5	259	29	12.5	8.3	251	28	12.7	9.6	241	30	19.0	17.7	297	30	18.3	18.2	293	30	19.4	16.8	284
1.5 „ .	29	13.0	17.5*	245	29	18.2	15.9	250	28	19.4	18.3	252	29	20.3	19.5	290	29	18.5	18.2	291	28	19.3	18.5	288
2.1 „ .	27	24.8	23.0	253	29	23.3	22.1	254	23	23.1	22.4	263	29	24.4	23.1	287	29	19.7	19.3	285	22	20.8	19.9	285
3.0 „ .	23	27.4	26.2	265	28	29.5	28.7	265	18	23.7	23.0	266	20	26.2	25.5	286	25	22.0	21.2	285	8	21.0	19.7	277
3.6 „ .	19	28.4	25.4	267	28	31.6	30.6	271	4	9.0	7.5	259	10	25.5	23.1	282	23	26.4	25.8	288				
4.5 „ .	14	26.4	24.2	276	27	33.6	32.1	276	2	2.5	2.5	357	3	21.6	18.8	285	13	29.5	29.2	281				
5.4 „ .	9	24.9	22.2	279	27	37.2	35.9	274	1	5.0	5.0	045	2	22.5	19.3	319	6	29.3	29.3	279				
6.0 „ .	8	25.2	22.0	270	26	37.0	35.2	276	1	5.0	5.0	140	2	30.0	26.9	331	6	29.7	29.3	285				
7.2 „ .	6	31.5	25.7	272	25	43.3	41.6	279																
9.0 „ .	3	36.3	31.0	284	20	52.9	48.8	279																

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

April 1957

Station	GOPALPUR												GORAKHPUR								GWALIOR			
Time in I.S.T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	7.2	6.7	226	30	15.9	15.3	206	30	12.8	12.3	217	30	2.6	2.2	250	30	6.4	6.1	279	30	3.6	1.5	284
0.15 a.g.	30	16.0	15.2	215	30	22.5	22.2	202	30	21.0	20.5	217	30	15.7	13.3	289	30	20.2	19.7	282	30	11.9	5.3	332
0.3 a.m.s.l.	30	12.3	11.8	228	30	21.7	21.1	205	30	17.2	16.6	220	30	18.1	16.3	293	30	22.3	22.0	282	30	9.3	3.8	309
0.6 ,,	30	8.8	7.4	243	30	12.3	11.1	199	30	11.6	10.5	220	30	22.5	22.3	300	30	26.3	25.8	285	30	13.1	7.0	335
0.9 ,,	30	9.3	6.7	246	30	7.7	5.1	185	30	9.1	7.0	219	30	23.5	23.3	299	30	26.6	26.4	285	30	11.8	7.4	318
1.5 ,,	29	7.4	3.0	275	27	5.2	0.5	303	27	7.1	2.8	247	28	25.0	24.6	294	29	25.2	25.0	282	30	13.9	10.4	292
2.1 ,,	29	7.7	4.1	334	24	7.9	6.8	345	27	7.1	3.4	339	20	22.5	21.5	287	25	25.2	24.8	283	30	18.1	16.1	284
3.0 ,,	24	11.7	10.0	345	24	11.9	9.7	338	17	10.3	8.4	331	10	20.6	19.7	287	20	27.1	26.0	286	29	22.4	21.1	276
3·6 ,,	20	15.3	12.6	339	22	13.7	10.1	333	4	13.0	12.6	331	8	21.4	21.1	286	16	28.1	26.4	292	27	22.9	21.6	275
4.5 ,,	15	14.3	12.5	317	19	14.3	10.5	311	1	15.0	15.0	330	1	17.0	17.0	330	10	30.7	29.7	289	23	28.5	27.4	273
5.4 ,,	15	17.0	14.0	296	16	15.0	13.8	299									9	33.3	32.6	287	20	34.5	33.4	275
6.0 ,,	13	17.6	15.9	307	13	17.0	15.1	299									6	25.7	24.4	280	17	39.0	38.2	276
7.2 ,,	8	25.4	23.2	293	10	23.7	21.7	293									1	25.0	25.0	325	12	45.2	44.4	275
9.0 ,,	6	40.7	35.4	291	7	30.0	27.8	285									1	54.0	54.0	345	3	40.3	37.6	289

Station	GWALIOR								IMPHAL												JABALPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5.2	4.2	306	30	3.7	2.2	318	30	3.5	2.3	244	30	5.7	4.7	258	30	2.6	1.5	232	30	2.4	1.5	151
0.15 a.g.	30	11.5	8.8	315	30	14.9	8.9	346	29	5.4	3.4	232	30	8.8	8.2	259	30	5.6	3.4	238	30	9.5	3.8	165
0.3 a.m.s.l.	30	10.0	7.9	315	30	11.4	6.1	342																
0.6 ,,	30	12.5	9.5	312	30	15.1	10.3	339													30	11.3	2.9	148
0.9 ,,	30	12.9	10.7	307	30	13.7	10.8	322	29	4.9	3.3	228	30	7.9	7.1	259	30	5.3	2.0	238	30	13.4	0.3	051
1.5 ,,	30	12.5	10.9	297	30	14.1	12.4	291	29	12.1	10.9	259	30	14.5	13.6	258	30	13.0	11.6	267	30	9.9	2.2	278
2.1 ,,	29	14.1	12.7	281	28	16.6	15.4	268	29	20.8	20.0	265	29	18.9	18.2	259	30	18.6	17.3	263	30	9.1	6.5	264
3.0 ,,	29	17.0	16.1	269	25	21.3	20.6	264	24	25.2	23.9	272	25	26.6	25.7	260	23	24.0	23.0	272	30	13.5	11.6	277
3.6 ,,	28	20.4	19.1	268					16	18.9	17.1	270	19	26.4	25.1	266	10	17.6	15.8	270	27	18.2	16.8	284
4.5 ,,	22	28.7	27.2	273					12	21.3	19.6	271	12	24.2	23.8	274	4	22.0	21.1	259	23	19.3	17.9	284
5.4 ,,	19	37.2	36.4	273					5	16.6	12.1	266	8	27.6	27.1	267					19	21.7	20.9	286
6.0 ,,	18	38.3	37.1	275					5	20.2	15.8	255	4	21.5	21.3	264					17	23.3	22.0	281
7.2 ,,	11	42.6	40.8	274					2	15.0	2.7	328	2	29.5	29.2	272					7	35.6	34.0	280
9.0 ,,	4	47.0	46.5	281					1	16.0	16.0	210	1	53.0	53.0	285								

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

April 1957

Station	JABALPUR								JAGDALPUR												JAIPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.6	1.1	276	30	16.7	1.0	114	30	1.6	1·2	219	30	2.6	1.4	196	30	2.0	1.5	198	30	3.2	1.6	009
0.15 a.g. . .	29	10.4	3.1	266	30	13.0	3.8	090	29	9.2	6.4	214	29	10.2	5·7	201	30	11.5	7.1	199	30	12.6	2.7	357
0.3 a.m.s.l. .																								
0.6 „ .	29	11.2	2.9	271	30	13.5	3.6	088	29	5.5	3.6	218	29	8.0	4.7	198	30	8.9	5.9	195	30	13.3	2.9	355
0.9 „ .	29	11.1	4.6	285	30	12·8	2.1	044	29	11.7	8.2	240	29	9.4	5.2	211	30	11.2	6.6	206	30	12.1	4.6	324
1.5 „ .	29	9.9	6.9	292	30	9.1	3.5	313	29	8.1	4.7	291	27	6.4	3.0	278	30	8.5	3.5	263	30	14.3	10.1	274
2.1 „ .	29	10.7	9.1	293	29	10.0	6.2	288	29	9.1	4.3	327	25	6.7	3.2	327	29	8.0	4.6	336	33	19.6	16.7	264
3.0 „ .	27	11.0	10.3	287	28	12.3	9.5	287	29	9.0	5.2	354	23	8.6	3.4	358	28	9.1	5.7	356	24	20.6	18.9	269
3·6 „ .	21	13.0	12.5	280	19	15.6	13.2	282	27	10.6	6.5	195	17	9.2	3.8	359	13	11.0	5.0	341	16	21.5	18.2	274
4.5 „ .	18	19.4	18.8	279	4	20.8	19.5	298	23	11.9	8.4	309	8	13.7	10.9	306	3	14·3	14·3	336	5	20.6	20.0	278
5.4 „ .	15	20.7	18.7	287	1	29.0	29.0	275	17	15.3	12.0	293	6	16.5	14.1	281					3	23.3	23.0	276
6.0 „ .	13	23·7	21·9	282					14	16·5	13.2	290	5	18.4	16.7	297					1	19.0	19.0	280
7.2 „ .	12	29·4	27·0	272					9	16.9	14.3	286	4	27.8	26.5	279					1	24·0	24·0	280
9.0 „ .	6	30·2	29·2	283					4	18·5	15·3	291												

Station	JAIPUR				JAMSHEDPUR								JHARSUGUDA											
Time in I. S. T.	1730				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	6.5	5.7	286	30	2.5	2.1	281	30	3.9	3.0	289	30	2.3	0.8	037	30	3.9	1.3	221	30	3.8	0.7	177
0.15 a. g. . .	29	10.2	8.2	293	30	6.7	5.9	271	30	6.5	5.0	287	30	7.8	1.2	211	30	9.3	3.0	228	30	10.7	3.3	237
0.3 a.m.s.l. .					30	6.8	5.8	266	30	6.6	5.1	290	30	6.9	0.7	113	30	7.4	2.6	224	30	9.5	2.3	234
0.6 „ .	29	10.8	9.5	293	30	9.6	6.5	281	30	9.8	8.3	296	30	9.4	2.7	284	30	9.3	3.1	242	30	11.4	4.3	264
0.9 „ .	29	11.3	9.9	296	30	10.8	7.5	305	30	10.3	9.0	292	30	10.0	4.9	296	30	8.6	4.5	252	30	10.6	5.6	276
1.5 „ .	29	12.2	10.1	290	30	11.2	9.6	307	30	11.1	10.4	288	30	9.0	6.4	312	29	9.7	7.4	268	29	9.0	7.7	300
2.1 „ .	29	13.3	11.5	284	30	13.8	12.8	297	30	12.2	11.2	290	29	9.4	8.3	296	29	12.0	9.7	281	29	9.7	8.6	300
3.0 „ .	29	16.4	14.3	277	28	17.1	16.5	287	30	14.4	14.0	293	24	13.0	11.5	300	27	12.6	10.7	302	27	11.0	9.2	305
3·6 „ . .	24	20.7	19.7	270	26	19.4	18.8	292	24	16.2	15.1	290	9	18.4	17.2	304	25	15.1	12.5	309	5	14·0	13·2	307
4.5 „ .	15	23.3	22.7	271	15	24.1	23.4	298	19	19.1	18.2	297	1	23.0	23.0	320	20	15.5	13.6	291				
5.4 „ .	6	58.2	56.7	267	7	28.1	25.8	292	12	22·1	20.9	291	1	15.0	15.0	285	13	19.8	15.7	276				
6.0 „ .	4	68.8	65.5	273	2	36·5	31·6	306	10	26.3	25.6	292	1	21.0	21.0	300	4	26.0	25.2	277				
7.2 „	3	37.3	37.3	275					8	35.9	34.3	284												
9.0 „ .									1	27·0	27·0	295												

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

April 1957

Station	JODHPUR												MADRAS							
Time in I. S. T.	0530*				1130				1730*				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	5.0	2.5	013	30	5.9	1.3	192	29	7.5	5.4	273	30	5.6	1.9	286	30	3.5	2.8	198	30	6.6	5.1	159
0.15 a. g. . .	30	7.3	2.6	360	30	6.1	1.6	174	29	9.6	7.1	273	30	16.7	3.9	274	30	10.5	9.4	193	30	10.8	9.4	156
0.3 a.m.s.l. .	30	6.5	2.7	005	30	6.0	1.4	196	29	8.9	6.4	273	30	12.2	2.8	275	30	10.6	9.7	189	30	9.9	9.2	167
0.6 „ .	30	9.5	2.1	330	30	7.3	1.6	169	29	9.8	7.4	266	30	19.4	4.7	271	30	10.7	10.0	181	30	8.7	7.4	183
0.9 „ .	30	12.1	3.5	296	30	8.1	3.4	240	29	10.4	8.2	263	30	18.3	6.7	262	30	10.5	9.1	175	30	7.9	6.4	187
1.5 „ .	30	12.6	9.6	250	30	11.9	7.3	245	29	11.6	8.4	253	28	13.1	5.3	254	30	7.9	4.8	121	28	7.9	3.9	102
2.1 „ .	30	15.4	13.8	250	29	15.6	14.9	254	29	12.4	10.6	253	24	10.5	6.8	254	30	10.4	7.8	072	28	12.5	10.9	078
3·0 „	29	20·7	17.4	255	29	18.7	16.0	266	26	15.8	14.4	253	20	13.7	11.0	249	30	15.6	12.9	058	27	16.8	15.5	065
3.6 „ .	28	22.6	20.1	263	27	19.6	18.5	252	26	20.1	18.8	256	9	18.0	7.6	258	30	14.5	11.5	050	27	16.3	14.3	063
4.5 „ .	27	26.0	24.1	260	25	25.7	24.8	255	25	25.9	24.2	257	2	10.0	10.0	320	30	12.2	8.9	039	25	14.1	11.0	066
5.4 „ .	26	32.1	30.8	255	23	30.4	29.1	258	25	33.0	31.0	261					29	12.0	6.8	052	24	12.2	7.3	076
6.0 „ .	26	35.9	34·2	255	20	31.4	31.2	258	25	33.5	32.0	263					29	12.5	4.6	059	24	12.6	6.3	074
7.2 „ .	25	47.5	45.5	260	8	37.6	35.4	267	22	43.0	41.0	264					28	12.8	2.8	320	20	12.6	3.9	349
9.0 „ .	20	61.7	60.5	265	4	47.3	43.3	263	17	54.0	52.4	264					22	16.7	9.3	292	15	11.7	9.2	316

Station	MADRAS								MANGALORE								MINICOY			
Time in I. S. T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	10.7	10.3	139	30	4.8	4.4	150	30	4.2	3.1	058	30	8.8	8.1	289	30	5.5	4.2	326	30	2.0	1.5	356
0.15 a. g. . .	29	13.0	12.9	139	30	14.4	13.9	153	30	6.6	4.0	358	30	11.7	11.2	294	30	8.4	7.0	320	29	6.0	4.2	349
0.3 a.m.s.l. .	29	12.5	11.6	141	30	15.0	14.7	153	30	6.6	4.9	336	30	12.1	11.4	292	30	8.4	7.5	318	29	5.8	4.0	348
0.6 „ .	29	9.6	7.7	145	30	13.1	12.1	154	30	6.1	4.3	330	30	10.3	9.4	290	30	7.5	6.6	317	29	4.7	2.8	345
0.9 „ .	29	6.6	3.2	145	30	9.2	6.7	154	30	6.3	3.9	316	28	8.1	6.4	294	30	6.3	4.7	309	29	4.1	1.4	051
1.5 „ .	29	7.0	3.9	067	30	7.4	4.1	119	28	6.9	3.0	287	26	5.0	3.5	010	29	4.7	1.4	281	29	8.2	7.4	085
2.1 „ .	29	11.4	9.4	070	30	9.8	6.7	079	28	7.2	3.5	080	24	9.7	8.5	079	22	8.7	7.4	9.3	29	12.7	12.1	087
3.0 „ .	30	15.3	2.9	055	30	12.8	9.2	062	25	13.1	11.5	081	20	17.1	14.5	081	12	16.6	15.7	085	29	13.9	13.2	089
3.6 „ .	30	14.3	10.9	054	22	12·5	9.2	055	19	15.8	12.1	082	17	19.2	18.5	084	10	14.2	12.3	079	27	11.9	10.8	093
4.5 „ .	29	12.4	8.2	054					8	12.3	8.7	068	14	13.4	8.4	081	5	12.6	7.5	054	26	10.7	9.7	087
5.4 „ .	28	12.1	7.7	055					3	8.7	3.1	304	13	11.1	5.9	068					20	11.6	10.0	086
6.0 „ .	28	11.5	5.5	055									13	11.7	7.5	058					16	11.7	9.6	086
7.2 „ .	28	12.4	6.1	323									9	11.8	5.5	002					12	9.4	8.3	089
9.0 „ .	25	16.7	11.8	294									8	16.1	8.6	306					8	9.7	6.0	112

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

April 1957

Station	MINICOY								MOHANBARI												MUSSOORIE			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3.1	2.5	354	30	2.4	1.7	332	30	2.9	2.8	045	30	2.8	2.8	046	30	3.3	3.0	040	30	4.6	3.9	010
0.15 a.g.	30	6.4	4.8	354	30	5.6	3.8	338	27	12.1	11.7	052	28	7.5	6.4	050	23	10.7	9.3	045	27	20.9	16.6	360
0.3 a.m. s.l.	30	6.6	5.1	355	30	5.6	4.0	337	27	12.9	12.5	049	28	8.6	7.5	050	23	11.0	9.8	044				
0.6 „	30	6.0	4.9	356	30	5.1	2.5	336	27	13.4	12.3	054	28	10.3	8.4	060	23	9.3	8.4	050				
0.9 „	30	4.9	2.5	031	30	4.4	1.4	083	26	8.8	7.2	065	28	9.1	6.1	070	23	7.0	5.0	069				
1.5 „	30	6.6	5.5	081	28	7.7	6.9	093	24	8.5	2.1	168	27	8.2	6.2	238	22	6.3	3.5	200				
2.1 „	29	11.1	9.9	081	27	12.3	11.8	083	20	9.9	7.7	232	27	16.3	15.4	237	16	9.0	7.7	252	27	12.7	9.9	003
3.0 „	28	13.9	12.9	081	25	16.1	15.7	079	18	16.4	14.8	254	22	22.3	20.9	236	11	13.0	12.7	260	27	9.9	5.9	275
3.6 „	28	13.1	11.4	081	23	14.1	13.5	076	16	15.1	13.9	259	18	24.4	22.7	236	3	17.6	17.1	256	26	13.1	8.5	276
4.5 „	27	11.9	10.6	080	20	13.0	12.5	083	10	11.5	11.0	255	8	14.7	11.3	250					22	14.3	13.5	290
5.4 „	25	12.6	11.7	090	14	11.4	8.7	083	6	16.5	13.0	294	7	19.7	15.1	270					19	17.8	17.0	283
6.0 „	24	13.9	12.8	087	10	14.8	14.1	080	4	18.0	17.7	308	7	23.0	18.7	277					17	21.9	21.0	280
7.2 „	23	13.3	11.7	067	4	16.5	13.2	043	3	27.7	21.2	284	1	27.0	27.0	295					4	27.5	25.0	278
9.0 „	21	9.1	4.1	058					1	59.0	59.0	265												

Station	MUSSOORIE				NAGPUR												NANPARA			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3.6	1.9	218	30	3.3	1.1	334	30	3.9	1.1	261	28	2.0	0.8	233	30	4.9	0.4	043	8	2.7	1.9	281
0.15 a.g.	28	7.0	3.3	217	30	6.2	0.9	311	30	5.2	2.3	259	28	3.1	1.0	228	30	12.1	2.2	110	8	14.0	13.7	313
0.3 a.m. s.l.																					8	14.7	13.5	313
0.6 „					30	7.6	0.6	215	30	5.9	2.1	236	28	3.8	1.3	237	30	13.0	3.3	126	8	17.9	17.7	316
0.9 „					30	9.6	3.3	214	30	6.0	3.2	216	28	4.9	1.7	260	30	10.8	3.8	139	8	20.6	18.3	300
1.5 „					30	9.0	4.8	226	30	6.4	4.5	215	28	6.2	3.0	263	29	7.1	2.0	169	8	20.6	20.4	301
2.1 „	28	6.9	4.7	214	30	7.5	3.5	245	30	4.3	4.0	232	28	6.5	4.1	268	29	6.5	1.6	266	8	21.9	21.1	293
3.0 „	28	6.6	2.8	269	30	9.1	6.3	284	29	8.5	4.9	270	27	8.8	6.9	280	28	8.5	5.7	293	4	28.3	26.9	299
3.6 „	27	8.9	4.2	301	28	12.2	10.2	281	29	11.2	7.6	289	27	11.5	9.7	279	2	10.5	9.9	327	2	19.0	18.8	279
4.5 „	25	13.6	10.4	288	27	16.5	14.7	274	26	16.2	13.2	284	26	15.2	13.9	280	1	12.0	12.0	325				
5.4 „	19	21.1	20.3	288	23	22.4	21.6	276	26	18.7	17.1	282	22	18.2	17.1	273								
6.0 „	18	26.4	25.7	286	22	24.6	23.3	279	26	21.0	18.8	279	22	20.4	19.1	270								
7.2 „	16	31.3	31.0	279	21	28.9	27.8	272	26	30.0	27.6	278	22	28.0	26.8	270								
9·0 „	7	51.1	50.5	271	19	39.6	38.1	267	20	37.8	34.3	274	21	38.2	37.1	270								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

APRIL 1957

Station	NANPARA				NEW DELHI												POONA			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	8	5.3	5.0	299	30	5.4	3.9	343	30	9.7	7.5	311	30	7.5	6.9	322	30	6.6	2.7	329	30	1.0	0.7	237
0.15 a.g.	8	20.4	19.1	299	30	14.1	9.7	328	30	10.1	7.1	307	29	11.4	9.9	314	30	16.3	11.5	354	30	5.6	3.7	274
0.3 a.m. s.l.	8	20.4	13.7	309	30	14.6	10.1	338	30	10.1	7.4	318	29	11.0	9.2	312	30	13.6	8.8	355				
0·6 „	8	18.9	17.8	295	30	14.0	10.0	328	30	11.4	7.5	302	29	11.4	9.8	314	30	16.3	10.6	343	30	3.1	2.1	242
0.9 „	8	17.1	17.5	300	30	14.4	10.4	312	30	12.7	9.5	299	29	11.5	10.1	312	30	14.6	9.6	320	30	7.5	4.5	295
1.5 „	8	17.8	17.7	297	30	16.9	14.7	295	30	14.9	11.8	289	29	12.1	10.8	307	30	14.3	11.8	291	30	10.2	5.2	350
2.1 „	8	19.5	19.2	293	30	19.2	17.0	289	30	18.1	14.7	283	30	13.5	12.4	293	30	17.6	15.3	275	30	9.9	2.1	040
3.0 „	8	23.8	23.1	291	30	21.4	19.4	284	30	21.1	18.5	270	30	15.8	14.5	285	24	21.3	19.3	272	30	9.5	9.3	134
3.6 „	8	27.9	27.3	291	30	22.4	20.5	278	30	23.4	21.1	270	29	18.9	15.9	277	15	20.8	18.9	265	28	9.3	4.2	170
4.5 „	6	32.5	31.8	295	30	24.0	22.3	274	30	27.2	25.0	269	29	24.0	21.7	274	1	19.0	19.0	260	12	9.8	6.1	251
5.4 „	4	33.3	31.4	293	30	27.4	26.3	271	27	31.1	29.3	267	28	27.4	26.4	273					6	14.8	9.5	248
6.0 „	4	40.3	38.3	294	30	30.3	28.5	269	27	35.4	33.8	266	29	29.0	29.0	274					3	21.7	17.2	224
7.2 „	1	30.0	30.0	330	28	36.3	31.0	264	26	41.0	39.7	269	26	36.2	35.1	275								
9.0 „					24	48.3	44.2	271	23	55.1	52.9	271	22	49.8	48.1	271								

Station	POONA								PORT BLAIR											
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.5	3.5	276	30	3.4	2.4	256	30	2.0	1.8	007	30	5.0	4.3	072	30	3.4	2.0	070	30	1.3	0.3	316
0.15 a.g.	30	9.7	6.5	285	30	10.4	7.7	281	30	5.7	3.1	006	30	7.1	6.5	073	30	5.8	3.8	072	30	5.1	2.9	040
0.3 a.m. s.l.									30	5.8	3.4	029	30	6.9	6.2	073	30	6.0	3.9	071	30	5.7	3.7	055
0.6 „	30	6.4	4.6	286	30	5.8	4.5	257	30	5.3	2.5	050	30	6.1	3.5	040	30	5.3	2.5	047	30	5.5	4.1	063
0.9 „	30	10.7	7.5	293	30	12.5	9.7	294	30	6.3	2.7	068	30	5.2	1.6	011	30	4.7	2.6	007	28	5.3	3.7	068
1.5 „	30	8.2	5.8	295	30	13.2	9.0	306	30	7.5	4.1	095	29	6.0	3.1	093	30	5.7	2.8	039	26	7.1	4.5	111
2.1 „	30	6.0	2.4	318	30	9.4	2.0	014	30	8.7	6.2	100	27	7.5	5.6	105	29	7.6	4.4	089	24	7.3	4.8	100
3.0 „	29	8.6	2.2	113	30	11.0	5.9	108	30	9.3	6.5	105	23	9.7	7.2	110	29	8.4	4.9	102	20	8.2	6.2	091
3.6 „	24	9.9	2.5	147	28	11.5	7.0	136	30	9.7	5.3	115	21	9.1	6.5	101	29	8.4	4.7	099	11	9.5	7.2	087
4.5 „	20	11.5	7.0	282	2	7.0	7.0	164	29	8.9	4.8	095	18	8.5	5.8	100	29	8.6	5.0	077				
5.4 „	16	17.9	14.6	277					27	11.2	4.5	078	15	10.0	6.5	083	29	11.4	5.4	070				
6.0 „	16	20.9	17.5	271					27	11.0	4.1	076	12	11.0	6.4	076	28	11.5	3.9	059				
7.2 „	14	27.4	24.1	284					27	10.6	4.1	021	10	8.4	1.2	182	27	10.3	3.2	038				
9.0 „	9	37.7	32.9	275					23	13.2	7.9	291	7	7.9	2.9	293	22	13.1	7.7	255				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

April 1957

Station	RAIPUR												SANTACRUZ											
Time in I. S. T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3.3	2.2	226	30	3.9	2.4	258	30	5.4	2.7	228	30	5.0	1.5	360	30	6.5	5.3	295	30	10.5	9.8	309
0.15 a. g.	30	10.8	5.3	256	29	7.6	5.3	277	30	12.9	4.0	272	29	11.1	2.0	017	30	6.6	4.2	290	29	15.1	14.3	316
0.3 a. m. s. l.													29	10.9	3.2	351	30	5.3	2.2	328	29	14.1	13.0	316
0.6 „	30	12.3	6.3	261	29	8.6	6.2	275	30	12.8	3.6	274	29	10.7	5.1	355	30	6.6	3.2	017	29	12.2	10.4	314
0.9 „	30	12.2	7.0	261	29	7.5	5.9	280	30	10.6	3.3	282	29	10.7	6.5	350	30	8.4	4.0	023	29	10.0	7.6	311
1.5 „	30	8.9	5.8	278	29	7.2	5.7	288	30	7.9	4.3	297	29	12.0	6.2	351	29	7.6	1.2	024	29	6.7	2.9	307
2.1 „	30	7.6	5.4	287	29	7.2	5.4	298	28	7.0	4.4	309	29	12.5	3.3	312	29	8.3	2.9	192	28	7.8	2.1	240
3.0 „	28	9.7	7.0	291	28	8.0	5.5	318	27	6.9	4.5	298	29	11.0	6.0	202	28	10.5	7.0	185	28	11.4	5.5	176
3.6 „	27	14.1	11.8	311	27	10.5	8.8	315	20	9.1	6.9	282	29	11.4	7.2	206	28	10.9	7.8	202	28	11.7	6.1	202
4.5 „	22	14.9	12.7	303	25	12.2	10.5	308	1	11.0	11.0	330	29	12.9	8.7	215	29	12.7	8.6	251	28	11.5	5.1	229
5.4 „	16	18.9	17.1	301	22	14.9	14.3	290					29	15.9	11.9	256	29	17.3	11.2	261	28	14.4	9.8	258
6.0 „	13	17.8	15.6	286	20	21.8	20.8	251					29	18.3	14.8	275	29	21.0	15.1	268	28	17.6	12.9	261
7.2 „	11	24.5	23.3	280	16	32.6	29.6	293					29	26.0	23.6	273	25	27.4	21.6	271	28	25.1	21.0	270
9.0 „	5	28.0	25.5	277	10	42.7	42.2	276					28	37.4	32.9	271	17	34.7	29.6	269	22	36.7	33.2	266

Station	SANTACRUZ				TEZPUR												TIRUCHIRAPALLI							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2.3	1.8	305	30	4.3	4.0	070	30	5.5	4.5	086	30	5.7	4.3	070	30	1.7	1.1	122	30	5.7	4.2	111
0.15 a. g.	30	7.9	5.4	311	28	14.3	13.5	078	30	16.3	10.9	081	25	18.5	14.9	082	30	6.4	3.3	150	29	8.6	6.4	103
0.3 a. m. s. l.	30	8.8	6.8	321	28	15.5	14.6	083	30	16.8	10.6	084	25	19.2	14.3	089	30	6.9	4.7	159	29	8.9	6.8	109
0.6 „	30	10.0	8.1	330	28	12.5	8.4	105	30	11.9	3.3	097	26	13.2	8.5	101	30	8.5	6.1	175	29	9.3	7.4	115
0.9 „	30	11.1	7.9	334	27	10.7	4.3	165	30	10.8	6.5	257	26	9.6	3.4	165	30	8.1	5.5	173	29	8.8	6.9	112
1.5 „	29	10.3	6.9	330	26	14.3	12.2	247	28	16.2	15.9	252	24	15.5	13.9	243	30	6.7	3.0	096	28	7.7	5.7	089
2.1 „	28	8.0	3.5	309	25	21.8	21.4	257	24	22.9	22.2	246	15	18.0	17.9	258	30	8.8	7.3	065	28	9.0	6.8	070
3.0 „	27	9.3	3.9	161	19	26.3	25.4	262	19	26.2	24.4	250	11	21.5	20.9	262	29	15.7	13.9	060	29	13.9	12.6	054
3.6 „	17	12.1	7.0	156	13	18.8	17.5	266	10	21.0	16.9	241	5	12.2	7.6	259	28	15.7	11.9	060	28	13.5	12.1	052
4.5 „	11	8.2	6.0	166	9	21.2	17.2	267	4	9.0	3.0	318	2	12.0	9.1	286	26	13.8	9.8	078	27	10.9	8.1	069
5.4 „	1	7.0	7.0	020	7	26.7	21.9	277	2	11.5	5.7	175					25	9.9	7.0	083	23	11.8	9.9	077
6.0 „	1	11.0	11.0	355	4	18.8	13.8	274	1	11.0	11.0	110					25	10.8	8.3	074	24	11.1	8.7	064
7.2 „					4	20.0	17.7	260									23	11.9	5.5	048	18	10.9	7.6	031
9.0 „					2	13.5	13.2	281									15	13.4	5.1	333	12	13.5	6.2	302

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

April 1957

Station	TIRUCHIRAPALLI				TRIVANDRUM												UDAIPUR			
Time in I.S.T.	2030				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	6.8	5.5	124	25	4·1	3·3	350	30	3.6	2.4	268	24	7.9	4.7	260	30	2.7	2.0	012	30	1.9	1.7	256
0.15 a. g. .	30	10.8	8.6	135	24	6.1	5.3	347	30	6.4	4.5	254	24	7.9	4.7	263	30	6.7	4.7	336	30	7.3	4.7	310
0.3 a. m. s. l. .	30	11.5	9.0	136	24	6.2	5.3	347	30	6.4	4.4	253	24	7.7	4.2	266	30	6.9	4.7	325				
0.6 ,, .	30	14.0	10.5	143	24	6.1	4.6	350	30	5.6	3.2	280	24	7.0	3.3	274	30	7.5	5.5	313				
0.9 ,, .	30	12.1	9.2	139	24	5.8	3.8	353	30	5.1	2.5	350	24	6.6	2.5	277	30	6.9	4.5	325	30	9.0	5.0	310
1.5 ,, .	30	6.5	4.1	076	25	6.5	5.3	0 8	24	8.0	7.2	056	24	8.8	6.7	047	27	8.2	5.2	055	30	12.2	6.5	276
2.1 ,, .	30	8.9	7.4	064	25	10.7	9.8	063	20	13.7	12.7	064	24	13.0	11.5	058	25	13.9	12.6	066	30	13.8	10.4	254
3.0 ,, .	30	12.1	10.1	069	24	13.6	12.6	067	13	18.2	17.0	068	24	14.7	13.9	069	19	14.9	13.7	076	27	16.2	13.7	242
3.6 ,, .	27	14.0	11.5	057	24	12.9	11.7	074	8	18.4	17.8	077	24	14.0	13.2	076	12	10.6	9.8	081	22	18.3	15.1	247
4.5 ,, .	24	12.0	9.8	066	24	11.1	9.7	085	7	17.0	16.8	092	24	12.9	11.8	086	7	12.1	11.8	108	7	17.4	15.2	254
5.4 ,, .	21	11.5	8.9	076	24	12.4	10.1	084	6	20.2	19.8	079	24	13.5	12.5	079	2	14.5	14.5	111				
6.0 ,, .	12	12.6	10.3	057	23	12.8	10.7	076	6	19.0	18.7	073	23	13.9	12.5	077	2	14.5	14.5	117				
7.2 ,, .	3	6.0	3.6	078	22	13.8	10.7	062	5	16.4	15.4	062	22	11.9	7.9	058								
9.0 ,, .					19	12.3	2.6	031	4	18.7	16.7	038	18	11.9	2.4	037								

Station	UDAIPUR								VENGURLA												VERAVAL			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.6	2.9	245	30	1.6	1.3	278	30	0.6	0.6	349	30	7.0	6.3	269	30	1.5	1.2	344	30	8.8	7.7	332
0.15 a. g. . .	30	8.0	5.6	251	30	10.0	5.9	291	30	7.6	3.5	010	30	9.5	8.8	280	30	8.2	6.4	333	29	15.8	14.4	333
0.3 a. m. s. l. .									30	8.2	4.2	352	30	9.8	7·9	282	30	9.8	7.4	335	29	17.1	15.6	332
0.6 ,, .									30	9.6	5.1	348	29	9.9	7.7	285	30	10.9	8.2	335	27	15.4	13.6	328
0.9 ,, .	30	8.6	6.4	261	30	11.6	6.9	295	28	12.0	7.3	351	26	7.4	5.1	305	30	10.4	7.0	326	26	11.9	9.9	324
1.5 ,, .	30	9.6	8.1	254	30	11.7	7·3	278	25	14.9	7.2	346	23	6.4	2.9	334	27	10.6	6.3	324	26	9.4	3.8	284
2.1 ,, .	30	9.7	8.6	252	30	10.5	6.7	253	25	9.6	0.8	060	22	7.0	3.5	073	25	8.8	2.8	088	23	9.7	6.3	246
3.0 ,, .	29	10.0	8.6	262	30	13.2	10.2	239	24	9.0	7.1	130	22	10.5	6.4	097	24	12.3	9.7	108	21	12.3	9.7	230
3.6 ,, .	27	12.0	11.2	266	21	15.8	12.6	253	17	9.2	6.0	121	22	11.9	7.2	104	11	14.4	11.1	119	15	11.4	9.6	238
4.5 ,, .	25	22.3	20.9	263	5	19.0	15.2	259	6	6.2	5.3	088	19	10.6	3.9	053	3	12.3	2.5	113	5	12.0	11.0	256
5.4 ,, .	23	29.5	24.0	263					1	11.0	11.0	295	17	10.5	3.5	350								
6.0 ,, .	21	30.5	29.1	264									16	10.0	5.2	308								
7.2 ,, .	16	37.3	35.6	268									13	13.7	10.0	291								
9.0 ,, .	7	47.1	42.6	275									4	17.7	17.3	264								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

April 1957

Station	VERAVAL								VISAKHAPATNAM											
Time in I.S.T.	1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	12.2	11.5	278	30	9.3	8.8	301	30	2.7	2.4	237	30	10.9	10.8	223	30	4.5	3.9	225
0.15 a. g. .	30	18.8	18.2	282	30	15.5	14.5	314	30	8.3	8.1	236	30	10.1	9.9	209	30	8.6	8.4	231
0.3 a. m. s. l.	30	18.8	15.9	282	30	17.1	16.3	321	30	10.3	10.3	238	30	9.8	9.5	215	30	10.3	10.1	237
0.6 ,, .	30	11.7	10.4	281	30	15.3	13.6	328	30	9.7	9.3	242	30	9.7	8.9	220	30	10.5	10.0	246
0.9 ,, .	30	9.3	7.9	294	29	11.0	9.5	319	30	7.4	6.4	244	30	9.1	6.7	233	30	7.7	6.3	247
1.5 ,, .	30	8.5	5.6	344	29	8.0	3.1	319	30	5.3	0.4	358	29	6.6	1.1	326	30	5.6	0.4	135
2.1 ,, .	30	8.6	4.2	323	29	8.2	3.3	238	30	6.9	3.6	026	29	7.4	4.6	030	30	6.7	3.9	036
3.0 ,, .	28	11.0	7.6	258	29	12.3	9.5	228	28	9.5	7.1	014	29	11.7	8.0	015	29	10.1	7.1	015
3.6 ,, .	28	12.9	9.9	251	20	13.3	11.7	226	13	9.5	6.9	344	24	13.0	10.0	015	18	10.7	7.8	001
4.5 ,, .	26	15.1	13.2	251	7	15.4	12.4	257	3	11.0	10.3	293	20	14.1	10.2	356	5	6.4	4.9	257
5.4 ,, .	26	18.3	15.7	256	4	21.5	20.5	253	1	24.0	24.0	220	12	13.3	8.8	323	1	9.0	9.0	295
6.0 ,, .	26	21.4	18.1	264	1	39.0	39.0	270	1	33.0	33.0	245	7	15.4	11.3	322	1	8.0	8.0	334
7.2 ,, .	24	30.2	27.6	264																
9.0 ,, .	21	41.3	38.6	267																

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds above 9·0 Km. above mean sea level

April 1957

Ht. in Km.	n	V	v	D
	AHMEDABAD			
	1730 hrs.			
10.5	4	48.7	43.5	266
12.0	1	34.0	34.0	245
14.1	1	29.0	29.0	265
	AMBALA			
	1730 hrs.			
10.5	4	52.5	51.7	274
12.0	3	63.0	62.3	280
14.1	2	62.0	62.0	278
16.2	1	56.0	56.0	250
	ANANTAPUR			
	0530 hrs.			
10.5	10	17.4	16.1	277
12.0	5	18.8	17.2	244
14.1	1	14.0	14.0	310
	1730 hrs.			
10.5	16	20.8	17.7	075
12.0	5	26.6	24.3	287
	BAGHDOGRA			
	0530 hrs.			
10.5	1	16.0	16.0	235
	1730 hrs.			
10.5	1	54.0	54.0	315
12.0	1	72.0	72.0	325
	BAIRAGARH			
	0530 hrs.			
10.5	3	41.0	36.4	272
12.0	2	26.5	21.9	310
14.1	1	45.0	45.0	265
	1730 hrs.			
10.5	3	51.7	51.4	264

Ht. in Km.	n	V	v	D
	BAMRAULI			
	0530 hrs.*			
10.5	11	70.7	68.9	256
12.0	8	69.0	68.3	257
14.1	4	61.3	60.3	264
16.2	1	52.0	52.0	275
	1130 hrs.			
10.5	2	70.5	70.3	281
12.0	1	103.0	103.0	290
	1730 hrs.*			
10.5	13	65.0	63.7	266
12.0	6	74.0	73.3	260
	BANGALORE			
	1730 hrs.			
10.5	1	13.0	13.0	270
	BAREILLY			
	0530 hrs.			
10.5	1	39.0	39.0	280
	BEGUMPET			
	1730 hrs.			
10.5	2	33.0	29.5	290
12.0	1	42.0	42.0	305
	BHUJ			
	1730 hrs.			
10.5	4	46.7	44.6	265
	CHIKALTHANA			
	1730 hrs.			
10.5	1	38.0	38.0	250
	COCHIN			
	0530 hrs.			
10.5	2	15.5	7.3	186
	1730 hrs.			
10.5	1	15.0	15.0	085

Ht. in Km.	n	V	v	D
	DARJEELING			
	0530 hrs.			
10.5	1	23.0	23.0	295
	DUMDUM			
	0530 hrs.*			
10.5	26	50.1	48.1	282
12.0	23	51.4	49.3	273
14.1	11	42.0	40.4	268
	1730 hrs.*			
10.5	28	59.2	56.1	278
12.0	27	56.9	55.0	271
14.1	15	42.9	40.1	274
16.2	9	29.6	27.6	261
18.0	1	28.0	28.0	250
	GADAG			
	0530 hrs.			
10.5	1	17.0	17.0	275
	GANNAVARAM			
	0530 hrs.			
10.5	1	37.0	37.0	295
	1730 hrs.			
10.5	9	32.0	29.5	292
12.0	5	32.6	31.6	276
14.1	2	33.5	33.2	265
	GAUHATI			
	0530 hrs.*			
10.5	15	65.7	61.7	281
12.0	11	81.5	74.1	270
14.1	3	66.0	64.0	284
16.2	1	69.0	69.0	310
	1130 hrs.			
10.5	2	61.5	49.6	289
	1730 hrs.*			
10.5	15	70.5	61.3	274
12.0	13	68.4	65.0	270
14.1	2	46.0	46.0	275

Ht. in Km.	n	V	v	D
	GOPALPUR			
	0530 hrs.			
10.5	2	21.0	20.3	271
12.0	1	31.0	31.0	265
	1730 hrs.			
10.5	3	47.7	46.4	312
12.0	3	54.3	52.9	311
14.1	1	29.0	29.0	270
	GORAKHPUR			
	1730 hrs.			
10.5	1	95.0	95.0	350
	GWALIOR			
	1730 hrs.			
10.5	1	42.0	42.0	305
	IMPHAL			
	0530 hrs.			
10.5	1	24.0	24.0	210
	JABALPUR			
	1730 hrs.			
10.5	1	42.0	42.0	295
12.0	1	38.0	38.0	280
	JAGDALPUR			
	0530 hrs.			
10.5	1	51.0	51.0	275
12.0	1	48.0	48.0	270
	JODHPUR			
	0530 hrs.*			
10.5	16	84.9	80.9	260
12.0	11	87.1	85.5	265
14.1	3	69.3	68.7	255
	1130 hrs.			
10.5	2	73.5	69.4	275
12.0	1	75.0	75.0	265

Ht. in Km.	n	V	v	D
	1730 hrs.*			
10.5	12	74.0	71.7	261
12.0	5	89.2	85.8	257
	MADRAS			
	0530 hrs.*			
10.5	18	18.9	14.0	274
12.0	13	20.5	16.9	267
14.1	8	21.6	15.6	254
16.2	4	16.3	3.7	102
18.0	1	7.0	7.0	035
	1130 hrs.			
10.5	12	17.8	14.7	298
12.0	10	18.1	13.8	276
14.1	7	18.0	14.9	288
16.2	2	14.0	14.0	234
18.0	2	11.0	6.9	069
	1730 hrs.*			
10.5	21	21.9	15.9	278
12.0	21	22.7	18.9	265
14.1	13	18.3	11.6	263
16.2	4	13.5	10.7	083
	MANGALORE			
	1730 hrs.			
10.5	5	17.0	12.9	248
12.0	4	14.2	12.1	257
14.1	3	8.3	7.8	215
	MINICOY			
	0530 hrs.			
10.5	5	14.6	10.5	124
12.0	2	8.5	7.7	109
	1730 hrs.			
10.5	17	12.0	1.3	051
12.0	11	14.8	5.6	127
14.1	6	18.8	4.5	115
16.2	2	15.0	13.9	249

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9·0 Km. above mean sea level

April 1957

Ht. in km.	n	V	v	D
	NAGPUR			
	0530 hrs.*			
10.5	18	46.2	43.6	265
12.0	14	53.3	51.2	268
14.1	8	49.6	48.0	264
16.2	4	37.0	36.0	278
18.0	1	22.0	22.0	215
	1130			
10.5	18	44.0	42.2	286
12.0	3	46.0	44.0	288
	1730 hrs.*			
10.5	18	45.8	43.6	270
12.0	16	50.5	49.6	273
14.1	11	44.8	42.8	262
16.2	6	37.5	35.9	261
18.0	4	23.0	10.6	260
	NEW DELHI			
	0530 hrs.*			
10.5	20	58.6	53.2	270
12.0	12	65.3	57.6	275
14.1	4	43.5	42.6	266
16.2	2	39.0	38.5	270
	1130 hrs.			
10.5	17	65.4	62.5	275
12.0	12	89.1	86.9	270
14.1	7	80.6	80.2	268
16.2	2	54.5	54.5	273
18.0	1	40.0	40.0	295
	1730 hrs.*			
10.5	20	59.7	57.7	277
12.0	15	69.7	67.3	277
14.1	8	61.1	59.5	275
16.2	5	32.2	31.7	274
18.0	1	26.0	26.0	290
	POONA			
	1730 hrs.			
10.5	7	50.0	44.9	283
12.0	5	54.4	51.1	283
14.1	2	35.0	35.0	256

Ht. in Km.	n	V	v	D
	PORTBLAIR			
	0530 hrs.*			
10.5	20	14.4	10.5	255
12.0	15	19.4	12.8	249
14.1	8	19.4	9.3	229
16.2	5	21.2	3.5	165
18.0	2	26.5	11.3	104
21.0	1	32.0	32.0	090
	1130 hrs.			
10.5	3	10.3	4.2	126
12.0	1	17.0	17.0	160
	1730 hrs.*			
10.5	18	17.1	11.1	254
12.0	10	26.2	17.0	250
14.1	6	25.7	18.8	267
16.2	3	32.3	27.0	279
18.0	1	21.0	21.0	060
21.0	1	29.0	29.0	030
	RAIPUR			
	0530 hrs.			
10.5	1	54.0	54.0	315
	1730 hrs.			
10.5	6	48.0	46.3	275
12.0	1	41.0	41.0	275
	SANTACRUZ			
	0530 hrs.*			
10.5	26	46.4	43.9	270
12.0	22	50.9	48.2	267
14.1	13	43.1	41.5	265
16.2	3	33.3	32.7	255
18.0	1	22.0	22.0	225
	1130 hrs.			
10.5	12	42.0	32.5	265
12.0	7	43.6	30.7	268
	1730 hrs.*			
10.5	14	47.9	42.2	270
12.0	11	53.8	49.1	270
14.1	6	45.5	42.9	259

Ht. in Km.	n	V	v	D
	TEZPUR			
	0530 hrs.			
10.5	2	28.5	27.0	261
12.0	2	47.0	23.0	290
	TIRUCHIRAPALLI			
	0530 hrs.			
10.5	9	10.8	7.6	284
12.0	6	9.2	1.6	332
14.1	1	39.0	39.0	305
	1730 hrs.			
10.5	10	14.7	6.1	090
12.0	7	20.9	13.8	258
14.1	6	23.7	13.8	252
16.2	4	23.7	12.7	229
18.0	1	14.0	14.0	135
21.0	1	38.0	38.0	075
24.0	1	57.0	57.0	070
	TRIVANDRUM			
	0530 hrs.*			
10.5	14	13.4	3.1	342
12.0	10	19.3	6.0	273
14.1	4	25.8	12.8	302
16.2	3	23.3	10.3	358
	1130 hrs.			
10.5	2	19.5	12.1	081
12.0	2	18.0	12.2	091
14.1	1	13.0	13.0	335
	1730 hrs.*			
10.5	11	11.4	4.3	172
12.0	9	14.6	4.0	172
14.1	6	18.0	5.1	222
16.2	3	14.3	13.5	323
	UDAIPUR			
	1730 hrs.			
10.5	2	71.0	70.4	285

Ht. in Km.	n	V	v	D
	VENGURLA			
	1730 hrs.			
10.5	1	31.0	31.0	255
	VERAVAL			
	1730 hrs.			
10.5	16	50.1	45.5	267
12.0	11	57.3	53.8	270
14.1	5	63.4	61.0	272
16.2	2	67.0	66.6	286

Ht. in Km.	n	V	v	D

RADIOSONDE DATA

April, 1957

During the month, observations of upper air temperature, pressure and humidity were made at 12 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I.M.D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

S.No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad . . .	Clock type	1st October 1944	00 and 12	
2	Bombay . . .	Clock type	7th September 1954	00 and 12	
3	Calcutta . . .	Clock type	13th December 1946	00 and 12	Fan type used from 13th December, 1946 to 30th November, 1947.
4	Gauhati . . .	Clock type	22nd July 1955	00 and 12	
5	Jodhpur . . .	Clock type	17th April 1946	00 and 12	
6	Madras . . .	Fan type	29th June 1946	00 and 12	
7	Nagpur . . .	Fan type	1st October 1946	00 and 12	
8	New Delhi . . .	Clock type	3rd December 1943	00 and 12	
9	Port Blair . . .	Fan type	4th December 1949	00 and 12	
10	Trivandrum . . .	Fan type	1st July 1947	00 and 12	
11	Veraval . . .	Fan type	3rd October 1944	00 and 12	
12	Visakhapatnam . .	Fan type	8th December 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

April 1957

Standard pressure Surface mbs.	ALLAHABAD Surf. Pr. (996 mb.)						BOMBAY (100. mb.)						CALCUTTA (1006 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	98	296.3	3 1	291	285.5	30	13	298.3	301	29	294.1	30	6	297.9	301	291	296.6
1000	30	6	..	..	..	..	29	77	..	..	..	..	30	62	..	.	..	..
900	30	987	298.6	3 3	291	273.2	29	1003	298.0	30	289	277.4	30	988	297.8	303	291	282.1
850	30	1 3 5	294.8	299	287	269.3	29	15 2	295.1	301	291	273.1	30	1 3	294.3	3 1	286	278.8
800	30	2006	29 .6	295	283	268.8	29	2027	292.8	297	289	270.9	30	2036	29 .3	299	283	276.4
700	30	3127	281.9	292	275	263.3	29	316	284.8	292	280	264.5	30	3143	280.8	292	27	271.5
600	29	4379	271.3	281	263	253.3	29	4426	274.7	2.9	267	254.9	29	43 9	271.7	278	268	266.0
500	29	58 8	262.7	269	2 2	..	29	58 3	266.7	27	26	..	28	581	261.4	271	2 8	..
400	26	7497	250.2	256	240	..	29	7583	25 .8	261	246	..	28	7510	253.	261	24	..
300	23	9543	236.0	243	225	..	28	9686	241.	247	229	..	25	96 7	238.8	249	22	..
250	19	10798	229.1	243	219	..	25	1098	233.	242	219	..	23	1086	232.0	24	223	..
200	1	12265	22 .6	228	212	..	23	12138	223.3	231	2 7	..	2	12349	223.2	238	21	..
175	12	13151	216.8	22	21	..	22	133 6	217.5	226	2 1	..	17	1320	217.7	23	211	..
150	8	14115	213.1	219	209	..	13	14255	212.6	22	208	..	14	14169	213.6	23	207	..
125							8	15396	2 8.1	212	20	..	8	1530	210.7	225	2 1	..
100																		
80																		

	GAUHATI (1002 mb.)						JODHPUR (984 mb.)						MADRAS (1007mb.)					
Surface	28	49	294.0	297	289	293.7	30	218	297.4	301	292	279.8	30	15	299.7	302	297	296.6
1000	28	63	..	..	..	..	30	72	..	..	..	..	30	81	..	..	..	..
900	28	977	294.4	299	288	286.3	30	991	297.7	302	288	273.4	28	104	295.4	299	291	283.8
850	28	1471	291.5	295	287	283.1	30	1491	294.4	299	285	270.2	28	1501	293.6	297	289	276.5
800	28	1989	288.0	293	283	279.7	30	2004	290.3	296	283	268.5	28	2022	291.0	294	288	274.8
700	28	3101	279.2	287	273	272.6	30	3130	28 .8	286	274	259.1	28	3149	283.9	292	279	270.1
600	28	4315	271.0	277	261	264.5	30	4379	271.7	275	26	231.6	28	4415	275.9	282	271	261.6
500	28	5777	264.0	270	25	..	29	58 8	262.4	268	254	..	27	5868	267.0	277	259	..
400	27	7466	252.1	259	248	..	28	7488	251.0	258	242	..	27	7 86	256.8	270	249	..
300	27	9532	238.0	248	217	..	24	9546	236.5	247	227	..	21	9681	241.5	249	23	..
250	25	10782	230.8	242	217	..	23	10783	228.4	241	22	..	16	10957	232.5	243	226	..
200	24	12268	223.5	235	205	..	20	1223	220.6	232	208	..	12	12403	219.2	234	214	..
175	21	13159	219.7	229	208	..	20	13097	216.8	226	201	..	10	13243	213.8	229	208	..
150	18	14135	215.9	224	206	..	18	14077	214.0	225	195	..	9	14228	207.2	223	199	..
125	8	15319	215.0	221	205	..	15	15228	212.3	228	199	..	6	15317	201.3	218	192	..
100	7	16761	211.9	217	203	..	10	16631	210.1	228	196	..						
80							6	18117	2 9.3	228	197	..						

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

April 1957

Standard pressure Surface mbs.	NAGPUR Surf. Pr. (973 mb.)						NEW DELHI (984 mb.)						PORT BLAIR (1001 mb.)					
			Temperature °A						Temperature °A						Temperature °A			
	No. of obs.	Ht. gpm.	Mean	Max.	Min.	Dew point	No. of obs.	Ht. gpm.	Mean	Max.	Min.	Dew point	No. of obs.	Ht. gpm.	Mean	Max.	Min.	Dew point
Surface	27	311	298.1	3 2	292	289.8	30	210	293.7	298	290	286.0	30	79	299.2	301	296	297.2
1000	26	7	..	..	..	..	29	67	..	..	..	..	30	88	..	..	..	..
900	26	998	293.1	3 4	293	281.5	29	98	296.4	301	289	276.2	30	1012	294.1	297	29	291.4
850	26	1 99	296.1	299	295	278.3	29	148	293.5	293	286	272.8	30	150	291.9	29	288	285.6
800	26	2022	291.5	295	287	277.2	29	2000	289.	295	276	271.7	30	2025	289.3	292	28	281.7
700	26	3148	282.5	285	279	272.4	29	3119	281.3	286	275	265.4	30	3148	282.8	287	279	275.3
600	25	4405	273.1	277	27	261.2	29	4370	272.3	277	267	260.4	30	441	276.4	281	273	265.6
500	25	5845	25..9	269	262	..	29	5801	262.5	266	259	..	28	5871	268.0	273	265	..
400	24	7441	253.7	260	249	..	28	7483	251.7	256	245	..	28	7593	258.0	261	253	..
300	21	9530	238.8	243	23	..	28	9546	237.5	243	232	..	23	9720	244.6	249	237	..
250	19	10883	230.2	243	223	..	27	10796	229.0	235	223	..	22	1100	235.2	243	22	..
200	19	12356	219.6	229	212	..	23	12271	223.3	233	215	..	19	12499	223.6	233	210	..
175	16	13201	215.1	226	208	..	20	13140	222.3	230	211	..	17	13377	217.8	226	205	..
150	16	14171	2 9.5	22	204	..	17	14131	219.3	226	210	..	14	14357	212.4	219	203	..
125	11	15264	206.9	213	200	..	14	153 6	215.6	221	211	..	8	15510	210.0	214	2 6	..
100	8	16597	200.3	206	195	..	8	16662	211.0	215	207	..	6	16935	205.2	210	198	..
80																		

	TRIVANDRUM (1002 mb.)						VERAVAL (1018 mb.)						VISAKHAPATNAM (1013 mb.)					
Surface	25	64	299.0	301	298	296.8	26	8	296.6	299	294	291.3	22	48	300.0	3 2	298	297 1
1000	25	80	..	..	..	..	26	81	..	..	..	..	22	74	..	..	..	
900	25	1008	294.1	296	292	288.7	26	1016	296.7	3 2	288	28 .8	22	1001	297.7	3 2	294	286.8
850	25	1495	291.3	295	289	286.1	26	1503	293.7	299	283	275.9	22	1500	295.3	299	289	283.9
800	25	2011	288.2	291	285	280.2	26	2024	291.8	296	283	273.9	22	2 23	291.7	295	286	281.7
700	25	3136	283.3	290	279	274.5	26	3151	282.2	286	273	268.6	22	315	282.9	286	279	275.8
600	25	4399	275.4	279	271	264.4	25	4417	271.1	281	271	265.6	21	4419	278.5	277	268	267.8
500	24	5853	267.7	271	265	..	25	5858	264.8	273	261	..	2	5858	266.6	271	261	..
400	23	7572	257.9	263	249	..	24	7559	253.	267	245	..	2	7568	256.1	262	251	..
300	21	9683	243.3	251	236	..	2	9633	238.8	256	226	..	15	9675	242.5	254	236	..
250	16	10942	233.6	249	226	..	17	10871	228.9	237	217	..	1	10934	233.7	141	227	..
200	14	12438	221.9	233	216	..	15	12329	218.9	227	205	..	7	12412	221.1	233	219	..
175	6	13283	215.5	219	208	..	11	1319	213.9	222	202	..	5	13288	219.2	228	216	..
150	6	14238	209.8	215	201	..							5	14261	214.0	223	210	..
125	5	15410	205.4	208	203	..												
100																		
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

April 1957

Standard pressure surface mbs.	ALLAHABAD Surf. Pr. (994 mb.)						BOMBAY (1006 mb.)						CALCUTTA (1004 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	29	98	310.0	311	304	279.6	30	13	302.6	306	300	295.4	30	6	306.6	313	299	294.6
1000	29	45	..	..	..	..	29	65	..	..	..	..	30	42	..	..	..	..
900	28	989	301.2	307	294	271.7	29	997	299.6	305	295	279.1	30	987	300.6	311	297	285.0
850	28	1486	296.6	303	290	267.1	28	1497	296.0	301	292	276.1	30	1486	296.5	307	291	281.3
800	28	2013	291.8	299	286	265.7	28	2021	292.3	297	288	274.2	30	2010	291.8	301	287	278.5
700	28	3137	282.2	289	277	253.9	28	3150	283.3	293	279	270.2	30	3139	282.3	290	277	272.4
600	28	4392	273.1	279	268	240.7	28	4412	274.3	282	264	258.7	30	4400	273.8	280	266	252.2
500	28	5827	263.9	269	256	..	28	5855	265.4	275	253	..	29	5837	265.2	273	258	..
400	26	7521	252.8	259	245	..	28	7557	254.2	263	238	..	29	7536	254.1	265	246	..
300	23	9598	239.3	247	231	..	18	9660	240.7	246	227	..	28	9620	239.9	249	230	..
250	20	10848	231.9	242	226	..	14	10944	233.6	242	226	..	25	10886	231.7	242	221	..
200	13	12311	224.2	233	217	..	13	12455	223.8	233	216	..	22	12378	224.1	235	214	..
175	8	13211	223.1	235	218	..	13	13328	218.2	227	215	..	16	13257	219.6	230	211	..
150	6	14202	219.0	231	214	..	10	14265	212.0	217	204	..	12	14200	214·1	226	208	..
125							5	15388	205.6	212	197	..	10	15370	210·6	222	204	..
100													6	16732	205·0	213	199	..
80																		

	GAUHATI (999 mb.)						JODHPUR (982 mb.)						MADRAS (1006 mb.)					
Surface	29	49	303.0	309	295	290.7	26	218	308.2	312	301	279.0	30	15	303.6	305	302	296.5
1000	29	37	..	..	..	..	26	52	..	..	..	..	30	67	..	..	..	..
900	29	971	296.9	302	290	292.6	26	995	300.0	306	289	274.0	30	999	297.7	302	293	286.2
850	29	1168	293.0	297	285	289.1	26	1496	295.7	301	289	272.3	30	1497	295.0	298	291	279.7
800	29	1987	288.7	293	280	285.7	25	2010	290.3	295	283	270.2	30	2021	292.3	296	289	274.9
700	29	3103	279.4	285	269	276.6	25	3135	281.3	284	276	264.4	30	3154	284.8	289	279	270.9
600	29	4348	271.3	278	257	268.1	25	4382	270.6	276	265	..	29	4425	277.0	280	272	261.8
500	29	5780	263.4	270	248	..	25	5804	261.9	266	257	..	28	5882	268.0	271	263	..
400	29	7465	251.6	259	236	..	24	7490	250.9	256	247	..	28	7601	256.4	261	251	..
300	28	9532	238.1	246	219	..	23	9541	236.0	243	229	..	24	9710	242.6	249	235	..
250	27	10764	229.4	238	213	..	22	10771	227.3	239	222	..	21	10987	233.5	239	227	..
200	25	12254	221.8	234	207	..	19	12234	218.7	229	211	..	19	12478	222.6	230	216	..
175	19	13084	216.9	229	201	..	16	13076	213.9	223	207	..	16	13327	216.3	225	212	..
150	14	14117	214·1	224	199	..	15	14 26	210.2	222	202	..	15	14295	208.5	217	204	..
125	10	15129	209.0	219	195	..	10	15168	208.4	219	199	..	6	15357	199.8	201	194	..
100							5	16476	206.2	211	199							
80							3	17819	206.2	211	200							

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

April 1957

Standard pressure Surface mbs.	NAGPUR Surf. Pr. (971 mb.)						NEW DELHI (983 mb.)						PORT BLAIR (1000 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	27	311	307.9	311	300	288.3	30	210	306.1	311	297	285.6	30	79	302.2	304	301	297.9
1000	27	44	..	..	..	..	30	54	..	..	..	..	30	78	..	..	..	..
900	27	995	303.7	308	296	282.8	30	995	299.8	304	294	275.3	30	1006	295.2	298	289	292.4
850	27	1501	298.9	303	291	280.8	30	1495	295.0	300	289	272.3	30	1501	292.3	296	286	288.1
800	27	2030	294.6	299	286	279.1	30	2017	291.6	295	284	271.1	29	2023	289.5	293	285	284.0
700	27	3166	284.2	289	277	274.4	30	3138	281.6	286	275	264.1	29	3146	283.9	287	278	275.4
600	27	4430	274.5	281	267	263.1	29	4392	272.6	277	266	251.9	29	4419	277.1	282	271	266.0
500	24	5886	267.2	273	263	..	28	5827	263.7	269	257	..	29	5878	268.6	275	263	..
400	24	7598	256.1	261	251	..	28	7523	252.9	261	247	..	27	7605	259.1	272	253	..
300	22	9707	241.7	249	237	..	28	9597	239.1	248	230	..	23	9723	244.1	251	237	..
250	19	10975	232.6	241	225	..	26	10777	231.4	240	219	..	18	10995	233.6	239	225	..
200	19	12464	221.9	229	213	..	23	12357	225.7	235	216	..	14	12482	222.4	235	214	..
175	17	13324	216.3	222	207	..	19	13242	222.9	234	213	..	9	13331	217.0	225	209	..
150	15	14300	210.8	216	199	..	16	14227	219.3	231	210	..	9	14315	211.1	221	201	..
125	12	15460	205.8	213	189	..	12	15378	216.3	227	205	..	5	15478	208.0	218	197	..
100	8	16792	200.4	209	196	..	9	16761	212.0	220	201	..						
80	5	18170	202.4	209	196	..	6	18195	213.8	215	207	..						

	TRIVANDRUM (1001 mb.)						VERAVAL (1008 mb)						VISAKHAPATNAM (1002 mb.)					
Surface	24	64	302.8	305	300	297.1	28	8	300.8	302	299	298.4	24	48	302.7	304	300	299.5
1000	24	71	..	..	..	..	28	74	..	..	..	..	23	61	..	..	..	..
900	24	1000	295.3	297	292	291.8	28	1008	298.3	302	291	284.6	23	994	298.6	302	293	289.2
850	24	1496	292.5	295	289	289.1	28	1508	295.8	301	291	279.8	23	1495	296.1	300	290	283.8
800	24	2016	289.5	293	285	285.6	28	2032	292.2	296	289	276.3	23	2020	292.3	295	287	282.1
700	24	3143	283.7	287	280	274.3	28	3164	284.1	288	281	272.1	23	3151	283.9	287	279	276.2
600	24	4412	276.9	282	271	265.8	28	4430	275.5	279	271	264.6	23	4414	275.0	279	268	268.6
500	24	5872	269.1	272	264	..	28	5881	266.1	272	259	..	23	5862	266.5	269	263	..
400	22	7596	257.9	263	251	..	28	7587	254.1	259	245	..	22	7567	255.8	265	250	..
300	18	9723	244.4	253	237	..	24	9689	241.0	249	236	..	17	9671	241.6	247	231	..
250	12	11006	235.4	241	228	..	20	10960	231.7	243	225	..	15	10928	231.9	238	222	..
200	10	12539	224.9	232	218	..	15	12510	221.8	227	211	..	10	12454	222.3	230	217	..
175	7	13417	219.5	225	211	..	9	13318	214.3	221	205	..	7	13305	215.9	226	212	..
150	7	14395	213.7	223	201	..	8	14264	210.0	215	201	..	6	14282	210.5	221	225	..
125							5	15320	203.0	205	199	..						
100																		
80																		

NOTE:—Number of observations refer to those of dynamic height.

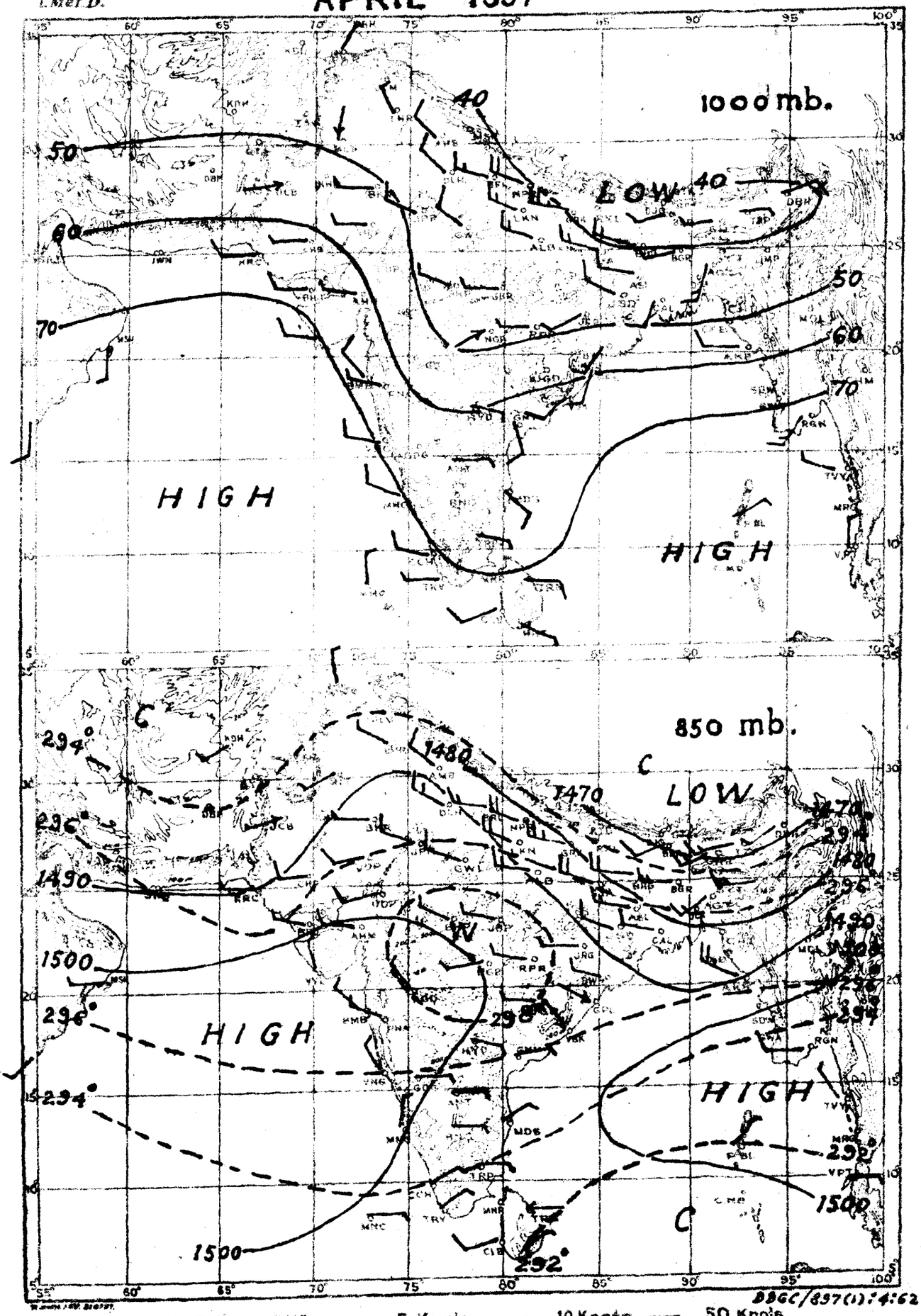
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperatures less than 273°A.

Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—S4—147 D. D, G. Obs. (Poona)/62—15-3-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I. Met. D. **APRIL 1957** Plate I



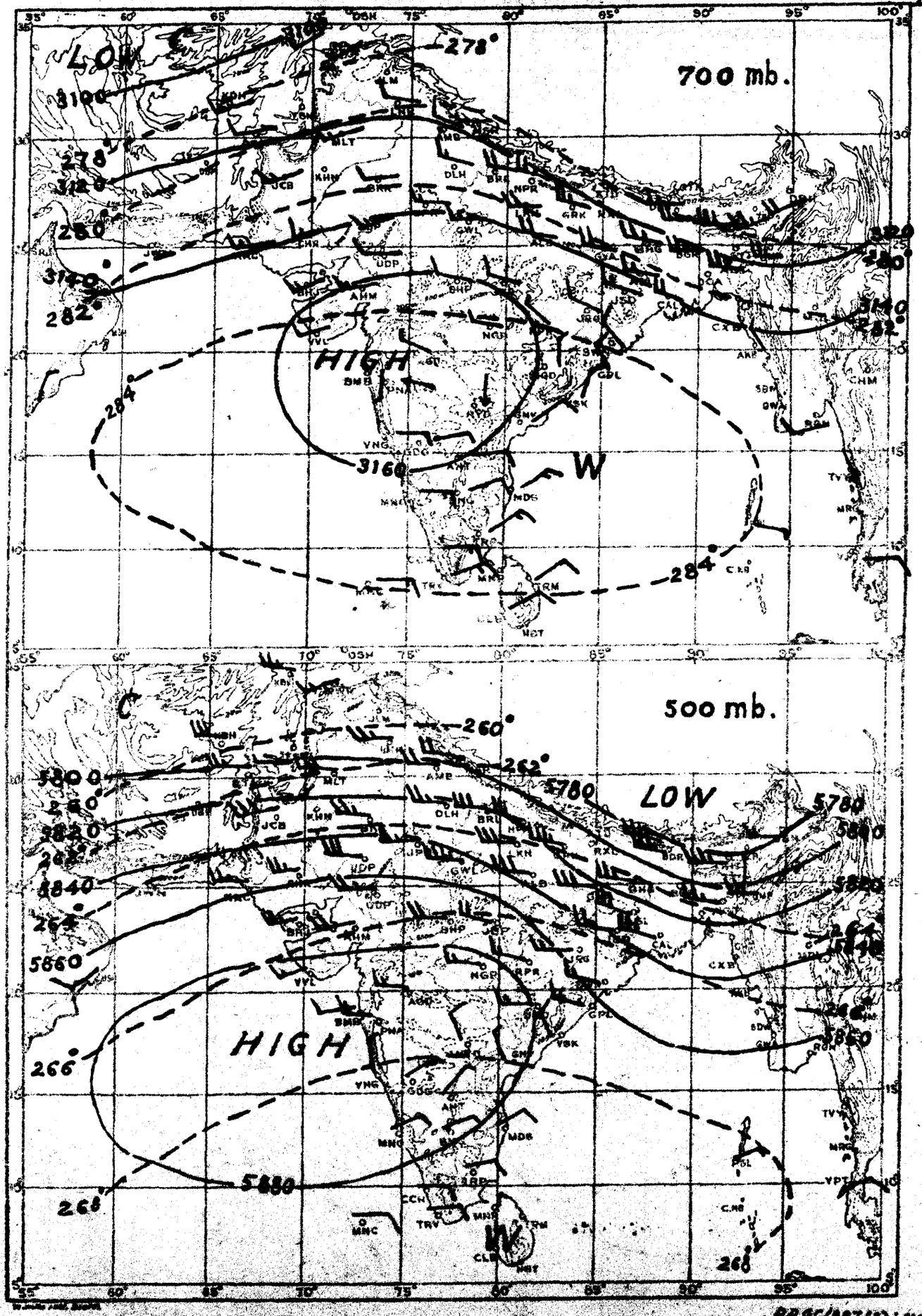
DBGC/897(1):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

- - - - - - Isotherms in degrees absolute. ———— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I.Met.D. **APRIL 1957** Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

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25 JAN 15
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SURFACE

Registered No. B-3097

INDIA WEATHER REVIEW, 1957.

Monthly Weather Report

May

Published by authority of the Government of India

Chief features—

(1) Good rainfall in northwest India and west Uttar Pradesh in association with the passage of six western disturbances,

(2) A spell of heavy to very heavy rains in the south Peninsula during the fourth week in association with the formation of a shallow depression in the Arabian Sea, and

(3) Deficiency of thunderstorm rain in northeast India outside Assam and in the central parts of the country.

Six western disturbances moved across the northern parts of the country during the month. Of these, the second and third were feeble and caused only scattered light precipitation in the extreme north of the country. The remaining four were active and caused good rainfall in many parts of northwest India and of west Uttar Pradesh. Details regarding the activity and movement of each of the six western disturbances are given in the following table on page 2.

In association with an upper air trough which appeared over Gangetic West Bengal and Chota Nagpur on the 3rd, there was an incursion of moist air into Assam and Sub-Himalayan West Bengal between the 3rd and 7th. Fairly widespread or local thundershowers occurred in Assam between the 3rd and 7th and in Sub-Himalayan West Bengal on the 3rd and 4th. Some heavy to very heavy falls were reported from Assam on some days, Cherrapunji recording 37 cms of rain on the 8th. According to newspaper reports, heavy rains caused floods in large areas of the town of Jorhat dislocating communications and disrupting normal life in the town. A shallow trough of low pressure again appeared over Chota Nagpur and Gangetic West Bengal on the 11th. Moving slowly northeastwards, it filled up over Assam by the 14th. In association with it, local or scattered thundershowers occurred in Assam between the 11th and 15th, in Sub-Himalayan West Bengal on the 12th and in Orissa on the 14th and 15th. A few falls of heavy rain occurred in Assam on some of the days. Pasighat recorded 11 cms on the 9th and Cherrapunji 19 cms on the 11th. Moderate thunderstorm activity continued in Assam during the rest of the month. Coastal West Bengal experienced local thunderstorms on the 28th. According to press reports, thirty persons were injured and many trees were uprooted in Calcutta due to a squall on the evening of 27th. Calcutta (Alipore) observatory recorded a maximum wind speed of 128 km.p.h. (70 m.p.h.) in a westerly squall on that evening.

A feeble incursion of equatorial maritime air into the extreme south of the Peninsula took place on the 11th and was maintained there till the 13th. As a consequence, fairly widespread thundershowers with locally heavy falls occurred in Kerala on the 12th. Local or scattered thundershowers also occurred in Kerala on the 11th and 13th, in south Madras State from the 12th to 14th and in coastal Mysore on the 13th and 14th. A well marked trough of low pressure developed in the southeast Arabian Sea off the Malabar coast on the 18th. Shifting slowly northeastwards, it lay as a deep upper air trough over south Mysore and neighbourhood between the 20th and 23rd. Under its influence, a temporary advance of the monsoon took place into Kerala and neighbourhood on the 21st. Fairly widespread and locally heavy thunder-rain occurred in Kerala from 18th to 25th in South Mysore on the 23rd and 25th and in the Madras State on the 24th. Some noteworthy amounts of rainfall recorded during the above period were : Kozhikode 12 cms on the 21st, Palghat 24 cms and Alleppey 16 cms on the 22nd, Mysore 18 cms on the 23rd Kallakurichi 17 cms on the 24th. The deep upper air trough which persisted over south Mysore and neighbourhood

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282—D.D.G. Obs. Poona/62.

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between the 20th and 23rd became diffuse on the 24th and extended from the southeast Arabian Sea to the southwest Bay of Bengal. The western end of this trough shifted northwestwards and concentrated into a shallow depression in the east central Arabian Sea with its centre about 200 kms to the west of Karwar on the morning of 26th. Moving northwestwards, it gradually weakened and lay as a trough of low pressure off the Kathiawar coast on the 28th morning. The trough became unimportant by the next day. In association with the formation and movement of the depression, the incursion of maritime air extended further northwards into the northern parts of the Peninsula on the 25th and 26th. Fairly widespread or local thundershowers occurred in Mysore State, Maharashtra and the Konkan on the 25th and 26th, in coastal Andhra Pradesh and Madras State on the 25th and in Rayalaseema on the 26th.

The monsoon advanced into the Comorin-Maldives area, the Andaman Sea and the southeast Bay of Bengal on the last day of the month.

Day temperatures were appreciably above normal in Gangetic West Bengal, Chota Nagpur and Bihar on most days during the month.

The total rainfall during the month was in large excess in west Rajasthan, Maharashtra, Vidarbha, south Mysore and Kerala, in moderate excess in Assam, Jammu and Kashmir and coastal and north Mysore and in slight excess in Rayalaseema. It was normal in Gangetic West Bengal and the Konkan, in slight defect in the Punjab (1), east Madhya Pradesh and the Madras State and in moderate defect in west Uttar Pradesh, west Madhya Pradesh and Telangana. Elsewhere over the country, it was in large defect.

Mean maximum temperature was above normal in the Bay Islands and northeast India outside Assam. It was below normal in northwest India, west Madhya Pradesh, Vidarbha and the Madras State and normal over the rest of the country. Mean minimun temperature was above normal in the Bay Islands, West Bengal and Chota Nagpur and normal elsewhere except in northwest India where it was below normal.

Mean relative humidity was in excess in the Punjab (I), Jammu and Kashmir and south Mysore and in defect in the Bay Islands, West Bengal, Chota Nagpur, Bihar, east Uttar Pradesh and Gujarat. Over the rest of the country, it was normal.

Mean cloud amount was in excess in Uttar Pradesh, northwest India, west Madhya Pradesh, Maharashtra, Vidarbha and north Mysore. It was in defect in West Bengal, Chota Nagpur and Bihar and normal elsewhere.

Table I contains the divisional and sub-divisional means of rainfall, temperatures humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
The 17th September, 1958.

B. N. SREENIVASAIAH,
for *Director General of Observatories.*

Errata to M.W.R. for May 1957 (Vaisakha 11 - Jyaistha 10, 1879 Saka).

Page No.	Station	Hour	Column	For	Read
Text Portion					
213	4th para, last word		-	page 2	page 215
215	Heading			Statement showing the..ete..	Statement showing details of .. etc.
215	S.No.5(a)		Remarks	Induced by disturbance No.5	Induced by Western disturbance No.5
215	S.No.6		Remarks	23rd and 25th	23rd to 25th
Table I - Sub-Division (page 217)					
11.	Himachal Pradesh	2		-54.7	54.7
11.	Himachal Pradesh	4,5,6		-33.3,-17.2, -55	33.3, 17.2, 55
11.	Himachal Pradesh	8,9		-3.6, -3.7	3.6, 3.7
Table II					
218	Kondul	28		Blank	0
218	Tezpur (P.B.O.)	13		112.	112.8
218	Goalpara	11		448.8	408.8
218	Tura	8		18.6	18.3
218	Agartala	11		616.4	316.4
218	Silchar	11		395.1	895.1
218	Purulia	8		25.1	25.0
218	Berhampore	19		+1.5	+1.1
219	Ranchi (C.W.O.)	1		Ranchi (C.W.O.)	Ranchi (C.W.O.)†
219	Arrah	12		-13.2	-31.2
219	Bahraich *	7		0.6	0
219	Mainpuri	1		Mainpuri*	Mainpuri
219	Foot note			(b)Mean of 29 days.	delete
219	Foot note	-		Not given	†Data not available
219	Foot note	-		*Data extracted from Indian Daily Weather Reports.	*Data extracted from Daily telegrams.
220	Heading	-		...1879 Saka)7	...1879 Saka).
220	Ludhiana	18		4.0	4.9
220	Srinagar	19		-1.1	-1.8
220	Alwar	1		Alwar	Alwar†
220	Jhalawar	27		Blank	0
220	Foot note	-		*Data extracted from Indian Daily Weather Reports.	†Data extracted from Daily telegrams
221	Khandwa	3		+0.6	-0.6
221	Nowgong	15		Blank	1 (a)
221	Sutna	17		12.2 (a)	12.2
221	Umaria	17		9.0	9.0
221	Bhuj	20		..	1
221	Bhuj (P.B.O.)*	20		Blank	..

P.T.O.

PageNo.	Station	Hour	Column	For	Read
222	Heading			(V isakha ... etc-	(Vaisakha..etc.,(a)
222	Jalgaon		18	20.0	20.0
222	Gannavaram		19	Blank	..
222	Ramagundam		21	Blank	0
222	Tiruchirapalli		3	2.	-2.1
223	Coimbatore		16	+1.3	+1.5
223	Bijapur		22	Blank	1
223	Gadag		12	Blank	-1.1
223	Raichur		16	-1.7	+1.7
223	Bangalore (Central Observatory)		12	+187.7	+181.7
223	Katmandu		7	-15.	-1.5
223	Lokpal		8	6.1	-6.1
223	Foot note		-	(R)Register not receiv	(R) Register not received.
224	Simla		10	4.9	34.9
224	Mahabaleshwar		29	Blank	0
224	Khijrawan		28	Blank	0
225	Sabarmati Catchment (contd.)		1	Damodar Catchment(contd.)	Sabarmati Catchment (contd.)

Table III

226	Gohpur	1730	1	1730	(R) 1730
226	Tezpur	-	1	Tezpur (R)	Tezpur
226	Tangla	1730	28	Blank	0
227	Dhubri (Rupsi Aerodrome)	0830	5	1000.9	..
227	Dhubri (Rupsi Aerodrome)	1130	5	1000.1	..
227	(Dhubri (Rupsi Aerodrome)	1730	5	996.9	..
227	Agartala	1130	16	Blank	0
227	Agartala	1130	22	Blank	3
227	Silchar	0830	24	Blank	0
227	Silchar	0830	28	Blank	1
227	Silchar (Kumbhigram Aerodrome)	0530	19-24	Blank	1,7,17,[illegible],0,1
227	Silchar (Kumbhigram Aerodrome)	0830	19-24	Blank	1,6,14,3,1,1
227	Silchar (Kumbhigram Aerodrome)	1130	19-26	Blank	1,1,11,2,2,3,3,2
227	Silchar (Kumbhigram Aerodrome)	1730	19-24	Blank	2,1,8,1,2,2
227	Imphal	0530	19 and 20	Blank	0 and 1
227	Imphal	0830	20-26	Blank	1,0,2,6,11,3,1
227	Imphal	2330	22	Blank	1
227	Halflong	0830	20	Blank	1
227	Calcutta	2330	Dum Dum	-	Calcutta should be deleted
228	Gangetic West Bengal	-	1	West Bengal -contd.	Gangetic West Bengal contd.
228	Calcutta	0830	1	Calcutta (contd.)	Calcutta
228	Calcutta	1130	3	6	,,
228	Barrackpore	0830	10	33.3	33.9
228	Bhubaneswar	1730	5	999.6	996.6
229	Jamshedpur	1730	27	0	2
229	Patna (Aerodrome)		1	Patna (Aerodrome)	Patna (Aerodrome)
230	Dumka	1730	14	Blank	..
230	Nautanwa	0830	1	Nautanwa	Nautanwa *
230	Nautanwa	0830	3	99	..
230	Nautanwa	1730	28	Blank	0

P.T.C.

Page No	Station	Hour	Column	For	Read
230	Gorakhpur (P.B.O.)	0230	20	Blank	3
230	Ballia	0830	28	Blank	0
230	Ballia	1730	28	Blank	0
230	Lucknow (Amausi Aerodrome)	0530	9	1 .7	11.7
231	Mainpuri	1730	19	Blank	1
231	New Delhi	2330	11	83	38
231	Hissar	0830	25	2	6
231	Hissar	1130	23	Blank	0
231	Hissar	1730	25	Blank	7
232	Ambala (P.B.O.)	1130	3	Blank	278
232	Ambala (Aerodrome)	0830	3	273	,,
232	Chandigarh	1730	4	1006.6	1000.6
232	Amritsar	1130	5	79.1	979.1
232	Gulmarg	0830	3	655	2655
232	Leh	0530	3	35 1	3541
232	Leh	0530	4	072.3	3072.3
232	Jammu	0830	23	3	0
232	Jammu	0830	28	Blank	0
232	Sri Ganganagar	2330	1	2330	+2330
232	Sri Ganganagar	2330	8	19.	19.1
232	Churu	0830	1	+0830	0830
232	Bikaner	0530	3	,,	224
232	Bikaner	0830	14	0.1	-0.1
232	Foot note			Observations for 30 days	+Observations for 30 days.
233	Jodhpur	0230	2	230	0230
233	Jodhpur	0530	2	530	0530
233	Jodhpur	1130	3	224	,,
233	Alwar	0830	1	Alwar	Alwar*
233	Jaipur	1730	21	0	1
233	Jaipur (Sanganer Aerodrome)	0530	21	0	3
233	Jaipur (Sanganer Aerodrome)	0830	15	8.0	8.9
233	Dholpur	1730	22	Blank	0
233	Udaipur	0230	16	Blank	0
233	Udaipur	0230	25	0	6
233	Udaipur	1130	17	1	0
233	Erinpura (Jawai Dam)	1730	4	Blank	1001.7
233	Erinpura (Jawai Dam)	1730	5	Blank	970.0
233	Sheopur Kalan	0830	23	8	5
233	Guna	1130	10	Blank	0
233	Footnote	-	-	Blank	* Data exctracted from Daily telegrams.
234	Guna	1730	3	,,	479
234	Rajgarh	1730	11	13	14
234	Neemuch	0830	5	952.3	952.8
234	Bhopal (Bairagarh)	0230	9	9.9	9.0
234	Bhopal (Bairagarh)	1130	4	1009.4	1004.4
234	Seoni	0830	18	28	27
234	Jabalpur	2330	19	Blank	0
234	Mandla	0830	4	1005.5	1005.8
234	Pendra	2330	19	Blank	3
235	Heading	-	-	Jyaistha 11,	Jyaistha 10,
235	Raipur	1130	23	Blank	3
235	Raipur	1130	24	36	6
235	Raipur	1730	3	298	,,
235	Kanker	1730	5	951.8	957.8
235	Ahmedabad	0830	14	-8	0 (a)
235	Surat	0530	15	3.7	3.7
236	Mandvi	1730	28	0	3
236	Porbander	0830	28	6	0
236	Porbander	1730	26	Blank	4
236	Rajkot (Adrodrome)	0830	28	2	0

P.T.O.

Page No	Station	Hour	Column	For	Read
236	Rajkot (Aerodrome)	1130	28	2	0
236	Surendranagar	0830	28	0	2
236	Surendranagar	1730	28	0	2
236	Mahuva	1730	28	3	0
236	Vengurla	1720	3	11	,,
236	Vengurla	2330	28	Blank	0
236	Foot note	-	-	Blank	(d) Mean of 27 days
237	Jalgaon	1730	4	1001.6	1001.5
237	Malegaon	0830	9	11.7	12.7
237	Deolali	0830	28	9	0
238-244	Heading of Vaisakha ...etc... should be in capitals letters.				
238	Gondia	1730	28	0	3
238	Brahmapuri	0830	28	3	0
239	Arogyavaram	1730	5	927.3	927.8
239	Mathurai	1730	5	919.3	989.3
239	Cuddalore	2330	9	5.7	25.7
241	Foot note	-	-	+Observations for 30 days	delete
242	Dharamshala	0830	3	1212	1211
242	Abu	1730	2	1730	*1730
242	Pachmarhi	0830	24	10	0
242	Pachmarhi	0830	25	11	10
242	Pachmarhi	0830	26	0	11
242	Tibet	-	1	not given	Read 'Tibet' inbetween Lachen and Yatung (Chumbi)
242	Hambantota	0830	4	1090.8	1009.8
242	Hazaribagh	1730	4	1010.9	1001.9
242	Foot note	-	-	Blank	* Observations for 30 days.
242	Foot note	-	-	(c) Mean of 28 days	delete
242	Foot note	-	-	(f) Mean of 25 days	delete
243	Punasa	1730	21	Blank	1
243	Pokhara	0830	9	15.9	15.6
243	Okhaldhunga	1130	23	2	0
243	Foot note	-	-	*Data not available	(e) Mean of 26 days
243	Foot note	-	-	(d) Mean of 29 days	(f) Mean of 25 days
244	Barahkshetra	0830	3	146.9	146
244	Foot note	-	-	not given	(b) Mean of 29 days
244	Foot note	-	-	not given	(a) Mean of 30 days
244	Foot note	-	-	not given	+ Data not available

P.T.O.

SG-11-10

Page No.	Station	Time	Ht. in Km.	Entry	Under	Column	Existing entry	Correct entry
247	Ambala	0530IST	1.5		V		10.1	13.3
247	Ambala	1730IST	5.4		v		14.7	14.7
248	Anantapur	0530IST	1.5		V		10.1	11.0
248	Asansol	1730IST	3.0		V		16.6	16.7
249	Bareilly	0530IST	2.1		V		12.5	21.5
250	Bhubaneshwar	1730IST	6.0		v		9.5	7.5
251	Cochin	0530IST	0.9		v		9.4	6.0
253	Imphal	2330IST	0.9		D		23	236
253	Imphal	2330IST	2.1		n		7	27
254	Jagdalpur	0530IST	3.6		D		0 8	008
255	Jodhpur	*0530IST	9.0		D		358	258
256	Mohanbari	2330IST	3.0		v		1.46	14.6
257	Nanpara	1730IST	0.6		V		11.2	17.6
257	Nanpara	1730IST	0.6		v		18.1	16.1
258	Raipur	0530IST	3.0		D		28	280
258	Santa Cruz	*1730IST	1.5		D		3 8	308
258	Santa Cruz	2330IST	3.0		D		2 8	208
258	Tiruchirapalli	1730IST	3.6		v		17.0	10.7
260			Col.1, Ht. in Km. (next to 3.0 Km.)				6.0	3.6
261	Bhubaneshwar	1730IST	10.5		D		225	220
261	Gopalpur	1730IST	18.0		V		13.0	31.0
264	Calcutta	00 GMT	Ht.gpm. column, against standard surface pressure mb. 200				124 8	12408
264	Calcutta	00 GMT	Ht.gpm column, against standard surface pressure mb 175				132 0	13270
264	Jodhpur	00 GMT	Temperature °A-Min.- against standard surface pressure mb.500				26	256
264	Madras	00 GMT	Ht.gpm. col.against standard surface pressure mb. 800				2 05	2005
			Temperature °A mean - against standard surface pressure mb. 600				2 6.9	276.9
265	New Delhi	00 GMT	Temperature °A - Min. against standard pressure surface mb. 850.				283	293
265	New Delhi	00 GMT	Temperature °A - Mean against standard pressure surface mb. 500				266.8	265.8
265	Visakhapatnam	00 GMT	Temperature °A - Min- against standard pressure surface mb. 700				289	282
27	New Delhi	1200GMT	Temperature °A - sub heading dw Dew Point				Dew Poi t	Dew Point

Note:- 2nd line, ultimate word temperatur temperatur.

Statement showing the movement and activity of Western disturbances in the month of May, 1957

S. No.	Period	Course	Region affected	Nature of precipitation	Period	Remarks
1	3rd-5th	Extreme north of the country.	Himachal Pradesh	Scattered thundershowers	3rd	Induced by Western disturbance No. 1
1(a)	3rd-5th	West Rajasthan—Punjab Kumaon hills.	Jammu and Kashmir.	Local thundershowers	5th and 6th	
			Punjab (I)	Scattered thundershowers.	5th	
2	6th-7th	Extreme north of the country.	Himachal Pradesh	Scattered thundershowers	7th	
3	8th-9th	North Baluchistan — Jammu and Kashmir.	Jammu and Kashmir	Scattered thundershowers	9th	
4	11th-13th	North Baluchistan — Jammu and Kashmir.	Himachal Pradesh	Fairly widespread thundershowers	12th and 13th	
			Jammu and Kashmir	Local or fairly widespread thundershowers	12th and 13th	
			Punjab (I)	Local or scattered thundershowers.	12th and 13th	
			West Uttar Pradesh	Scattered thundershowers.	12th and 13th	
			West Rajasthan	Scattered thundershowers.	13th	
5	15th-17th	Extreme north of the country.	Jammu and Kashmir and Himachal Pradesh	Fairly widespread thundershowers.	18th	
5(a)	17th-20th	Northwest Rajasthan—Punjab—Kumaon hills.	Northwest Uttar Pradesh and Punjab (I)	Local thundershowers.	18th	Induced by disturbance No. 5 Dharampore recorded a very heavy fall of 26 cms on 18th.
			Jammu and Kashmir	Local or scattered thundershowers.	19th and 20th	
			Himachal Pradesh and Kumaon hills.	Fairly widespread thundershowers.	20th	
			Punjab (I) and the Plains of Uttar Pradesh.	Scattered thundershowers	20th	
			Rajasthan	Scattered thundershowers	19th and 20th	
6	22nd-24th	North Baluchistan—Punjab Kumaon hills.	Jammu and Kashmir.	Local thundershowers.	23rd and 25th	
			Punjab (I)	Scattered thundershowers	24th and 25th	
			Rajasthan	Scattered thundershowers	23rd and 24th	
			West Uttar Pradesh.	Scattered thundershowers	24th	

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity %		Cloud	
					0830 hrs. I.S.T.	1730 hrs. I.S.T.	0830 hrs. I.S.T.	1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura).	437·5	146	30·2	22·1	81	76	5·0	4·2
	+137·1	..	−0·3	−0·1	0	..	−0·3	..
2. West Bengal .	37·1	22	39·5	26·9	60	44	1·9	2·3
	−131·3	..	+3.9	+1·9	−12	..	−2·0	..
3. Orissa . .	13·1	16	37·8	27·3	66	57	2·9	4·4
	−67·4	..	+1·1	+0·7	−4	..	−0·6	..
4. Bihar . . .	1·1	2	41·3	26·4	40	24	1·5	1·9
	−53·1	..	+3·6	+1·4	−16	..	−1·0	..
5. Uttar Pradesh .	5·7	32	40·2	25·3	35	23	1·6	2·2
	−12·1	..	0	−0·1	−5	..	+0·3	..
6. Punjab (I), (Including Himachal Pradesh & Delhi)*	9·8	75	38·3	23·0	41	27	2·1	2·8
	−3·2	..	−2·1	−1·9	+7	..	+1·0	..
7. Jammu & Kashmir.	63·1	138	23·0	11·5	56	48	4·6	5·9
	+17·5	..	−3·8	−1·5	+6	..	+1·9	..
8. Rajasthan . .	14·3	120	38·9	25·0	38	19	1·3	2·3
	+2·4	..	−2·2	−1·5	−1	..	+0·5	..
Sub-Division								
1. Bay Islands . .	144·8	38	33·1	25·1	68	78	5·0	6·3
	−239·5	..	+2·7	+1·2	−10	..	−0·6	..
2. Assam (Including Manipur & Tripura).	437·5	146	30·2	22·1	81	76	5·0	4·2
	+137·1	..	−0·3	−0·1	0	..	−0·3	..
3. Sub-Himalayan West Bengal.	104·5	37	36·1	24·7	62	43	2·5	1·3
	−176·5	..	+2·5	+1·3	−13	..	−1·1	..
4. Gangetic West Bengal. . .	11·8	93	40·5	27·6	59	45	1·7	2·6
	−114·4	..	+4·2	+2·1	−12	..	−2·3	..
5. Orissa . .	13·1	16	37·8	27·3	66	57	2·9	4·4
	−67·4	..	+1·1	+0·7	−4	..	−0·6	..
6. Chota Nagpur .	2·6	4	41·3	27·2	32	19	1·7	3·2
	−60·6	..	+2·9	+2·0	−18	..	−0·8	..
7. Bihar . . .	0·5	1	41·2	25·9	45	26	1·5	1·1
	−50·1	..	+4·1	+1·0	−15	..	−1·1	..
8. Uttar Pradesh (East).	0·5	3	41·0	26·0	34	22	1·5	1·9
	−18·7	..	+0·6	+0·2	−10	..	+0·3	..
9. Uttar Pradesh (West).	11·7	72	39·3	24·3	37	24	1·6	2·5
	−4·6	..	−0.7	−0·5	0	..	+0·3	..
10. Punjab (India) including Delhi.	9·8	75	38·3	23·0	41	27	2·1	2·8
	−3·2	..	−2·1	−1·9	+7	..	+1·0	..
11. Himachal Pradesh	−54·7	..	−33·3	−17·2	−55	27	−3·6	−3·7
	..	..	..	..	..	..	..	..
12. Jammu & Kashmir	63·1	138	23·0	11·5	56	48	4·6	5·9
	+17·5	..	−3·8	−1·5	+6	..	+1·9.	..
13. Rajasthan (West) .	25·5	260	38·9	24·6	44	19	1·3	2·1
	+15·7	..	−2·7	−1·5	+2	..	+0·5	..
14. Rajasthan (East)	3·2	23	38·9	25·3	34	19	1·3	2·4
	−10·8	..	−1·7	−1·5	−4	..	+0·5	..
15. Madhya Pradesh (West).	7·0	57	39·9	25·3	34	19	2·0	3·2
	−5·3	..	−1·1	−0·8	0	..	+0·9	..
Division—*Contd.*								
9. Madhya Pradesh .	13·6	76	40·0	25·7	35	22	2·1	3·4
	−4·3	..	−0·7	−0·3	0	..	+0·6	..
10. Bombay . .	20·7	114	37·3	25·4	60	41	2·7	2·8
	+2·6	..	−0·4	−0·2	0	..	+0·4	..
11. Andhra Pradesh .	25·6	66	38·3	27·4	60	48	3·7	4·3
	−13·1	..	−0·7	−0·2	+1	..	+0·2	..
12. Madras . .	46·6	85	35·0	26·5	71	60	4·0	4·9
	−8·3	..	−1·7	+0·4	+3	..	+0·6	..
13. Mysore . .	136·7	173	34·9	23·8	71	50	4·5	5·6
	+57·9	..	−0·4	+0·6	+3	..	+1·0	..
14. Kerala . .	439·5	175	31·4	25·5	82	79	5·5	6·1
	+187·7	..	−0·2	−0·1	+2	..	+0·4	..
Mean of India . . (Excluding Jammu & Kashmir and Himachal Pradesh).	50·4	98	37·9	25·3	52	37	2·6	3·3
	−0·8	..	−0·3	−0·1	−1	..	+0·2	..
Sub-Division—*Contd.*								
16. Madhya Pradesh (East).	23·0	89	40·0	26·3	36	25	2·2	3·7
	−2·8	..	−0·1	+0·4	+1	..	+0 1	..
17. Gujarat . .	2·3	24	39·2	25·8	55	27	1·7	1·8
	−7·1	..	−0·2	0	−9	..	−0·1	..
18. Saurashtra and Kutch.	1·9	25	36·9	25·0	73	51	2·1	1·6
	−5·6	..	−0·7	−0·2	+3	..	+0·3	..
19. Konkan . .	26·0	94	32·0	26·0	75	69	3·4	2·5
	−1·6	..	−0·3	−0·5	0	..	−0·4	..
20. Maharashtra .	36·6	158	39·0	24·0	52	30	3·1	4·0
	+13·5	..	0	+0·6	0	..	+1·1	..
21. Vidarbha . .	22·2	152	41·5	26·8	37	22	3 0	3·9
	+7·6	..	−1·1	−1·0	+4	..	+1·1	..
22. Coastal Andhra Pradesh	21·5	48	36·9	27·5	67	64	4·3	4·3
	−23·5	..	−1·0	−0·2	0	..	+0·2	..
23. Telangana . .	13·9	55	39·5	26·7	50	28	3·2	4·4
	−11·4	..	−0·5	−0·3	+3	..	+0·5	..
24. Rayalaseema .	45·4	116	40·5	28·1	53	31	2·9	4·3
	+6·2	..	−0·1	+0·3	−1	..	−0·3	..
25. Madras . .	46·6	85	35·0	26·5	71	60	4·0	4·9
	−8.3	..	−1·7	+0·4	+3	..	+0·6	..
26. Coastal Mysore .	166·5	135	32·3	26·1	78	69	5·2	5·3
	+43·3	..	−0·3	+0·1	+3	..	+0·1	..
27. Mysore North) .	53·0	145	37·6	24·6	60	41	4·2	5·8
	+16·5	..	−0·5	+0·5	0	..	+1·8	..
28. Mysore (South) .	205·4	208	33·1	22·3	79	52	4·6	5·5
	+106·6	..	−0·4	+0·9	+7	..	+0·6	..
29. Kerala . . (Including Laccadives)	439·5	175	31·4	25·5	82	79	5·5	6·1
	+187·7	..	−0·2	−0·1	+2	..	+0·4	..

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	30·9	...	33·9	14	26·2	...	24·1	31	115·0	121·4	...	23·6	17	10	...	10·7	6·4	...	11	0	0	0	0	0	0	0	0	0
Long Island	33·7	...	34·9	8,25	25.7	...	24·1	20	92·9	63·8	...	22·1	20	5	...	4.4	1·9	...	7	0	0	6	0	0	0	0	0	0
Port Blair	33·1	+2·7	35.1	13	25·1	+1·2	24·3	19,22	156·1	144·8	—239·5	35·3	18	10	−6·3	10·9	7·2	−6·6	13	0	0	17	0	0	0	0	0	0
Car Nicobar	32.0	...	33·3	7	24·0	...	22·6	8	123.3	185·3	...	39·4	15	11	...	5·6	2·7	...	15	0	0	5	0	0	0	0	0	0
Nancowry	31·4	...	33.6	2,7	25.4	...	22·7	29	145·8	354.4	...	95.8	10	14	...	7.0	4·9	...	21	0	0	15	0	0	0	0	0	0
Kondul	31·9	...	35.0	4,5	25·3	...	21·9	19	41·4	139·5	...	35·1	19	14	...	4·4	2·2	...	17	0	0	14	0	0	0	0		0
Assam (Including Manipur & Tripura).																												
Pasighat	26·8	...	33·6	3	20·4	...	16·5	9	170·0	448·8	...	105·4	9	17	...	4·2	5·5	...	24	0	0	3	0	0	0	0	0	0
Digboi	27·1	...	33.8	3	20·3	...	17·4	1	171·0	605·5	...	55·6	7	24	...	6·3	5·1	...	26	0	0	0	0	0	0	0	0	0
Dibrugarh	27·4	−1·8	33.3	3	20·6	−0·9	17·2	9	60·0	373·2	+66·1	49·3	27	21	+5.4	4·4	3·4	+1·5	27	0	0	11	0	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome).	27·2	...	32.9	3	20.5	...	16.1	8	109·8	537·7	...	68·6	9	22	...	5·5	6·8	...	26	0	0	20	0	0	0	0	0	0
North Lakhimpur	27·5	...	31.8	3	20.8	...	17.6	1	69·1	417·5	...	83·3	8	21	...	...	...	...	26	0	0	6	0	0	0	0	0	0
Sibsagar	27·7	−1.9	33.8	3	21·7	−0·4	19·7	1	194·5	718·2	+411·9	126·0	27	27	+11·4	8·5	7.4	+3.5	29	0	0	20	0	0	0	0	1	0
Jorhat	28·4	...	34.4	9	21·3	...	18·9	1	146·4	614·6	...	119·9	6	22	...	...	...	...	25	0	0	25	1	0	0	0	0	0
Golaghat	28·8	...	35·0	9	19·6	...	17·8	30	170·5	641·6	...	134·6	6	20	...	...	...	...	20	0	0	0	0	0	0	0	0	0
Gohpur (R)																												
Tezpur	29.7	—0.7	33.9	2,9	21·7	−0·7	17·7	7	41.2	504·1	+233·6	107·2	6	22	+6·7	...	...	...	26	0	0	14	0	0	0	0	1	0
Tezpur (P.B.O.)	29 3	...	35.3	2	21.6	...	20·0	31	39·9	497·8	...	112·	6	22	...	...	...	...	26	0	0	24	0	0	0	0	0	0
Majbat	...	...	...	...	...	...	...	...	110·0	526·4	...	97·6	12	21	...	11·2	8·9	...	24	0	0	19	0	0	0	0	0	0
Chaparmukh (R)																												
Tangla	30·2	...	34·3	1	21·7	...	19·7	10	56.6	450·5	...	56·4	6	24	...	8·6	7·7	...	24	0	0	1	0	0	0	0	0	0
Gauhati	30·7	−0·2	35.7	28	22.4	0	19·7	21	46·5	233·6	−2·4	35·8	29	18	+4·5	7·1	5·5	+2·4	21	0	1	15	0	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome).	31·1	...	37.7	16	22·4	...	20.6	3,21	85·0	255·2	...	31·0	3	17	...	10·7	8·9	...	20	0	0	22	0	0	0	0	4	0
Rangiya*																												
Goalpara	32·2	...	37.6	16,28	22·6	...	19·9	20	62·0	448·8	...	71·1	29	15	...	4·5	3·8	...	16	0	0	0	0	0	0	0	0	0
Dhubri	30·5	+0.6	38.9	16	23·5	+0·7	15·9	18	24·1	241·5	—159·6	52·1	3	10	−5·5	9·5	9·5	+0·3	12	0	1	6	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome).	32·7	...	38.3	28	22·9	...	19·6	20	28·7	253·6	...	69·9	29	11	...	10·7	7·9	...	12	0	0	4	0	0	0	0	1	-0
Tura	32·7	...	36·5	27	24·8	...	18.6	4	32·5	121.1	...	31·0	5	7	...	13·1	14·8	...	9	0	0	0	0	0	0	0	0	0
Agartala	34·2	...	37·4	1	24·6	...	18.6	3	213·7	616·4	...	121·0	30	8	...	19.9	16·5	...	11	0	0	13	0	0	0	0	0	0
Silchar	30·5	−1·0	34·8	25	22·1	—0·5	18·9	[illegible]	357·0	395·1	+478·0	127·8	21	21	+4·6	3·4	2·6	—0·6	25	0	1	25	0	0	0	1	2	0
Silchar (Kumbhigram Aerodrome)	31·2	...	34·4	25,27	21·7	...	18·5	8	169·5	799·7	...	110·0	11	22	...	8·0	8·0(a)	...	26	0	2	30	0	0	0	0	3	0
Imphal	28·3	...	31·6	3	18·8	...	14·8	1	43·4	151·7	...	33·3	8	16	...	13·5	10·0	...	20	0	0	20	0	0	0	0	2	0
Haflong	26·7	...	29·4	25	18·9	...	15·4	4,10	235·6	544·1	...	98·0	8	21	...	...	...	...	23	0	0	28	0	0	0	0	0	0
Lumding	34·8	+2·7	39·0	15	22·9	+1·0	19·7	2	76·2	96·6	—67·7	50·3	29	7	−3·7	10·9	8·1	...	10	0	1	6	0	0	0	0	0	0
Sub Himalayan—West Bengal																												
Cooch-Behar(G.W.O.)	33·5	...	39·1	28	22·6	...	19·0	20	25·4	221·1	−204·9	97·3	29	7	−8·5	11·7	9·6	...	8	0	0	11	0	0	0	0	1	0
Jalpaiguri	31·9	0	37·8	16	23·0	+0.4	20·2	8	13·2	92·5	−207·7	30·5	29	6	−7·1	14·5	11·3	+7·3	8	0	0	9	0	0	0	0	0	0
Bagdogra	34·3	...	39·4	16,28	22·6	...	17·7	9	16·3	54·4	...	19·3	4	4	...	12·0	9·0	...	7	0	0	7	0	1	0	0	2	0
Malda	40·3	+5·1	43·9	29	26·3	+2·2	22·2	4,5	0	0	−116·8	0	...	0	−5·6	12·7	9·8	+0·8	0	0	0	1	0	1	0	0	0	0
Gangetic West Bengal																												
Dum Dum	39·0	...	42·5	16	27·1	...	24·7	4	5·0	7·1	...	2·0	13	0	...	15·4	14·0	...	4	0	0	4	0	0	0	0	2	0
Calcutta	38·8	+3·5	42·5	16	27·7	+2·4	25·2	28	11·7	15·2	—124·3	11·2	28	2	−4·9	12·3	10·8	+2·8	3	0	1	4	0	0	0	0	3	0
Barrackpore	39·5	...	42·7	20	27·1	...	23·7	4	23·9	30·3	...	16·5	31	3	...	14·1	12·4	...	4	0	0	6	0	0	0	0	1	0
Saugor Island	32·3	—0·5	34·0	21	27·4	+0·4	21·3	5	0·5	15·9	−98·9	9·1	28	2	−3·5	...	...	...	3	0	0	3	0	0	0	0	0	0
Sandheads	...	...	...	...	...	...	...	...	0	12·3	−37·7	12·2	28	1	−2·2	...	...	...	2	0	0	1	0	0	0	0	0	0
Contai	34·9	...	39·1	16	27·7	...	22·6	22	0	7·4	...	7·4	28	1	...	24·4	21·0	...	1	0	0	0	0	0	0	0	0	0
Midnapore	43·4	+5·7	46·2	7	27.9	+2·0	25·1	28	3·8	4·3	−116·1	2·0	19	0	−6·9	9·7	10·3	+3·4	4	0	0	3	0	0	0	0	0	0
Purulia	42·7	...	45·2	29	29.2	...	25·1	31	0	4·3	...	1·8	31	0	...	9·3	6·0	...	[illegible]	0	0	1	0	0	0	0	0	0
Bankura	...	...	...	...	...	...	...	...	...	5·3	−98·1	4·3	20	1	−4·6	...	...	...	2	...	...	...	...	...	...	...	...	...
Burdwan	40·8	+4·1	42·7	7	27·5	+2·2	24·9	31	11·7	11·7	−139·7	11·7	31	1	−6·2	4·7	3·6	—1·5	1	0	0	0	0	0	0	0	0	0
Krishnagar	42·6	+6·7	44·4	20,25	27·4	+2·6	23·3	5	0	16·8	−153·6	16·8	5	1	−6·9	17·4	11·4	+2·4	1	0	0	5	0	0	0	0	0	0
Asansol	43·0	+4·0	46·1	30	28·2	+2·5	23·6	31	0	25·1	—49·3	25·1	31	1	−3·4	14·8	9·7	+0·5	1	0	0	4	0	0	0	0	0	0
Suri	43·1	...	45·8	30	27·4	...	24.2	31	0	1·0	...	1·0	21	0	...	17·2	12·9	...	1	0	0	0	0	0	0	0	0	0
Berhampore	42.3	+6·1	44·9	29	27·1	+2·3	22·4	14	0	0	−135·4	0	...	0	−7·3	7·1	7·2	+1·5	0	0	0	0	0	0	0	0	0	0
Orissa																												
Baripada	43·9	...	46·8	7	...	...	...	...	8·4	19·3	...	12·4	21	2	...	5·7	4·9	...	5	0	0	10	0	0	0	0	0	0
Balasore	39·9	+3·7	43·4	31	27·5	+1·5	25·2	1	23·6	30·9	−86·7	11·4	31	4	−1·9	24·7	16·2	+7·0	7	0	0	11	0	1	0	0	0	0
Chandbali	35·8	−0·5	43·3	14	27·2	+1·0	19·4	22	32·5	32·5	−109·2	26·7	22	2	−3·4	20·8	18·0	+1·7	2	0	0	1	0	0	0	0	0	0
Cuttack	41·8	+3·2	47·7	2	27·4	+0·8	25·0	1	1·6	2·6	—88·1	1·3	14	0	−5·2	8·8	7·3	+1·2	3	0	0	3	0	0	0	0	0	0

(R) Register not received.

(a) Mean of 30 days.

* Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orissa—*contd.*																												
Bhubaneswar	40·0	..	43·3	15	27·0	..	24·1	10	0	0	...	0	...	0	...	31·9	31·3	...	0	0	0	3	0	0	0	2	0	0
Puri	31·1	−0·9	32·6	25,26,27	27·6	+0·3	26·1	8	0	0	−72·6	0	...	0	−3·2	30·2	30·6	+9·2	0	0	0	1	0	0	0	0	0	0
Gopalpur	30·8	−1·6	33·6	26	25·6	−1·1	23·6	1,7	6·3	10·4	−43·7	4·8	19	3	−0·1	...	...	...	3	0	0	10	2	0	0	0	1	0
Koraput	34·2	...	36·7	17	22·3	...	19·2	8	24.6	49·4	...	17·0	31	5	...	...	...	...	6	0	0	0	0	0	0	0	0	0
Titilagarh	39·3	...	43·2	13	28·3	..	23.6	19,21	0·3	28·2	...	20·3	21	2	...	7·1	4·9	...	4	0	0	10	0	0	0	0	0	0
Bolangir (R)																												
Angul	42.4	+2·7	43·9	7	28·1	+2·0	25·6	2.4	0	0	−59·7	0	...	0	−4·7	11.8	9·7	+0·7	0	0	0	5	0	0	0	0	0	0
Keonjhar	41·6	...	42.4	18	26·0	...	20·5	18	1·3	5·1	−11·9	1·3	21	1	...	12·8	10.0	...	3	0	0	6	0	0	0	0	0	0
Sambalpur	42·6	+1·2	44·1	12	27·9	+0·6	24·2	1	11·4	15·5	...	10·4	31	2	−0·3	5·4	4·3	−1·0	3	0	0	3	0	0	0	0	0	0
Jharsuguda	42·8	...	44·6	12	26·5	...	22·5	21	2·5	8·1	...	8·1	21	1	...	11.3	8·9	...	1	0	0	5	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	42·7	+3·3	44·9	30	27·9	+1·7	24.3	1	0	10·5	−69·0	5·6	20	2	−3·1	10.7	7·8	+1·0	3	0	0	3	0	2	0	0	0	0
Jamshedpur (P.B.O.)	44·3	...	45·8	30	28·1	...	24·2	1	1·0	6·2	...	2·3	21	0	...	9·1	4·7	...	4	0	0	6	0	0	0	0	0	0
Chaibasa	43.0	+3·0	44·7	7	28·6	+2·4	23·9	7	0	0	−69.6	0	...	0	−5·2	7·0	4·4	+0·2	0	0	0	1	0	0	0	0	0	0
Ranchi	40·2	+3·2	42·6	30	26·5	+2·4	20·9	21	0	0	−53·9	0	...	0	−4·1	5·0	4·1	−3·8	0	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	..	...	..	...	...	...	...	...	...	...	...	...	..	..	...	...	...	...	..	..	..	..	..	..	..	..	..	...
Daltonganj	42·0	+0·8	45·1	30	26·4	+0·5	21·7	10	0	1·0	−13·5	1·0	20	0	−1·3	11·2	6·1	−1·0	1	0	0	1	0	0	0	0	0	0
Hazaribagh	39·5	+2·1	42·4	30	25·7	+1·5	21.4	10	0·5	0	−49·8	0	...	0	−3·4	15·4	10·8	−0·6	0	0	0	4	0	0	0	0	0	0
Dhanbad	42·5	...	45.1	30	28·5	...	23.9	31	0	4·1	...	2·8	31	1	...	...	...	...	2	0	0	3	0	2	0	0	0	0
Bihar																												
Purnea	40·0	+5·1	43.4	29	24·3	+0·7	20.6	22	0	0	−106·2	0	...	0	−5·5	12·4	8·0	+2·5	0	0	0	0	0	0	0	0	0	0
Forbesganj	39·8	...	42·9	5 days	23·4	...	20.0	9	0·5	0·5	...	0·5	21	0	...	17·2	12·9	...	1	0	0	2	0	0	0	0	1	0
Dharbhanga	39·9	+4·2	42·8	29	25·2	+1·0	22.3	5	2·3	2·3	−61·4	2·3	21	0	−3·5	7·4	3·7	−3·4	1	0	0	0	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	...	...	...	...	...	...	...	...	...	0	−50·3	0	...	0	−3·1	...	...	...	0	...	...	...	...	...	...	...	...	...
Chapra	...	...	...	...	...	...	...	...	...	0	−33·0	0	...	0	−1·8	...	...	...	0	...	...	...	...	...	...	...	...	...
Arrah	...	...	...	...	...	...	...	...	...	0	−13·2	0	...	0	−1·8	...	...	...	0	...	...	...	...	...	...	...	...	...
Patna	41·4	+3·5	44·7	30	27·4	+1·8	23.3	4	0	0	−35·6	0	..	0	−2·3	13.7	10·2	+2·0	0	0	0	1	0	0	0	0	0	0
Patna (Aerodrome)	41·2	...	44·2	30	25·7	...	22.7	2	0	0	...	0	..	0	...	14·0	8·9	...	0	0	0	2	0	0	0	0	0	0
Delhi	42·4	...	45·8	30	28·1	...	22.8	21	0	1·0	−15·0	1·0	20	0	−1·2	13·2	8·3	..	1	0	0	0	0	0	0	0	0	0
Gaya	42·6	+2·3	46·4	30	26·5	−0·1	23.1	10	0	2·1	−21·5	2·1	20	0	−1·7	14·6	9·0	−0·7	1	0	0	1	0	0	0	0	1	0
Jamui	42·3	...	45·1	29	27·4	...	24.5	5	0	1·5	...	1·5	20	0	...	14.7	8·8	...	1	0	0	0	0	0	0	0	0	0
Dumka	42·6	+5·4	45·6	30	27·2	+2·0	23·2	1	0	0	−91·7	0	...	0	−5·1	...	...	...	0	0	0	0	0	0	0	0	0	0
Bhagalpur	40·6	...	43·9	29	26·9	...	22.7	5	0	0·5	...	0·5	20	0	...	16·9	12·0	...	1	0	0	1	0	0	0	0	0	0
Sabour	40.8	+4·0	43·9	29	25·0	+0·7	21·3	9	0	0	−54·6	0	...	0	−3·6	15.9	10.4	−0·7	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	41·1	+1·8	45·0	30	24·7	−0·7	21.1	9	0	0	−26·2	0	...	0	−1·9	8·9	7·3	−0·9	0	0	0	0	0	0	0	0	0	0
Nautanwa	39·9	...	44·0	4 days	24·5	...	21.0	9	0	0	...	0	...	0	...	..	..	...	0	0	0	0	0	0	0	0	0	0
Gorakhpur	40·8	+2·4	43·7	25	26·6	+1·7	21.1	21	0	0	−35·1	0	...	0	−2·5	10·6	6·0	+1·3	0	0	0	0	0	0	0	0	0	0
Azamgarh	41·9	...	44·9	19,29	25·7	...	23.0	9	0	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Ballia	41·8	...	44·7	30	24.1	...	20.6	2,4	0	0	...	0	...	0	...	[a] 11·5	[a] 7·3	...	0	0	0	0	0	2	0	0	0	0
Varanasi *(Banaras)	41·3	+0·5	45·0	30	27·1	+0·9	24·0	9	0	0	−13·5	0	...	0	−1·1	...	...	...	0	0	0	0	0	0	0	0	0	0
Varanasi (Banaras)	41·4	...	45·5	30	26·6	...	23·2	10	0	0	...	0	...	0	...	24·1	14·7	...	0	0	0	0	0	0	0	0	0	0
(Babatpur Aerodrome) Allahabad Bamrauli)	42·1	+0·4	45·8	30	27·1	+0·5	22·6	20	0	1·3	−14·7	1·3	20	0	−1·2	12·3	6·7	−0·9	1	0	0	4	0	1	0	0	1	0
Banda	42·5	...	46·7	30	27·3	...	24·4	1	0	0	...	0	...	0	...	7·4	3·8	...	0	0	0	0	0	0	0	0	0	0
Fatehpur	40·3	−1·5	44·1	18	26·2	−0·7	23·3	9	0·5	0·5	−3·1	0 5	20	0	−0·6	11·5	6·8	+0·4	1	0	0	2	0	0	0	0	0	0
Kanpur	41·4	+0·2	45·5	30	26·6	−0·3	22·7	8	2·3	2·3	−5·8	2·3	25	0	−1·0	12·9	15·0	+2·3	1	0	0	9	0	2	0	0	0	0
Lucknow	40·7	−0·1	45·0	30	25·9	+0·2	23·0	8	0	0	−19·6	0	...	0	−1·3	...	...	...	0	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome).	41·0	+0·5	44·9	30	24·8	0	20.7	9	0	0	−19·6	0	...	0	−1·3	14·5	11.6	...	0	0	0	0	0	0	0	0	0	0
Hardoi	40·6	...	44·5	30	24·7	...	21·1	8	0	0	...	0	...	0	...	13·1	7·7	...	0	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri	40·9	...	44·7	30	24·8	...	21.7	21	0	0	...	0	...	0	...	8·9	6·4	...	0	0	0	1	0	1	0	0	0	0
Bahraich*	40·5	+1·4	45·0	30	25·1	0·6	21·0	9,15	0	0	−30·7	0	...	0	−2·1	...	...	...	0	0	0	3	0	0	0	0	0	0
Uttar Pradesh (West)																												
Orai	41·4	..	45·6	29,30	24.9	...	21.7	8	0	1·5	...	1.5	12	0	...	15·0	10·6	...	1	0	0	0	0	0	0	0	0	0
Jhansi	40·8	−1·7	44·5	30	27.1	−1·0	22.2	20	0	1·0	−8·4	1·0	23	0	−1·0	8·2	6·3	−0·6	1	0	0	2	0	0	0	0	0	0
Agra	39·7	−1·5	44·1	29	25·3	−0·4	21.7	21	0	10·7	+1·0	5·6	12	2	+0·9	6·0	5·6	−1·6	2	0	0	4	0	2	0	0	0	0
Mainpuri*	41·6	−0·3	45.6	22	25.5	−0·2	21·2	8,9	4·8	6·8	−6·1	2·8	20	1	−0·2	10·5	6·3	+2.0	3	0	0	0	0	0	0	0	0	0
Aligarh	40·1	−0·6	44·6	29	..	..	..	..	0	1·3	−9·1	0·8	14	0	−1·2	11·3	8·4	0	2	0	0	4	0	1	0	0	0	0
Bareilly	40·3	+0·8	44·3	30	25·5	+0·4	21.7	20	0	0	−16·8	0	..	0	−1·5	11·0	6·7	+2·0	0	0	0	1	0	1	0	0	0	0
Meerut	38·4	−1·1	43·3	29,30	24·0	−0·2	19.1	20	...	7·6	−7·6	7·6	20	1	−0·5	...	9·0	...	1	0	0	0	0	0	0	0	0	0

(R) Register not received.
(a) Mean of 30 days.

*Data extracted from Indian Daily Weather Reports.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with										
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or Sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West)—*cont'd.*																												
Najibabad	38.5	...	43.4	29,30	21.9	...	17.7	8	0	0	...	0	...	0	...	3.8	2.6	...	0	0	0	0	0	0	0	0	0	0
Roorkee	38.7	−0.3	44.7	31	22.4	−0.9	18.0	1	0.5	7.0	−12.3	2.5	12,18	2	+0.3	9.1	7.6	+2.5	4	0	0	3	0	2	0	0	0	0
Dehra Dun	34.6	−1.0	39.6	29	20.2	−1.0	15.9	20	34.1	59.2	+22.4	34.3	20	4	+1.0	5.7	4.0	+0.3	5	0	0	6	0	0	0	0	0	0
Punjab (India), (Including Delhi) New Delhi	38.7	−2.5	44.1	29	25.0	−1.7	20.4	20	0.5	8.6	−4.6	2.8	12,25	2	+0.4	17.9 (i)	14.6 (h)	+0.9	5	0	0	7	0	5	0	0	8	0
Hissar	39.3	−1.4	45.6	29	21.8	−2.6	18.3	8	0	18.6	+4.9	14.7	18	1	−0.4	6.2	6.4	−1.6	5	0	0	6	0	6	0	0	0	0
Karnal	37.8	...	43.3	31	22.7	...	17.6	20	0	0	...	0	...	0	...	..	...	...	0	0	0	3	0	5	0	0	0	0
Patiala	38.4	...	45.0	31	22.9	...	18.6	20	3.8	11.6	+5.3	6.3	13	2	+1.2	12.8	10.7	...	3	0	0	2	0	0	0	0	0	0
Ambala	36.5	−3.4	44.1	31	23.7	−0.6	18.9	20	0	10.2	−8.3	7.1	13	2	+0.5	10.4	9.9	+3.9	2	0	0	1	0	0	0	0	0	0
Ambala (Aerodrome) (R)																												
Chandigarh	36.5	...	42.2	30	23.5	...	18.1	1	8.9	17.8	...	6.8	18	3	...	...	...	...	4	0	0	0	0	0	0	0	0	0
Ludhiana	38.9	−1.2	45.9	31	21.5	−2.8	16.6	13	0	0	−13.5	0	...	0	−1.5	6.9 (a)	4.0 (a)	+1.4	0	0	0	0	0	0	0	0	0	0
Ferozepur	36.4	...	43.9	29	21.3	...	15.8	14	0	8.1	...	4.3	5	2	...	6.0	4.2	...	2	0	0	0	0	3	0	0	0	0
Amritsar	35.7	...	43.5	31	19.6	...	15.5	2	0.5	17.0	...	10.2	13	2	...	11.1	10.0	...	4	0	1	7	0	3	0	0	0	0
Pathankot	35.2	...	43.4	31	21.0	...	17.7	13	3.8	20.8	...	9.4	13	3	...	5.0	4.3	...	6	0	0	0	0	2	0	0	0	0
Himachal Pradesh Bilaspur	34.9	...	41.2	30,31	18.5	...	14.8	1	9.4	29.4	...	14.7	13	3	...	8.1	7.1	...	4	0	0	5	0	0	0	0	0	0
Mandi	31.7	...	37.9	31	15.9	...	12.9	8	19.4	80.0	...	18.3	18	6	...	4.1	3.3	...	8	0	0	3	0	0	0	0	0	0
Jammu and Kashmir Srinagar	19.5	−5.5	29.6	31	10.6	+0.1	7.5	7	50.3	146.7	+86.2	47.4	24	8	+2.6	3.2	2.7	−1.1	18	0	0	6	0	0	0	0	0	0
Gulmarg	Closed during winter months																											
Sonamarg*																												
Dras*																												
Kargil	...	...	...	...	...	...	...	...	...	12.7	−12.2	12.7	11	1	−1.4	...	...	...	1	..	...	...	...	...	...	...	...	...
Leh	14.1	−3.5	19.9	29	1.9	−0.9	−1.6	8	0	9.8	+4.2	5.1	18	2	+1.3	9.5	7.2	+2.7	4	3	0	2	0	0	0	0	0	0
Skardu (R)																												
Gurez	...	...	...	...	..	...	...	...	...	121.6	+7.8	25.4	11,23	8	−1.1	...	...	...	9	...	...	...	...	...	...	...	...	...
Gilgit (R)																												
Misgar (R)																												
Jammu	35.4	−2.3	43.4	31	22.1	−3.6	17.8	2,14	...	24.9	+1.3	8.9	24	4	+1.8	...	...	...	8	0	0	1	0	0	0	0	0	0
Gund	...	...	...	...	...	...	...	...	...	205.3	...	58.4	24	13	...	...	...	...	18	...	...	...	...	...	...	...	...	...
Pandras	...	...	...	...	...	...	...	...	...	25.8	...	11.4	24	4	...	...	...	...	4	...	...	...	...	...	...	...	...	...
Panamik	...	...	...	...	...	..	...	...	...	20.7	...	5.1	7	2	...	...	...	...	10	...	...	...	...	...	...	...	...	...
Khangral	...	...	...	...	...	...	...	...	...	56.4	...	22.9	5	5	...	...	...	...	16	...	...	...	...	...	...	...	...	...
Digar	...	...	...	...	...	...	...	..	...	11.7	...	5.1	19	1	...	...	...	...	6	...	...	...	...	...	...	...	...	...
Khalatse	...	...	...	...	...	...	...	...	...	0	...	0	...	0	...	...	...	...	0	...	...	...	...	...	...	...	...	...
Mulbik	...	...	...	...	...	...	...	...	...	0	...	0	...	0	...	...	...	...	0	...	...	...	...	...	...	...	...	...
Rajasthan (West) Sri Ganganagar	37.2	−4.9	44.4	29	22.4	−1.5	19.5	14	25.4	38.6	+32.8	19.8	20	3	+2.2	4.7	5.2	−5.6	5	0	0	8	0	1	0	0	0	0
Churu	38.7	...	44.3	29	22.7	...	19.2	7	3.1	13.6	...	4.3	18	3	...	12.9	6.3	...	6	0	0	6	0	10	0	0	0	0
Bikaner	38.6	−3.5	44.2	29	24.0	−3.6	18.8	8	11.7	20.2	+5.2	12.5	23	2	+0.7	10.0	8.3	−1.8	5	0	0	4	0	1	0	0	0	0
Jaisalmer	39.1	...	43.3	28,29	24.2	—	20.4	20	5.3	13.7	...	6.6	21	2	..	18.6	14.5	...	3	0	0	0	0	0	0	0	0	0
Phalodi	37.7	...	43.8	29	24.9	—	19.5	19	0	7.8	−1.1	2.8	19	3	+2.2	20.4	15.9	...	3	0	0	1	0	1	0	0	0	0
Jodhpur	39.9	−0.9	43.4	28,29	26.1	−0.2	20.6	19	0	12.7	+2.3	10.9	19	1	−0.1	16.0	13.4	−3.8	2	0	0	4	0	2	0	0	4	0
Barmer	39.8	−1.5	43.1	28	25.8	−0.9	20.0	19	0	48.0	+39.1	34.0	19	2	+1.3	13.5	13.2	+2.1	3	0	0	5	0	0	0	0	0	0
Rajasthan (East) Alwar*	38.7	..	43.3	29,31	...	...	...	...	0	9.4	...	9.4	23	1	...	...	..	...	1	0	0	0	0	0	0	0	0	0
Sikar	38.0	...	41.9	29	22.7	..	18.4	23	0	2.0	...	1.0	23	0	...	12.4	8.6	...	3	0	0	0	0	0	0	0	0	0
Jaipur	38.7	−2.2	42.7	30	23.7	−1.2	20.8	7	0	2.8	−11.7	1.5	23	0	−1.6	11.8	8.0	−0.7	3	0	0	7	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	38.5	...	42.5	30	23.8	...	20.6	7	0	5.6	...	5.1	21	1	...	...	...	...	2	0	0	1	0	2	0	0	0	0
Dholpur	40.9	...	45.6	30	29.4	..	21.6	9	9.4	12.5	...	9.4	22	2	...	11.3	8.1	...	2	0	0	0	0	0	0	0	0	0
Ajmer	37.5	−1.9	40.7	29	25.1	−1.7	19.8	19	0	7.4	−8.9	6.1	19	1	−0.5	14.2	11.8	+1.3	3	0	1	6	0	0	0	1	0	0
Kotah	40.8	−1.2	43.3	29,30	28.1	−1.1	24.3	19	0	5.8	−6.1	5.8	24	1	0	12.1	9.0	+2.4	1	0	0	3	0	2	0	0	0	0
Chambal	40.2	...	42.8	29	21.9	...	15.6	9	0.5	10.7	...	9.9	30	1	...	13.6	9.2	...	3	0	0	3	0	2	0	0	0	0
Jhalawar	40.3	−1.4	42.8	29,30	25.9	−1.0	22.7	1	0	0	−8.9	0	...	0	−0.9	10.7	7.5	−0.9	0	0	0	0	0	0	0		0	0
Udaipur	37.3	−1.9	40.3	28	23.5	−2.5	16.4	7	0	0	−18.3	0	...	0	−1.5	8.3	5.9	...	0	0	0	1	0	0	0	0	0	0
Erinpura (Jawai Dam)	38.0	...	40.8	28,29,30	26.9	...	22.1	19	0	0	...	0	...	0	...	12.6	10.9	...	0	0	0	0	0	0	0	0	0	0

*Data not reliable. (a) Mean of 30 days. (R) Register not received. (i) Mean of 22 days. (h) Mean of 23 days.

*Data extracted from Indian Daily Weather Reports.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·5mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madhya Pradesh (West).																												
Gwalior (P. B. O.).	41·0	−2·1	45·2	31	27·6	−1·0	20·6	9	0	2·6	−4·3	1·5	19	0	−0.9	12·5	9·6	...	3	0	0	4	0	1	0	0	0	0
Sheopur Kalan	40·3	...	43·8	30	25·2	...	21·4	6	8.1	15·7	...	15·7	19	1	...	12·8	9·0	...	1	0	1	1	0	0	0	0	0	0
Guna	39·7	−1·6	43·4	30	24·0	−1.3	19·9	9	6·4	18·4	+4·7	7·1	26	4	+2·8	15·6	9·2	+0·2	5	0	0	5	0	0	0	0	1	0
Rajgarh	41·3	...	44·4	9	26·0	..	22·3	1	0	0·3	...	0·3	26	0	...	14·9	11·7	...	1	0	0	0	0	0	0	0	0	0
Neemuch	38·7	−1·0	40·6	2	25·2	0	22·9	1	0	0	−15·0	0	...	0	−1·2	14·4	11·3	−2·1	0	0	0	0	0	0	0	0	0	0
Ratlam	38·6	...	40·7	2,17	25·2	...	22·6	1,2	3·6	13·8	...	8·4	28	2	...	12·5	9·2	...	4	0	0	0	0	0	0	0	0	0
Alirajpur	39·1	...	41·8	1	25.5	...	22·8	22	0	4·1	...	4·1	25	1	...	14·5	11·6	...	1	0	0	0	0	1	0	0	0	0
Indore	38·7	−1·4	40·8	2,3	24·3	+0·1	20·8	6	5·3	6·1	−6·8	5·3	28	1	−0·3	20·8	19·1	...	2	0	0	4	0	0	0	1	1	0
Bhopal (Bairagarh).	39·5	−0·9	41·8	17	24·3	−1·8	21·6	9	1·8	10·7	−3·8	10·2	30	1	−0·2	18·5	14·5	+0·8	2	0	0	1	0	0	0	0	3	0
Khandwa	41·0	+0·6	43·4	3	27·1	−0·2	21·4	13	0	8·1	+0·2	8·1	26	1	+0·3	13·7	11.5	−1·4	1	0	0	0	0	0	0	0	0	0
Hoshangabad	41·0	−0·6	42·7	3,17	26·4	−0·8	22·.	7	0	1·5	−11·0	1·5	29	0	−1·2	6·6	4·2	−0·9	1	0	0	2	0	0	0	0	0	0
Betul	38·3	...	40·1	12,17	23·0	...	19·2	7	0	12·5	...	12·5	30	1	...	10·2	6·5	...	1	0	0	4	0	0	0	0	0	0
Chhindwara	39·2	...	42·8	18	23·3	...	21·9	24	0	5·1	...	5·1	24	1	...	12·6	8.5	...	1	0	0	1	0	0	0	0	0	0
Seoni	39·6	−0·2	41·7	11	24·9	+0·3	22·1	1	1·1	10·0	−9·3	5·6	30	1	−0·7	9·2	6·7	+0·6	5	0	0	5	0	1	0	0	0	0
Sagar	39·2	−1·2	42·5	30	25·5	−0·5	23·2	8	4·6	9·7	−1·0	8·4	23	1	−0·1	10·8	7·3	...	2	0	0	4	0	0	0	0	0	0
Nowgong	40·8	−1·1	45·1	30	23·6	−2·7	18·9	9	0	2·5	−6·9	2·5	24		0	10·3	5·8	+1·3	1	0	0	0	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	40·9	−0·1	44.4	30	26·4	−0·2	23·1	10	0	0	−11.9	0	...	0	−1·3	12·2	6·7	−0·5	0	0	0	1	0	0	0	0	1	0
Umaria	40·4	−0·4	43·0	30	25.6	−0·5	21·4	10	28·7	35·0	+24·1	27·7	24	2	+1.3	(a) 9·0	6·5	+0·9	4	0	0	2	0	0	0	0	1	0
Jabalpur	41·0	0·2	43·3	29	25·...	−0·2	20·6	3	4·8	6·6	−9·1	6·3	31	1	−0·4	9·5	6·1	+1·3	2	0	0	3	0	0	0	0	0	0
Mandla	40·0	...	41·8	30	22·3	...	16·8	3	5·6	7·9	...	5·6	31	1	...	7·9	4·2	...	3	0	0	9	0	2	0	0	0	0
Pendra	38·7	+0·8	41·3	30	25·9	+0·7	22·5	13,22	10·2	15·8	−5·5	9·4	22	2	−0·1	13·8	9·9	...	3	0	0	9	0	0	0	0	0	0
Ambikapur	39·5	...	42·3	30	24·1	...	20·5	1	0·3	0·3	...	0·3	27	0	...	14·3	10·1	...	1	0	0	5	0	0	0	0	0	0
Champa	42·8	...	45·1	• 30	27·8	...	20.5	19	4·6	37·1	...	26·2	19	3	...	8·0	4·5	...	3	0	0	6	0	6	0	0	0	0
Raigarh	43·0	...	44·8	12	28·7	...	25·6	9	0	4·1	...	3·6	28	1	...	6·3	4·7	...	2	0	0	1	0	0	0	0	0	0
Raipur	41·7	0·1	43·9	12	28·8	+1·0	21.3	19	1·8	25·2	+2·6	20·1	19	2	−0.1	11·1	9·7	−1·7	4	0	0	7	0	0	0	0	0	0
Kanker	39·6	−0·6	41·6	17	28·1	+1·8	21.2	22	16·5	16·5	−21·4	16·5	22	1	−1·7	7·6	5·2	−2·0	1	0	0	1	0	0	0	0	0	0
Jagdalpur (P.B.O.)	37·8	−0·5	40·3	16	24·1	−0·1	20·8	31	15·2	61.8	+41·9	19.8	30	5	+0·2	8·6	5·9	...	6	0	1	18	0	0	0	0	1	0
Gujarat																												
Deesa	39·8	...	42·3	26,28	25·8	...	21·2	2	0	0	...	0	...	0	...	13·4	10·5	...	0	0	0	0	0	0	0	0	0	0
Idar	39·0	...	41·2	28	25·3	..	20·7	12	0·3	1·6	...	1·3	28	0	...	12·9	10·5	...	2	0	0	0	0	3	0	0	0	0
Ahmedabad	40·2	−1·4	41·8	2	25·8	−0·1	21·8	2	0	6·1	3·8	6·1	28	1	+0·3	12·2	9·5	0	1	0	0	1	0	1	0	0	1	0
Dohad	38·5	−0·9	41·7	1	26·0	+0·1	23·5	6	0	1·5	−15·3	1·5	28	0	−0·5	22·5	21·9	+8·2	1	0	0	1	0	1	0	0	0	0
Baroda	40·1	−0·2	43·0	25	25·2	−0·2	20·8	6	0	0	−5·1	0	..	0	−0·5	8·0	5·9	3·4	0	0	0	1	0	1	0	0	0	0
Baroda (Aerodrome)	39·7	...	42·4	25	25·9	...	21·6	6	0	0	..	0	..	0	...	11·5	9·3	..	0	0	0	1	0	1	0	0	0	0
Broach	39·4	..	42·8	25	26·3	...	21·2	6	0	0	...	0	..	0	...	11·3	9.4	...	0	0	0	0	0	0	0	0	0	0
Surat	38·0	+1·7	42·6	25	26·2	+0·1	22·8	6	0	1·8	−4·3	1·8	27	0	−0·3	10·0	9·3	−1·3	1	0	0	0	0	0	0	0	0	0
Saurashtra & Kutch																												
Bhuj	38·0	0·3	41·9	27	24·6	0·3	21·6	9	0·8	2·6	−4·0	2·6	15	...	+0·7	15·5	12·5	−5·0	..	0	0	1	0	0	0	0	0	0
Bhuj (P. B. O.)*	...	...	...	..	...	...	...	...	...	...	...	...	..	...	...	...	...	...	..	0	0	1	0	0	0	0	0	0
Bhuj (Aerodrome)	38·1	...	41·3	27	25·1	...	21.7	9	0	12·2	...	12·2	15	1	...	(d) 18·1	15·9	...	1	0	0	1	0	0	0	0	0	0
Kandla	35·7	...	42·2	26	25·6	..	22·1	9	3·1	3·1	...	3·1	28	1	...	28·1	23 4	...	1	0	0	0	0	0	0	2	0	0
Mandvi	32·1	...	36·6	27	25·5	...	21·1	6	0	0	...	0	..	0	...	30·7	27·2	...	0	0	0	0	0	0	0	0	0	0
Dwarka	31·2	0·1	36·3	27	26·2	−0·8	24·7	1	0	0	−0·5	0	...	0	−0·1	16·3	15·1	−3·2	0	0	0	0	0	0	0	0	0	0
Porbander	31·7	...	35·3	26	25.5	...	22·7	1	0	0	...	0	...	0	...	18·0	13·5	...	0	0	0	0	0	0	0	0	0	0
Porbander Aerodrome	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	0	0	0	0	0	0	0	0
Jamnagar	...	...	...	...	24·2	−0·6	21·1	1	0·8	0·8	−0·8	0·8	28	0	−0·3	...	...	...	1	0	0	1	0	0	0	1	1	0
Rajkot (Aerodrome)**	38·4	−2·1	41·8	26	24·2	+0·2	20·6	8	7·1	7·1	−5·6	7·1	28	1	+0·4	26·6	24·5	+6·3	1	0	0	2	0	0	0	0	0	0
Surendranagar	40·3	...	42·7	26	25·7	...	23·0	6	11·9	12·9	...	11·9	28	1	...	(a) 16·2	16·5	...	2	0	0	1	0	1	0	0	0	0
Bhavnagar	40·0	−0·7	42·8	1,2	26·0	+0·4	22.5	6	0	0	−10·4	0	...	0	−0·7	14·1	13·1	+1·5	0	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome).	38·8	...	41·7	31	26·3	...	22·2	2	...	0·5	...	0·5	20	0	...	...	21·3 (a)	...	1	0	0	1	0	0	0	0	0	0
Mahuva	35·9	...	39·8	6	24·8	..	20·0	8	...	0	0	0	...	0	...	18·0	16·6	...	0	0	0	0	0	0	0	0	0	0
Keshod	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24·0	19·0	...	...	0	0	0	4	0	0	0	0	0
Veraval	30·9	...	32·7	26	24·6	...	20·2	9	0	0·8	−6·3	0·8	27	0	−0·3	21.0	17·5	...	1	0	0	0	2	0	0	0	0	0
Konkan																												
Dahanu	32·2	−0·9	36·1	27	25·8	−1·1	23·2	8,9	0	2·8	+0·3	2·3	26	0	−0·2	20·8	16·4	−0·5	2	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	33·1	+0·3	34·6	27	26·3	−0·1	24.0	26	0·8	25·4	+8·9	25·4	26	1	+0·2	15·1	12·6	+1·8	1	0	0	3	0	0	0	0	0	0
Bombay (Santacruz Aerodrome).	33·5	+1·1	36·7	27	25·3	+0·2	22·3	10	0	22·3	+5·8	19·8	26	1	+0·2	19·2	13.1	...	3	0	0	2	0	0	0	0	0	0
Alibag	31·2	−0·4	35·3	27	25·5	−0·7	23·2	10	...	23·4	−3·0	22·9	26	1	+0·2	...	14·1	+0·7	2	0	0	1	0	0	0	0	0	0
Harnai	29·8	−1·2	32·2	27	26·0	−0·8	22.2	25	0	45·5	+15·3	30·5	25	2	−1·0	23·4	20·7	+5·4	2	0	0	1	0	0	0	3	0	0

*0830 + 1730 hrs I. S. T. observations discontinued from 12th May. (a) Mean of 30 days. (d) Mean of 27 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm or more)		Wind speed, km. per hour			Weathe phenomena—No. of days w th								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830 1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·5mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan—*contd.*																												
Ratnagiri	32·0	...	33·4	30	26·2	...	22·9	25	0	33·3	+5·4	16·8	25	2	+0 6	...	...	...	2	0	0	1	0	0	0	0	0	0
Devgad	32·2	−0·7	33·9	31	26·9	−0·4	23·9	26	6·1	29·3	−43·6	25·7	26	2	−1·4	24·4	19·9	+2·5	2	0	0	3	0	0	0	0	0	0
Vengurla	32·9	...	34·4	16,24	25·7	...	23·2	7	0·8	14.8	...	10·9	25	2	...	...	...	...	4	0	0	5	0	0	0	0	0	0
Maharashtra																(a)											
Jalgaon	42·4	...	44·8	3	27·1	...	24·0	26	0	5·6	−4·8	4·3	26	1	+0·1	20·8	20·0	...	3	0	0	0	0	0	0	0	0	0
Malegaon	40·2	−0·4	42·7	3	24·4	+0·5	21·3	10	0	15·3	−3·2	14·0	26	1	−0·2	12·8	11·1	−2·9	2	0	0	2	0	0	0	0	0	0
Deolali	37·5	...	40·9	1	22·3	...	18·9	14	9·2	12·8	...	8·9	24	2	...	13·7	11·0	...	4	0	0	4	0	0	0	0	0	0
Aurangabad	39·4	−0·3	41·6	17	25·0	+0·7	21·5	26	13.2	53·4	+35·1	31·0	26	3	+1·7	14·1	14·4	−1·5	3	0	0	6	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	39.0	...	40·9	10,11	24·5	..	20·4	8	8·6	28·3	...	23·3	26	2	...	15·7	14·1	...	4	0	0	5	0	0	0	0	0	0
Khandala	...	...	...	...	...	...	...	...	...	39·1	+19·0	37·3	26	1	−0·3	...	...	..	2	...	..	...	...	...	...	...	...	...
Ahmednagar	38·6	−0·2	41·1	2	23·5	+1·2	21·2	13,26	1·8	20·6	−2·5	14·0	26	2	+0·4	11·4	9·4	−3·2	3	0	0	0	0	0	0	0	0	0
Parbhani	41·4	...	43·4	17	25·9	...	22·2	23	8·9	36·8	+17·5	12·9	24	5	+3·6	12·7	10·2	...	5	0	0	6	0	0	0	0	0	0
Poona	38 1	+1·0	42·0	2	22·4	0	19·1	7	4·1	70·7	+43·8	55·6	26	4	+2·3	6 5	4·6	−10·0	4	0	0	5	0	0	0	0	1	0
Poona (Lohagaon Aerodrome)	37·7	...	40·6	2	22·3	...	19.5	7	18·0	76·1	..	59·1	26	2	...	...	...	...	4	0	0	5	0	0	0	0	0	0
Baramati	39·1	...	42·3	2	24·1	...	21·3	26	0	38·1	...	33·0	26	2	...	12·1	12·1	...	2	0	0	0	0	0	0	0	0	0
Jeur	39·7	...	41·7	17	24·1	...	20·9	10	0	8·5	...	4·1	25	2	...	12·5	11·1	...	4	0	0	0	0	0	0	0	0	0
Sholapur	39·7	−0·7	42·2	4,17	25·7	+0·7	21·3	26	11·0	33·9	+11·3	11·9	12	4	−2·1	13 0	10 5	−2·7	7	0	0	7	0	0	0	0	0	0
Miraj	37·8	+0·5	40·8	10,11,17	22·8	+0·3	19·6	7	22·2	54·0	+6 0	18·3	26	5	−2·1	11·6	10 6	−2·4	6	0	0	5	1	0	0	0	0	0
Kolhapur	36·8	..	40·3	17	22·0	..	19·6	8	80·0	145·2	...	17·2	25	7	...	13 5	12·5	...	9	0	0	9	0	0	0	0	1	0
Vidarbha																												
Buldhana	37·9	...	40.4	3	25·9	...	21·4	26	3·3	20·1	...	15 0	26	2	...	14 1	13·3	...	2	0	0	0	0	0	0	0	0	0
Akola	41 9	−0·4	44·1	17	27·1	−0·3	23·1	26	2·0	8·9	−1·5	2·8	25	1	0	12·5	10·7	1·0	5	0	0	6	0	0	0	0	0	0
Amravati	41·7	−0 3	43·6	17	26·8	−0·3	23·3	7,26	1·6	12·5	−0·7	8·6	23	2	+0·7	13·4	9·8	+0·5	2	0	0	7	0	0	0	0	0	0
Yeotmal	41·4	...	43·7	12	26·9	...	23·8	22,26	2·5	5·5	...	4·5	25	1	...	10 5	8·6	...	2	0	0	6	0	1	0	0	0	0
Nagpur	41·2	−2·1	42·9	11	26·5	−2·2	20·6	22	0	14·3	−5·0	13·5	22	1	−1·0	14·0	11 6	...	2	0	0	9	0	0	0	0	7	0
Gondia	41·1	...	42·8	11	27·8	...	24·1	22	0	4·3	...	2·0	18	0	...	7·4	5 0	..	3	0	0	3	0	4	0	0	0	0
Brahmapuri	41·0	...	43·4	17	24·8	...	19·7	22	5·3	54·1	...	13·7	22	2	...	8·7	6 9	...	3	0	0	6	0	3	0	0	0	0
Chanda	41·3	−1·7	44·1	11	26·7	−1·1	22 0	22	19·8	53·2	+37·7	35·6	12	3	+1·6	9 1	6·1	−0·3	6	0	0	12	0	0	0	0	0	0
Sironcha	41·9	...	43·9	17.29	28·3	...	22·1	30	6·9	27·9	...	15·2	30	2	...	5·8	4·8	...	2	0	0	8	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	38·5	−1·6	41·9	7	27·2	−0·5	24·4	1	15·0	20·6	−7·1	13·2	31	2	+0 6	13·8	11·8	+2 8	4	0	0	3	0	0	0	0	0	0
Ongole	34·3	...	39·5	31	27·3	...	24·3	25	9·7	35 3	...	24 6	25	3	...	14·9	11·3	...	3	0	0	5	0	0	0	0	0	0
Rentachintala	40·5	−1·1	43·3	7	27·8	−1·2	22·8	29	4·6	59·7	−4·3	55·1	29	2	−0·8	7·6	7·9	−4·8	2	0	0	3	0	0	0	0	0	0
Gannavaram	38 6	...	41·6	31	27·2	...	25·3	2,5	26·8	23·2	...	11·2	25	4	...	18·6	14·9		4	0	0	5	0	0	0	0	0	0
Masulipatam	35·3	−2·2	40·0	31	27·6	0	24·9	5	6·1	6 1	−27·4	5·6	25	1	1·0	19·6	15 0	+4 4	2	0	0	3	0	0	0	0	0	0
Nidadavolu	37·0	...	38·8	15	26·8	...	22·8	31	100·8	100·8	...	57·7	25	4	...	10·6	6·2	...	4	0	0	8	0	2	0	0	0	0
Kakinada	37·8	+0·5	40·7	15	27·9	+0 3	25·7	1,3	0	0·3	−38·8	0·3	3	0	−2·5	14 0	11·2	+2·0	1	0	0	0	0	0	0	0	0	0
Visakhapatnam	36·3	−0·1	39·0	1	27·6	+0 3	25·4	19	2·8	6·6	−44·2	2·3	22	1	−1·7	29·9	20·1	+6 3	5	0	0	8	0	0	0	0	0	0
Callingapatam	33·1	−1·5	35·2	1	26·8	−0·3	25 0	19,21.29	35·6	35 6	−19·4	35 6	29	1	−2·2	26·3	20·5	−6·5	1	0	0	3	0	0	0	0	0	0
Telangana																												
Ramagundam	42 0	...	44·6	10,11	28·4	...	22·3	30	0	97·4	...	65·5	30	4	...	7·5	7·4	...	5		0	6	0	3	0	0	0	0
Nizamabad	40·4	−1·0	42·8	11	27·1	−0·3	23·9	12	0	24·2	+6·9	14·2	22	4	+2 6	7·4	6·2	-0·7	4	0	0	0	0	0	0	0	0	0
Mahbubnagar	38 0	..	41·3	8	25·9	...	22·1	12	0	31·6	...	15·0	14	3	...	10·1	8·2	...	7	0	0	6	0	1	0	0	0	0
Hyderabad (Begumpet Aerodrome	37·9	−0 6	40·5	9	25·7	−0·3	20·9	12	6·9	12·7	−15·0	5·1	29	3	+0·7	13·6	11·4	0	4	0	0	8	0	0	0	0	2	0
Hakimpet	37·4	...	40·4	11,12	25·1	...	18·9	12	7·9	39·4	...	31·5	12	2	...	...	...	...	2	0	0	13	0	0	0	1	0	0
Hanamkonda	40 3	0	43·2	17	27·3	−0·3	25·0	29	0·5	4·8	−26·2	2 5	29	1	-1·0	10·2	13·1	;3·0	3	0	0	6	0	0	0	0	0	0
Bhadrachallam	40 8	...	43·4	17	27·4	...	24·8	22	7·4	7·0	...	3·6	25	2	...	9·7	9·8	...	3	0	0	5	0	0	0	0	0	0
Khammameth	40·7	...	43·3	8	27·0	...	21·2	24	24·9	13·5	..	11·7	24	1	...	8·6	9·5	...	2	0	0	6	0	3	0	0	0	0
Rayalaseema																												
Arogyavaram	35·3	...	38·3	9	23·3	...	20·7	21	14·2	45·9	...	14·5	27	6	...	9·2	7·7	...	10	0	0	5	0	0	0	0	0	0
Cuddapah	40·8	−0 1	43·3	8,9,17	28·8	+0·4	22·8	28	0	55.8	+17·5	45·7	28	3	+0·4	10·3	7·7	-2·1	3	0	0	0	0	0	0	0	0	0
Anantapur	38 7	...	42·1	8	26·1	...	22·8	29	24·7	54·7	+2·9	17·3	25	6	+2·3	9·2	9·6	...	8	0	6	9	0	0	0	1	0	0
Kurnool	40·1	−0·2	43·2	8	27·4	+0·2	24·2	29	5·6	25·7	−1·7	18·8	27	2	−0·5	10 0	10 0	-0·9	3	0	0	9	0	0	0	0	0	0
Madras																												
Palayamcottai	37·4	...	41·2	8	26·8	...	24·3	18	15·3	22·4	−19·0	7·9	28	3	+0 5	11·9	9·1	...	6	0	0	4	0	0	0	0	0	0
Tuticorin	33·1	...	35·6	31	26·6	...	24·3	18	10·5	24·0	...	13·5	18	3	...	18·9	13·1	...	5	0	0	0	0	0	0	0	0	0
Pamban	31·4	−1·8	33·5	9	28·0	+0·7	24·6	13,18	6·3	33·2	+8·6	20·8	18	3	+1·3	13 6	11·8	−4·5	5	0	0	0	0	0	0	0	0	0
Mathurai	36·9	−0·2	40·7	9	25·8	+0·2	21·6	14	48·9	67·3	−2·3	14·0	13	7	+2·3	6 3	5·1	−1·8	11	0	0	2	0	0	0	0	0	0
Nagapattinam	33·4	−2·9	37·8	7,31	27.7	+0·6	25·1	13	36·6	47·8	+7·9	27·2	25	4	+2·2	20·1	15·7	+5·4	4	0	0	4	0	0	0	0	0	0
Tiruchirapalli	36·0	2·	39·5	9	26.6	+0·4	23·9	13	50·3	58·5	−25·6	31·7	13	3	−1·1	12·0	11·7	−3·7	6	0	0	9	0	1	0		0	0

(a) Mean of 30 days

Division and station.	Air temperature in °C: Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Rainfall in millimetres: Total fall during 0830-1730 hours	Total fall in 24 hours.	Departure from normal	Heaviest fall in 24 hours	Date	No. of rainy days (2·5 mm. or more): Total for the month	Departure from normal	Wind speed, km. per hour: Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Weather phenomena—No. of days with: Precipitation (0·3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras—(*Contd.*)																												
Coimbatore	32·8	−1·9	38·0	17	24·1	+1·0	21·1	22	31·0	107·2	+44·5	54·1	22	6	+1·3	10·3	8·3	+2·2	9	0	0	2	0	0	0	0	0	0
Coimbatore (Peclamedu Aerodrome)	34·4	...	38·6	17	23·9	...	21·2	29	68·9	152·8	...	69·3	22	5	...	15·4	16·6	...	7	0	0	5	0	0	0	0	0	0
Salem	36·7	−0·7	39·8	8	25·8	+0·8	22·7	29	23·4	66·1	−50·7	23·1	23	5	−2·1	7·6	7·5	+1·7	5	0	0	8	0	0	0	0	0	0
Kallakurichi	38·2	...	41·9	9	26·5	...	23·1	24	54·4	192·3	...	165·9	23	4	...	...	...	...	4	0	0	6	0	0	0	0	0	0
Cuddalore	33·7	−2·9	37·6	31	26·9	0	24·4	1	1·2	8·9	−16·5	4·1	24	2	+0·7	15·6	11·8	+3·3	3	0	0	3	0	0	0	0	0	0
Vellore	37·9	−0·9	41·6	9	26·4	+0·3	23·4	24	9·5	42·0	−16·2	22·1	24	3	−0·8	9·4	9·1	+3·0	7	0	0	8	0	0	0	0	0	0
Madras	36·2	−2·3	39·3	7	27·5	−0·1	25·2	1	0	12·6	−13·6	6·3	24	3	+1·9	15·6	11·2	−3·0	3	0	0	4	0	0	0	0	0	0
Madras (Nungambakkam)	34·1	...	36·8	7	27·4	...	24·7	1	..	10·1	...	9·1	25	1	...	...	10·3	...	2	0	0	2	0	0	0	0	0	0
Coastal Mysore																												
Karwar	31·8	...	32·8	1	26·3	...	24·1	27	4·4	81·9	−0·1	60·0	26	5	+1·5	...	...	...	5	0	0	0	0	0	0	0	0	0
Honavar	32·5	0	33·6	5	25·9	−0·2	21·5	20	15·5	150·4	+19·6	101·6	26	4	−1·6	8·2	7·5	+1·7	6	0	0	6	0	0	0	0	0	0
Mangalore	32·2	−0·5	34·4	5	26·4	+0·4	22·3	22	19·1	267·3	+110·3	86·8	22	7	+0·3	12·0	9·7	+0·8	11	0	0	11	0	0	0	0	0	0
Mangalore (Bajpe Aerodrome)	32·8	..	34·0	2	25·4	...	22·3	24	6·9	236·9	...	76·5	22	7	...	...	...	...	9	0	0	10	0	0	0	0	0	0
Mysore (North)																												
Bidar	37·5	−1·5	40·3	11	25·1	−0·6	21·1	12,20	0·8	45·6	−21·6	16·8	29	4	+1·6	12·8	11·7	−1·0	6	0	0	0	0	0	0	0	0	0
Gulbarga	39·7	−0·8	42·8	11	26·3	+0·4	21·6	12	0·5	26·9	−1·6	25·4	12	1	−1·4	14·0	11·7	−4·7	3	0	0	3	0	0	0	0	0	0
Bijapur	38·2	−0·5	41·6	17	25·0	+1·4	21·8	12	7·6	28·0	−0·5	19·6	26	2	−0·2	9·6	8·9	−1·9	5	0	0		0	0	0	0	0	0
Belgaum	34·5	−0·5	38·7	10	20·8	+0·6	18·3	9	47·8	131·1	+72·7	31·0	26	9	+4·7	9·3	6·4	−1·2	9	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	34·7	+0·1	38·6	11	20·8	+0·6	18·3	8	56·4	93·7	35·3	26·2	17	8	−3·7	10·0	8·0	−2·2	9	0	0	4	0	0	0	0	0	0
Belgaum (Sambre Aerodrome)	31·8	.	38·6	10	20·5	...	17·4	8	43·8	87·2	.	17·3	26	8	...	20·1	16·5	...	10	0	0	12	4	0	0	0	0	0
Gadag	36·9	+0·1	40·6	10	23·1	+0·5	21·1	25	31·1	52·0		25·7	25	4	−0·1	8·2	9·6	−4·1	10	0	0	7	0	0	0	0	0	0
Raichur	39·0	−0·8	42·5	8	27·2	+1·0	23·2	29	0	35·1	+7·9	15·2	29	4	−1·7	10·5	11·1	−2·1	6	0	0	7	0	0	0	0	0	0
Mysore (South)																												
Bellary	37·5	−1·4	41·1	9,10	26·2	+0·8	20·0	29	7·1	90·4	+42·4	59·9	29	5	+1·7	8·0	7·1	−2·6	8	0	0	8	0	0	0	0	0	0
Chitaldrug	34·6	−0·5	37·8	10	23·5	+1·3	18·6	29	18·7	111·3	+36·6	52·1	25	6	+1·6	7·0	7·2	−2·6	8	0	0	4	0	0	0	0	0	0
Shimoga	34·6	...	38·1	21	22·8	...	20·8	29	53·6	152·5	...	89·4	25	8	...	6·5	4·4	...	12	0	0	8	0	0	0	0	0	0
Balchonnur	30·2	+1·0	33·6	2	19·6	+0·1	17·0	6,14	...	170·1	+64·7	44·5	14	9	+3·0	...	...	...	19	0	0	0	0	0	0	0	0	0
Hassan	31·5	−0·4	35·1	4,5	20·7	+0·9	18·4	23,24	54·8	187·4	+70·1	55·1	20	9	+1·8	8·2	7·9	−0·6	14	0	0	12	0	0	0	0	0	0
Mysore	32·3	−1·0	36·1	8,9	21·9	+0·8	18·3	23	157·8	386·4	+244·4	184·4	23	9	+1·1	8·4	8·3	−1·5	13	0	0	11	0	0	0	0	0	0
Bangalore (Central Observatory)	32·6	−0·3	36·1	9	22·0	+1·5	18·3	31	113·9	287·4	+187·7	103·6	23	10	+3·4	9·3	8·5	−0·4	11		0	15	0	0	0	0	1	0
Bangalore (Aerodrome)	33·0	..	36·4	17	21·4	..	17·2	21	48·2	194·5	...	54·4	21	9	...	...	...	...	11	0	0	14	0	0	0	0	7	0
Kerala (Including Laccadives)																												
Kozhikode	32·0	−0·3	35·0	3	25·9	+0·2	23·2	21	110·5	380·6	+144·9	115·6	21	11	+2·3	12·1	12·5	11·2	14	0	0	14	0	0	0	0	0	0
Palghat	33·8	...	39·1	2	25·4	...	22·2	22	172·7	364·2	...	236·2	22	10	...	12·1	10·3	...	13	0	0	3	0	0	0	0	0	0
Fort Cochin	30·6	−0·2	33·0	12	25·5	−0·2	23·2	22	180·4	584·4	+287·7	144·5	23	11	−1·3	10·1	7·9	−0·6	15	0	0	10	0	0	0	0	0	0
Cochin (Naval Air Station)	31·3	...	34·0	16	25·6	...	23·0	6 days	172·1	582·2	.	140·7	22	13	...	9·7	6·6	...	15	0	0	22	0	0	0	0	1	0
Alleppey	31·4	...	34·0	10	25·6	...	22·8	12	157·6	541·2	...	160·6	22	13	...	17·0	14·8	...	14	0	0	9	0	0	0	0	0	0
Punalur	33·3	...	37·1	2	24·1	...	22·8	31	107·0	420·3	..	80·2	21	16	...	6·0	3·4	...	19	0	0	1	0	0	0	0	0	0
Trivandrum	31·7	−0·2	35·2	4	25·0	−0·3	22·6	23	263·4	353·5	+130·5	83·6	18	16	5·9	8·0	5·5	−2·7	20	0	0	14	0	0	0	0	0	0
Trivandrum (Aerodrome)	32·1	..	34·5	18	25·5	...	23·0	18	..	242·8	...	65·0	18	13	...	...	7·7	...	17	0	0	15	0	0	0	0	3	0
Hill Stations excluding Kashmir	...	...	...	..	...	...	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	..	...
Walong (R)																												
Kohima	26·3	...	31·7	21	18·1	...	14·3	4	14·4	30·0	..	12·5	30		...	...	...	...	9	0	0	0	0	4	0	0	0	0
Aijal *																												
Shillong	25·6	+2·3	30·1	27	17·1	+2·0	13·3	4	155·1	200·1	−86·7	79·8	29	9	−8·3	11·4	8·5	+2·5	22	0	1	15	0	0	0	0	0	0
Cherrapunji	22·2	−0·1	24·3	25,27	16·0	−0·1	12·4	7,8	745·3	2491·4	+1210·2	373·4	8	30	−8·0	18·9	16·5	+7·6	30	0	0	0	0	0	0	0	0	0
Mawsynram	...	...	...	..	...	...	...	...	...	2754·3	...	369·6	7	30	...	...	...	...	30	...	...	...	...	...	...	...	...	...
Darjiling (Raj Bhawan)	20·5	+2·7	23·3	27,29	13·3	+1·0	10·8	3	20·2	70·8	−173·8	37·8	4	6	−8·4	4·5	4·5	+1·9	10	0	0	6	12	0	0	0	0	0
Kalimpong	25·1	+1·4	28·0	26	17·4	+0·3	12·3	2,17	2·5	45·6	−113·7	17·8	4	7	−4·8	6·0	4·6	−6·3	7	0	0	0	0	0	0	0	0	0
Katmandu	33·7	+4·1	37·5	30	14·3	−15.	10·3	1	23·4	86·4	−43·1	28·7	31	6	−4·5	1·5	0·6	−1·7	7	0	0	1	0	0	0	0	1	0
Mukteswar (Kumaon)	23·3	+0·5	27·9	29	13·4	+0·2	7·1	20	19·8	41·5	−16·9	17·3	20	4	−1·1	17·4	16·7	+5·4	7	0	0	8	0	0	0	0	0	0
Nainital	23·7	...	27·3	28,29,30	15·2	...	10·6	20,21	13·7	30·7	..	13·7	21	3	...	9·7	7·3	...	4	0	0	0	0	0	0	0	0	0
Tapoban	23·7	...	30·6	29	11·1	...	6·1	20	...	78·1	..	31·7	13	5	...	...	...	...	13	0	0	0	0	0	0	0	0	0
Badrinath	Closed during winter months.																											
Lokpal	1·8	...	4·4	31	−4·8	...	6·1	2	...	142·5	...	38·6	18	13	...	...	...	...	13	6	0	0	8	0	17	0	0	0
Jamuna Chetty	...	...	...	...	...	...	...	...	...	119·3	...	50·8	13	5	...	...	...	...	5	...	...	...	...	...	...	...	...	...
Mussooree	23·8	−0·9	28·3	30	14·2	−0·6	6·5	21	16·0	70·8	+28·4	34·5	20	4	−0·3	9·0	...	−1·8	5	0	0	5	0	1	0	0	0	0
Kharsali	...	...	...	...	...	...	...	...	...	195·8	...	77·0	18	7	...	...	...	...	9	...	...	...	...	...	...	...	...	...

*Temporarily Closed. (R) Register not receiv

Division and station.	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (·3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations (excluding Kashmir)—*Contd.*																												
Rana	...	...	...	...	...	...	...	...	...	194·8	...	74·9	18	8	...	...	...	...	12	...	...	...	...	...	...	...	...	...
Simla	21·3	−1·6	27·4	30	12·8	−1·5	6·2	12	4·9	196·5	+42·2	42·7	20	6	+0·8	5·9	4·8	−1·3	9	0	2	7	0	0	0	0	0	0
Dharampore	...	...	...	...	...	...	...	...	...	153·2	+103·9	56·9	18	6	+2·6	...	...	...	6	...	...	...	...	...	...	...	...	...
Kyelang	...	...	...	...	...	...	...	...	...	160·5	+101·8	28·5	17	13	+7·4	...	...	...	13	...	...	...	...	...	...	...	...	...
Gondla	...	...	...	..	...	...	...	...	...	69·1	...	15·7	22	8	...	...	...	...	9	...	..	...	...	..	..	...	...	...
Kothi	...	...	...	...	...	...	...	...	...	477·1	...	110·5	12	16	...	...	...	...	16	...	...	...	...	...	...	...	...	...
Koksar	...	...	...	...	...	...	...	..	...	318·1	...	141·7	18	11	...	...	...	...	13	...	...	...	...	...	...	...	...	...
Dalhousie	23·0	...	29·6	30,31	13·6	...	7·2	13	23·4	53·2	−0·7	15·2	13	7	+2·8	4·3	5·6	...	10	0	0	0	0	0	0	0	0	0
Dharamshala	28·1	...	33·9	29	18·1	...	12·6	13	10·4	57·1	...	27·9	13	6	...	8·2	6.2	...	8	0	0	8	0	0	0	0	0	0
Abu	30·2	−0·9	33·9	28	20·9	−0·8	16·8	19	0	0	−23·6	0	...	0	−1.3	11·2	10·9	−0.8	0	0	0	0	0	0	0	0	0	0
Pachmarhi	35·0	−0·4	37·3	17	23·2	−0·7	18·5	16	4·1	8·7	−7·0	4·1	23	2	+0·4	9·3	8·3	−0·2	4	0	1	7	0	0	0	0	0	0
Mahabaleshwar	30·5	+1·7	34·2	19	18·5	+0·3	16·2	10,11,28	23·9	61·5	+20·9	54·1	26	3	+0·6	12·9	13·7	0	3	0	0	4	5	0	0	0	0	
Nandi Hills	29·4	...	31·7	6,9,17	17·8	...	15·6	23,30	...	134·8	...	62·5	31	6	...	...	...	...	6	0	0	0	11	0	0	0	0	0
Mercara	26·3	0·4	28·9	1	19·1	+1·0	17·4	14	55·9	191·8	+59·5	34·8	22	11	+2·5	10·2	8·6	+2·5	13	0	0	0	0	0	0	0	0	0
Kodaikanal	19·6	−0·6	22·2	6	12·4	−0·2	11·0	1,29	61·4	120·3	−41·5	26·4	21	8	−2·6	13·8	14·6	+2·6	13	0	0	13	7	0	0	1	0	0
Ootacamund	21·1	−0·2	25·0	8	11·4	0	9·4	6,27	339·2	500·5	+340·7	113·3	23	13	+1·0	4·2	3·0	−1·3	16	0	0	2	0	0	0	0	0	
Coonoor	23·7	−0·9	27·2	8	14·9	−0·1	12·3	26	...	354·9	+249·0	193·0	22	8	+0·3	...	5·5	+0·2	12	0	0	3	0	0	0	0	0	0
Sikkim																												
Thangu	..	...	..	...	...	..	...	.	...	34·9	...	24·6	24	1	...	..		...	8	...		...	...					
Chungthang	...	...	...	...	...	...	...	.	...	363.9		56·1	16	18				...	16	...	...	...	...					
Lachen	17·9	...	18·3	13,15,24	1·5	...	−1·1	1	...	115·9	..	14·5	11	18	...	..	...		20	...	..	...	...					
Tibet																												
Yatung (Chumbi)	19·4	+3·4	21·1	16,17	3·4	−2·3	0·6	1	...	96·0	−7·1	17·5	29	9	−2·0	.	(c)	...	11	0	0	0	0	0	0	0	0	0
Lhasa	20·2	...	24·1	30	3·4	...	−1·2	3	...	3·3	...	2·0	27	0	...	...	4·4	..	3	0	2	0	0	2	0	0	0	0
Ceylon																												
Colombo	31·6	+0·7	33·0	9,10	24·5	−0·8	23·0	8 days	169·3	516·3	+180·0	103·9	31	21	+6·9	.	..	...	23	0	0	8	0	0	0	0	0	
Trincomalee	33·5	−0·5	38·0	9	26·1	+0·4	24·0	13,18	10·6	53·4	−14·7	19·3	18	5	+1·6	...	...	..	7	0	0	0	0	0	0	0	0	
Batticoloa	31·9	...	36·0	19	25·3	...	23·0	24	27·6	57·7	.	19·1	23	5		...	.	.	8	0	0	3	0	0	0	0	0	
Hambantota	30·8	+0·4	33·0	7,9	25·3	+0·1	24·0	4 days	38.1	74·2	−43·9	19·3	14	9	+2.2	..	...	...	15	0	0	4	0	0	0	0	0	0
Mannar	33·1	...	36·0	10,11	26·4	...	24·0	18	12·5	109·3	...	60·5	18	6		.	.	.	12	0	0	1	0	0	0	0	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																												
Damodar Catchment																												
Bokaro	41·9	...	44·5	30	25·0	..	20·4	10	5·3	6·4	...	5·3	31	1	.	12·5	7·7	...	3	0	0	2	0	0	0	0	0	0
Hazaribagh	38·6	...	41·1	30	24·0	...	20·4	1	2·5	2·5	...	2·5	27	1		11·4	(a) 7·6		1	0	0	1	0	0	0			
Tilaiya	40·4	...	43·3	30	27·6	...	23·3	10	1·5	1·5	...	1·5	31	0		...		..	1	0	0		0	0		0	0	0
Ramgarh	42·9	...	45·7	30	24·7	...	20·4	10	0	0·8	.	0·5	20	0		9·9	5·2	..	2	0	0	4	0	0		0		
Panchet Hills	43·4	...	46·5	30	27·9	...	22·0	5	0	2·8	..	2·8	31	1		15·4	10·6		1	0	0	3	0	0				
Durgapur	43·5	...	45·8	30	29·3	...	...	...	...	0	...	0		0		...	..	...	0	0	0	0	0	0	0	0	0	0
Asansol	...	.		..	...	..	...	...	...	25·1	.	25·1	31	1					1	...	..							
Dhanwar	...	...	..	..	...	...	...	...	..	0	..	0	...	0	..	...			0	...	..							
Dumri	...	...	...	...	...	...	...	..	..	0	.	0	...	0	..				0	...	..			..				
Bishungarh	...	...	.	...	...	...	...	...	...	0	..	0	...	0	.	..	..	..	0	...	..							
Palganj (Giridih)	...	...	...	...	...	..	...	..	...	11·7	...	11·4	31	1	..	..	.	..	2	...	..	.	.					
Chandwa	...	...	...	.	...	...	...	..	...	4·3	...	4·3	20	1	.	...	...	...	1	...								
Maithon	...	...	...	...	...	...	...	...	...	8·4	...	7·9	31	1	...	...	...	...	2	...	..			..	.	..	..	
Subarnarekha Catchment																												
Baramul	42·9	...	45·4	16	25·8	...	21·5	1	10·9	10.9	..	7·1	22	1		6·1	4·1		3	0	.	4	0		0	0	0	0
Hirakud	42·3	...	44·4	12	28·9	...	25·8	1,9	14·5	17·3	...	10·7	31	2		5·9	5·7	...	4	0	0	9	0	1	0	0	1	0
Khijrawan	39·9	...	42·2	12	...	...	...	...	48·2	47·4	...	31·7	29	2	...	13·3	7·9	...	2	0	0	6	0	0	0			0
Sonepur	42·9	...	45·0	19	29·7	...	18·8	18	...	4·9	...	3·1	28	1	...	...	8·8	...	2	...	..	..	..		..	..	..	..
Ginabahar	41·4	...	43·9	30,31	24·0	...	21·0	28,30	...	7·4	...	4·1	25	1	..	...	...	..	3	...	..	..	..	..	..	..	..	..
Narbada Catchment																												
Punasa	42.0	...	44·2	2,3	25·9	...	22·4	7	0	6·1	...	5·8	26	1	...	11·4	8·1	...	2	0	0	1	0	0	0	0	0	0
Ragra Tawa	41·3	...	43·0	17,29	26·5	...	21·7	1	0	8·9	...	6·9	31	1	...	10·1	14·8	...	2	0	0	1	0	0	0	0	0	0
Thikri	41·4	...	44·5	1	27·7	...	23·7	26	...	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Tapti Catchment																												
Nandurbar	40·0	...	43·0	1	...	...	...	...	...	20·1	...	9·4	28	3	...	...	...	..	3	...	..	...	..	..	...	...	...	...
Sabarmati Catchment																												
Jhadol	37·1	...	40·8	28	22·1	...	17·5	1	...	0	...	0	...	0	...	...	...	...	0	0	0	0	0	0	0	0	0	0
Salawara (Surajgarh)	...	...	...	...	...	...	...	...	...	0	...	0	...	0	...	...	...	...	0	...	...	...	...	...	...	...	...	...

(c) Mean of 28 days.

(a) Mean of 30 days.

Division and Station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
HYDROMETEOROLOGICAL OBSERVATORIES—(*contd.*)																												
Damodar Catchment—(*contd.*)																												
Bikrani . (R) .	...	...	...	...	...	..	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tarpal . . .	...	...	...	...	...	...	...	...	...	1·3	...	1·3	25	0	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Kotra Cantonment .	...	...	...	...	...	...	...	..	...	10·2	...	10·2	19	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Dharoi . . .	39·6	...	42·8	26	26·0	...	22·9	13	0	0	...	0	...	0	...	...	...	..	...	...	...	...	...	...	...	...	..	.
Ganga Catchment																												
Mukhim . .	24·0	..	28·9	29	14·7	...	8·8	20	31·6	125·5	...	39·6	18	5	...	...	...	...	10	0	0	1	2	0	0	0	0	0
Tehri . . .	24·2		39·9	29	18·3	...	15·4	20	44·0	69·7	...	20·6	20	5	...	...	...	...	7	0	0	4	0	0	0	0	0	0
Gandak Catchment																												
Gorkha . . .	32·1	...	35·6	29	21·6	...	17·3	31	...	67·1	...	28·7	5	6	..	...	...	..	7	...	...	...	..	...	...	...	...	...
Pokhara . .	33·2	...	36·6	29	20·0	...	16·0	13	...	97·8	...	52·3	4	5	..	...	...	...	7	...	...	...	...	...	...	...	...	...
Nawakot . .	31·9	...	38·3	29	..	...	...	...	...	61·0	...	36·1	4	2	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Gogra Catchment (Trans Himalayan Region)																												
Dailekh. . .	30·4	...	34·3	29	...	...	...	..	0·3	6·9	...	6·6	19	1	...	...	...	...	2	...	...	...	...	..	...	..	...	...
Gogra Catchment																												
Dandeldhura . .	26·0	...	30·7	29	16·5	...	10·4	20	13·7	14·7	...	8·1	21	2	...	...	...	...	3	...	...	...	...	...	...	...	...	...
Munsiyari . .	25·2	...	30·8	29	14·5	..	8·1	13	52·5	102·1	...	32·3	20	9	...	...	...	..	13	...	..	...	...	...	...	...	...	...
Sallyana . .	..	...	..	..	...	...	...	.	0	0	...	0	...	0	...	...	...	..	0	...	...	...	...	...	...	...	...	.
Butwal . . .	40·9		42·9	18,28	22·4	..	10·1	5	0	0	..	0	...	0	...	...	.	.	0	...	...	...	...	...	...	...	...	...
Bagmati Catchment																												
Katmandu . .	31·9	..	34·9	28	13·7	...	10·1	1·8	23·2	84·4	..	26·2	31	6	...	1·5	0·6	...	8	0	0	9	0	0	0	0	1	0
Kosi Catchment																												
Chautara . .	31·2	..	34·0	25	19·0	...	15·1	2	7·6	57·9	.	13·5	29.30	7	..	...	...	...	8	...	...	...	...	...	...	...	...	...
Okhaldunga .	26·2	...	29·2	29	16·5	...	13·2	3	60·5	99·4	...	50·2	4	4	...	9·1	7·2	...	5	>	0	3	0	0	0	0	0	0
Barahkshetra . .	37·4	...	40·9	14	24·6	...	21·6	20	7·9	37·3	...	15·5	4	4	...	15·3	8·8	...	6	0	0	5	0	1	0	0	0	0
Angbung . .	30·6	...	33·8	14, 26	19·0	...	16·3	4	...	166·3	...	37·1	30	10	...	...	...	...	14	...	...	...	...	...	...	...	...	...
Taplejung . .	25·3	...	28·3	29	15·5	...	12·7	4	59·9	159·7	...	36·8	4	12	...	...	...	...	17	0	0	13	2	0	0	0	0	0
Taplethok . .	28·6	...	31·3	24	15·7	...	14·1	2	...	112·3	...	26·9	16	11	...	...	...	...	13	...	...	...	...	...	...	...	...	...
Wallungchung Gola(R)	...																											
Bhojpur . .	26·1	...	29·4	15,29	17.6	...	14·3	3.4	50·1	71·1	...	26·9	3	4	...	...	...	...	5	...	...	...	...	...	..	...	...	..
Chainpur . .	30·9	...	34·3	15	19·3	...	15·6	4	...	41·1	...	22·6	18	3	...	...	...	...	3	...	...	...	...	...	...	...	...	..
Tista Catchment																												
Gangtok . .	22·7	...	25·4	14. 18	14·1	...	11·3	7	138·9	354·9	...	54·6	29	17	...	...	...	...	22	0	1	19	10	0	0	0	0	0
Geyzing . .	26·5	...	29·4	14	15·7	...	13·8	20	8·9	149·5	...	43·4	19	12	...	...	...	...	21	...	...	...	...	...	...	...	...	..

(P) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibares: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibares: At station level	Mean pressure in millibares: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Okta): Mean amount	Cloud amount (Okta): Departure from normal	Mean wind speed, km. per hour	Wind speed (km. p.h.): 62 or more	Wind speed (km. p.h.): 20 to 61	Wind speed (km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1009.6	1007 0	...	30·0	26·6	25·3	32·3	76	...	4·3	...	2·0	0	0	16	2	4	0	0	0	10	0	0	15	0
	1730	„	1006·8	1004·2	...	28·8	25·9	25·0	31·4	81	...	5·2	...	2·3	0	0	17	0	5	1	0	0	11	0	0	14	0
Long Island	0830	33	1010·9	1007·3	...	30 4	26·5	24·8	31·5	72	...	5·1	...	1·5	0	0	13	0	0	0	0	0	9	3	1	18	0
	1730	„	1008·0	1004·3	...	29·7	26·2	24·7	30·8	76	...	6·5	...	1·6	0	0	13	0	1	1	0	1	8	2	0	18	0
Port Blair	0530	79	1008·7	999·8	...	25·7	24·9	24·5	30·7	95	...	4·5	...	3·0	0	0	16	0	0	0	0	0	6	9	1	15	0
	0830	„	1010·0	1001·3	+1·5	30·8	26·2	24·0	29·8	68	—10	5·0	—0·6	5.7	0	1	25	0	6	2	3	1	7	5	2	5	9
	1130	„	1009·0	1000·3	...	30·2	26·1	23.7	29·9	66	...	5·1	...	9·2	0	0	28	0	2	5	7	2	5	7	0	3	0
	1730	„	1007·4	998·5	...	28·3	25·3	23.9	29·7	78	...	6·3	...	7·8	0	0	24	0	0	2	1	2	10	8	1	7	0
	2330	„	1008 9	1000·0	...	26 4	25·1	24·6	30·5	90	...	3·7	...	5 0	0	0	25	0	0	0	0	1	9	12	3	6	0
Car Nicobar	0830	10	1010·3	1009·1	...	30·0	26·4	25.0	31·5	75	...	4·9	...	3·3	0	0	23	0	2	3	2	3	8	3	1	8	1
	1730	„	1007.6	1006·5	...	28·6	25·8	24·7	30·9	79	...	5·1	..	1·2	0	0	9	1	0	0	0	0	5	1	2	22	0
Nancowry	0830	26	1010·6	1007·7	...	28·7	25 9	24·8	31·2	80	...	5·0	...	3·9	0	0	21	0	0	0	0	2	16	2	1	10	0
	1730	„	1008·1	1005·2	...	28·4	25·8	24·7	31·1	81	...	5·5	...	2·5	0	0	20	1	0	0	0	1	15	3	0	11	0
Kondul	0830	8	1010·5	1009·6	...	28·9	26 9	26·0	34·0	85	...	4·6	...	2·9	6	0	21	0	1	11	7	0	0	0	0	10	2
	1730	„	1007·9	1007 0	...	28 0	26·2	25·4	32·1	85	...	4·7	...	2·3	0	0	9	0	1	4	4	0	0	0	0	22	0
Assam (Including Manipur Tripura)																											
Pasighat	0830	...	...	...	...	23·2	21.1	19·9	23·4	87	...	6·9	...	4·2	0	0	17	7	1	1	1	2	0	0	5	14	0
	1730	...	...	...	...	24·3	22.1	20·9	24.8	82	...	6·2	..	2·1	0	0	9	2	1	0	2	0	0	1	3	22	0
Digboi	0830	...	...		...	22 9	21·5	20 3	24·5	88	...	7·0	.	3·8	0	0	31	3	16	0	3	1	5	0	3	0	0
	1730	...	...	...	...	25·3	22 6	21·2	25 0	80	...	6·1	.	3·5	0	0	31	2	17	4	1	0	5	1	3	0	5
Dibrugarh	0830	106	1007·2	995·1	—0·7	23·4	21·8	20 9	24·8	87	+4	6·3	+0·8	2·5	0	0	23	10	6	5	1	0	0	0	1	8	0
	1730	„	1003 1	991·1	...	24·4	22·3	21·2	25 0	83	...	6·0	...	3·3	0	0	21	2	12	5	1	1	0	0	0	10	0
Dibrugarh (Mohanbari Aerodrome).	0230	111	1004·6	991·9	...	21·4	20·8	20 4	24·2	94	...	6·7	...	3·4	0	1	13	0	9	1	1	0	2	1	0	17	0
	0530	„	1005·8	993·0	...	21·4	20·8	20·5	24·2	95	...	7·3	...	3·6	0	0	19	2	15	2	0	0	0	0	0	12	0
	0830	„	1007·5	994·8	...	23·5	21·6	20·5	24·3	85	...	6·4	...	6·4	0	0	24	2	20	1	1	0	0	0	0	7	0
	1130	„	1006.5	994·1	...	25·5	22·3	20·5	24.3	76	...	6·6	...	7 0	0	0	28	1	19	4	3	0	1	0	0	3	0
	1730	„	1003·2	990 6	...	24·6	22·4	21·2	25·3	82	...	6·6	...	6 3	0	0	21	1	19	1	0	0	0	0	0	10	0
	2330	„	1005·0	992·3	...	22·0	21.3	20·9	24·8	93	...	6·2	...	4·5	0	1	12	1	10	2	0	0	0	0	0	18	0
North Lakhimpur	0330	102	1007·2	995·5	...	23·7	21·8	20.9	24·6	85	...	6·7	...	5·7	0	0	23	7	11	3	0	0	0	0	2	8	0
	1130	„	1006·3	994·7	...	26·0	23·1	21·6	25·8	78	...	6 5	...	8.5	0	0	27	8	10	7	0	0	2	0	0	4	0
	1730	„	1003 1	991·6	...	24 8	22·9	21·9	25·4	85	...	6·3	..	7·9	0	0	27	12	10	2	1	0	0	0	2	4	0
Sibsagar	0830	97	1007·7	996·7	+0 1	24·1	22·6	21·7	26 3	87	+3	6·8	+0 5	3·5	0	0	29	11	10	1	1	2	3	0	1	2	0
	1730	„	1003·4	992·5	...	25·5	23·5	22·5	27·5	84	...	5·7	.	4·7	0	0	28	14	12	1	0	0	1	0	0	3	0
Jorhat	0530	90	1005·1	994·8	...	21·9	21·7	21·7	25·7	98	...	6·4	...	7.7	0	1	26	16	9	1	0	0	2	3	2	4	0
	0830	„	1006.9	996·7	...	24·1	22·8	22·2	26·5	89	...	6·5	...	8·3	0	1	27	12	7	2	1	1	2	0	3	3	0
	1130	„	1005·8	995·7	...	26·4	23 8	22.8	27·5	81	...	5 0	..	12·5	0	3	28	14	10	1	1	1	1	2	1	0	0
	1730	„	1002·2	992·1	...	25·6	23·6	22·5	27·6	84	...	4·8	..	12.6	0	5	26	12	14	2	0	3	0	0	0	0	0
Golaghat	0830	...	...	...	...	24·3	22·3	21 0	25·4	83	...	6·8	.	0.4	0	0	4	0	0	0	3	0	0	0	1	27	0
	1730	...	...	...	...	27·4	23·5	21 0	25·8	72	...	9·4	..	1·3	0	0	11	0	0	0	9	0	0	0	2	20	0
Gohpur (R)	0830	...	...	...	...	...	...	...	...	...	...	...	...	...	.	.	.	...	..	...	.	...	..	..	...	...	...
	1730	...	...	...	...	...	...	...	...	...	...	...	...	...	.	.	.	...	..	...	.	...	..	..	...	...	...
Tezpur (R)	0830	79	1007·1	998.1	—0 9	24·5	22·8	22·1	26·5	87	+6	5·2	0	3·5	0	0	24	0	3	18	2	0	0	0	0	7	1
	1730	„	1002·5	993·6	...	27·1	24·3	23·1	28·2	79	...	3·5	...	3·5	0	0	20	1	3	16	0	0	0	0	0	11	0
Tezpur (P B. O.)	0230	78	1004·1	994 9	...	22·5	21·5	20·5	24·9	91	...	6·2	...	...	0	2	20	0	2	18	0	0	2	0	0	9	0
	0530	„	1005·4	996·4	...	22·3	21·6	21.1	25·3	94	...	5·6	..	...	0	1	21	0	3	18	0	1	0	0	0	9	0
	0830	„	1007·1	998 1	...	24·9	22·7	21·9	25·8	83	...	5·3	..	...	0	1	26	1	3	22	0	1	0	0	0	4	0
	1130	„	1005·8	997·0	...	27·3	23.9	22·3	27·0	76	...	4·5	.	...	0	2	27	0	3	21	1	2	2	0	0	2	0
	1730	„	1002·1	993·3	...	27·3	24·1	22·3	27·6	76	...	4·6	...	...	0	1	22	0	4	16	0	0	3	0	0	8	0
	2330	„	1004·6	995·6	...	23.6	22·1	21·2	25·7	88	...	6·2	...	...	0	2	24	0	5	16	0	1	4	0	0	5	0
Majbat	0830	...	...	...	...	...	...	...	...	...	...	6·4	...	9·8	0	0	27	0	10	13	2	2	0	0	0	4	0
	1730	...	...	...	...	...	...	...	...	...	...	5.1	...	10·1	0	2	27	0	8	14	2	0	3	2	0	2	0
Chaparmukh (R)	0830	66	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
(R)	1730	„	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tangla	0830	78	1006·4	997·5	...	25.9	23·3	22.0	26·7	81	...	4·0	...	10·2	0	1	28	0	11	9	3	0	1	5	0	2	0
	1730	„	1001·4	992·6	...	28·1	25·1	23·7	29·1	78	...	3·2	...	7·5	0	0	26	1	2	9	3	1	5	4	1	5	
Gauhati	0830	55	1006·2	999·9	—0·8	26·1	23·3	22·1	26·4	78	—1	3·1	—1·9	3·5	0	0	30	1	3	15	8	2	0	0	1	1	0
	1730	„	1001·4	995.2	...	29.2	24·5	22·5	26·9	69	...	3·3	...	3·2	0	0	28	0	7	7	9	1	2	0	2	3	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam—*contd.*																											
Gauhati (Kaikuchi Aerodrome).	0230	49	1003·5	997·8	...	23·3	21·9	21·2	25·2	88	...	4·9	...	6·5	0	0	20	1	16	1	1	0	0	1	0	11	0
	0530	,,	1004·7	999·0	...	23·1	21·9	21·4	25·5	90	...	5·0	...	6·6	0	0	24	1	16	2	1	2	2	0	0	7	0
	0830	,,	1006·1	1000·6	...	26·8	23·5	21·8	26·3	75	...	3·8	...	7·9	0	0	27	6	19	1	0	0	0	0	1	4	0
	1130	,,	1005·3	999·7	...	29·1	24·4	22·1	26·9	68	...	3·7	...	10·6	0	1	30	10	15	0	0	0	4	0	2	0	0
	1730	,,	1001·3	995·9	...	29·4	24·6	22·2	26·9	67	...	3·9	...	6·9	0	2	22	2	16	2	1	0	2	1	0	7	0
	2330	,,	1003·8	998·2	...	24·8	22·9	21·9	26·3	84	...	5·1	...	7·9	0	2	21	1	14	2	0	2	1	2	1	8	0
Rangiya . . .	0830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*	1730	,,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Goalpara . . .	0830	38	1006·0	1001·7	...	26·1	23·4	22·1	26·5	79	...	4·3	...	3·3	0	0	28	0	16	1	7	0	0	2	2	3	0
	1750	...	1001·1	996·8	...	30·4	25·8	23·6	29·4	68	...	4·6	...	2·8	0	0	23	1	11	3	3	0	4	1	0	8	0
Dhubri . . .	0630	35	1005·9	1002·1	-0·7	26·3	24·3	23·0	27·9	82	0	3·3	-1·7	8·9	0	0	31	0	26	0	2	1	2	0	0	0	0
	1730	,,	1005·9	997·0	...	28·6	25·6	24·3	30·2	79	...	2·1	...	6·9	0	0	28	0	20	1	3	1	3	0	0	3	0
Dhubri (Rupsi Aerodrome)	0830	36	...	1000·9	...	27·8	24·4	22·9	27·9	75	...	4·5	...	8·1	0	2	29	0	4	9	11	5	1	1	0	0	0
	1130	,,	...	1000·1	...	30·1	25·8	23·8	29·6	69	...	4·2	...	9·5	0	4	26	1	3	9	9	6	2	0	0	1	0
	1730	,,	...	996·9	...	29·7	25·6	23·7	29·3	71	...	3·2	...	3·1	0	0	21	4	5	6	5	0	0	0	0	10	0
Tura . . .	0830	370	1005·8	964·8	...	27·3	25·5	25·4	31·0	87	...	3·5	...	10·4	0	3	28	0	5	0	10	11	6	1	1	0	0
	1730	,,	1002·5	962·0	...	30·9	28·2	27·0	35·9	79	...	3·5	...	9·9	3	0	31	0	2	0	11	12	5	0	1	0	0
Agartala . . .	0230	16	1003·7	1001·9	...	25·9	24·5	23·9	29·7	89	...	4·4	...	11·1	0	4	26	0	1	1	10	13	0	0	0	1	0
	0530	,,	1004·4	1002·6	...	26·0	24·8	24·3	30·2	91	...	4·4	...	12·1	0	2	29	0	0	2	13	10	0	0	0	0	0
	0830	,,	1005·9	1004·2	...	29·6	26·0	24·4	30·9	74	...	5·6	...	18·9	0	16	15	1	0	2	5	22	1	0	0	0	0
	1130	,,	1004·9	1003·2	...	32·5	26·6	24·1	30·2	62	...	5·6	...	20·0	1	17	14	0	0	0	1	27	1	0	0	0	0
	1730	,,	1001·9	1000·2	...	29·6	25·4	23·6	29·4	71	...	5·2	...	20·4	0	19	12	0	1	2	4	24	0	0	0	0	0
	2330	,,	1004·2	1002·4	...	26·7	24·7	23·9	29·4	85	...	4·7	...	14·0	0	10	20	0	1	2	2	22	0	0	0	1	0
Silchar . . .	0830	29	1008·3	1004·9	+0·6	25·9	23·3	22·0	26·7	80	0	5·3	+0·3	2·3	0	0	2	0	3	2	1	0		3	1	10	
	1730	,,	1003·4	1000·1	...	28·2	25·0	23·5	28·6	77	...	4·8	...	1·5	0	0	14	2	3	2	0	0	0	1	3	17	1
Silchar (Kumbhigram Aerodrome)	0530	97	1005·5	994·4	...	22·4	21·7	21·4	25·4	94	...	6·8	...	6·6	0	2	29			0	-		-	1	2	0	0
	0830	,,	1006·9	995·9	...	25·3	23·2	22·2	26·8	83	...	6·2	...	6·1	0	1	27		0	-	-		-	1	1	0	0
	1130	,,	1005·5	994·7	...	28·2	24·4	22·8	27·6	74	...	4·7	...	6·7	0	1	29			11	2	1		0	2	3	0
	1730	,,	1002·2	991·4	...	27·4	24·8	23·7	29·3	82	...	5·5	...	2·9	0	0	21	2		1			2	2	1	10	0
Imphal . . .	0530	801	1007·6	919·4	...	20·2	18·1	16·8	19·2	82	...	5·6	...	8·1	0	5	12	1	1	0	1	2	2	4	1	14	0
	0830	,,	1008·2	920·9	...	23·6	19·8	17·6	20·1	71	...	5·2	...	9·7	0	7	17	0		0	-	0	0	1	1	7	0
	1130	,,	1006·2	919·9	...	26·6	20·8	17·7	20·2	59	...	4·7	...	15·1	0	13	18	0	1	1	3	2	16	7	1	0	0
	1730	,,	1003·5	917·1	...	25·4	20·2	17·3	19·8	62	...	5·1	...	10·5	0	3	25	0	0	0	1	1	12	11	2	4	0
	2330	,,	1006·4	918·7	...	21·6	19·4	18·1	20·8	81	...	5·3	...	7·2	0	5	23	2	5	0	1	5	5	5	3	8	0
Haflong . . .	0830	682	1006·8	931·6	...	21·9	20·0	19·0	22·0	84	...	5·6	...	...	0	0	31	0	-	0	0	14	16	0	0	0	0
	1730	,,	1002·2	928·0	...	24·2	21·4	19·8	22·8	77	...	5·1	...	...	0	0	31	0	0	0	0	14	17	0	0	0	0
Lumding . . .	0830	149	1006·3	980·6	...	28·8	23·8	21·6	25·5	66	-12	4·1	-	8·5	0	2	24	0	2	0	3	7	5	2	1	5	0
	1730	,,	1001·8	985·3	...	30·5	24·0	20·8	24·6	59	...	4·7	...	11·7	0	5	25	1	1	-	3	8	7	3	1	5	0
Sub-Himalayan West Bengal—																											
Cooch Behar (C.W.O.)	0830	43	1005·7	1001·1	...	27·8	24·0	21·9	26·6	73	...	5·1	- -	13·7	0	2	29	0	4	17	5	3	2	0	0	0	0
	1130	,,	1004·7	1000·1	...	31·2	25·2	22·3	26·9	61	...	4·6	-	15·3	0	6	25	0	4	13	5	4	4	1	0	0	0
	1730	,,	1000·3	995·7	...	30·7	25·3	23·0	27·4	64	...	2·9		8·4	0	2	24	1	15	8	1	0	1	0	0	5	0
Jalpaiguri . . .	0830	83	1005·7	996·3	-0·8	26·2	22·9	21·1	25·1	74	-5	3·0	-0·8	14·0	0	4	25	0	5	25	1	0	0	0	0	2	0
	1730	,,	1000·4	991·3	...	31·4	24·6	20·9	25·0	57	...	1·4		9·2	0	2	27	2	9	15	1	0	1	0	1	2	0
Bagdogra . . .	0230	131	1002·1	987·2	...	24·1	22·4	21·4	25·7	84	...	2·6	-	6·6	1	0	25	4	9	10	1	0	1	0	0	6	0
	0530	,,	1003·3	988·5	...	24·2	21·9	20·6	24·3	83	...	4·0	...	9·5	0	1	27	1	14	11	0	0	1	0	1	3	0
	0830	,,	1004·8	990·2	...	28·5	23·5	20·8	24·9	65	...	4·4	-	13·1	0	1	29	0	5	23	2	0	0	0	0	1	0
	1130	,,	1003·7	989·2	...	31·5	24·3	20·6	24·4	54	...	4·4		14·3	0	2	29	0	1	19	9	2	0	0	0	0	0
	1750	,,	999·4	985·1	...	31·2	24·0	20·1	23·9	55	...	3·0	-	9·7	0	1	29	0	14	8	4	0	2	2	0	1	0
	2330	,,	...	...	...	26·0	23·2	21·9	25·5	79	...	2·7		7·5	0	0	28	3	14	10	1	0	0	0	0	3	0
Malda. . . .	0830	31	1004·1	1000·6	-1·1	32·4	24·1	19·5	23·1	50	-21	2·1	-1·3	10·0	0	0	31	0	3	8	4	6	5	3	2	0	0
	1730	,,	999·3	995·8	...	37·5	23·4	14·5	17·1	28	...	1·3	...	11·6	0	4	27	2	5	3	0	0	1	10	10	0	0
Gangetic West Bengal																											
Dum Dum	0230	6	1002·1	1001·4	...	28·3	27·4	27·0	36·0	93	...	2·3	..	12·5	0	0	30	0	0	0	2	19	9	0	0	1	0
	0530	,,	1003·0	1002·3	...	27·7	27·0	26·7	35·4	94	...	3·2	...	9·9	0	1	28	0	1	0	2	18	7	0	1	2	0
	0830	,,	1004·6	1003·9	...	31·9	28·6	27·4	36·5	78	...	2·2	...	14·3	0	5	26	0	0	0	0	21	8	2	0	0	0
	1130	,,	1003·8	1003·1	...	36·6	29·8	27·2	36·9	61	...	1·8	...	14·0	0	4	27	2	0	0	0	20	8	1	0	0	0
	1730	,,	1000·3	999·6	...	33·9	28·7	26·7	34·9	67	...	3·3	...	18·5	0	8	23	0	1	0	3	20	7	0	0	0	0
Calcutta . . .	2330	,,	1003·0	1002·3	...	28·6	27·7	27·3	36·7	93	...	1·3	...	15·5	0	3	28	0	1	0	4	19	7	0	0	0	0

*Data not reliable

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in c.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mb.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km p.h.): 62 or more	Wind speed (km p.h.): 20 to 61	Wind speed (km p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
West Bengal—*contd.*																											
Calcutta (contd.)	0830	6	1004 9	1004·2	−0·1	32·4	26·9	24·9	30·9	66	−8	1 9	−2·3	10 6	0	0	31	0	0	0	1	16	13	1	0	0	0
	1130	6	1004·0	1003·3	...	37.0	27·5	23·4	29·1	47	...	1·7	...	11·4	0	0	30	0	0	0	0	14	13	2	1	1	0
	1730	,,	1000·7	1000·0	...	33.7	26·9	23·8	30·3	58	...	3·2	...	14·1	0	1	30	0	0	0	0	6	21	4	0	0	0
Barrackpore	0530	7	1003·0	1002·3	...	27·5	26.3	25·9	33·5	91	...	2.9	...	9·9	0	3	24	0	0	1	3	14	9	0	0	4	0
	0830	,,	1004·7	1004.0	...	32·7	27·9	25·9	33·3	68	...	1.9	...	12·9	0	3	28	0	0	0	1	10	17	2	1	0	0
	1130	,,	1003.7	1003·0	...	37·5	27·9	23·8	29·3	47	...	1·7	...	13 5	0	3	26	1	0	0	0	10	11	3	4	2	0
	1730	,,	1000.3	999·5	...	33·7	26·9	23·9	30·2	59	..	2·6	...	14 9	0	6	23	0	0	1	3	18	6	1	0	2	0
	2330	,,	1003·0	1002·3	...	28.5	26·6	25·8	33·2	85	...	1·5	...	13·7	0	6	24	0	0	2	3	14	11	0	0	1	0
Saugor Island	0830	3	1005·1	1004·8	+0·1	30 2	27·6	26·7	34 9	82	+7	4 4	−0·6	38 3	0	31	0	0	0	0	0	6	23	2	0	0	0
	1730	,,	1001 2	1000·9		30 3	27 8	26·7	35 4	81	..	4 0	...	44 8	0	31	0	0	0	0	0	14	16	1	0	0	0
Sandheads	0530	10	1003 8	1002·7	..	28·4	27 0	26·4	34·5	89	...	4·3	...	..	0	22	9	0	0	0	0	7	24	0	0	0	0
	0830	,,	1005·8	1004·7	+0 5	29 0	27·3	26·6	35.2	87	+8	3·7	−0·1	..	0	16	15	0	0	0	0	5	26	0	0	0	0
	1130	,,	1005 3	1004·2	..	29 3	27·4	26·6	34·8	86	...	2·8	...	...	0	16	15	0	0	0	0	7	24	0	0	0	0
	1730	,,	1001·8	1000·7	...	29·1	27·3	26.5	35.2	86	...	3 5	...	..	0	23	8	0	0	0	0	7	24	0	0	0	0
	2330	,,	1003.7	1002.6	...	28.4	27.2	26.7	35.4	92	...	...	...	..	0	21	10	0	0	0	0	6	24	1	0	0	0
Contai	0830	11	1004 9	1003.7	..	31.9	28.2	26.8	35.6	77	...	2.2	...	...	0	3	27	0	0	0	0	14	14	1	1	1	0
	1730	,,	1001.4	1000.2	...	30.5	28.2	26.7	36.6	83	...	3·0	...	14.3	0	6	25	0	0	0	1	17	13	0	0	0	0
Midnapore	0830	45	1004.3	999·3	−0.3	35.1	25.5	20.1	25.1	45	−24	0.8	−2·1	4 6	0	0	28	2	2	0	2	10	10	1	1	3	0
	1730	,,	999.5	994.6	...	37 6	25.6	19.7	23.1	38	...	3.1	...	14.3	0	6	25	1	1	0	3	18	8	0	0	0	0
Purulia	0830	255	1003.9	976.6	...	35.0	22.2	13.9	16.4	30	...	1.6	...	3.1	0	0	28	2	0	0	0	3	9	3	11	3	0
	1730	,,	998·2	971.6	...	40·2	22.3	9.6	10.8	17	...	2.9	...	2.7	0	0	21	3	0	0	1	1	1	2	13	10	0
Burdwan	0830	32	1004·3	1000 6	−0·5	33.8	...	...	...	...	...	1·2	−3·0	1 7	0	0	18	2	1	0	2	5	8	0	0	13	0
	1730	,,	1000·1	996·5	...	37 0	...	...	...	...	...	2·8	...	5·5	0	0	15	0	1	0	4	8	1	0	1	16	0
Krishnagar	0830	15	1004.5	1002 8	−0.5	33·3	26·9	24 4	30 3	61	−14	1·3	−2·7	4·3	0	0	30	0	0	2	0	23	0	5	0	1	0
	1730	,,	999 6	998·0	...	38·1	25·3	18·8	21·7	35	...	1·7	...	5·6	0	1	26	0	0	1	1	17	0	7	1	4	0
Asansol	0230	126	1001·2	987·2	...	30·0	23·2	19·4	22·5	55	...	1·1	...	5·6	0	0	20	1	0	4	6	1	4	3	1	11	0
	0530	..	1002·2	988·2	...	28·5	23·0	19·8	23·5	62	...	1·7	...	2·8	0	0	13	0	1	3	5	0	2	1	1	18	0
	0830	,,	1003 7	989·9	−0 1	35·6	24·7	18·7	22 4	40	−23	1·5	−1 6	8·1	0	0	30	0	0	2	1	2	8	9	8	1	0
	1130	,,	1002·5	989·0	...	40 7	25 5	16·9	21 7	27	...	1·1	...	10·6	0	1	28	3	0	1	1	1	4	10	9	2	0
	1730	,,	998 6	985 1	...	40·2	25 3	16·5	19 8	28	...	2·5	...	9·9	0	1	29	1	1	2	2	0	2	11	11	1	0
	2330	,,	1001·6	987·7	...	31·9	23 8	19·2	23 1	49	...	1·3	...	5·6	0	0	21	1	0	2	5	4	3	3	3	10	0
Suri	0830	77	1003·9	995 4	...	33·9	23·5	17·1	20·8	41	..	1·5	...	12·0	0	0	31	1	1	2	2	8	10	7	0	0	0
	1730	,,	999·2	991 0	...	40·7	21·9	6·6	10 7	16	...	3.3	...	14·7	0	6	23	1	2	2	1	0	1	11	11	2	0
Berhampore	0830	19	1003·8	1001·7	−1·4	31·4	25·9	23·2	28·9	62	−11	0·7	−3 7	4·5	0	0	25	0	0	4	2	13	4	1	1	6	0
	1730	,,	998·9	996·8	...	38·9	24·2	15·9	18·2	28	...	1·1	...	4·0	0	1	20	0	0	6	0	4	3	4	4	10	0
Orissa																											
Baripada	0830	54	1004·7	998.7	...	32·5	28·9	27·3	36·2	78	...	1·9	...	3·0	0	0	25	2	2	0	2	7	8	0	2	6	2
	1730	..	1000·1	994·2	..	37·8	...	...	.	...	...	3·3	...	8·2	0	0	30	0	0	3	8	7	4	1	1	1	6
Balasore	0830	20	1004·7	1002·5	+0·1	32·5	26·7	24·1	30 2	62	−8	2·4	1 1	18·4	0	12	19	1	0	0	0	13	16	1	0	0	0
	1730	,,	1000·6	998·4	...	33·2	26·5	23·3	29·3	58	...	5·5	...	21·1	0	12	19	0	0	0	8	17	6	0	0	0	0
Chandbali	0830	6	1005·6	1004·9	+1·0	31·6	27·1	25·3	32 4	69	−4	2·7	−2·0	10·7	0	2	29	0	0	0	4	4	21	2	0	0	0
	1730	,,	1001·2	1000·5	...	33·2	27·3	25·5	31·7	64	...	3·8	...	12 3	0	5	26	0	0	2	19	4	5	1	0	0	0
Cuttack	0830	27	1005·6	1002·6	+0·4	31·5	26·4	24·2	30·6	66	−4	2·7	−1·2	0·8	0	0	6	0	0	0	0	0	6	0	0	25	0
	1730	,,	1001.2	998·2	...	35·2	26·8	23·1	28 5	50	...	4·2	..	4·8	0	0	29	0	0	0	0	19	10	0	0	2	0
Bhubaneswar	0230	46	1003 0	997·8	...	28·0	25·5	24·4	30.6	82	...	4·2	..	28·7	0	23	7	1	0	0	0	13	16	0	0	1	0
	0530	,,	1004 0	998·8	...	27·5	25·5	24·5	31·1	85	...	5·2	..	21·4	0	17	12	0	0	0	0	14	15	0	0	2	0
	0830	,,	1005·8	1000·6	...	31·9	26·2	23·7	28·9	62	...	3·7	...	24·8	0	17	14	0	0	0	0	12	18	1	0	0	0
	1130	,,	1004·5	999 5	...	37·2	26·2	20·7	24·9	39	...	2·4	...	21·7	0	15	16	1	0	0	0	13	12	3	2	0	0
	1730	,,	1001·7	999 6	...	33.0	26·2	23·2	28 0	57	...	5·1	.	34·8	0	29	2	0	0	0	0	18	13	0	0	0	0
	2330	,,	1004·1	998 9	...	28·8	25·8	24·4	30 6	78	...	4·2	...	28 5	0	23	7	0	0	0	0	1	13	15	1	0	1	0
Puri	0830	6	1006·4	1005·7	+1 3	29·3	27 0	26·0	34·0	83	+2	3·7	−0 1	27·5	0	21	10	0	0	0	0	0	0	27	4	0	0	0
	1730	,,	1002·8	1002·1	...	29·2	27·3	26·4	34 0	85	...	4·9	...	20·7	0	27	4	0	0	0	0	2	26	3	0	0	0
Gopalpur	0530	17	1004·3	1002·4	...	26·1	25·2	24·9	31·4	92	...	3·9	...	22·0	0	19	11	0	0	0	1	13	16	0	0	1	0
	0830	,,	1006·3	1004·4	+1·3	28·1	25 9	24·9	31·4	82	+3	3·0	+0·6	22 5	0	19	12	0	0	1	1	14	15	0	0	0	0
	1130	,,	1005·8	1004·0	...	30·1	26·6	25·2	31·6	75	...	2·2	...	25·1	0	20	11	0	0	0	1	17	13	0	0	0	0
	1730	,,	1002 8	1000·9	...	28·1	26·3	25·4	33·0	85	...	4·7	...	28·2	0	23	7	0	0	0	0	17	13	0	0	1	0
	2330	,,	1004·8	1002·9	...	26·9	25·5	24·8	31·5	89	...	2.0	...	25·6	0	23	8	0	0	0	1	11	18	0	1	0	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MAY, 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C.: Dry bulb	Mean temperature in °C.: Wet bulb	Mean temperature in °C.: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—(*Contd.*)																											
Koraput	0830	913	1513·0	909·8	...	26·1	20·4	17·0	20·1	60	...	2·5	...	...	0	0	31	1	0	1	0	13	13	2	1	0	0
	1730	,,	1488·2	906·8	...	30·2	20·3	14·1	16·4	41	...	3·9	...	...	0	0	31	7	0	2	2	7	6	6	1	0	0
Titilagarh	0830	211	1005·9	982·6	...	33·1	23·4	18·1	20·8	43	...	2·4	...	3·5	0	0	29	1	0	1	4	7	14	1	1	2	0
	1730	,,	1000·1	977·6	...	39·3	23·0	12·0	14·6	22	...	3·3	...	2·5	0	0	23	1	2	1	4	4	7	1	3	8	0
Bolangir (R)	0830	...	...	...																							
(R)	1730	...	...	...																							
Angul	0830	139	1005·2	990·1	+1·1	32·1	24·7	20·9	24·8	53	−13	3·5	0	4·2	0	1	25	3	4	3	4	4	1	4	3	5	0
	1730	,,	999·7	984·9	...	40·1	23·6	13·1	15·9	22	...	4·7	...	11·3	0	3	27	0	0	0	7	6	5	6	6	1	0
Keonjhar	0830	463	1001·2	951·6	...	33·7	22·4	16·1	18·6	36	...	1·5	...	9·6	0	0	28	3	2	0	2	2	5	9	5	3	0
	1730	,,	996.5	947·6	...	37·9	21·7	11·4	14·4	22	...	3·3	...	11·3	0	0	31	0	0	0	4	2	3	10	12	0	0
Sambalpur	0830	148	1005·5	989·3	+1·4	35·2	25·5	20·7	24·6	45	−3	2·1	−0·3	3·7	0	0	26	1	2	0	1	5	11	4	2	5	0
	1730	,,	1000·0	984·2	...	39·5	26·4	19·7	23·8	35	...	2·7	...	3·1	0	0	21	2	1	0	1	1	3	8	5	10	0
Jharsuguda	0230	230	1002·1	976·8	...	29·9	20·7	14·5	17·0	41	...	2·4	...	3·8	0	0	16	2	2	0	0	7	2	2	1	15	0
	0530	,,	1003·3	977·8	...	28·2	20·7	15·8	18·3	44	...	2·5	...	3·2	0	0	16	2	4	2	0	3	4	0	1	15	0
	0830	,,	1004·8	979·8	...	34·4	22·5	15·2	17·5	33	...	1·9	...	8·3	0	1	26	2	2	0	0	7	9	6	1	4	0
	1130	,,	1003·5	978·9	...	39·3	22·8	11·6	14·5	20	...	1·3	...	10.6	0	3	26	2	3	0	0	4	6	13	1	2	0
	1730	,,	999·1	974·6	...	39·7	22·2	9·5	12·6	18	...	2·8	...	8·9	0	0	29	1	1	0	1	4	4	15	2	2	1
	2330	,,	1002·4	977·3	...	32·2	21·4	14·1	16·6	35	...	2·3	...	8·0	0	1	24	3	2	0	2	8	5	4	1	6	0
Chota Nagpur																											
Jamshedpur	0830	129	1004·2	990·0	+0·7	34·0	23·2	16·3	19·5	38	−20	1·5	−1·3	6·0	0	0	28	0	0	1	0	0	6	17	4	3	0
	1730	,,	998·5	981·7	...	40·8	22·6	9.5	12·9	17	...	3·2	...	9·2	0	2	27	0	0	2	0	0	5	14	8	0	0
Jamshedpur (P. B O.)	0530	145	1002·9	986·8	...	29·9	21·6	17·2	19·8	51	...	2·3	...	1·5	0	0	10	0	1	0	0	1	2	3	3	21	0
	0830	,,	1004·3	988·4	...	34·1	22·8	16·2	18·4	36	...	1·3	...	6·3	0	0	28	0	1	0	0	0	13	9	5	3	0
	1130	,,	1002·8	987·2	...	40·4	22·5	9·9	13.2	17	...	1·8	...	10·5	0	4	24	1	1	0	0	1	10	7	8	3	0
	1730	,,	998·5	983·1	...	40·9	22·3	8·7	12·7	15	...	4.3	...	10·3	0	2	26	0	2	0	0	0	5	10	11	3	0
	2330	,,	1002·2	986.2	...	33·0	22·5	16·1	18·6	38	...	2·2	...	5·5	0	1	18	0	3	1	3	2	7	1	2	12	0
Chaibasa	0930	226	1004·0	979·5	+0·6	35·5	...	...	...	...	...	1·9	−0·6	2·5	0	0	19	0	2	0	0	0	13	3	1	12	0
	1730	,,	998·7	971·7	...	40·1	...	...	...	...	...	3·8	...	2·2	0	0	20	3	0	0	0	0	8	4	5	11	0
Ranchi	0830	655	1003·8	934·3	+1·6	34·4	22·2	15·1	17.8	33	−14	0·5	−1·7	1·1	0	0	9	1	0	2	0	3	0	2	1	22	0
	1730	,,	999·2	930·4	...	36·0	20·3	9.7	12·0	22	...	2·7	...	0.1	0	0	1	0	0	0	0	0	0	1	0	30	0
Ranchi (C. W. O.) *	0530	652	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*	0830	,,	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1130	,,	1001·9	933·5	...	36·6	22·0	13·4	15·4	26	...	2·3	...	10·9	0	2	28	0	0	0	1	1	4	21	3	1	0
	1730	,,	998·6	930·4	...	37·0	21·9	12·8	15·4	25	...	3·0	...	9·3	0	2	25	0	0	1	0	0	2	19	5	4	0
Daltonganj	0830	221	1004·1	980·0	+0·9	35·3	22·6	14·6	17·0	31	−9	2·5	+1·1	4·6	0	1	17	0	1	0	2	1	1	5	8	13	0
	1730	,,	998·9	975·3	...	39·7	23·6	12·2	15·9	21	...	2·9	...	9·4	0	0	29	0	1	0	1	1	1	5	20	2	0
Hazaribagh	0830	611	1003·2	938·1	+1·2	33·4	19·3	9·2	12·0	24	−21	2·7	+0·3	10·9	0	4	22	2	0	0	1	0	5	2	16	5	0
	1730	,,	998·3	934·1	...	36·8	20·0	7·7	11·4	18	...	3·2	...	16·6	0	10	21	7	0	0	1	0	1	2	20	0	0
Dhanbad	0830	257	1003·3	975·4	...	35·7	22·4	13·4	16·1	29	...	1·7	...	3·9	0	0	31	1	0	0	2	0	5	19	4	0	0
	1730	,,	998·3	970·9	...	39·9	22·4	9·7	12·8	18	...	2·7	...	5·0	0	0	31	7	0	1	1	0	0	7	15	0	0
Bihar																											
Purnea	0830	38	1004·3	1000·1	−1·0	30·8	23·7	19·5	23·2	55	−17	1·9	−1·5	7·0	0	0	26	0	8	11	0	1	1	5	0	5	0
	1730	,,	999·1	995·0	...	37·0	22·9	13·7	16·2	28	...	0·8	...	6·9	0	0	28	1	3	4	0	0	1	15	4	3	0
Forbesganj	0830	61	1004·2	997·4	...	30·4	23·8	20·0	23·9	56	...	2·7	...	12·4	0	1	30	0	1	26	0	0	0	4	0	0	0
	1730	,,	998·7	992.1	...	36·9	22·9	12·9	16·8	29	...	1·3	...	12·7	0	1	30	0	1	12	0	0	0	18	0	0	0
Darbhanga	0830	49	1004·3	998·8	−0·3	31·0	23·7	19·5	23·5	54	−10	0·9	−1·5	4·0	0	0	30	0	1	18	2	0	0	8	1	1	0
	1730	,,	999.1	993·8	...	38·1	23·6	14·8	17·4	28	...	1·1	...	4·0	0	0	28	0	1	5	0	0	0	18	4	3	0
Motihari (R)	0830	66																									
(R)	1730	,,																									
Patna	0830	53	1003·6	997·7	−0·4	33·4	22·3	15·2	17·8	36	−22	1·0	−0·8	9·4	0	0	29	3	4	7	0	0	1	10	4	2	0
	1730	,,	999·1	993·4	...	38·9	22·4	10·9	13·9	20	...	1·0	...	10·7	0	1	27	0	2	1	0	0	0	18	7	3	0
Patna (Aerodrome)	0530	60	1001·3	994·5	...	26·5	19·7	14·7	17·6	52	...	1·5	...	7·3	0	1	21	1	0	7	1	0	1	10	2	9	0
	0830	,,	1003·0	996·4	...	33·3	21·8	14·0	17·0	35	...	1·2	...	12·9	0	4	24	1	3	8	1	0	3	8	4	3	0
	1130	,,	1002·2	995·7	...	38·3	22·7	12·0	15·0	24	...	1·3	...	20·1	0	14	17	3	2	5	1	0	1	8	11	0	0
	1730	,,	998·2	991·8	...	39·9	22·2	8·8	12·2	17	...	0·9	...	19·0	0	17	12	3	1	2	0	0	0	0	23	2	0
	2330	52	1001·3	995·6	...	31·8	22·2	16·1	19·3	41	...	0·2	...	5·1	0	2	6	0	0	4	2	0	1	0	1	23	0
Dehri	0830	107	1003·5	991·8	...	36·2	21·8	12·1	14·3	25	...	2·0	...	3·7	0	0	30	1	1	1	3	1	12	3	3	1	0
	1730	,,	998·9	987.4	...	40·5	22·2	8·2	13·3	15	...	0·8	...	5·4	0	0	31	2	0	0	0	0	0	8	21	0	0

(R) Register not received. *Data not available.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mb.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour.	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*Contd.*																											
Gaya	0230	116	1001·4	988·4	...	28·4	18·9	11·4	14·3	36	...	0·7	...	1·6	0	0	8	0	0	2	1	0	3	1	1	23	0
	0530	,,	1002·2	989·1	...	27·2	18·5	11·8	14·4	40	...	2·0	...	2·6	0	0	10	0	1	2	1	0	5	1	0	21	0
	0830	,,	1003·7	991·0	+0·7	35·6	21·6	11·8	14·6	26	−10	1·7	+0·1	9·1	0	3	25	0	1	1	2	0	7	11	6	3	0
	1130	,,	1003·0	990·4	...	40·3	22 4	9·3	12·7	17	...	1·7	...	18·4	0	10	21	2	0	1	1	0	0	7	20	0	0
	1730	,,	999·0	986·5	...	40·7	21·8	7·4	10·7	14	...	1 6	...	16·4	0	8	22	3	1	0	0	0	0	4	22	1	0
	2330	,,	1001·8	988·9	...	30·6	19·7	11·2	14·2	31	...	1·0	...	4·2	0	1	11	0	0	4	2	0	1	4	1	19	0
Jamui	0830	82	1003·5	994·4	..	35·8	23·0	15·2	18·7	32	...	1·7	...	5·9	0	0	30	2	0	9	2	1	1	3	12	1	0
	1730	,,	998·0	989·1	...	39·8	23·2	12·2	14·8	20	...	0·7	...	9·1	0	0	31	1	1	2	0	0	0	3	24	0	0
Dumka	0830	149	1003 8	987·5	−0·4	33·8	24·2	19·1	22·0	44	−18	1·2	−1·5	...	0	0	28	0	2	1	3	0	5	5	12	3	0
	1730	,,	998·9	982·9	...	39·2	24·6	16·2	18·6	28	...	1.3		...	0	0	30	1	4	1	0	0	4	8	12	1	0
Bhagalpur	0530	49	1002·2	986·7	...	27·5	21·3	16 8	20 5	57	...	1·7	...	8·5	0	0	27	1	1	14	0	1	6	4	0	4	0
	0830	,,	1003·9	998·5	...	32·3	22·9	16·9	19·6	45	...	1·5	...	9 0	0	1	30	0	2	14	1	1	2	11	0	0	0
	1130	,,	1003·2	997·9	...	37·5	23 8	15·3	18·5	30	...	1 3	...	12·8	0	9	17	1	0	7	1	0	1	15	1	5	0
	1730	,,	998 9	993·6	...	38·1	23 6	13·2	18 4	25	..	0 7	...	15·3	0	7	23	2	0	6	0	0	1	12	9	1	0
	2330	,,	1011·8	996 3	...	30·9	21·9	16 1	19·3	45	...	0·9	...	7·9	0	0	25	0	0	13	0	0	3	9	0	6	0
Sabour	0830	37	1003·8	999·6	−0·4	32·1	24·7	20 0	25 3	54	−10	2·1	−1·7	9 9	0	1	28	3	6	5	2	0	3	4	6	2	0
	1730	,,	998·7	994·7	...	38·3	25·9	18·6	23·3	37	...	0·8	...	11·4	0	2	29	5	2	4	0	0	0	3	17	0	0
Uttar Pradesh (East)																											
Gonda	0830	110	1003·3	991·4	...	32·2	21·7	14·2	17 3	34	−13	1·0	−0·5	4·8	0	0	19	0	0	3	0	0	0	9	7	12	0
	1730	,,	999·1	987·3	...	38 9	22·7	11·4	14·6	20	...	1·5	...	8 4	0	0	24	0	0	0	0	0	0	7	17	7	0
Nautanwa	0830	99	...	...	...	31 3	20·2	13·5	15·3	34	...	0 7	...	12 0	0	4	26	4	1	6	7	3	4	3	2	1	0
	1730	,,	...	...	...	37·8	21·3	10·8	12 8	20	...	1·2	...	11·9	0	5	25	1	1	0	1	1	4	18	4	1	
Gorakhpur	0830	77	1003·4	995·6	+0·2	32·3	22 5	16·7	19·3	40	−18	1 3	−0·1	4 4	0	0	28	0	4	6	1	0	6	10	1	3	0
	1730	,,	999·5	991·3	...	38 9	24·5	15 0	13·8	26	...	1·5	...	5·3	0	0	30	0	0	1	1	0	7	18	3	1	
Gorakhpur (P.B.O.)	0230	78	1000·5	992 0	...	28·9	20·3	13·9	16 8	43	...	0 5	...	5 6	0	0	27	0		1	2	2	3	11	4	4	1
	0530	,,	1001·4	992 6	...	27·3	19·5	13·8	16·3	46	...	1·8	...	6 1	0	2	25	2	4	3	0	1	4	11	2	4	0
	1130	,,	1002·6	994·1	...	38·2	22·6	11·5	15·0	22	...	1·1	...	9·0	0	1	29	1	0	2	2	6	1	14	4	1	0
	2330	,,	1000·9	992·3	...	31·3	21·3	14·3	16·9	38	...	0·6	...	5·0	0	0	25	0	1	3	1	1	7	9	3	6	0
Azamgarh	0830	78	1002·9	994·4	...	34·2	23·8	18·3	21·7	43	...	0·7	...	...	0	0	30	0	0	4	0	0	0	26	0	1	0
	1730	,,	999·1	990·5	...	39·9	25·3	18·0	20·1	30	...	0 8	...	4·3	0	0	22	0	0	0	0	0	1	21	0	9	0
Ballia	0830	64	1002·3	995·3	..	31·9	20·8	13.2	16·0	35	...	1·4	...	6·9	0	0	30	0	3	2	4	1	16	4	0	0	
	1730	,,	998.4	991·6	..	40 2	22·1	9.4	11·6	17	...	1 8	(a) ..	(a) 10.0	0	0	31	0	0	2	0	0	21	8	0	0	
Varanasi* (Banaras)	0830	76	1003·8	995.4	+0·5	35 0	25·0	20·1	23·5	42	−3	1·7	0 3	7.6	0	0	26	1	2	0	0	2	10	9	2	5	0
	1730	,,	999·6	991·4	...	39·0	25·4	18·6	21·3	30	..	1·8	...	9 5	0	0	29	0	0	0	0	0	11	7	11	2	0
Varanasi (Banaras) (Babatpur Aerodrome).	0530	85	1002.7	993·2	...	27·4	19·2	13·7	15·1	44	...	2·1	...	6 8	0	1	30	1	1	1	1	3	12	10	2	0	0
	0830	,,	1004·3	994 9	..	34·9	22·2	14·1	16·4	30	...	1·4	...	14·4	0	4	27	3	1	2	0	0	11	8	6	0	0
	1130	,,	1004 1	994 6	...	39·6	22·9	11.7	15 0	22	...	1.7	...	22·3	0	13	18	1	0	1	0	0	3	16	10	0	0
	1730	,,	1000 0	990·8	..	39.7	23·2	12·6	14·8	21	...	1·5	...	19·0	0	11	20	2	0	0	0	0	0	14	15	0	0
	2330	,,	1002 3	992·8	..	30·4	20 4	13 6	16·1	38	.	1·3	...	9·9	0	2	25	2	1	2	0	0	10	8	4	4	0
Allahabad (Bamrauli)	0230	98	1001·5	990·5	..	29·4	19·1	11·5	13·9	34	...	1·5	..	3·7	0	0	19	1	0	1	0	0	3	11	3	12	0
	0530	,,	1002·1	991.3	...	27·8	18·6	11 5	14·0	38	...	2·3	..	4·3	0	1	23	2	0	0	2	2	10	7	1	7	0
	0830	,,	1004·2	993 4	+0·7	34·2	20·5	11·1	13·5	26	−10	1·9	+0 5	9·8	0	3	24	1	2	0	0	1	4	17	2	4	0
	1130	,,	1003.8	993·1	...	39·8	22·3	9·9	13·0	18	...	2·0	...	13·7	0	4	27	1	1	1	0	0	3	17	8	0	0
	1730	,,	999·5	988·9	..	40·5	21·9	7·8	11·2	15	...	2·7	..	15.7	0	5	25	2	0	0	0	0	1	11	16	1	0
	2330	,,	1001·8	990·9	..	31·3	20·1	11·9	14·4	32	...	1·2	...	3.3	0	0	20	1	2	1	0	2	5	6	3	11	0
Banda	0830	121	1004·6	991·3	...	35·3	25·5	20 9	25·3	44	...	1·5	...	1·8	0	0	12	1	0	0	0	0	1	5	5	19	0
	1730	,,	1000 1	987·4	..	41·0	28·3	22·4	28 0	36	...	1·7	...	4·7	0	0	25	0	0	0	0	0	12	0	13	6	0
Fatehpur	0830	114	1004 0	991.6	...	33·5	21·4	14 0	15.7	30	−14	1·5	+0.2	2·3	0	0	12	1	0	0	0	0	2	1	8	19	0
	1730	,,	999·6	987·4	...	40·2	23·0	11·9	13·9	20	...	1·5	...	3·1	0	0	11	0	0	0	0	0	0	0	11	20	0
Kanpur	0830	126	1004·5	990·6	+1·5	33·6	21·4	13·3	15·9	30	−7	1·7	+1·0	12·6	0	4	27	0	1	1	1	3	8	10	7	0	0
	1730	,,	1000·1	986.6	...	39·7	22·8	11·4	13·4	20	...	2·5	...	15·7	0	6	25	2	0	0	0	0	5	15	9	0	0
Lucknow	0830	113	1003·9	991·4	+0·7	32·2	22·1	15·9	18·7	39	−4	1·3	+0·1	3·1	0	0	31	1	0	5	0	0	3	11	11	0	0
	1730	,,	1000·0	987·8	...	39·2	23·7	13·7	16·9	25	...	1·3	...	4·5	0	0	31	2	1	1	2	0	6	15	4	0	0
Lucknow (Amausi Aerodrome).	0230	128	1001·2	986·9	..	27·2	18·0	11·0	13·3	37	...	1·5	...	16·2	0	1	22	1	0	2	0	0	2	8	10	8	0
	0530	,,	1001 9	987·5	...	24·4	17·6	1 ·7	14·4	44	...	2·0	...	6·5	0	2	20	0	0	1	0	0	4	10	7	9	0
	0830	,,	1003·5	989·5	+0·4	33·2	20·2	10·9	13·0	27	−9	1·6	+0 4	14.3	0	7	23	2	1	2	0	0	2	12	11	1	0
	1130	,,	1003·1	989·3	...	38·4	21·6	8·0	11·7	17	...	1·9	...	19·5	0	12	19	2	0	0	1	0	2	11	15	0	0
	1730	,,	999·3	985·5	...	39·1	21·1	5·9	9·9	14	...	2·4	...	20·8	0	15	15	2	0	0	0	0	3	9	16	1	0
	2330	,,	1001·7	987·4	...	29·4	19·2	11·7	13·9	93	...	1·4	...	7 6	0	1	25	2	0	2	0	0	2	8	12	5	0

(a) Mean of 30 days.

*Data extracted from daily telegrams

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (Km. p.h.): Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (East)— *Contd.*																											
Hardoi	0830	142	1003·4	987·6	...	31·2	22·8	18·3	20·9	46	...	1·5	...	4·6	0	0	28	6	0	1	1	0	1	11	8	3	0
	1730	,,	999·3	984·0	...	39·0	25·9	19·5	22·6	33	...	1·8	...	7·2	0	0	30	2	0	0	0	0	2	14	12	1	0
Lakhimpur Kheri	0830	147	1003·2	986·9	...	31·1	22·6	17·7	20·2	46	...	1·4	...	3·6	0	0	22	0	2	3	2	0	0	15	0	9	0
	1730	,,	998·7	982·9	...	38·9	25·0	17·8	20·3	30	...	0·8	...	4 5	0	0	28	0	0	0	0	0	0	28	0	3	0
Bahraich*	0830	124	1003·0	989·3	−0·3	32·3	22·3	16·2	18·7	39	−12	(a) 1·6	+0·4	(a) 4·3	0	0	23	0	1	0	6	0	11	0	5	7	0
	1730	,,	999·0	985·6	...	38·5	24·1	15·3	17·8	27	...	(b) 2·1	...	(a) 4·5	0	0	27	0	0	0	1	1	9	1	15	3	0
Uttar Pradesh (West)																											
Orai	0830	141	1006·1	990·1	...	34·0	24·5	19·2	22·9	44	...	(b) 0·8	...	5·4	0	0	30	0	1	0	2	0	4	0	23	1	0
	1730	,,	1000·4	984·7	...	40·2	26·3	19·1	22·5	31	...	(c) 1·2	...	6·4	0	0	31	2	1	0	0	3	3	5	17	0	0
Jhansi	0830	251	1005·1	977·6	+1·5	32·2	21·2	13·8	16·0	35	+5	1·9	+0·7	3·6	0	0	29	4	1	0	1	1	5	7	10	2	0
	1730	,,	999·9	973·1	...	39·8	23·3	12·3	15·1	21	...	3·3	...	4·3	0	0	29	3	0	0	1	1	0	9	15	2	0
Agra	0830	169	1005·0	986·5	+2·0	32·1	21.1	13·8	17·8	34	+7	1·5	+0·4	4·0	0	0	22	3	1	0	0	1	6	4	7	9	0
	1730	,,	1000·5	982·3	...	39·3	22·6	11·1	13·8	19	...	(a) 1·6	...	(a) 3·3	0	0	21	1	1	0	0	2	5	2	10	9	0
Agra (Aerodrome) (R)	0530	168																									
(R)	0830	,,																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									
Mainpuri	0830	157	1004·5	987·1	+1.6	32·9	20·8	12·9	14·3	29	−8	1·5	+0·1	3·3	0	0	27	0	0	1	1	1	1	17	6	4	0
	1730	,,	1000·7	983·8	...	39·1	23·6	13·9	16·0	24	...	1·1	...	3·4	0	0	26		0	1	0	0	0	17	7	5	0
Aligarh	0830	187	1004·0	983·5	...	31·0	22·6	18·4	20·9	46	+15	1·6	+0·9	4·9	0	0	23	3	0	3	0	0	0	8	9	8	0
	1730	,,	1000·3	979·0	...	38·4	25·9	19·7	23·0	36	...	3·1	...	4·1	0	0	25	2	0	0	0	0	0	2	21	6	0
Bareilly	0830	173	1003·3	984·3	+0·4	32·1	20·6	12·6	15·3	32	−14	2·1	+0·7	7·2	0	0	24	2	0	1	0	0	3	13	5	7	0
	1730	,,	999·1	980·4	...	38·2	21·3	8·3	11·7	18	...	2·5	...	6·8	0	1	27	2	0	0	0	0	3	17	6	3	0
Bareilly (P. B. O.)	0230	172	1001·2	982·0	...	28·2	19·1	13 4	14·8	42	...	1·2	...	5·2	0	1	23	2	0	2	0	0	0	15	5	7	0
	0530	,,	1001·8	982·5	...	26·0	18·6	14·4	15·4	49	...	2·4	...	5·6	0	0	26	2	0	1	1	0	1	11	10	5	0
	1130	,,	1002·9	984·3	...	37·3	23·5	15·8	17·3	29	...	2·0	...	12·7	0	4	27	2	0	2	1	0	0	14	12	0	0
	2330	,,	1001·7	982·6	...	31·4	20·2	14·2	15·2	37	...	1·3	...	5·8	0	1	23	3	0	2	0	0	1	14	4	7	0
Meerut	0830	222	1004.1	979·8	+1·4	30·9	21·4	15·4	18·2	41	+1	0	−1·2	5·2	0	0	24	0	1	1	0	0	0	15	7	7	0
Najibabad	0830	270	1004·2	974·3	...	28·5	19·2	12·5	14·8	38	...	0·7	...	2·7	0	0	15	3	2	0	0	0	2	0	8	16	0
	1730	,,	1000·5	971·6	...	37·5	21·2	9·2	12·1	21	...	0·7	...	4·7	0	0	25	5	0	0	1	0	2	0	17	6	0
Roorkee	0830	274	1003 9	973·7	+0·8	29·8	19·8	12·8	15·3	37	−2	2·8	+1·5	2 0	0	0	21	0	0	0	2	0	0	0	19	10	0
	1730	,,	999·8	970·3	...	36·6	21·5	9·7	13·7	21	...	3·2	...	3 1	0	0	31	0	0	0	1	0	0	0	30	0	0
Dehra Dun	0530	682	1003·8	928.3	...	21·1	15·7	11·7	14·2	57	...	1·1	...	1·0	0	0	11	2	4	0	0	1	0	3	1	20	0
	0830	,,	1003·5	929·9	+0·8	27·4	18·7	13·0	15·2	42	—2	1·5	−0·4	2·4	0	0	21	3	1	0	2	0	11	4	0	10	0
	1130	,,	1002·7	930 0	...	32·1	19·4	10·5	13·3	27	...	2·1	...	3·0	0	0	28	0	0	0	1	5	7	10	5	3	0
	1730	,,	999·6	927·3	...	32·6	19·6	10·5	13 4	27	...	2·4	...	3 2	0	0	27	6	1	0	1	0	5	10	4	4	0
	2330	,,	1003·3	928·7	...	25·4	17·3	12·1	14·1	47	...	2·0	..	2 9	0	0	17	5	9	0	1	0	0	1	1	14	0
Punjab (India) (including Delhi)																											
New Delhi	0230	216	1002·4	978·4	...	27·6	18·6	11·7	14·6	39	...	1·7	...	9·5	0	3	21	3	1	0	0	0	0	9	11	7	0
	0530	,,	1003·2	978·8	...	25·7	18·7	12·5	15·8	46	...	2·4	...	9·7	0	2	23	2	0	0	1	0	2	12	8	6	0
	0830	,,	1004·6	980·5	+1·4	30·0	20·1	12·9	15·3	37	+7	2·1	+1·0	15·5	0	5	25	2	1	1	0	0	3	12	11	1	0
	1130	,,	1004·2	980·6	...	35·8	21·8	12·0	15·5	26	...	2 6	...	16·9	0	8	23	4	1	0	0	0	0	10	16	0	0
	1730	,,	1000·1	976·8	...	37·8	22·2	11·1	14·1	22	...	2·9	...	16·3	0	9	21	2	1	0	0	0	3	4	20	1	0
	2330	,,	1002·9	978·8	...	29·7	19·8	12·3	15·3	83	...	1·9	...	12·0	0	2	25	6	2	0	0	1	3	5	10	4	0
Hissar	0530	221	1003·,	978·8	...	23·0	17·6	12·7	14·0	54	...	2·1	...	3.3	0	0	14	2	1	1	0	1	2	2	5	17	0
	0830	,,	1004·9	980·4	+1·9	29·3	19·6	12.9	15·1	39	+3	1·7	+0·7	4·8	0	0	25	3	2	3	0	0	6	2	5	6	0
	1130	,,	1004·5	980·7	...	36·9	21·3	10·1	13·2	22	...	2·7	...	6·1	0	3	17	2	2	0	2		6	3	5	11	0
	1730	,,	1000·1	977·2	...	37·5	21·3	10 4	12·3	21	..	3·1	...	6·8	0	0	26	4	0	0	0	1	5		9	5	0
	2330	,,	1003·2	978·7	...	27·8	18·3	10 8	13·4	39	...	2·3	...	6·0	0	2	20	2	5	2	2	1	5	2	3	9	0
Karnal	0830	249	1003·6	976·0	...	28 1	19·0	12·1	14·8	39	...	2·3	...	0·5	0	0	5	0	2	0	1	0	0	1	1	26	0
	1730	,,	1001·0	974·1	...	36·7	21·1	9·6	13·7	22	...	3·7	...	1·9	0	0	9	0	0	0	0	0	0	4	5	22	0
Patiala	0830	251	1004·2	976·5	...	29·6	19·6	12.5	14·5	36	...	2·1	...	5·8	0	0	27	4	2	0	1	0	1	4	15	4	0
	1730	,,	1000·9	973·7	...	36·2	21·4	10·2	13·2	22	...	3·1	...	11·8	0	3	24	6	0	0	1	0	0	0	20	4	0
Ambala	0830	272	1003·7	973·5	+0·8	28·5	20·7	15·2	17·9	45	+14	3·1	+1·8	3·0	0	0	17	1	0	0	0	1	1	1	13	14	0
	1730	,,	999·9	970·5	...	36·2	21·9	13·0	14·8	28	...	2·9	...	4·7	0	0	25	0	1	0	0	0	2	1	21	6	0
Ambala (P. B. O.)	0230	278	1002·0	971·3	...	26·5	17·7	12·2	13·2	43	...	2·6	...	9·4	0	1	25	5	1	1	0	0	3	3	13	5	0
	0530	,,	1002·2	971·3	...	24·7	17·3	12·4	13·9	48	...	2·5	...	7·5	0	0	26	3	3	2	0	0	1	4	13	5	0

(a) Mean of 30 days. *Data extracted from daily telegrams. (b) Mean of 29 days. (c) Mean of 28 days. (R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level (a) height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km p.h.): 62 or more	Wind speed (Km p.h.): 20 to 61	Wind speed (Km p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) (including Delhi)—*Contd.*																											
Ambala P. B. O.—*Contd.*	1130	..	1008·1	973 0	...	34·5	20·3	11·6	12·3	27	...	2·4	...	11·2	0	3	27	5	1	0	1	2	2	8	11	1	0
	2330	..	1002·2	971 7	...	28·8	18·5	11·9	13·1	37	..	2·3	...	8 9	0	0	31	7	5	1	1	0	1	2	14	0	0
Ambala (Aerodrome)(R)	0530	273																									
(R)	0830	273																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									
Chandigarh	0830	347	1003 5	965 4	..	0 0	19·6	11·9	14 6	35	...	0·3	...	...	0	0	20	2	3	2	2	0	0	0	11	11	0
	1730	.	1006 6	963 1	...	34·5	19 8	9 0	11·0	23	...	1·0	...	3 3	0	0	27	4	3	0	5	2	4	0	9	4	0
Ludhiana	0830	247	1004·6	977	1·9	30 3	21·2	15.5	18 0	42	+4	1·7	+0·5	4·1	0	0	27	0	8	1	4	0	3	4	7	4	0
	1730		1002 4	975 4		36 1	23 9	16·4	19·7	36	...	2 3	...	5·8	0	0	26	2	2	0	1	0	3	3	15	5	0
Ferozepur	0830	200	1004 2	982 5		28 1	22·4	19·4	23·2	62		2·1	...	2·5	0	0	20	1	4	0	0	1	1	1	12	11	0
	1730	,,	1001 5	979		35·2	25 4	18·9	24·3	41	..	2 5	..	2·7	0	0	21	2	3	0	0	2	1	0	13	10	0
Amritsar	0530	234	1004 1	977		20 5	16 6	14·3	15.8	69	.	3·7	..	4·5	0	0	22	4	5	1	1	1	0	2	8	9	0
	0830	.	1004 9	978 8		27 1	19·3	13.7	16 3	46		3 0	..	7·2	0	1	26	3	7	2	1	1	1	1	11	4	0
	1130		1004 8	79 1		32.7	20 5	11·6	14·3	30		3 1 (a)	..	10 5	0	2	27	4	3	1	2	1	2	4	12	2	0
	1730		001 5	976 1		34·5	20 1	9·0	11·7	24		3·4	..	13·0	0	5	24	2	2	1	0	2	4	5	13	2	0
Pathankot	0530	344	1004·8	966·		27 4	19·9	15.1	16·9	49		4·1	..	0.8	0	0	8	1	2	3	1	0	0	1	0	23	0
	1730	..	002·0	965 2		33·4	21 2	13 2	15 1	31		4·5		6 4	0	1	25	0	4	2	1	2	0	15	2	5	0
Himachal Pradesh																											
Bilaspur	0830	493	1005 0	950 5		25·4	17·5	12·5	14·9	45		3·9	...	2 8	0	0	21	1	4	2	1	2	3	0	0	10	8
	1730	,,	1000·4	947·6	..	33·5	18·7	7·6	9·5	23	.	4·0	...	7·4	0	0	31	2	1	1	0	1	2	3	13	0	8
Mandi	0830	761	1006 3	922·4	...	20·6	16·3	13·3	15·6	64	...	3·3	...	0·7	0	0	8	0	1	1	0	2	0	3	1	23	0
	1730	,,	1000.5	919·8		29·6	18·4	10·1	13·0	30	..	3 5	...	4.3	0	6	20	2	0	4	0	1	2	5	6	11	0
Jammu & Kashmir																											
Srinagar	0830	1587	1502·4	841·7	+1·5	13·3	11·2	9·8	12·2	80	+2	5·8	+2·9	0·8	0	0	7	0	0	0	3	1	1	2	0	24	0
	1130	,,	1502.3	841 8	..	16·8	13·0	10·3	12·3	66		4·9	...	1·0	0	0	10	1	0	0	1	0	0	5	3	21	0
	1730	,,	1482.4	839 9	..	17·6	12·8	9·6	12·0	63	..	6·0	...	1·4	0	0	13	1	0	0	2	0	0	2	8	18	0
Gulmarg	0830	655	Closed during winter months																								
	1730		Closed during winter months																								
Leh †	0530	35 1	972 3	573·		2·7	1 1	−7·4	3 5	49	..	4 6		4 4	0	0	15	8	11	0	0	0	1	0	0	15	0
	0830		1069 9	663 7	3·6	6·9	1·8	−5·4	4·4	45	+5	4·5	+1 0	2·0	0	0	8	0	0	0	1	1	6	0	0	23	0
	1730		1033 5	661·0		11 4	4 6	−6.5	4 1	3		5 7		12·9	0	5	26	6	4	1	1	4	6	5	0	4	0
Skardu (R)	0830	2258																									
(R)	1730	..																									
Gilgit (R)	0830	1491																									
(R)	1730	,,																									
Kargil (R)	0830	3106																									
(R)	1730	,,																									
Jammu	0830			..		25·6	17 9	12 4	14 6	45	+11	3 5	1 7	..	0	0	31	0	28	0	0	3	3	0	0	0	
Rajasthan (West)																											
Sri Ganganagar	0530	171	1003·8	983·7		23·1	18 0	14·4	17·0	61		2 0		2·4	0	0	20	2	5	2	1	1	6	0	3	11	0
	0530	,,	1004·8	985·0		27·7	19·5	13.6	15·8	44	+13	1 3	+0 9	4 6	0	0	28	6	3	5	2	2	5	1	4	3	0
	1130	,,	1004·8	985 8	...	33 9	20 8	11.3	14·0	20		1 6		5·6	0	0	29	4	3	0	3	3	9	2	5	2	0
	1730	,	1001 1	981 6		35.7	21·1	10 5	13·3	24	...	2·1	..	4 6	0	0	26	4	4	0	0	0	5	5	8	5	0
	2330	,,	1003 7	983 8		26 8	19·	13·5	15·5	47	..	1·1	...	2 3	0	0	13	2	3	0	0	0	4	0	4	17	0
Churu †	0830	291	1005 6	973 3		28.7	20 7	15·6	18 1	47	...	2 3	...	9 1	0	4	21	6	0	7	1	1	1	8	1	6	0
	1730	,,	1000·9	969 6	...	37·1	23 0	13·9	16 6	27	...	2.5	...	14·2	0	6	24	7	1	0	0	2	3	12	5	1	0
Bikaner	0830	224	1005 4	980 4	+2.1	28 0	19·5	13·3	16·1	42	+10	0·8	0 1	6 7	0	1	29	1	8	1	6	1	10	2	1	1	0
	1730	,,	1000 9	976 8	...	37·6	22 0	9·6	14·1	20	...	1 9	...	9·1	0	1	29	3	4	0	0	1	13	1	8	1	0
Bikaner (F.B O.)	0530	,,	1004 0	978 8	...	24·5	20 0	16·8	19·8	64	...	2·0	...	3·0	0	0	13	2	2	1	0	5	3	0	0	16	0
	1130	,,	1004 7	980·3	...	35·8	23·3	15·4	18 0	33	...	1.5	...	8·9	0	3	22	2	7	0	1	4	6	4	1	6	0
	2330	,,	1003 8	978·9	...	29·2	21.4	16·5	19·6	50	...	2·5	...	9.9	0	3	24	8	2	0	0	8	4	2	3	4	0
Jaisalmer	0830	242	1005·2	977·9	...	28·3	18 8	13·9	16 0	41	...	0·9	...	15·8	0	7	24	0	7	0	2	0	21	0	1	0	0
	1730	,,	1001·1	975·0	...	37·2	21 0	8 3	11 9	20	...	2·0	...	19·7	0	10	21	0	4	0	0	0	26	0	1	0	0
Phalodi	0830	234	1005·8	979·6	...	27.8	19·8	13·9	16 4	45	...	1·9	...	15·9	0	6	23	0	5	0	4	2	15	0	3	2	0
	1730	,,	1001·7	976·5	...	37·1	21·3	9·0	12 6	22	...	3.7	...	20·9	0	16	15	1	2	0	1	2	12	6	7	0	0

(R) Report not received. (a) Mean of 30 days. † Observations for 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p h.): 62 or more	Wind speed (Km. p h.): 20 to 61	Wind speed (Km. p h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan, (West)—*Contd.*																											
Jodhpur	2330	224	1004·1	979·2	...	29·1	19·3	11·5	15·1	37	...	1·1	...	13·0	0	5	24	3	4	0	1	0	7	12	2	2	0
	0530	"	1004·5	979·4	...	27·4	19·1	13·0	15·1	43	...	1·6	...	10·5	0	1	27	3	5	0	1	0	8	11	0	3	0
	0830	"	1006·3	981·4	+3.2	29·9	20·7	14·0	17·2	41	−1	1·6	+0·6	12·6	0	5	25	0	5	0	2	0	16	5	0	1	0
	1130	224	1005·9	981·5	...	35·7	21·7	11·9	13·9	25	...	1·4	...	15·1	0	3	27	0	4	1	5	2	14	3	1	1	0
	1730	"	1001·4	977·3	...	38·7	21·2	8·4	11·2	16	..	2·6	...	15·1	0	5	25	2	0	0	0	2	13	8	5	1	0
	2330	"	1004·5	979·8	..	31·7	19·7	10·8	13·3	30	..	1·7	..	12·7	0	3	26	4	3	0	0	1	12	5	4	2	0
Barmer	0530	194	1004·8	983·0		27·0	20·6	16·5	19·4	54	...	1·6	...	12·5	0	3	28	0	2	0	1	1	13	7	7	0	0
	0830	"	1006·4	984·8	+2·6	29·2	21·4	16·6	19·6	48	−13	1·3	+0·6	11·3	0	0	31	1	3	0	1	4	13	5	4	0	0
	1130	"	1006·1	984·9		35·4	22·3	13·5	16·6	29	...	0·8	...	13·2	0	4	26	0	2	0	5	5	14	3	1	1	0
	1730	"	1001·6	980·7	...	38·9	21·9	9·5	12·5	18	...	1·9	...	13·1	0	4	26	0	2	0	1	0	19	5	3	1	0
	2330	"	1004·7	983·3	..	31·3	21·4	14·8	16·9	40	...	0·9	..	12·0	0	2	26	1	2	0	0	2	16	4	3	3	0
Rajasthan (East)																											
Alwar	0830	271	1004·9	975·2	.	32·1	23·2	18·2	21·2	44	.	1.7 (a)		2·1 (a)	0	0	8	2	0	1	0	0	1	3	0	23	0
	1730	"	1000·3	971·2	...	37·6	27·4	22·8	28·5	43	...	2·2	.	4·1	0	0	26	9	2	5	0	1	1	6	2	4	0
Sikar	0830	43	1004·0	957·4	...	29·3	23·7	21·1	25·1	64	...	1·8	...	3·4	0	0	29	0	2	6	4	2	9	3	3	2	0
	1730	.	1002·6	956·0	..	36·6	28·3	25·0	31·7	55	..	3·3	.	3·1	0	0	31	2	1	1	0	2	7	12	6	0	0
Jaipur	0830	416	1005·8	957·7	+1·1	30·6	19·7	11·8	14·1	33	−1	1·4	+0·4	6·6	0	1	26	5	2	3	1	1	1	9	5	4	0
	1130		1004·4	957·7	..	36·1	20·9	9·6	12·6	21	..	1·5	...	10·5	0	1	30	2	0	1	3	4	5	13	3	0	0
	1730	"	1000·8	954·0	..	37·6	20·8	7·7	11·1	17	..	2·4	..	9·7	0	0	29	0	0	0	0	2	8	10	8	2	0
Jaipur (Sanganer Aerodrome).	0230	330	1003·3	930·1	...	26·4	18·5	12·6	14·9	43	...	1·5	...	...	0	2	25	6	5	0	0	1	0	4	11	4	0
	0530	"	1004·1	950·5	...	24·8	18·3	13·6	16·3	51	...	2·1	...	6·0	0	0	26	5	2	0	0	0	0	2	14	5	0
	0830	"	1004·9	962·1	...	30·6	20·9	15·0	16·7	40	...	1·7	..	8·0	0	1	26	5	0	5	2	0	0	6	9	4	0
	1130	"	1004·2	962·3	...	35·4	22·3	14·2	16·6	29	...	1·9	..	13·8	0	5	25	2	0	1	4	1	1	10	11	1	0
	1730	"	1000·1	959·4	...	37·7	23·8	15·3	18·3	27	...	3·6	...	11·9	0	2	29	0	0	0	1	1	3	12	14	0	0
	2330	"	1003·6	960·7	...	29·1	19·9	13·3	15·5	39	...	1·2	...	9·0	0	4	24	8	3	0	0	1	0	9	7	3	0
Dholpur	0830	176	1004·9	985·5	..	32·9	23·3	17·7	20·3	43	...	0·7	...	6·9	0	2	22	4	1	1	1	1	2	9	5	7	0
	1730	"	1001·2	982·4	..	37·5	24·8	18·2	21·2	34	...	1·0	...	9·0	0	0	29	3	1	2		1	4	12	6	2	0
Ajmer	0830	486	1005·6	952·9	+1·4	29·7	19·6	13·5	16·1	38	−1	1·9	−0·9	10·5	0	4	24	2	0	0	3	3	11	9	0	3	0
	1730	"	1000·8	940·1	...	36·6	19·5	6·8	11·4	17	...	3·0	...	13·1	0	3	28	2	1	0	0	0	7	15	6	0	0
Kotah	0530	25	1003·9	975·4		28·5	19·3	12·6	14·8	33	..	1·5	...	5·3	0	0	17	1	0	0	1	0	2	12	1	14	0
	0830	"	1005·4	977·5	+1·6	33·2	21·1	13·1	16·7	36	+1	0·9	0	5·8	0	0	23	0	1	1	0	0	1	16	4	8	0
	1130	"	1004·8	977·2	...	37·8	22·4	12·2	14·8	22	...	1·2	..	8·6	0	1	26	0	0	2	1	1	1	14	8	4	0
	1730	"	1000·9	975·1	..	39·3	21·7	9·3	11·6	17	..	2·3	.	5·9	0	0	28	0	0	2	0	1	0	14	11	3	0
	2330	"	1003·5	975·3	..	32·3	20·4	11·7	14·1	30	...	1·3	.	5·5	0	1	19	1	0	0	0	0	4	10	5	11	0
Chambal	0830	351	1005·5	67.2		31·7	21·1	14·0	16·5	36	...	1·0	.	12·1	0	3	23	1	2	2	1	1	2	8	9	5	0
	1730	"	1000·2	962·9	...	38·6	22·7	11·9	15·3	21	...	3·0	...	14·2	0	7	24	1	1	2	0	0	6	14	7	0	0
Jhalawar	0830	321	1005·8	970·5	+1·8	30·6	19·9	11·7	14·8	33	−10	1·1	−0·3	5·6	0	0	22	1	1	0	3	2	1	9	5	9	0
	1730	.	1000·5	966·4	..	39·4	21·8	8·3	12·1	17	...	1·8	.	7·7	0	0	30	0	2	0	1	0	5	13	9	1	0
Udaipur	0230	582	0·5·0	941·2	.	26·5	19·1	14·5	16·7	49	...	0·9	..	3·1		0	15	1	0	0	0	0	8	0	0	16	0
	0530		1005·5	941·6		24·6	18·4	14·5	16·6	55	...	1·3		2·5	0	0	12	2	0	0	0	0	5	5	0	19	0
	0830		1006·3	943·3	+1·2	30·1	19·9	13·4	15·5	37	−8	1·1	+0·7	4·4	0	0	19	2	0	2	0	2	8	1	4	12	0
	1130	"	1005·4	943·3		34·5	20·7	12·1	14·0	27	...	1·2	.	7·5	0	1	26	2	0	2	0	3	6	12	1	5	0
	1730	'	1001·4	939·8		35·4	21·2	12·6	15·1	26	...	2·6	..	5·8	0	0	28	0	1	2	0	1	10	9	5	3	0
	2330	"	1005·1	941·8	...	28·6	19·6	14·1	16·9	42	..	0·8		4·5	0	1	15	0	0	0	0	0	5	11	0	15	0
Erinpura (Jawai Dam)	0830	235	1006·7	974·0		29·8	23·2	19·2	23·2	55	...	1·3		8·7	0	1	23	3	0	0	0	11	7	3	0	7	0
	1730					37·1	25·1	18·6	22.4	35	...	2.7	..	12·3	0	7	21	0	1	0	0	2	7	14	4	3	0
Madhya Pradesh (West)																											
Gwalior (P.B.O.)	0230	210	1002·3	979·1	...	29·9	18·7	10·4	12·5	32	...	1·4	...	6.2	0	1	22	1	0	0	0	0	9	6	7	8	0
	0530	"	1003·1	979·8		28·5	18·1	9·7	12·3	33	...	2·1	..	5·9	0	1	20	4	0	0	0	0	2	8	7	10	0
	0830	"	1004·6	981·7	+2.3	33·3	20·1	9·9	12·6	26	+2	1·9	+1·0	8.9	0	3	24	2	3	0	1	3	3	7	8	4	0
	1130	"	1004·1	981·5	...	37·9	21·3	8·0	11·7	17	...	1·5	...	10.8	0	1	30	3	2	0	3	1	3	4	15	0	0
	1730	"	999·9	977·5	..	39·4	21·0	6·0	9·9	14	...	3·0	...	9·9	0	1	29	3	0	0	1	3	2	5	16	1	0
	2330	"	1002·6	979·6	...	31·8	19·5	9·8	12·7	28	...	1·4	...	4·6	0	1	16	1	1	0	0	0	4	6	5	14	0
Sheopur Kalan	0830	235	1005·1	979·1	..	31·3	21·3	13·5	10·9	38	...	1·9	...	8·3	0	1	30	2	3	1	2	8	9	6	3	0	0
	1730		999·9	974·6	...	38·6	22·3	11·7	13·5	24	...	3·7	...	15·6	0	7	23	1	1	0	2	2	5	11	7	1	1
Guna	0530	479	1004·7	951·7	...	24·9	16·7	10·4	12·9	42	...	1·8	...	1·1	0	0	9	0	1	1	1	1	1	4	0	22	0
	0830	"	1000·5	953·4	+1.8	30·4	19·0	10·6	14·5	33	+4	1·9	+1·1	3·7	0	0	23	3	1	2	1	2	1	13	0	6	0
	1130	"	1004·6	953·5	...	36·5	20·2	8·2	11·7	20	...	1·6	...	9·1		0	0	6	1	0	0	2	2	12	6	2	0

(a) Mean of 30 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—MAY, 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in terms of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (Km. p.h.): Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (West)—*Contd.*																											
Guna—*Contd.*	1730	"	1000·3	949·7	...	37·8	20·3	7·6	11·0	17	...	3·1	..	10·5	0	3	25	3	0	1	2	1	2	14	5	3	0
	2330	"	1004·2	951·8	...	28 5	17 9	10·0	13·9	33	...	1·9	..	2·5	0	0	12	1	1	1	1	0	5	2	1	19	0
Rajgarh	0830	382	1005·8	964·0	...	31·0	18·9	8·6	12·0	27	..	1·7	..	7·6	0	0	24	1	0	1	2	1	3	14	2	7	0
	1730	"	1000·5	959·9	...	39·2	20·6	4·4	9·1	13	...	3·2	...	12·1	0	2	27	4	0	0	0	2	1	20	2	2	0
Neemuch	0830	496	1006·9	952·3	+1·7	30·0	20·3	14·1	16·7	40	−7	2·0	+1 2	11·3	0	4	25	1	7	1	1	2	4	11	2	2	0
	1730	"	1001·2	948·7	...	37·4	21·6	11·5	14·1	23	...	2·7	..	14 1	0	7	23	1	1	1	0	0	5	19	3	1	0
Ratlam	0830	486	1007 0	953·7	...	28·8	20·5	15·5	18·1	46	...	2·3	...	10·3	0	1	27	0	1	2	1	0	11	11	2	3	0
	1730	"	1001 6	949·8	...	36·9	21·2	10 9	13·7	23	...	2·6	.	13·6	0	4	26	0	1	1	1	1	7	14	5	1	0
Alirajpur	0830	293	1008·1	975·6	...	28·8	23·5	20·7	24·7	62	..	1·6	...	14 3	0	4	26	0	0	1	0	2	12	14	1	1	0
	1730	"	1002·5	971·1	...	37·4	24·3	16·7	19·8	32	...	2·1	...	16 8	0	7	24	1	0	1	2	2	7	12	6	0	0
Indore	0530	567	1005·7	943·1	...	25·0	17·0	10·7	13 5	43	...	2·0	...	16 3	0	6	25	2	1	0	0	3	10	11	4	0	0
	0830	"	1006·6	944·9	+0 9	29·3	19·7	13·7	15·9	40	−8	2·1	+1 1	20·3	0	11	20	6	1	1	0	0	5	12	6	0	0
	1130	"	1005·2	944·6	...	34 6	20·5	10 9	13 8	22	...	2·2	..	19·2	0	12	19	6	1	2	1	0	3	10	8	0	0
	1730	"	1000 7	940·9	...	37·1	20·1	7·6	10 8	18	...	3·0	...	25·1	0	17	14	3	2	0	1	0	8	12	5	0	0
	2330	"	1005 3	943·4	...	28 9	17·7	9 1	12·3	31	...	1·7	..	14·8	0	5	26	2	2	0	0	1	8	17	1	0	0
Bhopal (Bairagarh)	0230	523	1003 9	946·7	...	27·4	17·1	9·9	12 0	33	...	1 7	...	8 6	0	3	22	2	1	1	0	1	1	10	9	6	0
	0530	"	1004·9	947·3	...	25·4	16 6	9·8	12·4	39	.	1·8	...	8 0	0	1	24	2	3	0	0	1	4	10	5	6	0
	0830	"	1005·8	949·2	+1·5	30·9	19·0	10·6	13 3	31	0	1·5	+0·6	16 3	0	13	17	2	5	1	2	1	2	8	9	1	0
	1130	"	1009·4	948·7	...	36·3	20·5	9·7	12·5	21	...	1·5	...	13·5	0	7	23	3	4	1	1	0	6	10	5	1	0
	1730	"	999·9	944·9	...	37·9	20 1	7.0	10·6	17	...	2 9	...	18 3	0	19	12	1	1	0	1	1	3	13	11	0	0
	2330	"	1004·2	947·3	...	29·3	17·7	8·4	11·7	29	...	1·7	..	10 9	0	4	24	4	2	1	1	0	4	13	3	3	0
Khandwa	0830	318	1006·9	971·8	+1·1	30 8	21·9	16·7	19·1	43	+3	2·3	+1·2	14·6	0	6	23	1	0	0	0	2	2	21	3	2	0
	1730	"	1000·9	967·2	...	39·5	23·3	12·9	15·5	22	..	3·7	...	14·1	0	3	27	0	1	1	1	1	4	14	8	1	0
Hoshangabad	0830	302	1006·4	973·3	+1·4	31·8	20·6	11 9	15·1	33	+1	1·7	+0·5	3·7	0	0	18	1	0	2	0	5	6	4	0	13	0
	1730	"	1000 6	968·4	...	39·5	23·3	11·4	15·5	23	...	3·3	...	3 7	0	0	23	3	1	1	0	5	4	8	1	8	0
Betul	0830	653	1006 6	936·0	...	29 6	19·7	12·8	15·8	39	...	1·5	...	7·1	0	0	27	4	0	1	2	1	1	8	10	4	0
	1730	"	1000·2	931·6	...	36·5	21·5	11·2	14·7	25	...	3·5	...	10·9	0	1	30	4	2	6	0	0	3	14	8	0	0
Chhindwara	0830	685	1006 4	932·6	...	30.4	20 6	14 4	17·0	41	...	0·8	...	3·2	0	0	30	0	4	5	2	1	4	8	6	1	0
	1730	"	999·2	927·6	...	37·2	23·1	15·8	17·8	29	..	3·1	...	4·2	0	0	30	3	2	0	1	1	4	4	15	1	0
Seoni	0830	618	1005·4	939·1	+1·6	32 0	20·7	13·2	16·1	34	+5	3·6	+2 0	5 8	0	0	28	6	3	2	1	3	5	1	6	4	0
	1730	"	999·9	935·0	...	37 2	22·4	13·8	16·4	26	.	5·0	..	5·5	0	0	31	3	4	2	0	5	7	2	8	0	0
Sagar	0830	551	1005·1	945 4	+1·2	30·3	18 7	10·6	13 0	31	0	1·7	+0·3	9 6	0	3	24	1	3	2	2	0	1	8	10	4	0
	1730	"	999·4	941·3	...	37·3	19·7	6·2	10·2	16	..	2·8	. .	9 3	0	0	29	1	0	1	2	0	3	11	11	2	0
Narsinghpur	0830	229	1005 2	980·1	+1·7	32·7	20·4	11·5	15 1	29	−4	1·7	−0 2	4 8	0	0	27	2	1	1	1	1	10	9	2	4	0
	1730	"	1000·3	975·9	...	39·7	22 0	8·7	12·1	17	..	2.7	. .	6 7	0	0	29	2	2	0	0	0	7	10	8	2	0
Madhya Pradesh (East)																											
Sutna	0530	317	1003·3	968·1	...	26·8	17·7	10 5	12 8	37	.	3·0	..	2·	0	0	15	0	0	0	0	0	4	9	2	16	0
	0830	"	1004 5	970 0	+1·6	33·4	19·9	9·1	12·2	24	−6	2·1	+0·5	4 1	0	0	27	1	0	2	2	5	4	8	5	4	0
	1130	"	1003 5	969·5	...	38·7	21·3	7·7	11·3	17	. .	1·9	...	8·3	0	0	28	0	0	2	3	2	7	8	6	3	0
	1730	"	999·5	965·8	...	39·1	21·1	7·1	10 4	16	...	2·6(a)	...	5·5(a)	0	9	30	3	0	0	0	1	2	17	7	0	0
	2330	"	1002·4	967·7	...	31·2	19 3	10·1	12·7	28	...	1·8	.	2·6	0	0	17	1	0	2	2	0	1	8	3	14	0
Umaria	0830	459	1004·7	955 1	...	32·8	21 6	15 2	17 7	37	+11	1·5	−0·5	6 4	0	0	26	1	1	2	1	2	4	12	3	5	0
	1730	"	999 3	950 8	...	38·2	22 9	14 4	16·7	27	..	2 2	...	5·5	0	0	22	1	3	0	1	0	2	4	11	9	0
Jabalpur	0530	393	1004·2	960 6	...	25·9	18·4	12·9	15·1	46	...	2·0	...	2·6	0	0	16	0	0	1	5	1	6	3	0	15	0
	0830	"	1005·3	962·6	+1·6	32·2	20·5	12.2	14.6	31	+2	1·9	+0·7	6 6	0	0	27	0	3	1	3	1	12	6	1	4	0
	1130	"	1003·9	962·7	...	38·3	21·9	10·9	13 0	21	...	1·4	...	5·2	0	0	25	2	1	3	0	1	7	8	3	6	0
	1730	"	999·3	957·8	...	39·4	22 1	9.6	12·5	18	...	2·9	...	8·4	0	0	31	3	2	1	0	2	10	10	3	0	0
	2330	"	1002·4	960·3	...	28 9	20·2	14·7	16·7	43	...	1·5	...	3 1	0	0	13	0		4	2	2	4	1	0	18	0
Mandla	0830	443	1005·5	957·5	...	31 1	21·0	14·0	16·7	37	...	2 0	...	3·2	0	0	23	4	2	5	4	4	0	3	1	8	0
	1730	"	999·4	952·6	...	37·8	21·5	8·7	12·4	20	...	3·2	...	5 2	0	0	30	6	1	0	1	3	2	10	7	1	0
Pendra	0530	625	1003·8	935·8	...	26·6	17 4	10·4	13·2	39	...	2·3	...	7 3	0	1	26	4	0	0	1	2	4	8	8	4	0
	0830	"	1004 5	937·7	+1·2	32·4	19·5	10.4	12·9	28	−5	1·3	−0·6	9·5	0	2	28	9	2	0	3	5	4	1	6	1	0
	1130	"	1003·2	937·3	...	36·4	20·5	9·5	12·5	21	...	1·9	...	11·1	0	1	30	9	3	0	0	3	5	7	4	0	0
	1730	"	999·4	933·7	...	36·3	20·3	9·1	12·2	21	..	3.4	...	11·9	0	3	26	6	2	1	0	3	3	7	5	2	2
	2330	"	1003·5	936·0	...	28.9	18·3	11·0	13·3	34	...	1·9	...	7 0	0	2	26		1	0	2	8	4	7	8	3	0
Ambikapur	0830	611	1004·7	939·1	...	31·9	19·7	11.5	14·0	31	...	1·0	...	7·0	0	1	26	1	3	1	0	4	10	7	1	4	0
	1730	"	999·0	934·9	...	37·4	20·1	7·7	11·0	18	...	2·5	...	11·4	0	3	28	7	4	1	0	1	2	3	13	0	0

(a) Mean of 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (East) —*Contd.*																											
Champa	0830	245	1005·1	978·3	...	33·4	21·4	13·5	15·8	32	...	2·3	...	6·3	0	3	15	2	1	1	0	0	2	12	0	13	0
	1730	"	999·2	973·2	...	40·6	22·4	9·7	12·5	17	...	3·8	...	7·0	0	1	20	1	0	0	0	2	1	13	4	10	0
Raigarh	0830	220	1005·0	981·0	...	34·5	22·1	13·8	16·4	31	...	2·2	...	4·2	0	0	23	1	2	0	1	0	11	6	2	8	0
	1730	"	999·2	975·8	...	41·0	22·6	9·5	12·3	16	...	3·3	...	3·9	0	0	22	1	2	0	1	0	6	6	6	9	0
Raipur	0530	298	1003·4	970·6	...	29·2	20·6	14.7	17·2	43	...	3·7	...	6·6	0	1	21	0	1	0	1	6	7	7	0	9	0
	0830	"	1005·3	972·8	+1·6	34·0	22·1	14.5	16 5	33	0	2·4	+0·3	9·2	0	2	27	2	1	1	1	3	10	8	3	2	0
	1130	"	1004·0	972·1	...	38·6	22·6	11·7	13·1	22	...	2·4	...	10·0	0	4	27	3	0	1	1		36	10	7	0	0
	1730	298	999.6	967·9	...	39·6	22·3	9·8	12·9	19	...	4·1	...	9·7	0	1	28	3	0	1	1	2	7	11	4	2	0
	2330	"	1002·8	970·3	...	32·9	21·3	12·8	15·8	32	...	2·5	...	11·1	0	4	25	1	0	0	2	4	13	7	2	2	0
Kanker	0830	402	1005·7	962·1	+2·1	32·9	24·2	19·1	23·0	45	+5	2·7	-0 4	1·6	0	0	15	0	0	0	1	0	13	1	0	16	0
	1730	"	1000·5	951·8	...	37·2	24·3	16·8	19·8	33	...	4·3	...	0·7	0	0	7	0	1	0	1	0	4	0	1	24	0
Jagdalpur (P. B.O.)	0530	553	1005.5	944·6	...	24·9	21·1	19·2	24 4	71	...	4·3	...	1·4	0	0	9	0	0	3	0	4	2	0	0	22	0
	0830	"	1006·8	946·8	+2·0	29·6	22·6	19·2	22·4	55	0	3·7	+1·0	4·1	0	0	23	1	0	0	2	11	6	1	2	8	0
	1130	"	1005·0	946·1	...	34·3	23·3	17·6	20·7	39	...	3·3	...	5·3	0	0	27	0	0	2	2	4	10	7	2	4	0
	1730	"	1001·5	942·5	...	34·0	23·2	17·3	20·4	39	.	6·4	...	6·1	0	0	27	0	2	3	7	7	6	2	0	4	0
	2330	"	1005·1	944·8	...	27·8	22·0	19·0	22·1	60	..	3·0	..	1·7	0	0	9	0	0	0	2	6	0	1	0	22	0
Gujarat																											
Deesa	0830	136	1007·6	992·3	+1·2	29·2	23·4	20·1	24·0	60	...	2·0	..	7·6	0	1	30	0	2	0	1	6	9	9	4	0	0
	1730	"	1002·5	987·7	..	38·3	23·3	14·0	16·3	24	.	3·5	...	10·3	0	2	28	1	0	0	0	2	9	15	3	1	0
Idar	0830	219	1007·4	983·1	...	29·1	...	...	...	...	..	1·8	..	7·4	0	0	31	0	3	0	7	0	7	8	6	0	0
	1730	"	1002.5	978 9	...	38·0	...	...	...	...	..	1·9	...	8·8	0	0	31	1	2	1	0	1	14	6	6	0	0
Ahmedabad	0230	55	1005·4	999 2	...	28·7	20·9	15·8	18·4	47	...	0·9	...	11·5	0	1	28	1	0	0	0	2	3	18	5	2	0
	0530	"	1005 9	999·6	...	26·5	21·2	17·9	20·9	60	...	1·1	...	10·5	0	0	29	0	1	0	1	2	3	16	6	2	0
	0830	"	1007·9	1001·7	+0·7	29·4	22·9	19·3	22·7	56	-14	1·6	-8	14·6	0	3	28	1	1	1	0	2	6	7	13	0	0
	1130	"	1007·5	1001·4	...	35·2	23·1	15·6	18·3	33	...	1·6	...	14·3	0	5	26	1	0	1	2	0	6	7	14	0	0
	1730	"	1002·9	996·9	...	39·1	22·3	10·2	13·2	19	...	2·3	...	15·3	0	5	26	0	1	0	2	4	4	15	5	0	0
	2330	"	1005·7	999·6	..	31·2	21·7	15·2	18·2	41	..	1·1	...	12·5	0	3	27	1	0	1	0	4	5	16	3	1	0
Dohad	0830	333	1007·4	970·6	..	29·3	21·3	16·0	18·8	47	-13	1·4	0	21·8	0	18	13	0	0	1	1	2	9	16	2	0	0
	1730	"	1003·2	967·4	...	37·3	21·7	10 4	13·3	21	...	1·1	...	19·8	0	12	19	0	0	0	1	1	12	17	0	0	0
Baroda	0530	35	1006·2	1002·2	...	26·0	22·1	19·8	23·4	69	..	1·3	...	1·6	0	0	11	0	0	0	0	0	8	0	3	20	0
	0830	"	1008·1	1004·1	...	29·9	23·5	20·0	23·7	56	-8	1·7	+0·3	4·7	0	0	26	0	0	0	1	1	11	6	7	5	0
	1130	"	1007·8	1003·9	...	35·7	24·0	17·4	20·3	35	..	1·8	...	7·0	0	0	29	1	3	0	2	0	12	7	4	2	0
	1730	"	1003·3	999.5	...	38·8	23·4	13·4	16·3	24	...	1·4	...	7·8	0	0	29	1	2	2	1	0	6	10	7	2	0
	2330	"	1006·1	1002·2	..	30·3	23·4	19·5	23·2	54	..	1·1	...	6·1	0	0	31	0	0	1	1	0	22	7	0	0	0
Baroda (Aerodrome)	0830	38	1008·3	1004·1	...	30·1	24·0	20·9	24·9	59	...	1·7	...	7·3	0	0	31	2	0	0	0	3	12	8	6	0	0
	1130	"	1007·8	1003·6	...	35·4	24·5	18·8	21·9	38	...	1·7	...	9·0	0	0	31	2	0	1	1	0	9	10	8	0	0
	1730	"	1003·3	999·2	...	38·4	24·1	15·7	18·2	28	...	2·3	...	8·2	0	0	31	0	2	1	1	0	12	5	9	0	0
Broach	0830	17	1008 0	1006·0	...	29·0	24·6	22 4	27·2	68	...	1·6	...	5·0	0	0	30	1	0	0	0	5	18	2	4	1	0
	1730	"	1003·9	1001·9	...	38·0	24·9	16 9	20·9	33	...	1·6	...	10·6	0	2	29	0	0	0	0	0	21	4	6	0	0
Surat	0530	12	1006·4	1005·1	...	26·5	23·8	22·5	27·2	79	...	2·1 (a)	...	3·7	0	0	20	3	0	0	4	4	7	0	2	10	0
	0830	"	1008·6	1007·3	+0·8	30·0	24·6	22·0	26·4	63	-3	2·2	-0·8	5·2	0	0	28	2	1	1	2	3	9	3	7	3	0
	1130	"	1008·4	1007·1	...	34·1	24·7	19·7	23·4	44	...	1·9	...	8·5	0	1	28	3	2	0	0	3	5	7	9	2	0
	1730	"	1004·8	1003·5	...	35·3	25·6	21·1	24·8	44	...	2·3	...	10·3	0	0	31	1	0	0	0	6	16	8	0	0	0
	2330	"	1006·9	1005·6	...	28·9	25·2	23·6	29·1	73	...	1·3	...	9·6	0	2	27	0	0	1	0	8	16	4	0	2	0
Saurashtra & Kutch																											
Bhuj	0830	105	1007·6	995·8	+1·4	28·2	23·2	20·6	14·3	65	+1	1·9	+0·9	9·8	0	1	28	0	2	0	0	0	8	16	3	2	0
	1730	"	1003·9	992·4	...	35·9	22·9	15·0	27·2	30	...	1·4	...	17·4	0	6	25	1	0	0	1	1	13	12	3	0	0
Bhuj (P. B. O)	0230	106	1006·0	994·1	...	26·3	23·2	21·5	26 0	76	...	1·1	...	8·3	0	1	24	0	0	0	0	0	17	6	2	6	0
	0530	"	1006·2	994·3	...	25·5	23·0	21·8	26·1	81	...	1·5	...	5·7	0	1	17	0	0	0	0	0	13	3	2	13	0
	0830	"	1007·3	995·5	...	...	...	...	...	...	...	1·6	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1130	"	1007·1	995·5	...	34·7	22·8	15·4	18·0	33	...	1·4	...	13·7	0	4	27	0	0	1	0	2	14	10	4	0	0
	1730	"	1004·1	992·5	...	...	...	...	...	...	...	1·8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2330	"	1006·1	994·2	...	27·7	23·3	21·1	25·0	69	...	1·0	...	11·3	0	2	27	0	1	0	0	0	13	13	2	2	0
Bhuj (Aerodrome)	0830	80	1007·3	998·3	...	28·8	24·9	23·2	28·3	73	...	2·1	...	15·4	0	6	24	0	2	0	1	0	8	16	3	1	0
	1130	"	1007 1	998·2	...	34·8	25·5	20·6	25·0	46	...	1·6 (d)	...	19·1 (d)	0	12	18	0	2	0	2	1	8	12	5	1	0
	1730	"	1003·4	994·7	..	36·3	26·5	21·4	26·6	46	...	2·3	...	20·9	0	12	15	0	2	0	2	0	7	10	6	0	0
Kandla	0830	5	1008·1	1007·5	...	27·8	24·9	23·6	29·3	78	...	2·6	...	17·7	0	13	18	0	1	0	0	1	19	9	1	0	0
	1730	"	1004·4	1003·8	...	33·7	25·3	20·9	25·5	50	...	2·5	...	39·1	0	30	1	1	0	1	0	0	22	7	0	0	0

(a) Mean of 30 days.

(d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p. h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch— *Contd.*																											
Mandvi	0830	9	1007·8	1006·8	...	28·7	26·7	25·8	33·3	85	...	2·8	...	21·0	0	15	16	0	2	0	0	1	8	13	1	0	6
	1730	,,	1005·1	1004·1	...	30·2	28·0	27·0	36·0	84	...	1·5	...	38·2	0	31	0	0	0	0	0	0	6	22	0	0	0
Dwarka	0830	11	1008·4	1007·1	+1·2	28·1	25·7	24·7	31·0	83	0	2·3	0	12·6	0	3	28	0	1	0	0	1	7	19	3	0	0
	1730	,,	1005·9	1004·6	...	29·5	26·4	25·0	32·0	77	...	1·9	...	18·4	0	5	26	0	0	0	1	1	7	17	5	0	0
Porbander	0830	7	1008·4	1007·6	...	27·9	25·4	24·4	30·4	81	...	2·4	...	10·3	0	1	30	1	1	2	1	1	4	9	12	0	6
	1730	,,	1005·8	1005·0	...	30·3	26·4	24·7	31·4	71	...	2·9 (d)	...	19·6 (d)	0	12	19	0	0	0	1	1	7	18		0	0
Porbander (Aerodrome)	0830	7	1008·4	1007·6	...	29·6	25·7	24·2	29·8	73	...	2·8 (d)	...	15·2 (d)	0	7	20	0	0	0	2	2	6	8	9	0	0
	1130	,,	1008·7	1007·9	...	32·3	26·3	24·1	29·2	63	...	2·3	...	24·2	0	22	5	0	1	0	0	2	9	15	0	0	0
Jamnagar	0530	23	1006·0	1003·7	...	25·3	23·7	23·1	27·9	88	...	2·3	...	11·9	0	2	29	0	0	0	1	1	19	10	0	0	0
	0830	,,	1008·0	1005·4	+1·2	29·0	25·2	23·4	28·9	72	+6	3·9	+2·3	19·3	0	15	15	1	0	0	0	2	8	17	2	1	0
	1130	,,	1008·1	1005·6	...	33·6	25·4	21·3	25·9	50	...	1·9	...	25·3	0	23	8	1	0	0	0	1	5	20	4	0	0
	1730	,,	1004·7	1002·2	...	32·9	25·0	21·0	25·2	52	...	1·9	...	35·3	0	29	2	2	0	0	0	0	1	26	2	0	0
Rajkot (Aerodrome)	0830	134	1008·1	993·2	+1·2	28·3	24·0	21·9	26·3	69	0	0·8	-1·4	20·5	0	14	17	0	0	0	1	3	8	11	8	0	2
	1130	,,	1007·5	992·8	...	35·1	23·1	15·9	18·5	34	...	0·5	...	21·5	0	15	16	0	2	0	1	3	6	13	6	0	2
	1730	,,	1003·6	989·1	...	36·9	22·4	12·4	15·4	25	...	1·0 (a)	...	28·9 (a)	0	24	7	0	1	1	0	0	7	13	9	0	0
Surendranagar	0830	74	1007·9	999·5	...	29·4	24·2	21·5	25·8	63	...	1·4	...	18·7	0	13	17	1	0	0	1	0	6	10	10	0	0
	1730	,,	1003·2	995·0	...	38·6	23·9	14·2	17·6	26	...	2·9	..	19·2	0	12	19	1	0	2	1	0	6	10	9	0	0
Bhavnagar	0830	17	1008·7	1006·8	+1·2	28·7	24·4	22·2	27·0	68	+7	1·0	−0·8	9·3	0	0	30	0	1	0	0	1	6	12	10	1	0
	1730	,,	1003·9	1002·1	...	37·8	27·3	22·5	27·6	43	...	1·2	...	6·2	0	0	31	0	4	0	9	1	13	0	4	0	0
Bhavnagar (Aerodrome)	0830	11	1008·2	1007·0	...	29·8	23·2	19·8	23·0	55	..	1·2	...	18·0	0	8	23	2	0	0	1	0	5	10	13	0	0
	1130	,,	1008·1	1006·9	...	34·9	23·6	17·0	19·8	36	...	1·2	...	17·9	0	8	23	4	3	13	0	3	2	1	5	0	0
Mahuva	0830	16	1008·1	1006·3	...	29·0	25·9	24·6	31·0	77	...	1·5	...	11·1	0	4	23	0	1	0	0	3	5	3	15	4	0
	1730	,,	1004·9	1003·1	...	32·4	29·0	27·7	37·3	78	..	1·7	...	29·9	0	27	4	0	1	0	1	15	13	1	0	0	3
Keshod	0830	51	1008·7	1002·9	...	28·6	24·9	23·4	28·6	74	...	4·0	...	16·0	0	5	25	2	0	0	2	3	3	16	4	1	0
	1130	,,	1008·7	1003·0	...	33·9	24·8	20·9	23·8	47	...	2·6	...	23·2	0	18	13	2	0	1	1	1	8	15	3	0	0
	1730	,,	1005·3	999·7	...	34·4	24·6	20·0	22·8	44	...	2·5	...	38·9	0	30	1	0	0	0	2	2	4	23	0	0	0
Veraval	0230	8	1006·9	1006·0	...	26·0	25·1	24·7	31·1	93	...	1·9	...	11·3	0	4	24	2	0	0	1	1	1	8	15	3	0
	0530	,,	1006·8	1005·9	...	25·0	24·2	24·2	29·5	94	...	2·3	...	12·3	0	4	25	7	0	0	2	2	1	4	13	2	0
	0830	,,	1008·6	1007·7	+0·5	27·5	25·6	24·7	31·1	84	+2	3·0 (a)	+0·6	16·9 (a)	0	11	19	3	0	0	2	1	2	3	19	1	0
	1130	,,	1009·0	1008·1	...	29·7	26·7	25·4	32·5	78	..	1·5	...	19·3	1	12	18	0	0	0	2	1	2	17	8	0	0
	1730	,,	1005·9	1005·0	...	29·3	26·7	25·6	32·9	81		2·4	...	23·7	1	19	12	0	0	0	1	2	3	22	3	0	0
	2330	,,	1007·7	1006·8	...	26·8	25·7	25·3	32·1	91	...	1·5	...	16·0	3	5	26	0	0	0	1	1	3	15	11	0	0
Konkan																											
Dahanu	0830	5	1008·4	1007·9	+0·8	28·9	25·3	23·6	29·3	73	−4	2·1	−2·3	11·0	0	2	29	5	1	6	5	1	2	10	1	0	0
	1730	,,	1005·4	1004·9	...	30·8	26·1	24·0	29·9	67	...	1·7	...	24·5	0	24	7	4	0	0	0	0	3	22	2	0	0
Bombay (Colaba)	0830	11	1009·1	1007·9	+0·2	29·3	25·4	23·6	29·4	71	−3	3·0	−0·3	6·8	0	0	31	12	2	4	3	2	1	2	5	0	0
	1130	,,	1009·0	1007·8	...	31·6	26·3	23·8	29·9	64		1·9	...	12·6	0	1	30	0	1	0	1	2	5	6	16	0	0
	1730	,,	1005·6	1004·4	...	31·1	26·2	24·0	30·1	66	.	1·8	...	18·1	0	6	25	1	0	0	0	2	3	10	15	0	0
Bombay (Santacruz Aerodrome)	0230	8	1007·0	1006·1	...	26·8	24·4	23·1	28·7	81	. .	1·9	...	3·3	0	0	13	4	0	0	0	3	2	1	3	18	0
	0530	,,	1007·3	1006·4	...	25·8	24·0	22·9	28·4	85	..	2·8	...	1·3	0	0	9	1	1	1	1	2	2	1	0	22	0
	0830	,,	1009·1	1008·2	+0·2	29·4	25·1	23·1	28·2	69	−3	3·5	+0·2	5·6	0	0	25	9	5	1	1	3	2	1	3	6	0
	1130	,,	1009·0	1008·1	...	32·1	25·8	23·1	28·1	59	...	2·5	...	14·6	0	2	29	0	0	1	0	2	3	13	12	0	0
	1730	,,	1005·6	1004·7	...	31·3	25·6	23·0	28·1	61	...	2·4	...	19·4	0	11	20	1	0	0	0	2	3	5	20	0	0
	2330	,,	1008·2	1007·3	...	28·0	25·0	23·6	29·2	78	..	2·0	...	10·9	0	2	26	6	0	0	1	2	4	3	12	3	0
Alibag	0830	7	1009·0	1008·2	+0·5	28·9	26·2	25·0	31·8	80	+8	3·1	−0·4	6·7	0	0	30	9	4	1	3	2	3	2	6	1	0
Harnai	0830	20	1008·6	1006·3	+0·8	27·9	25·1	24·0	29·6	79	0	3·8	...	10·7	0	3	23	7	3	1	2	1	1	1	10	5	0
	1730	,,	1005·4	1003·1	...	29·1	26·1	24·8	31·4	78	...	2·6	...	35·0	0	25	6	1	0	0	0	2	2	4	22	0	0
Ratnagiri	0830	35	1008·9	1004·9	−0·1	28·3	25·1	23·8	29·1	76	. .	3·6	...	...	0	0	31	0	0	15	2	0	0	14	0	0	0
	1730	,,	1006·0	1002·1	...	30·5	26·4	24·3	31·1	70	...	3·1	...	...	0	13	18	0	0	0	0	0	1	30	0	0	0
Devgad	0830	36	1009·1	1005·0	−0·6	28·5	25·7	24·3	30·8	77	+3	5·2	+0·6	14·9	0	9	22	8	3	2	2	1	1	3	11	0	0
	1730	,,	1005·7	1001·7	...	30·7	27·0	25·5	32·7	74	...	4·2	...	26·8	0	22	9	3	0	1	0	0	2	11	14	0	0
Vengurla	0230	9	1007·0	1006·0	...	27·1	24·7	23·7	29·1	83	...	2·0	...	...	0	0	5	3	0	1	0	0	0	1	0	26	0
	0530	,,	1006·9	1005·9	...	26·3	24·4	23·7	29·2	86	...	3·4	...	...	0	0	4	0	0	2	1	0	0	0	1	27	0
	0830	,,	1009·1	1008·1	...	29·0	25·3	23·6	29·2	73	...	4·8	...	...	0	0	14	7	0	3	0	1	0	1	2	17	0
	1130	,,	1008·8	1007·8	...	31·9	26·2	23·7	29·3	62	...	2·5	...	...	0	0	29	0	0	1	0	0	0	21	7	2	0
	1730	11	1006·0	1005·0	...	30·9	25·8	23·5	29·0	65	...	3·4	...	...	0	6	24	0	2	0	0	0	0	19	9	1	0
	2330	,,	1008·2	1007·2	...	28·0	25·2	23·8	29·8	79	...	2·9	...	...	0	0	20	3	0	1	0	0	2	3	11	11	

(a) Mean of 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in c. p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra																											
Jalgaon	0830	201	1008·0	985·7	...	30·5	22·0	16·6	19·5	46	...	1·9	...	23·5	0	19	12	1	0	0	1	0	1	19	9	0	0
	1730	"	1001·6	980·0	...	40·8	23·1	10·5	13·7	19	...	2·9	...	25·2	0	21	10	0	0	2	1	0	0	19	9	0	0
Malegaon	0830	437	1008·0	960·2	+1·3	30·8	21·5	15·6	18·1	41	−6	2·1	+0·7	6·9	0	0	29	2	1	0	1	0	2	9	14	2	0
	1730	"	1001·6	955·3	...	37·5	22·6	11·7	15·2	24	...	3·4	...	10·9	0	3	28	5	0	1	1	0	1	9	14	0	0
Deolali	0830	571	1008·5	946·0	...	27·5	19·9	14·9	17·8	49	...	3·1	...	9·9	0	4	26	0	1	1	0	2	10	11	5	1	9
	1730	"	1003·3	942·5	...	34·8	20·7	11·9	14·1	25	...	3·0	...	19·9	0	12	19	1	0	1	2	0	4	11	12	0	0
Aurangabad	0830	581	1008·0	944·6	+0·7	28·5	20·8	16·2	18·9	49	+5	3·1	+1·4	11·0	0	3	27	0	2	2	0	5	2	14	5	1	0
	1730	"	1001·1	940·1	...	37·6	23·2	15·3	17·8	28	...	4·4	...	18·5	0	10	21	3	1	2	0	1	2	16	6	0	0
Aurangabad (Chikalthana Aerodrome).	0230	579	1004·9	941·7	...	27·5	20·3	16·3	18·7	53	...	2·1	...	7·2	0	1	23	6	0	0	0	0	1	7	8	7	0
	0530	"	1005·7	942·2	...	25·4	19·4	15·8	18·1	57	...	2·2	...	5·2	0	0	21	3	1	1	0	0	1	6	9	10	0
	0830	"	1006·9	944·1	...	29·9	22·2	18·1	21·0	52	...	2·1	...	9·8	0	1	27	7	1	1	0	0	0	9	10	3	0
	1130	"	1005·5	943·8	...	35·0	24·0	18·4	21·2	40	...	1·8	...	8·3	0	0	29	6	4	1	1	0	0	6	11	2	0
	1730	"	1000·7	939·8	...	37·2	24·7	18·3	21·9	36	...	4·0	...	10·1	0	0	29	5	2	1	2	1	0	7	11	2	0
	2330	"	1005·6	942·7	...	29·3	21·4	16·7	19·8	50	...	1·8	...	9·8	0	4	23	5	1	0	1	0	0	4	16	4	0
Ahmednagar	0830	657	1007·5	936·3	+0·6	28·1	19·9	14·8	17·3	46	+5	1·8	+0·4	2·3	0	0	22	0	5	0	2	0	5	0	10	9	0
	1730	"	1000·6	931·5	...	36·9	21·8	12·6	15·1	26	...	3·3	...	3·1	0	0	30	0	2	0	3	0	7	0	18	1	0
Parbhani	0830	423	1007·3	961·2	...	31·3	23·0	18·0	21·3	47	...	2·4	...	13·9	0	3	28	1	1	3	0	1	0	5	20	0	0
	1730	"	1000·8	955·9	...	38·4	25·3	18·3	21·6	33	...	4·0	...	11·5	0	2	28	4	2	1	1	1	1	9	11	1	0
Poona	0530	559	1007·2	945·1	...	23·2	19·2	16·9	19·3	69	...	2·4	...	0·3	0	0	3	0	0	0	0	1	0	1	1	28	0
	0830	"	1008·1	946·9	+0·2	27·6	20·7	16·8	19·3	54	−4	3·1	+1·1	2·1	0	0	17	0	0	1	1	4	2	6	3	14	0
	1130	"	1006·3	946·4	...	34·1	21·6	14·1	16·6	33	...	2·1	...	3·5	0	0	21	4	1	1	2	1	0	5	7	10	0
	1730	"	1002·3	942·8	...	34·8	22·4	15·3	17·9	34	...	2·1	...	7·5	0	0	28	5	0	0	0	0	3	5	15	3	0
	2330	"	1007·2	945·8	...	26·4	20·8	17·7	20·5	61	...	1·1	...	2·2	0	0	14	0	0	0	0	2	4	5	3	17	0
Poona (Lohagaon Aerodrome).	0230	593	1006·6	941·1	...	24·2	19·0	15·6	18·1	61	...	1·9	...	9·3	0	2	22	0	0	0	0	0	0	12	12	7	0
	0530	"	1007·3	941·5	...	22·7	19·0	16·7	19·2	67	...	2·8	...	7·4	0	0	23	1	0	1	0	0	0	15	6	8	0
	0830	"	1008·3	943·3	...	26·9	19·5	15·2	17·2	51	...	3·5	...	13·1	0	4	26	1	0	1	0	0	0	21	7	1	0
	1130	"	1006·4	942·8	...	33·1	20·4	11·5	14·6	31	...	2·6	...	15·3	0	8	22	2	1	3	0	0	0	10	14	1	0
	1730	"	1002·3	939·2	...	34·4	21·0	12·3	15·1	30	...	2·8	...	25·9	0	22	9	1	0	0	1	0	1	6	22	0	0
	2330	"	1007·4	942·2	...	25·9	20·1	16·5	19·2	59	...	1·8	...	14·0	0	5	24	0	1	0	0	0	0	16	12	2	0
Buramati	0830	551	1007·8	947·5	...	27·6	20·1	15·5	18·0	48	...	2·4	...	7·5	0	0	26	2	1	1	0	0	2	8	12	5	0
	1730	"	1000·7	942·6	...	37·2	21·8	11·4	14·8	24	...	4·1	...	8·1	0	2	26	5	1	2	0	3	3	4	10	3	0
Jeur	0830	521	1007·0	950·2	...	29·0	20·8	15·5	18·5	48	...	2·9	...	6·9	0	0	30	0	0	1	1	0	1	14	13	1	0
	1730	"	1000·4	945·5	...	38·2	22·2	12·5	15·1	23	...	4·1	...	4·9	0	0	31	0	1	3	2	0	1	13	11	0	0
Sholapur	0530	479	1006·0	953·2	...	26·3	20·1	16·3	18·9	57	...	4·0	...	7·7	0	1	29	5	7	1	1	0	3	9	4	1	0
	0830	"	1007·4	955·0	+0·6	29·1	21·0	16·2	19·0	49	+1	4·0	+1·8	8·9	0	0	29	4	4	0	1	1	4	0	15	2	0
	1130	"	1005·7	954·5	...	35·5	22·1	13·9	16·7	31	...	2·9	...	12·7	0	2	28	13	7	1	1	2	3	2	1	1	0
	1730	"	1000·4	949·8	...	38·0	23·5	15·9	18·3	30	...	5·0	...	10·2	0	2	28	5	9	3	5	0	3	1	4	1	0
	2330	"	1005·5	953·5	...	30·8	21·3	15·7	18·3	44	...	4·3	...	9·2	0	1	29	3	4	0	4	2	11	2	4	1	0
Miraj	0830	554	1008·2	947·4	+0·4	25·8	22·0	20·2	23·7	72	0	4·2	+1·5	6·5	0	0	26	1	0	1	2	2	4	9	7	5	0
	1730	"	1001·8	943·0	...	34·6	23·4	17·5	20·7	40	...	5·6	...	13·5	0	6	23	2	3	2	0	3	4	8	7	2	0
Kolhapur	0530	570	1007·0	943·8	...	22·9	20·7	19·4	22·8	81	...	3·5	...	9·0	0	2	25	1	1	2	0	1	0	19	3	4	0
	0830	"	1008·3	945·6	...	25·7	21·7	19·6	23·0	70	...	3·8	...	9·9	0	3	26	0	1	3	0	2	2	19	2	2	0
	1130	"	1006·5	945·3	...	32·5	22·4	16·9	19·7	42	...	3·2	...	14·4	0	6	25	2	8	2	2	0	2	8	7	0	0
	1730	"	1002·8	941·7	...	32·2	23·1	18·4	21·6	48	...	4·6	...	23·4	0	18	13	0	0	2	0	3	4	19	3	0	0
Vidarbha																											
Buldhana	0830	650	1007·2	936·5	...	28·1	19·7	14·3	16·9	45	...	1·6	...	4·0	0	0	31	0	1	1	0	1	1	0	27	0	0
	1730	"	1000·8	932·4	...	36·3	20·6	9·8	12·6	23	...	2·4	...	2·7	0	0	25	0	1	0	0	2	0	0	22	6	0
Akola	0830	282	1006·4	975·5	+1·1	32·1	21·0	13·4	15·8	35	−1	3·1	+1·3	11·9	0	2	26	1	0	0	1	1	4	17	4	3	0
	1130	"	1004·8	974·5	...	37·5	22·2	11·3	14·3	24	...	1·9	...	10·0	0	2	28	1	3	1	0	1	2	10	12	1	0
	1730	"	999·9	969·9	...	40·4	22·3	8·6	12·2	17	...	3·3	...	7·1	0	1	29	3	0	0	0	0	4	5	18	1	0
Akola (Aerodrome)	0530	309	1004·9	970·5	...	27·3	17·9	9·3	12·8	37	...	3·3	...	11·3	0	2	29	0	0	0	0	2	5	17	7	0	0
	2330	"	1004·4	970·5	...	31·6	18·9	7·1	11·6	27	...	2·1	...	11·0	0	3	28	1	1	0	1	3	1	9	15	0	0
Amravati	0830	370	1006·3	965·9	+1·3	31·1	20·6	13·2	15·6	36	+1	2·8	+1·2	8·8	0	4	27	1	3	0	0	5	8	10	4	0	0
	1730	"	999·7	960·6	...	39·2	23·1	12·5	15·1	23	...	4·9	...	9·0	0	0	31	0	3	1	1	0	9	5	12	0	0
Yeotmal	0830	451	1005·9	957·1	...	32·5	22·7	16·6	19·7	41	...	2·2	...	13·6	0	7	20	4	1	0	0	2	5	10	5	4	0
	1730	"	999·7	952·2	...	39·2	24·8	16·7	19·5	29	...	3·7	...	8·0	0	4	17	4	1	0	0	3	3	5	5	10	0
Nagpur	0230	310	1003·3	969·0	...	28·8	20·4	14·3	17·2	44	...	2·8	...	8·0	0	2	26	1	2	1	2	1	9	1	11	3	0
	0530	"	1004·2	969·7	...	27·4	19·6	13·9	16·5	46	...	3·5	...	8·1	0	2	27	3	2	1	1	1	6	5	10	2	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p. ms. of the mean standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Vidharbha Nagpur—*Contd.*																											
	0830	310	1005·8	971·9	+1·4	33·2	22·2	15·2	17·9	36	+6	2·5	+0·4	13·9	0	6	22	3	2	3	3	2	4	4	7	3	0
	1130	,,	1004·5	971·2	...	38·3	24·1	15·7	18·4	28	...	2·2	...	11·6	0	4	26	5	3	3	1	1	1	6	10	1	0
	1730	,,	999·8	966·8	...	39·6	24·0	14·4	17·1	24	...	3·9	...	11·7	0	2	28	3	3	1	3	2	2	5	11	1	0
	2330	,,	1003·8	969·7	...	31·1	21·5	15·1	17·8	41	...	2·7	...	9·0	0	3	24	3	1	2	3	2	5	2	9	4	0
Gondia	0830	313	1006·0	971·9	...	32·8	21·9	14·4	17·5	36	...	2·8	...	5·3	0	0	28	3	3	0	3	2	11	1	3	3	2
	1730	,,	999·9	966·8	...	40·0	22·4	10·1	12·9	19	...	3.0	...	5·5	0	0	30	3	3	0	0	0	13	3	5	1	0
Brahmapuri	0830	229	1006·5	981·4	...	31·9	23·4	18·2	21·8	46	...	2·4	...	10.9	0	1	30	1	2	0	1	16	5	3	3	0	3
	1730	,,	1001·2	976·6	...	38·3	23·6	14·4	17.1	27	...	2·8	...	9 3	0	2	28	2	5	0	3	6	7	5	2	1	0
Chanda	0830	193	1006·4	985·1	+1·4	32·4	22·8	16·9	19·9	42	+9	3·6	+1·6	7·8	0	2	25	1	1	0	4	8	8	4	1	4	0
	1730	193	1000·8	980·1	...	39·0	23·6	13·9	16·6	25	...	3·7	...	8 3	0	1	29	3	1	2	6	7	2	4	5	1	0
Sironcha	0830	123	1007·5	993·8	...	31·9	24·7	21·2	25·3	55	...	3·9	...	7·3	0	0	30	0	1	3	10	9	4	2	1	1	0
	1730	,,	1000·9	987·6	...	40·5	25·3	17.1	19·7	27	...	4·5	...	5·0	0	0	26	4	2	1	2	4	4	4	5	5	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1005·6	1003·3	...	27·3	25·3	24·5	31·2	85	...	3·5	...	3·5	0	0	27	0	0	1	19	6	1	0	0	4	0
	0830	,,	1007·4	1005·2	+1·4	32·1	26·4	24·0	30.0	63	+3	4.9	+1·1	8·5	0	0	31	0	1	0	20	8	2	0	0	0	0
	1130	,,	1006·6	1004·4	...	36·5	26·4	21·8	26·3	43	...	4·2	...	6·6	0	0	29	1	0	1	11	10	2	2	2	2	0
	1730	,,	1003·6	1001·4	...	32·8	26·7	24·1	31·7	60	..	3·5	...	15·3	0	0	31	0	0	8	21	0	1	1	0	0	0
	2330	,,	1006·5	1004·3	...	28·9	26·0	24·9	31·3	79	...	1·7	...	6·1	0	0	26	0	0	1	22	2	0	1	0	5	0
Ongole	0830	12	1007·2	1005·9	...	31·3	28·6	27·6	36·8	81	...	3·4	...	6·3	0	0	26	0	0	0	19	3	2	0	2	5	0
	1730	,,	1003·7	1002·4	...	32·1	30·7	30·0	43·0	90	...	3·0	...	11·7	0	1	29	0	0	0	29	0	1	0	0	1	0
Rentachintala	0830	106	1007·2	995·5	...	31·8	25·4	22·4	27·1	58	+5	4·0	−0·2	4·1	0	0	28	2	0	3	2	14	0	5	2	3	0
	1730	,,	1001·8	990·4	...	38·4	25·4	18·5	22·5	33	...	5·0	...	4·5	0	0	31	4	2	10	3	7	0	3	2	0	0
Gannavaram	0230	23	1005·2	1002·6	...	28·1	26·3	25·1	31·9	84	...	2·8	...	5·4	0	0	19	0	0	1	3	13	2	0	0	12	0
	0530	,,	1005·5	1002·9	...	27·6	25·7	24·8	31·4	85	...	4·7	...	4·7	0	0	20	0	0	3	4	9	2	1	1	11	0
	0830	,,	1007·4	1004·9	..	31·5	26·5	24·4	30·6	67	...	4·7	..	11·8	0	2	29	2	0	1	2	23	1	2	0	0	9
	1130	,,	1006·7	1004·2	...	36·1	26·2	21·6	25·8	45	...	3·6	...	14·3	0	3	28	2	1	2	6	13	3	1	3	0	0
	1730	,,	1003.4	1000·8	...	34·9	25·4	20·8	24·8	46	...	3·6	...	17·9	0	7	23	0	1	1	9	17	1	0	1	1	0
	2330	,,	1003·3	1003·7	...	28·8	25·9	24·6	31·2	78	...	2·2	...	8·2	0	1	27	0	0	1	3	20	3	1	0	3	0
Masulipatam	0830	3	1007·6	1007·3	+1·6	31·5	27·3	25·6	32·8	71	−1	4·8	+1·1	13·9	0	5	25	0	0	0	1	22	5	1	1	1	0
	1730	,,	1004·1	1003·8	...	31·7	27·5	25·6	32·8	71	...	3·6	...	18·9	0	14	17	1	1	0	4	24	0	0	1	0	0
Nidadavolu	0830	12	1008·1	1006·7	...	30·6	27·5	26·2	34·2	78	...	5·8	...	6·2	0	0	27	1	1	1	3	6	13	2	0	4	0
	1730	,,	1003·9	1002·5	...	33·2	27·0	24·4	30·5	61	...	3·7	...	11·1	0	1	28	0	1	2	0	25	1	0	0	2	0
Kakinada	0830	8	1008·2	1007·3	+2·0	31·9	27·1	25·3	31·8	68	−3	4·5	+0·1	10·2	0	0	31	0	0	0	6	0	24	0	1	0	0
	1730	,,	1004·3	1003·4	...	33·4	26·9	24·1	30·0	59	...	3·4	...	14·6	0	0	31	0	0	0	16	3	9	0	3	0	0
Visakhapatnam	0230	3	1005·3	1004·9	..	28·3	26·7	25·9	33·6	87	..	2.3	..	7·8	0	2	21	0	0	0	0	0	20	3	0	8	0
	0530	,,	1005·9	1005·5	...	27 9	26·3	25·6	32·8	87	...	3·7	...	6.0	0	1	16	0	0	0	0	0	13	4	0	14	0
	0830	,,	1007·5	1007·1	+1·7	31·9	27·5	25.7	33.1	70	--4	3·5	−1·2	17·0	0	9	22	0	0	0	0	3	25	2	1	0	0
	1130	,,	1006·7	1006·3	...	35·1	29·2	27·0	35·8	63	...	3·0	...	23·2	0	18	13	0	0	0	0	2	29	0	0	0	0
	1730	,,	1004·1	1003·7	...	31·1	28·0	27·1	35·2	80	...	4·7	...	19·8	0	14	17	0	0	0	0	5	26	0	0	0	0
	2330	,,	1006·7	1006·3	...	28·6	27·3	26·5	35·2	87	...	3·0	...	11·3	0	4	21	0	0	0	0	0	22	3	0	6	0
Calingapatam	0830	6	1007·4	1006·7	+1·9	30·7	26·7	25·0	31.8	71	−1	3.9	+0·4	10·8	0	0	31	0	0	0	0	15	15	1	0	0	0
	1730	,,	1003·5	1002·8	...	29·6	26·8	25·7	33·1	79	...	5·7	..	13·4	0	0	31	0	0	0	0	15	15	0	1	0	0
Telangana																											
Ramagundam	0830	156	1006·7	989·5	...	32·1	24·2	20·2	23·7	51	...	3·7	...	5·7	0	0	27	2	0	0	10	9	4	2	0	4	0
	1730	,,	1000·9	984·2	...	40·9	24·4	14·5	17·2	23	...	3·5	...	4·9	0	1	26	4	3	1	6	3	7	1	2	4	0
Nizamabad	0830	381	1006·7	965·1	+1·1	31·8	21·9	15·6	19·1	41	0	2·6	+0·4	2·8	0	0	25	2	1	0	3	6	3	5	5	6	0
	1730	,,	1000·6	960·2	...	39·2	23·8	14·5	16·8	25	...	3·6	...	3·3	0	0	25	1	3	5	1	7	4	0	4	6	0
Mahbubnagar	0830	505	1006·7	951·8	...	30·0	22·7	18·8	21·5	53	...	3·9	...	10·2	0	1	27	2	4	3	2	2	7	3	5	3	0
	1730	,,	1001·6	947·7	...	35·9	22·7	15·6	16·0	32	...	5·1	...	7·9	0	4	23	2	1	4	7	4	1	3	5	4	0
Hyderabad (Begumpet Aerodrome).	0230	545	1004·5	944 9	...	28·0	22·2	19·2	22·7	60	...	3·8	...	8·4	0	5	10	1	0	0	7	4	0	2	1	16	0
	0530	,,	1005·4	945·5	...	26·9	21·5	18·9	21·9	63	...	5·0	...	8·6	0	5	14	1	0	2	2	1	4	3	6	12	0
	0830	,,	1006·8	947·8	+1·5	30·3	22·1	17·7	20·9	49	−2	4·0	+1·0	10·1	0	6	23	1	1	0	3	5	7	5	7	2	0
	1130	,,	1005·3	947·2	...	35·0	22·9	16·4	19·0	35	...	3·9	...	10·0	0	3	27	3	3	1	3	6	6	1	7	1	0
	1730	,,	1001·2	943·5	...	35·6	22·6	15·3	17·6	32	...	5·7	...	9·5	0	4	24	1	4	3	9	3	1	2	5	3	0
	2330	,,	1005·2	946·4	...	29·9	22·4	18·7	21·6	52	...	4·1	...	8·1	0	2	15	1	0	0	9	4	2	0	1	14	0
Hakimpet	0830	613	1006·2	940·0	...	29·9	24·4	21·9	26·7	63	...	3·7	...	12·8	0	3	28	2	1	2	5	0	8	5	8	0	0
	1730	,,	1001·4	936·7	...	33·1	26·0	21·9	27·1	48	...	4·9	...	12·4	0	4	26	3	2	3	8	4	2	4	4	1	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, Km. per hour	Wind speed (Km. p.h.).			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Telangana—*Contd.*																											
Hanamkonda	0830	269	1007·3	977·6	+1·6	30·4	24·4	21·5	25·6	59	+12	3·0	0	8·2	0	0	31	0	1	0	9	12	4	3	2	0	0
	1730	"	1002·0	973·3	...	38·7	24·0	15·2	17·8	26	...	3·9	...	6·1	0	0	30	3	1	2	11	5	0	4	4	1	0
Bhadrachallam	0830	111	1008·0	995·7	...	31·2	25·7	23 3	28·4	63	...	3·8	...	11·7	0	0	30	0	4	1	8	6	8	3	0	1	0
	1730	"	1002.0	990·0	...	37·9	24·8	18·1	19·2	34	...	5·2	...	8·7	0	1	27	0	2	2	6	9	4	0	5	3	0
Khammameth	0830	112	1007.5	995·0	...	30·7	25·8	23·6	29·2	66	...	3·9	...	7·2	0	0	30	1	0	3	17	4	2	0	3	1	0
	1730	"	1002.1	990·0	...	38·3	24·9	18·0	20·5	33	...	4·6	...	5·3	0	0	26	1	1	2	12	3	4	0	3	5	0
Rayalaseema																											
Arogyavaram	0830	701	1007·5	931·6	...	27·5	22·1	19·4	21·9	62	...	5·2	..	4.3	0	0	28	2	4	0	9	4	2	1	6	3	0
	1730	"	1002·1	927·3	...	32·6	21·5	14·9	17·6	38	...	6·0	...	6·1	0	0	31	3	5	8	10	2	2	0	1	0	0
Cuddapah	0830	130	1007.7	993·4	+0·7	33·3	26·0	22·5	27·6	55	+1	1·9	−1·3	2.7	0	0	13	1	0	4	0	0	1	7	0	18	0
	1730	"	1002·1	988·0	...	38·8	26·4	20·1	24·2	36	...	3·5	...	8·5	0	0	28	1	2	21	1	0	0	2	1	3	0
Anantapur	0530	350	1005·3	966·6	...	26·9	22·6	20·4	23·3	69	...	3·8	...	6·1	0	0	25	0	0	3	4	2	5	9	2	6	0
	0830	"	1007·0	968·5	...	29·6	23·8	20·8	24·7	59	...	3·9	..	7·5	0	0	29	2	1	2	1	2	6	13	2	2	0
	1130	,,	1005.7	967·9	...	34·4	24·4	19·0	22·5	42	...	3·2	...	8·2	0	0	29	3	3	0	1	4	4	4	10	2	0
	1730	"	1000.9	963·6	...	37·1	24·1	16·6	19 3	33	...	5·0	...	7.6	0	0	25	2	6	3	4	1	2	2	5	6	0
	2330	,,	1005.3	966·9	...	30·1	22·8	18·5	22·3	53	...	5.2	...	10·7	0	3	25	1	0	9	5	1	4	6	2	3	0
Kurnool	0830	281	1007.4	976·7	+0·9	30·7	23·3	19·3	22·8	52	−3	3·8	+0·7	9·2	0	4	20	2	1	1	4	3	5	5	3	7	0
	1730	,,	1001.4	971·3	...	37·9	23·5	14·7	17·2	27	...	5·1	...	7.5	0	2	18	0	1	3	7	1	2	2	4	11	0
Madras																											
Palayamcottai	0830	51	1008.2	1002·5	...	30·7	24·7	21·7	26·2	59	...	4·9	...	3·9	0	0	30	8	1	1	0	4	1	9	6	1	0
	1730	"	1004·5	998.9	...	33·0	24·8	20·7	24·5	50	...	5·9	...	14·8	0	6	23	1	1	4	7	6	1	6	3	2	0
Tuticorin	0830	4	1008.7	1008·3	...	30·4	25·9	24·0	29·9	70	...	2·7	...	10·0	0	1	30	4	6	2	0	3	6	6	4	0	0
	1730	"	1005.1	1004·7	...	31·2	26·9	25·1	32·1	70	...	3·3	...	22·0	0	18	13	0	0	0	11	13	2	5	0	0	0
Pamban	0830	11	1008.5	1007·2	+0·6	30·5	27·1	25·8	33·4	76	−2	3·6	+0·9	10·7	0	3	24	0	1	0	8	6	10	2	0	4	0
	1730	"	1005.3	1004·0	...	30·5	27·2	26·0	33·4	77	...	6·0	...	14·6	0	7	21	0	0	0	6	13	9	0	0	3	0
Mathurai	0830	133	1008·1	993·3	+0·3	30·0	25·2	22·9	28·0	67	+4	4·0	−0·3	3·0	0	0	31	1	15	0	11	0	1	0	3	0	0
	1730	"	1003·8	919·3	...	34·0	25·1	20·6	24·5	49	...	6·2	...	3·1	0	0	31	1	12	1	13	0	2	2	0	0	0
Nagapattinam	0830	9	1008·6	1007·5	+1·0	30·5	26·4	24·6	31·6	71	+2	4·6	+0·8	11·4	0	2	28	0	0	0	9	8	9	4	0	1	0
	1730	"	1004·9	1003·8	...	31·1	26·7	24·7	31·9	69	...	4·2	...	14·3	0	1	30	0	0	5	14	9	3	0	0	0	0
Tiruchirapalli	0230	88	1006·0	996·1	...	27·6	24·8	23·5	29·0	78	...	3·5	...	7·9	0	3	17	0	0	0	3	11	2	3	1	11	0
	0530	"	1006·4	996·4	...	26·9	24·6	23·5	28·9	82	...	4·1	...	3·9	0	2	6	0	0	0	0	3	0	5	0	23	0
	0830	"	1008·3	998·4	+0·4	29·5	25·2	23·2	28·5	69	+4	4·4	+1·0	10·0	0	4	17	0	0	0	0	8	1	12	0	10	0
	1130	,,	1007.4	997·7	...	33·6	25·6	22·0	26·2	51	...	4·5	...	10·1	0	3	24	0	0	4	1	5	3	11	3	4	0
	1730	"	1003.8	994·1	...	34·3	25·3	20·8	24·9	47	...	5·5	...	10·9	0	4	22	0	2	4	5	6	2	7	0	5	0
	2330	"	1007·6	997·6	...	28·7	25·0	23·3	28·7	73	...	3·5	...	16·2	0	8	18	0	0	1	7	13	1	4	0	5	0
Coimbatore	0830	409	1008·5	963·3	+0·4	27·3	23·6	21·8	26·2	73	−5	4·2	+0·8	9·5	0	0	30	1	1	1	5	11	10	0	1	1	0
	1730	"	1003.7	959·4	...	31·6	23·5	19·1	22·4	52	...	5·7	...	13·4	0	3	28	1	2	1	2	11	12	2	0	0	0
Coimbatore (Peelamedu Aerodrome).	0530	398	1006·6	962·2	...	24·3	23·1	22·3	27·3	89	...	4·5	...	9·7	0	2	26	0	0	2	1	8	15	2	0	3	0
	0830	"	1008·2	964·1	...	26·9	23·6	22·0	26·5	75	...	4·3	...	10·8	0	5	24	0	3	1	4	3	15	1	2	2	0
	1130	"	1007·0	963·9	...	31·0	23·9	20·5	23·2	55	...	4·7	...	12·5	0	3	27	0	3	3	6	6	8	3	1	1	0
	1730	"	1003·5	960·2	...	31·3	23·1	18·2	21·4	52	...	5·8	...	21·9	0	15	13	1	0	5	0	11	9	2	0	3	0
	2330	,,	1007·4	963·1	...	25·6	23·4	22·3	27·0	83	...	4·0	...	19·1	0	13	16	1	0	1	0	15	8	4	0	2	0
Salem	0530	278	1006·3	975·3	...	26·2	25·1	24·7	30·9	91	...	4·1	...	3·8	0	0	23	0	2	4	2	5	5	5	0	8	0
	0830	,,	1007·9	977·1	+0.1	28·8	26·4	25·3	32·6	81	+10	3·5	+0·1	5·3	0	0	30	0	3	4	4	0	13	6	0	1	0
	1130	"	1006·9	976·5	...	32·9	26·8	24·1	30·2	60	...	4·1	..	5·3	0	0	26	0	0	0	6	4	4	11	1	5	0
	1730	"	1002·7	972·5	...	34·1	28·3	26·1	33·9	64	...	5·0	...	4·2	0	0	23	0	2	8	1	7	3	2	0	8	0
	2330	"	1007·1	976·3	...	28·9	26·7	25·9	33·2	84	...	4·2	...	6·5	0	0	19	0	0	6	3	2	5	1	2	12	0
Kallakurichi	0830	127	1007·9	993·8	...	30·2	25·8	23·9	29·5	70	...	3·0	...	1·1	0	0	11	0	0	11	0	0	0	0	0	30	0
	1730	"	1003·1	989·4	...	35·4	25·6	20·9	24·7	48	...	3·9	...	2·5	0	0	21	0	3	16	1	1	0	0	0	10	0
Cuddalore	0530	12	1006·3	1005·0	...	27·0	25·5	24·9	31·4	88	...	4·4	...	1·9	0	0	10	0	0	0	2	7	1	0	0	21	0
	0830	"	1008·4	1007·1	+1·2	30·5	26·5	24·7	31·4	72	+4	3·4	+0·1	4·4	0	0	25	0	0	0	9	12	4	0	0	6	0
	1130	"	1007·7	1006·4	...	33·2	27·2	24·7	31·3	64	...	4·1	...	9·7	0	0	31	0	0	1	28	2	0	0	0	0	0
	1730	"	1004·4	1003·1	...	30·8	27·2	25.8	33·2	74	...	3·5	...	10·8	0	0	31	0	0	4	25	2	0	0	0	0	0
	2330	,,	1007·4	1006·1	...	28·5	26·6	5·7	33·2	83	...	3·3	...	6·9	0	0	25	0	0	0	20	4	1	0	0	6	0
Vellore	0530	214	1006·3	982·4	...	26·6	23·7	22·2	27·0	77	...	5·8	...	3·5	0	0	17	1	1	0	2	8	2	2	1	14	0
	0830	"	1007·7	984·0	+1·4	29·9	24·3	21·8	25·9	62	−1	4·3	+1·7	5·9	0	0	24	2	1	0	4	6	5	3	3	7	0
	1130	"	1006·7	983·3	...	34·6	25·0	20·3	23·9	44	...	4·2	...	6·8	0	0	25	0	3	2	5	6	3	4	2	6	0
	1730	"	1002·9	979.7	...	35·2	24·1	17·7	21·0	39	...	4·5	...	6·7	0	1	28	1	2	4	10	9	0	2	1	2	0
	2330	"	1007·5	983·7	...	28·9	24·1	21·8	26·0	66	...	5·0	...	8·3	0	2	22	0	0	0	6	15	2	0	1	7	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed. Km per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Madras	0230	16	1005·9	1004·2	...	28·3	26·1	25·2	32·0	83	...	3·2	...	7·2	0	0	29	0	0	0	3	22	4	0	0	2	0
	0530	,,	1006·3	1004·6	...	27·8	25·9	25·1	31·9	85	...	4·3	...	5·5	0	0	24	0	0	0	0	16	7	1	0	7	0
	0830	,,	1008·1	1006·4	+1·5	30·7	26·4	24·5	30 8	70	+10	4·1	+0·7	12·2	0	0	30	0	0	0	1	19	8	2	0	1	0
	1130	,,	1007·3	1005·6	...	35·3	26·8	23·1	28·1	50	...	3·3	...	12·8	0	0	31	0	0	0	9	15	5	1	1	0	0
	1730	,,	1004·4	1002·7	...	32·2	26·9	24·5	31·2	65	...	3·1	...	17·3	0	6	25	0	0	1	15	13	1	0	1	0	0
	2330	,,	1007·3	1005·6	...	29·1	26·4	25·3	32·1	80	...	2·6	...	11·0	0	2	28	0	0	0	7	20	3	0	0	1	0
Madras(Nungambakkam)	0830	6	1007·7	1007·0	...	31·0	26·5	24·6	31·1	69	...	5·7	...	6·6	0	0	30	0	0	0	1	16	12	1	0	1	0
Coastal Mysore																											
Karwar	0830	4	1008·6	1008·2	−0·4	28·4	25·4	23·9	30·3	77	...	5·1	...	3·2	0	0	15	1	8	0	0	0	1	0	5	16	0
	1730	,,	1005·7	1005·3	...	30·5	26·3	24·6	31·0	71	...	4·6	...	11·2	0	0	31	1	0	0	0	0	3	10	17	0	0
Honavar	0830	26	1009·1	1006·2	+0·2	28·0	25·4	24·2	30·3	80	+3	5·4	0	0·8	0	0	11	1	0	6	0	2	0	2	0	20	0
	1730	,,	1006·2	1003·2	...	30·9	26·5	24·5	31·1	69	...	5·6	...	5·7	0	0	30	0	0	0	0	2	22	4	2	1	0
Mangalore	0230	22	1007·0	1004·5	...	27·3	24·9	23·7	29·5	81	...	5·4	...	6·2	0	0	23	3	6	5	1	0	0	0	8	8	0
	0530	,,	1007·1	1004·6	...	27·0	24·9	23·9	29·9	84	...	6·2	...	8·1	0	2	27	5	6	11	3	0	0	1	3	2	0
	0830	,,	1008·9	1006·4	−0·6	28·9	25·5	23·9	29·9	76	+2	5·0	+0·1	5·7	0	0	30	6	6	9	2	1	3	0	3	1	0
	1130	,,	1008·8	1006·4	...	30·8	26·1	24·1	29·9	68	...	4·5	...	8·9	0	0	30	3	1	0	0	0	2	11	13	1	0
	1730	,,	1005·9	1003·4	...	30·6	26·2	24·3	30·4	69	..	5·1	...	12·2	0	3	28	4	0	0	0	0	3	8	16	0	0
	2330	,,	1008·4	1005·9	...	28·0	25·0	23·7	29·2	78	...	6·1	...	10·5	0	3	27	6	2	6	2	0	0	2	12	1	0
Mangalore (Bajpe Aerodrome)	0530	103	1007·4	995·8	...	25·8	24·3	23·5	29·1	88	...	6·0	...	1·0	0	0	5	2	1	1	1	0	0	0	0	26	0
	0830	,,	1009·2	997·6	...	28·2	25·2	23·8	29·6	77	...	5·6	...	5·7	0	0	20	4	0	11	2	0	1	1	1	11	0
	1730	,,	1006·2	994·7	...	29·5	25·7	24·0	29·8	73	...	5·3	...	13·0	0	0	29	3	0	0	0	0	2	12	12	2	0
Mysore (North)																											
Bidar	0830	664	1006·5	934·9	...	29·4	20·6	14·9	17·7	46	−1	4·9	+2·5	15·3	0	6	25	3	0	2	1	1	5	10	9	0	0
	1730	,,	1000·6	930·7	...	35·4	21·2	12·1	14·7	27	...	6·2	...	11·8	0	3	27	1	6	3	6	5	2	2	5	1	0
Gulbarga	0830	458	1006·7	956·8	+0·4	30·9	21·1	15·0	17·9	41	−10	4 8	+2·7	13·2	0	3	28	2	7	4	2	1	6	3	6	0	0
	1730	,,	1000·5	952·0	...	37·5	22·2	13·0	15·5	25	...	7·1	...	13·8	0	4	27	6	2	5	4	5	3	3	3	0	0
Bijapur	0830	594	1007·1	942·6	+0·1	28·8	21·3	16·6	19·8	51	−8	4·3	+1.9	10·4	0	0	30	8	4	0	0	1	5	3	9	1	0
	1730	,,	1000·6	937·9	...	36·0	23·0	15·4	18·6	35	...	6 0	...	5·5	0	0	25	6	2	3	2	3	3	2	4	6	0
Belgaum	0830	781	1009.4	924.0	+0·6	23·1	20·1	18·9	23·5	78	+3	...	...	1.8	0	0	16	0	1	0	1	3	7	3	1	15	0
	1730	,,	1004·9	921·5	...	29·1	22·6	19·6	22·6	58	...	...	...	5·9	0	0	29	1	0	0	1	1	10	12	4	2	0
Belgaum (C. T. O.)	0830	753	1008·6	926·6	+0·1	25·1	21·7	19·0	23·5	71	−5	4·5	+1·3	4·6	0	0	27	1	2	3	2	2	4	8	5	4	0
	1730	,,	1003·5	923·1	...	29·7	23·3	20·2	24·0	59	...	4·7	...	11·6	0	0	31	0	1	0	0	1	6	18	5	0	0
Belgaum (Sambre Aerodrome)	0530	761	1007·6	923·9	...	21·3	19·7	18·8	21·7	86	...	4·3	...	3·8	0	0	19	1	0	0	1	1	2	13	1	12	0
	0830	,,	1008·4	925.6	...	25·0	20·8	18·5	21·6	69	...	4·7	...	5·2	0	0	23	0	2	0	2	0	2	13	4	8	0
	1130	,,	1006·3	925·3	...	31·5	21·3	15.1	17·9	41	...	3·6	...	13·3	0	7	23	5	9	0	2	0	0	8	6	1	0
	1730	,,	1003·0	922·1	...	30·7	22·6	18·4	21·4	52	...	4·9	...	16·6	0	10	19	1	1	0	1	3	3	18	2	2	0
Gadag	0830	650	1007·9	937·2	+0.4	26·8	24·3	23·5	28·6	83	+9	3·5	+0·5	7·0	0	0	31	0	0	1	1	0	4	21	4	0	0
	1730	,,	1002·0	933·1	...	33·4	27·7	25·5	32·6	67	...	4·8	...	6·7	0	0	29	0	1	6	3	1	3	13	2	2	0
Gadag (P. B. O.)	0530	661	1006·8	934·3	...	23·8	21·5	20·4	24·0	82	...	4·6	...	11·2	0	1	25	1	0	0	0	2	13	10	0	5	0
	0830	,,	1007·6	935·7	...	26·8	22·6	20·9	24·2	71	...	3·9	...	9·5	0	0	24	3	3	5	1	2	4	4	3	7	0
	1130	,,	1006·3	935·6	...	31·9	23·1	19·5	21·7	49	...	2·8	...	9·4	0	0	27	4	3	3	0	1	3	9	4	4	0
	1730	,,	1002·1	931·8	...	32·6	22.2	17·3	19·0	44	...	5·8	...	9·8	0	1	24	3	3	5	1	2	4	4	3	5	0
	2330	,,	1007 3	935·1	...	25·8	22·4	21·1	24.9	76	...	4·1	...	16·8	0	6	24	0	0	1	0	1	14	13	1	1	0
. aichur	0830	400	1007.3	963·6	+0·6	30.4	24.8	21·9	26·8	62	+6	3·6	+1·3	11·2	0	1	30	4	4	2	2	2	7	5	5	0	0
	1730	,,	1001·4	958·9	...	37.5	25·8	19·5	23·5	37	...	5·1	...	9·5	0	1	28	2	5	5	4	4	4	4	1	2	0
Mysore (South)																											
Bellary	0830	449	1007·4	958·2	+0·2	29.0	25.0	22·9	28·4	71	+16	4.5	+1·1	4·7	0	0	21	1	1	0	3	0	2	0	14	10	0
	1730	,,	1001·5	953·4	...	35.1	26.9	23.3	28·7	53	...	4·6	...	7·6	0	0	28	0	2	0	9	1	5	1	10	3	0
Chitaldrug	0830	733	1008·0	928.1	−0·1	25·3	22·0	20.6	24.0	74	+3	4.6	+1·4	5.0	0	0	26	0	0	0	0	3	6	17	0	5	0
	1730	,,	1002·1	924.4	...	32·1	23·0	18·3	21.3	46	...	5·8	...	5.7	0	0	26	1	0	4	1	0	1	13	6	5	0
Shimoga	0830	571	1008·7	945.8	...	25·4	22.6	21.4	25.5	78	...	4.9	...	5·4	0	0	15	0	0	1	0	3	6	5	0	16	0
	1730	,,	1003.3	941·9	...	30·5	23·3	20·2	24·1	57	...	5.5	...	4·7	0	0	26	0	1	1	2	5	8	7	2	5	0
Balehonnur	0830	..	..	..	...	21.5	20·7	20.0	24·0	91	+5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hassan	0830	960	1502·6	904·9	0	22.9	21·2	20·4	24·0	86	+11	4.8	+1·0	6.9	0	0	30	3	1	2	2	0	4	14	4	1	0
	1730	,,	1480·3	901.8	...	27.0	21·7	19.1	22·1	64	...	6·1	..	6.7	0	0	30	3	0	1	2	0	4	15	5	1	0
Mysore	0830	767	1008·8	925·0	−0·1	24.3	21.9	20·6	24·5	80	+5	4.0	−0·6	8.4	0	0	31	0	0	0	1	11	15	0	4	0	0
	1730	,,	1003·4	921·5	...	30.2	21.4	16.5	19.2	49	...	4·8	...	10.1	0	0	31	3	5	3	0	8	8	3	1	0	0

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Kms.p.h.): 62 or more	Wind speed (Kms.p.h.): 20 to 61	Wind speed (Kms.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (South)—*Contd.*																											
Bangalore (Central Observatory).	0230	921	1479·9	906·6	...	23.3	20·4	18.8	22·0	77	...	3·6	...	6·9	0	0	30	1	1	3	5	4	6	8	2	1	0
	0830	"	1503·7	908·7	+0·1	25.1	21·8	20·0	23.4	74	+1	5.2	+1.3	9.3	0	0	29	1	1	2	5	3	4	12	1	2	0
	1130	"	1508·9	908.3	...	29.7	22·0	18·0	20.7	52	...	4.2	...	7.9	0	0	29	2	2	3	3	5	4	5	5	2	0
	1730	"	1479·8	905·4	...	29.3	20.6	15.1	17·7	48	...	6.2	...	9·3	0	1	30	3	2	7	7	2	2	3	5	0	0
Bangalore (Aerodrome)	0530	897	1482·5	909·5	...	22.8	20.4	19.1	22·2	80	...	4·7	...	7·1	0	0	21	0	0	2	2	5	3	8	1	10	0
	0830	"	1504.4	911·3	...	25.2	21·6	19·8	23.1	73	...	4·6	...	10·2	0	1	24	1	1	2	2	2	6	9	2	6	0
	1130	"	1510.4	911.0	...	29.7	21.8	17·9	20·4	50	...	4·4	...	12.1	0	0	26	5	2	4	2	3	2	6	2	5	0
	1730	"	1480·1	907·8	...	30.0	20·6	14·6	17·3	45	...	6·1	...	14·1	0	6	22	4	2	9	5	1	1	3	3	3	0
	2330	"	1498·1	910·7	...	25·0	20·5	17·9	20·9	67	...	4·8	...	8·7	0	1	21	1	1	2	7	0	4	7	0	9	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1007·5	1007·0	...	26·7	24·8	23·9	29·8	85	...	5·7	...	8·1	0	0	30	9	12	6	1	0	0	0	2	1	0
	0830	"	1009·1	1008·6	−0·1	28·4	25·6	24·5	30·6	80	0	4·7	−0·3	7·8	0	0	31	4	6	4	0	1	2	0	14	0	0
	1130	"	1009·2	1008·7	...	31.1	26·8	25·0	31·8	71	...	5·4	...	12·9	0	1	29	2	0	1	2	0	5	9	11	1	0
	1730	"	1006·6	1006·1	...	30·6	27·0	25·4	32.7	75	...	5·2	...	15·1	0	4	27	0	1	1	0	1	1	14	13	0	0
	2330	"	1008·7	1008·2	...	28·0	25.6	24·6	30·9	82	...	6·0	...	13·5	0	1	30	7	6	0	1	0	0	2	15	0	0
Palghat	0830	97	1009·0	998·0	...	27·6	25·2	24·1	30·0	82	...	5·0	...	10·4	0	0	30	0	0	1	1	0	0	27	1	1	0
	1730	"	1005·3	994·5	...	30·8	25·5	23.1	28·4	65	...	5·6	...	16·9	0	5	26	0	0	0	0	0	1	28	2	0	0
Fort Cochin	0830	3	1009·1	1008·8	−0·5	28·4	25·9	24·5	31·4	81	+1	6·6	+1·6	1·7	0	0	12	2	4	3	1	0	0	1	1	19	0
	1730	"	1006·1	1005·8	...	28.9	26·1	24·9	31·4	80	...	6·8	...	10·8	0	6	17	0	1	0	0	0	2	10	10	8	0
Cochin (Naval Air Station)	0230	3	1007·9	1007·6	...	26·7	25·1	24·4	30·5	88	...	5·5	...	4·5	0	1	20	5	0	3	4	2	0	2	5	10	0
	0530	"	1007·8	1007·5	...	25·8	24·8	24·1	30·5	91	...	5·4	...	4·3	0	2	17	1	5	8	5	0	0	0	0	12	0
	0830	"	1009·1	1008.8	...	28·2	25·7	24·7	31·0	82	...	5·5	...	4·9	0	0	25	5	5	9	2	3	0	0	1	6	0
	1130	"	1009·1	1008·8	...	30·1	26·5	24·9	31·7	75	...	5·3	...	12·2	0	4	26	3	0	0	3	1	0	10	13	1	0
	1730	"	1006·8	1006·5	...	29·1	26·1	24·8	31·2	79	...	6·4	...	12·3	0	4	25	1	0	1	1	3	1	10	12	2	0
	2330	"	1009·0	1008·7	...	27·3	25·3	24·3	30·7	85	...	5·8	...	4.5	0	0	23	1	5	5	3	0	0	2	7	8	0
Alleppey	0830	4	1008·9	1008·5	...	28·8	26·8	25·4	32·5	83	...	6·2	...	9·0	0	0	31	3	4	5	8	1	2	1	7	0	0
	1730	"	1006·3	1005·9	...	29·7	26·7	25·5	32·5	79	...	6·2	...	22.7	0	22	9	2	0	1	1	0	0	9	18	0	0
Punalur	0830	34	1009.2	1005.3	..	26.5	25.1	24.6	30.7	90	...	4.3	..	5.1	0	0	17	1	6	1	2	3	2	0	2	14	0
	1730	"	1006.3	1002.7	...	29·4	25.8	24.1	30.3	74	...	5.6	..	4.0	0	0	28	2	2	2	1	5	9	3	4	3	0
Trivandrum	0230	64	1007·2	999·9	...	25·8	24·9	24 5	30.9	93	...	5·4	...	5·7	0	0	30	9	8	2	2	0	1	0	8	1	0
	0530	"	1007.3	1000·0	...	25·5	24·7	24·4	30·4	94	...	5·9	...	6·7	0	0	30	14	6	1	1	0	0	1	7	1	0
	0830	"	1009·2	1001·9	−0·2	27·5	25·7	24.9	31·4	86	+5	5·2	−0·2	8·5	0	1	28	2	1	0	2	1	1	0	22	2	0
	1130	"	1008·9	1001·6	...	30·2	26·1	24·4	30·5	72	...	6.3	...	10·8	0	2	28	2	0	1	1	0	5	4	17	1	0
	1730	"	1006·5	999·2	...	28·4	26·0	25.0	31·7	82	...	6·4	...	10·1	0	2	26	3	0	0	1	1	2	3	18	3	0
	2330	"	1008·9	1001·6	...	26·2	25·2	24·8	31·2	92	...	5·6	...	5·3	0	0	27	10	3	0	5	0	0	0	9	4	0
Trivandrum (Aerodrome)	0830	8	1009·3	1008·4	...	28·8	26·1	25·0	31·9	80	...	5·2	...	8·9	0	2	22	12	2	0	1	0	1	2	6	7	0
Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1505·2	859·9	...	22·2	16·9	13·1	15·5	59	...	5·1	...	7·1	0	0	31	1	1	1	7	0	0	3	14	0	4
	1730	"	1490·4	858·5	...	22·8	17·7	14·7	16·6	62	...	5·8	...	4·3	0	0	31	7	0	0	0	1	9	10	2	0	2
Aijal*	0830	1097																									
	1730	"																									
Shillong	0830	1500	1480.3	848·3	+0·5	22·0	17·0	13·6	15·7	60	−8	2·9	−2·1	9·5	0	0	28	0	0	0	0	4	19	5	0	3	0
	1730	"	1444·8	844·8	...	21·7	17·3	14·4	16·5	65	...	4·0	...	5·0	0	0	21	0	0	0	0	3	15	3	0	10	0
Cherrapunji	0830	1313	1480·1	866·8	0	19·3	18·6	18·1	21·0	93	+14	...	...	4·2	0	0	31	0	0	0	0	0	31	0	0	0	0
	1730	"	1452·4	863·9	...	20·3	19·3	18·4	21·6	90	...	...	...	4·2	0	0	31	0	0	0	0	0	31	0	0	0	0
Darjiling (Raj Bhawan)	0830	2127	1491·5	790·0	+2·5	18·0	15·4	13·7	15·7	78	−2	4·1	−1·5	1·4	0	0	14	2	0	0	0	0	6	4	2	17	0
	1730	"	1467·1	787·6	...	16·9	14·5	13·0	14·8	79	...	4·8	...	6·8	0	2	22	0	0	0	0	0	16	8	0	7	0
Kalimpong	0830	1209	1480·9	877·6	+0·8	21·5	19·5	18·3	21·4	83	+4	1·8	−2·4	3·0	0	0	30	0	0	0	0	0	0	0	30	1	0
	1730	"	1468·2	876·1	...	21·7	19·6	18·4	21·1	82	...	2·8	...	3·0	0	0	31	0	0	0	0	0	31	0	0	0	0
Katmandu	0830	1337	1483·9	864·4	...	24·7	16·8	11·4	13·6	44	−23	1·9	−2·6	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	"	1455·2	861·5	...	27·5	17·9	11.1	13·2	40	...	3·7	...	0·7	0	0	4	1	0	0	0	0	1	1	1	27	0
Mukteswar (Kumaon)	0830	2311	3140·2	772·2	+0·4	17·0	9·9	3·2	8·1	41	−4	2·1	+0·1	10·9	0	2	26	0	2	4	1	0	0	11	10	3	0
	1730	"	3131·8	770·6	...	20·2	11·8	4·5	8·4	37	...	3·3	...	19·5	0	15	15	0	1	1	0	0	1	14	13	1	0
Nainital	0830	1953	1462·4	803·5	...	20·4	12·3	5·3	9·3	39	...	2·5	...	6·1	0	0	27	5	7	5	3	0	0	4	3	4	0

(R) Register not received.

+Observations for 30 days.

*Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C.: Dry bulb	Mean temperature in °C.: Wet bulb	Mean temperature in °C.: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations excluding Kashmir—*Contd.*																											
Nainital—*Contd.*	1730	1953	1441·7	801·9	...	22·0	13·1	5·3	9·6	35	...	2·5	...	6·5	0	0	30	11	2	7	1	0	0	8	1	1	0
Tapoban	0830	...	...	...	...	13·7	8·8	5·0	8·6	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Badrinath	0830						Closed	during	winter	months																	
Lokpal	0830	...	...	...	...	−3.7	−5·1	7·8	3.3	73	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mussoorie	0830	2042	1458·9	794·9	−1·9	19·4	13·7	9·9	11·8	56	+11	2·5	+0·3	2·1	0	0	18	7	3	0	0	2	1	1	4	13	0
	1730	"	1445·9	793·9	...	20·5	15·0	11·4	13·5	57	...	3·7	...	3·6	0	1	26	2	0	0	4	10	10	1	0	4	0
Simla	0830	2202	1465·9	780·7	+0·2	17·7	10·1	2.5	7·7	38	+3	3·7	+1.6	3·0	0	0	26	3	3	5	5	4	2	1	3	5	0
	1730	"	1455·8	779·9	...	19·0	11·4	4·6	8·7	42	...	3·9	...	5·5	0	1	29	3	3	1	0	7	9	2	5	1	0
Dalhousie	0830	1959	1419·3	798·5	...	17·5	10·4	4·7	8·1	45	...	2·1	...	0·3	0	0	2	0	2	0	0	0	0	0	0	29	0
	1730	"	1424·4	799·5	...	20·0	13·5	8.9	11·5	49	...	2·0	...	0·7	0	0	3	0	3	0	0	0	0	0	0	28	0
Dharamshala	0830	1212	1499·0	878·6	...	23·2	16·9	12·2	14·7	54	...	3·7	...	1·4	0	0	13	3	5	2	0	1	1	0	1	18	0
	1730	"	1496·0	877·9	...	25.6	18·7	14·1	16·4	51	...	3·6	...	3·0	0	0	25	0	2	0	4	0	7	9	3	6	0
Abu	0830	1195	1494·0	879·7	+0·5	23·9	16·2	10·2	12·0	45	+9	1·6	+0·8	3·2	0	0	19	2	0	1	0	1	7	7	1	12	0
	1730	"	1481·0	878·0	...	28·8	17·0	7·7	9·6	28	...	2·4	...	7·4	0	2	21	0	1	0	0	3	12	4	3	7	0
Pachmarhi	0830	1075	1506·4	892·6	+1·1	27·9	17·8	10·1	13·1	35	0	1·5	−0·5	8·3	0	1	27	2	2	1	0	2	10	11	0	3.	0
	1730	"	1479·8	889·2	...	33·2	19·2	9·1	11·9	24	...	2·9	...	10·8	0	1	29	0	3	1	0	0	0	17	9	1	0
Mahabaleswar	0830	1382	1508·3	862·6	+0·7	24·1	16·3	9·6	12·9	47	−6	3·7	+0·8	14·5	0	4	27	6	17	2	0	1	1	3	1	0	0
	1730	"	1483·0	860·0	...	26·4	20·6	17·2	19·9	59	...	3·3	...	10·5	0	0	31	0	0	0	2	0	2	0	27	0	0
Nandi Hills	0830	...	...	...	...	22·6	18·7	16·4	18·8	70	...	6·5	...	25·6	0	29	2	2	3	1	0	2	6	14	3	0	0
Mercara	0830	1152	1499·4	885·1	+0·2	20·9	19·6	18·9	21·7	89	+5	4·1	−1·0	7·2	0	0	29	1	1	2	0	0	0	12	11	2	2
	1730	"	1481·5	882·8	...	23·7	21·3	20·0	23·5	81	...	4·3	...	6·0	0	0	31	0	0	1	0	0	0	15	15	0	0
Kodaikanal	0830	2343	3158·4	771.4	+0·6	16·2	12·6	9.7	12·3	69	+6	4·0	+0·4	8·0	0	3	25	2	8	3	7	2	2	2	2	3	0
	1130	"	3168.9	771.6	...	18.7	14.4	11·3	13·9	66	...	4·7	...	9.1	0	2	28	1	13	2	6	2	1	2	3	1	0
	1730	"	3141.7	769.8	...	15.9	14·0	12.7	14.7	82	...	6 4	...	6·6	0	1	25	1	2	1	11	7	0	1	3	5	0
Ootacamund	0830	2249	1500.4	779·6	+0.3	16·4	12·9	10·4	12·6	70	+6	3.8	−0.1	0·9	0	0	8	0	5	3	0	0	0	0	0	23	0
	1730	"	1478.9	777.8	...	17·1	14·4	12·8	14·5	77	...	6·1	...	1·0	0	0	10	0	2	7	0	1	0	0	0	21	0
Coonoor	0830	1747	1503·4	826·9	...	20·5	16·2	13·7	15·2	66	+9	3.6	−0 6	2·0	0	0	13	2	0	4	1	4	1	0	1	18	0
Sikkim																											
Lachen	0830	..	..	..	..	12·2	10·9	10·0	12.1	85	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Yatung (Chumbi)	0830	...	...	...	...	12·2	11·5	10·8	13.0	93	+10	0.3	−3·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lhasa	0830	3685	3091.2	653·4	...	14·8	8·1	1·6	7·1	42	...	3.6	...	(b) 1·1	0	0	5	0	1	0	1	1	2	0	0	24	0
Ceylon																											
Colombo	0830	7	1009·8	1008·9	−0·1	27·6	25·7	24·7	31·4	86	+1	6·6	+0·7	7·6	0	0	29	0	3	5	8	3	7	2	1	2	0
	1730	"	1007·4	1006·5	...	28·5	24·9	24.0	28·2	79	...	6·9	...	9·7	0	0	30	0	1	1	3	4	13	7	1	1	0
Trincomalee	0830	3	1008·8	1008·5	+1·4	29·3	25.6	24·1	30·6	74	−5	5·0	+1·6	10·3	0	1	27	0	1	0	2	9	15	1	0	3	0
	1730	"	1006·0	1005·6	...	30·0	26·1	24·5	31·0	74	...	5·9	...	14·4	0	9	21	0	0	10	8	3	9	0	0	1	0
Batticoloa	0830	3	1009.1	1008·8	...	28.8	24·8	22·8	27·9	70	...	5·3	...	6·3	0	0	22	0	2	0	2	8	4	3	3	9	0
	1730	"	1006·3	1006·0	...	29·7	25·0	22·6	27·8	67	...	5.7	...	13·9	0	8	21	0	0	3	9	8	5	2	2	2	0
Hambantota	0830	15	1090·8	1008·0	+1·1	28·0	25·8	24·8	31·3	83	−3	5·3	+1·4	14·0	0	9	22	3	0	0	0	0	6	17	5	0	0
	1730	"	1006·9	1005·2	...	28·6	26·1	25·0	31·9	81	...	6.5	...	23·6	0	22	8	0	0	0	0	3	17	10	0	1	0
Mannar	0830	4	1008·9	1008·5	...	29·1	26·6	25·6	32·8	81	...	5·5	...	13·1	0	4	27	0	0	1	9	13	8	0	0	0	0
	1730	"	1005·9	1005·5	...	30·5	26·7	25·3	32·5	74	...	6·2	...	14·0	0	5	26	0	0	0	2	4	23	1	1	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																											
Damodar Catchment																											
Bokaro	0830	239	1003·7	977·8	..	35·0	21·2	10·9	13·8	26	...	2·5	...	8.0	0	2	29	0	0	1	1	1	17	4	7	0	0
	1730	"	998·5	973·0	...	39·6	20·7	4·0	9.0	13	...	3·3	...	13·3	0	4	26	3	0	1	0	1	1	6	18	1	0
Hazaribagh	0830	615	1003·0	936·7	...	29·7	18·9	11·7	14·0	34	...	1·3	...	6·0	0	1	27	2	0	1	0	1	2	13	9	3	0
	1730	"	1010·9	935·8	...	30·4	18·9	11·1	13·6	32	...	1·2	...	13·1	0	0	31	0	1	0	0	3	3	14	10	0	0
Tilaiya	0830	...	...	...	...	33·9	20·4	10·0	12·9	23	...	2·1	...	6·2	0	0	31	0	0	3	0	0	2	23	3	0	0
	1730	...	...	...	...	38·3	20·6	5·7	9·7	11	...	1·7	...	8·1	0	0	31	2	0	2	0	0	0	17	10	0	0
Ramgarh	0830	...	...		...	35·4	21·3	11·3	13·8	25	...	3·0	...	5·2	0	0	26	0	0	1	0	0	3	12	10	5	0
	1730	...	..	...	..	39·0	21·5	8·1	11·4	17	...	3·7	...	7·8	0	0	30	0	0	0	1	0	0	15	13	1	1
Panchet Hills	0830	...	...	...	...	36·0	22·8	14·3	16·9	30	...	2·0	...	5·2	0	0	31	0	0	3	0	0	18	8	2	0	0
	1730	...	...	...	...	40·4	22·9	10.8	13.6	19	...	3·3	...	6·7	0	0	31	5	1	1	2	0	3	8	11	0	0
Durgapur	0830	...	...	...	...	35·9	25·1	19·2	22·9	40	...	1·5	...	14·0	0	8	22	4	12	2	1	0	0	10	1	1	0
	1730	..	...	...	...	40·8	23·9	13·3	15·8	21	...	1·7	...	17·5	0	8	23	0	13	0	2	1	0	15	0	0	0

(b) Mean of 29 days.

(e) Mean of 26 days.

(f) Mean of 25 days.

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mb.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms per hour	Wind speed (Km. p.h.): 62 or more.	Wind speed (Km. p.h.): 20 to 61.	Wind speed (Km. p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mahanadi Catchment																											
Baramul	0830	64	1006·4	999·3	...	33·7	25·1	20·8	25·2	48	...	1·2	...	1·1	0	0	11	0	4	1	2	3	1	0	0	20	0
	1730	,,	1002·1	995·2	...	38·0	24·4	16 3	17·6	31	...	3·1	...	2·6	0	0	16	0	3	0	4	0	8	0	1	15	0
Hirakud	0830	159	1005·3	987·9	...	34·2	23·5	17·3	20·1	38	...	1·9	...	3·9	0	0	25	0	0	0	1	4	12	6	2	6	0
	1730	...	999·8	982·7	...	39·4	24·0	14·7	16·9	25	...	2·9	...	3·3	0	1	21	0	1	0	0	0	8	9	4	9	0
Khijrawan	0830	...	...	...	...	33·1	23·5	18·1	21.5	42	...	2·3	...	9.3	0	0	31	0	1	2	1	2	13	11	1	0	0
	1730	...	...	...	...	35·4	22·5	13·9	16·9	30	...	3·3	...	7·5	0	1	26	1	0	4	2	4	7	7	2	4	0
Sonepur	0830	...	...	...	...	36·5	28·3	25·3	32·5	54	...	...	...	12·6	0	4	24	1	0	0	0	6	13	6	2	3	0
Ginabahor	0830	...	...	...	...	30·8	21·3	12·2	15·1	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Narbada Catchment																											
Punasa	0830	...	...	...	...	32.2	22·2	15·9	18·7	39	...	(e) 1·7	...	6·2	0	1	22	5	0	0	0	0	6	9	3	8	0
	1730	...	...	...	...	40·4	23·7	12·9	15·7	21	...	(f) 3·0	...	11·7	0	4	26	2	0		0	0	9	14	3	1	1
Bagra Tawa	0830	...	...	...	...	33·3	20·7	11·4	13·8	28	...	1·0	...	6·8	0	0	27	0	2	0	3	1	10	9	2	4	0
	1730	...	...	...	...	38·6	21·6	9·6	12·1	18	...	1·3	...	6·7	0	0	27	1	2	0	0	1	14	7	2	4	0
Thikri	0830	...	...	...	...	31·3	26·8	24·9	32·0	70	...	2·7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tapti Catchment																											
Nandurbar	0830	...	...	...	...	29·7	22·5	18·6	21·3	54	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sabarmati Catchment																											
Jhadoi (R)	0830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dharoi	0830	...	...	...	...	29.4	21·5	16·4	19·2	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	37·8	22.5	12·1	14·8	23	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
Ganga Catchment																											
Mukhim	0830	...	...	...	...	18.0	12·3	7.1	10.6	51	...	3.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	20.6	12.3	(a) 5.0	(a) 8.9	(a) 38	...	3.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tehri	0830	...	...	...	...	23·7	16.4	11.7	13.4	49	...	2.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	31.6	18.3	7.9	11.3	27	...	3.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gandak Catchment																											
Gorkha	0830	...	..	...	...	25.0	(h) 17.7	(h) 12.8	(h) 15·0	(h) 47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	27.7	(c) 18.4	(c) 12.4	(c) 14·7	(c) 39	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pokhara	0830	...	...	...	...	27·7	19·7	15·9	17·5	48	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	27·3	19·6	15·0	17·2	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nawakot	0830	...	...	...	...	26·9	19·3	14·9	16·9	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	(a) 29·1	(a) 19·1	(a) 13·0	(a) 14·8	(a) 37	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gogra Catchment (Trans Himalayan Region).																											
Dailekh	0830	...	...	...	...	24·1	16·4	7·4	11·2	35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	26·7	16·0	6·2	10·4	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Gogra Catchment																											
Dandeldhura	0830	...	...	...	...	20·0	(a) 13·7	9·0	11·6	49	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	22·5	(d) 11·5	1·0	6·5	24	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Munsiyari	0830	...	...	...	...	19·9	13·3	8·3	11·1	47	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	20·5	13·3	7·7	10·6	44	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Sallyana	0830	...	...	...	...	25·6	15·0	5·9	9·4	29	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	24.3	14·3	5·4	9·1	30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Butwal	0830	...	...	...	...	30·8	21·2	15.1	17·3	40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	37·1	22·6	13·4	15·5	25	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...
Bagmati Catchment																											
Katmandu	0830	1333	1469·1	864·4	...	22·8	16·2	11·5	13·6	51	...	1·8	...	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1130	,,	1463·1	863·6	...	29·7	17·5	8·0	11.1	28	...	2·0	...	2·0	0	0	16	1	0	1	0	2	3	7	2	15	0
	1730	,,	1439·5	861·3	...	26·5	17·0	10·1	12.5	39	...	3·4	...	0·8	0	0	6	0	0	0	0	0	0	1	5	25	0
Kosi Catchment																											
Chautara	0830	...	...	...	...	22·2	16·9	13·9	15·9	59	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	26·0	16·2	9·8	12·1	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Okhaldhunga	0830	...	...	...	...	21·3	14·9	10·5	12·8	52	...	2·2	...	3·4	0	0	17	0	1	0	2	2	6	5	1	14	0
	1130	...	...	...	...	23·6	14·9	8·9	11·3	42	...	2·8	...	6·4	0	0	29	1	0	0	0	2	9	13	6	2	0
	1730	...	...	...	...	20·9	13·9	8·4	11·3	48	...	4·2	...	9·6	0	0	30	1	0	1	0	0	5	16	7	1	0

*Data not available. (h) Mean of 23 days. (c) Mean of 28 days. (a) Mean of 30 days. (R) Register not received.
(d) Mean of 27 days. (d) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of mean sea standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	NS	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kosi Catchment—*Contd.*																											
Barahkshetra . .	0830	146·9	1004·1	987·9	...	30·9	21·9	17·1	19·6	47	...	1·6	...	4·3	0	0	13	1	1	2	1	0	2	6	0	18	0
	1130	...	1002·8	986·8	...	34·0	24·2	19·4	22·1	42	...	3·1	...	17·8	0	13	16	0	0	0	0	0	0	11	18	2	0
	1730	...	998.9	983·2	...	35·1	23·2 (b)	16·4	18·6	31	...	2·7	...	8·0	0	1	23	1	2	1	0	1	9	10	0	7	0
Angbung . . .	0830	...	...	...	...	22·0	18·6	16·7	19·0	71	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taplejung . . .	0830	...	...	...	...	20·6	15.5	12.5	14.4	60	...	3·1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1130	...	...	...	...	23·3	16·3	11·6	14·0	50	...	4.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	20·5	15·7	12·5	14·7	63	...	5·7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Taplethok . . .	0830	...	...	...	...	18·0	15·3	13·3	15·5	75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wallungchung Gola *	0830	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*	1730		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bhojpur . . .	0830	...	...	...	...	21·7	17·7 (a)	18·4 (a)	17·7 (a)	68 (a)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	22·1	16·7 (b)	13·6 (b)	15·6 (b)	58 (b)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chainpur . . .	0830	...	...	...	...	24·5	18·4	14·4	16·7	54	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tista Catchment																											
Gangtok . . .	0830	1812	1468·3	817·0	...	17·9	15·4	13·8	15·8	78	...	3·3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1130	„	1460·6	816·5	...	21·0	17·1	15·2	17.5	71	...	4.2	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...
	1730	„	1438·8	814·2	...	17·8	16·0	14·8	17·0	86	...	6.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Geyzing . . .	0830	...	...	...	...	20·2	17·4	15·7	19·3	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1730	...	...	...	...	20·4	17·5	15.9	18·2	76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

MONTHLY MEANS OF UPPER WINDS, MAY 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

During the month, observations of velocity and direction of upper winds were made at 53 stations in India. Out of these, 43 stations recorded observations by means of pilot balloons only and the remaining 10 stations made some observations by means of radiowind method and the other observations by the pilot balloon method. Particulars of these stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the Table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a. m. s. l. are given under Table IV and data above 9.0 km. a. m. s. l. under Table V.

In Tables IV and V :

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0·15 km. a. g., 0·3, 0·6, 0·9, 1·5, 2·1, 3·0, 3·6, 4·5, 5·4, 6·0, 7·2, 9·0, 10·5, 12·0 14·1, 16·2, 18·0, 21·0, 24·0, 27·0, 30·0, 33·0 and 36·0 km. a. m. s. l. Of these the levels 1·5, 3·0, 5·4, 7·2, 9·0, 12·0, 14·1 and 16·2 km. a. m. s. l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb respectively.

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Particulars of Pilot Balloon and Rawin Stations in India

Station	Lat. N	Long. E	Height of Anemometer head a. m. s. l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November 1951	0530	1730	2330	
Ahmedabad	23°04′	72°38′	60	19th May 1928	0530	1730	2330	
Amausi	26°45′	80°53′	132	20th November 1950	0530	1730	2330	
Ambala	30°23′	76°46′	283	1st April 1941	0530	1730	2330	
Anantapur	14°41′	77°37′	364	12th February 1946	0530	1730	2330	
Asansol	23°41′	86°59′	136	29th May 1942	0530	1730	2330	
Baghdogra	26°38′	88°19′	140	7th June 1953	0530	1730	2330	
Bairagarh	23°17′	77°21′	532	26th February 1943	0530	1730	2330	
Bamrauli	25°27′	81°44′	103	28th February 1930	0530*	1130	1730*	2330
Bangalore	12°58′	77°35′	936	19th May 1915	0530	1730	2330	
Bareilly	28°22′	79°24′	180	12th January 1943	0530	1730		
Begumpet	17°27′	78°28′	553	1st September 1929	0530	1730	2330	
Bhagalpur	25°14′	86°57′	61	19th May 1950	0530	1730		
Bhubaneshwar	20°15′	85°50′	55	5th December 1942	0530	1730	2330	
Bhuj	23°15′	69°48′	111	14th September 1937	0530	1730	2330	
Bikaner	28°00′	73°18′	229	18th October 1946	0530	1730	2330	
Chikalthana	19°51′	75°24′	583	7th October 1951	0530	1730	2330	
Cochin†	09°56′	76°14′	3	16th March 1942	0530	1730	2330	
Darjeeling	27°03′	88°16′	2115	21st May 1956	0530	1730		
Dum Dum	22°39′	88°27′	19	14th May 1921	0530*	1130	1730*	2330
Gadag	15°25′	75°38′	650	3rd May 1943	0530	1730	2330	
Gannavaram	16°32′	80°48′	24	8th April 1942	0530	1730	2330	
Gauhati	26°05′	91°43′	51	12th March 1955	0530*	1130	1730*	2330
Gaya	24°45′	84°57′	119	19th March 1937	0530	1730	2330	
Gopalpur	19°16′	84°53′	24	15th February 1946	0530	1730	2330	
Gorakhpur	26°45′	83°22′	83	5th January 1943	0530	1730		
Gwalior	26°14′	78°15′	219	7th May 1938	0530	1730	2330	
Imphal	24°51′	93°58′	805	8th March 1952	0530	1730	2330	
Jabalpur	23°10′	79°57′	402	30th July 1928	0530	1730	2330	
Jagdalpur	19°05′	82°02′	562	25th March 1948	0530	1730	2330	
Jaipur	26°49′	75°48′	404	6th June 1953	0530	1730		
Jamshedpur	22°49′	86°11′	147	23rd July 1942	1530	1730		
Jharsuguda	21°55′	84°05′	234	1st May 1944	0530	1730	2330	
Jodhpur	26°18′	73°01′	229	15th October 1934	0530*	1130	1730*	2330
Madras	13°00′	80°11′	29	8th April 1926	0530*	1130	1730*	2330
Mangalore	12°52′	74°51′	40	4th June 1928	0530	1730	2330	
Minicoy	08°18′	73°00′	16	14th April 1941	0530	1730	2330	
Mohanbari	27°29′	95°01′	110	1st June 1948	0530	1730	2330	
Mussoorie	30°27′	78°05′	2050	3rd November 1955	0530	1730		
Nagpur	21°06′	79°03′	316	23rd April 1943	0530*	1130	1730*	2330
Nanpara	27°50′	81°30′	141	23rd April 1957	0530	1730		
New Delhi	28°35′	77°12′	227	20th October 1936	0530*	1130	1730*	2330
Poona	18°32′	73°51′	593	5th January 1925	0530	1730	2330	
Port Blair	11°40′	92°43′	93	29th October 1945	0530*	1130	1730*	2330
Raipur	21°14′	81°39′	308	15th July 1944	0530	1730	2330	
Santa Cruz	19°07′	72°51′	12	14th May 1933	0530*	1130	1730*	2330
Tezpur	26°37′	92°47′	79	12th August 1932	0530	1730	2330	
Tiruchirapalli	10°46′	78°43′	96	22nd June 1936	0530	1730	2330	
Trivandrum	08°29′	76°57′	73	8th December 1928	0530*	1130	1730*	2330
Udaipur	24°35′	73°42′	587	24th June 1947	0530	1730	2330	
Vengurla	15°52′	73°38′	8	22nd November 1941	0530	1730	2330	
Veraval	20°54′	70°22′	17	13th October 1941	0530	1730	2330	
Visakhapatnam	17°43′	83°14′	10	24th September 1928	0530	1730	2330	

* Radiowind ascents.

† Naval Meteorological Office.

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	7·0	6·0	162	31	10·5	9·5	174	31	7·8	6·4	167	31	5·1	3·9	289	31	8·7	5·4	257	31	7·9	5·3	244
0·15 a. g.	31	15·8	14·1	164	31	18·8	17·8	169	31	15·3	13·2	176	31	17·1	13·3	288	31	12·1	7·9	257	31	18·9	13·9	259
0·3 a. m. s. l.	31	20·4	19·6	185	31	21·2	19·4	171	31	17·7	16·0	186	31	19·3	14·7	290	31	12·4	8·8	254	31	20·0	14·9	262
0·6 ,,	31	23·4	22·7	192	31	23·0	22·4	181	28	22·6	21·2	193	31	20·0	15·1	303	31	12·2	9·3	255	31	19·3	15·2	271
0·9 ,,	30	23·0	21·7	211	30	21·4	21·1	193	23	22·1	21·0	203	31	16·5	11·7	293	31	12·3	9·1	256	31	16·0	12·9	276
1·5 ,,	27	19·7	17·9	246	28	16·4	15·5	228	17	16·1	14·3	238	30	11·6	8·7	263	31	13·0	10·8	261	31	11·4	8·9	259
2·1 ,,	22	18·5	17·7	262	26	19·2	18·0	264	13	15·5	15·1	276	29	11·7	9·0	245	31	13·1	10·8	265	31	11·2	8·3	246
3·0 ,,	14	21·0	20·0	274	17	25·1	24·2	286	11	22·8	22·5	292	27	17·3	13·3	245	31	17·1	14·9	255	27	14·9	11·6	251
3·6 ,,	5	27·0	25·7	284	13	28·6	27·4	289	1	23·0	23·0	295	22	18·3	15·5	240	30	18·6	17·0	251	6	14·8	7·5	274
4·5 ,,	1	16·0	16·0	285	8	26·4	26·3	284					18	17·7	16·0	246	28	19·6	17·9	251				
5·4 ,,	1	20·0	20·0	245	7	27·0	26·7	279					16	20·4	18·4	254	26	21·7	19·6	254				
6·0 ,,					5	29·6	29·4	277					12	22·6	20·2	257	23	25·0	22·8	259				
7·2 ,,					3	29·7	29·0	280					6	29·2	25·8	261	15	32·7	29·1	258				
9·0 ,,					2	30·5	20·4	282					2	35·5	34·5	273	9	37·7	34·0	247				

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·0	2·8	289	31	9·9	8·5	295	31	4·0	3·1	289	31	4·5	3·3	336	31	8·4	7·2	299	31	6·0	4·3	336
0·15 a. g.	31	15·6	11·0	310	31	13·1	12·8	280	31	16·7	12·7	306	31	13·2	10·3	338	31	15·0	13·5	307	31	17·4	12·5	344
0·3 a. m. s. l.	31	15·7	12·1	316	31	14·9	13·5	279	31	17·2	13·5	308	31	6·6	5·1	339	31	10·0	8·7	305	31	8·7	6·2	339
0·6 ,,	31	17·4	14·9	311	31	17·2	15·9	285	31	17·6	14·6	312	31	14·5	11·5	340	31	16·4	14·6	310	31	17·5	13·0	340
0·9 ,,	31	17·5	16·3	297	31	18·1	16·8	285	31	16·4	14·9	304	31	14·8	11·7	337	31	16·4	14·1	310	31	16·1	12·7	334
1·5 ,,	30	18·6	17·7	293	30	17·9	17·4	283	31	16·2	14·9	294	31	10·1	10·7	315	31	15·5	13·4	305	31	13·0	9·8	318
2·1 ,,	29	22·1	18·8	283	27	19·2	17·7	276	27	17·5	16·7	290	31	14·5	11·3	304	30	14·4	12·0	303	30	12·6	9·8	303
3·0 ,,	19	20·0	18·5	277	24	19·1	17·7	276	11	16·3	14·3	271	30	15·1	10·9	281	29	14·0	11·6	294	29	14·6	10·3	277
3·6 ,,	9	24·5	23·0	271	22	22·6	21·2	272					27	17·1	13·5	276	28	15·0	11·2	286	15	18·5	13·4	271
4·5 ,,	1	29·0	29·0	290	16	29·6	27·3	270					22	19·1	15·3	268	25	16·1	11·9	283	8	16·1	14·0	240
5·4 ,,					8	29·4	27·9	263					12	17·9	12·7	251	22	18·0	14·7	277	6	13·0	12·0	255
6·0 ,,					8	34·8	33·5	259					10	18·0	13·7	233	21	20·6	17·2	280	6	16·3	15·3	252
7·2 ,,					2	36·0	36·0	262					9	27·0	22·9	246	15	27·3	23·6	285	2	27·0	24·7	231
9·0 ,,													5	42·8	41·0	256	5	38·2	34·1	278				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	ANANTAPUR												ASANSOL											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4·5	2·1	250	31	4·6	1·2	031	31	8·0	3·1	193	31	3·2	1·4	252	31	5·0	3·0	309	31	3.9	0·8	195
0·15 a. g. .	31	11·1	7·0	257	30	7·9	2·8	024	29	13·8	6·6	200	31	10·0	6·4	260	31	11·9	7·5	309	31	10·8	2·6	224
0·3 a. m. s. l. .													31	10·3	6·6	263	31	12·2	7·8	306	31	10·9	2·5	240
0·6 „ .	31	12·9	8·5	260	30	7·7	2·0	015	29	14·4	6·4	196	31	13·7	9·4	287	31	14·3	9·9	308	31	13·9	6·7	294
0·9 „ .	31	12·4	7·1	267	30	6·7	2·5	036	29	13·1	5·4	183	31	13·1	11·2	302	31	14·5	11·8	306	31	14·5	9·3	306
1·5 „ .	31	10·1	2·7	228	30	8·1	3·7	066	29	11·3	5·9	141	30	15·4	14·6	305	31	13·9	12·9	299	29	16·4	14·4	307
2·1 „ .	31	10·5	4·3	099	30	9·0	4·9	076	28	8·4	4·6	107	30	19·6	18·7	298	31	15·8	15·3	293	24	16·8	15·9	300
3·0 „ .	29	11·2	9·5	082	30	11·5	7·8	083	27	11·0	8·6	072	17	20·5	19·1	291	23	16·6	15·9	285	14	17·4	16·6	280
3·6 „ .	28	14·9	12·6	070	29	12·6	10·4	074	24	12·2	10·4	068	7	18·7	18·1	286	21	18·8	17·9	285	1	14·0	14·0	260
4·5 „ .	27	17·4	14·1	073	27	11·8	9·3	088	13	13·2	11.4	075	3	18·3	17·2	288	16	22·7	22·0	285	1	17·0	17·0	255
5·4 „ .	23	14·4	10·6	094	21	8·9	6·6	098	8	10·7	7·0	065	2	13·0	12·8	261	11	28·1	26·9	289				
6·0 „ .	18	15·4	11·6	108	19	10·4	6·7	071	6	9·5	3·1	070					6	26.5	25·1	292				
7·2 „ .	11	9·9	6·2	129	15	11.9	5·4	037	1	9·0	9·0	170					4	39·2	36·3	292				
9·0 „ .	4	12·7	8·4	091	5	15.0	0·7	105																

Station	BAGHDOGRA												BAIRAGARH											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	6·9	6·2	060	31	5·7	3·2	073	31	5·7	5·0	062	31	4·3	3·0	277	31	9·1	7·7	271	31	6·3	5·0	292
0·15 a. g. .	31	15·3	14·9	068	30	10·5	4·9	073	29	12·0	10·7	069	31	17·2	10·6	299	31	13·6	11·4	269	31	21·6	16·7	298
0·3 a. m. s. l. .	31	15·8	15·2	071	30	10·6	4·9	076	29	12·0	10·7	073												
0·6 „ .	30	17·3	16.2	077	29	9·3	4.0	105	28	12·2	10·6	086	31	14·9	9·4	294	31	12·9	10·9	268	31	21·0	16·4	295
0·9 „ .	27	17·2	16·2	080	29	9·3	1·9	166	28	9·7	6·3	174	31	18·9	12·7	307	31	13·6	12·1	279	31	20·6	15·7	299
1·5 „ .	24	11·2	5·7	077	28	14·4	11·8	251	25	13·5	5·4	255	31	15·2	10·8	304	31	15·2	13·4	278	31	15·9	12·8	288
2·1 „ .	20	15·1	10·1	273	27	21.1	20·7	262	22	17·9	17·3	275	31	13·6	10·9	276	31	13·8	12·6	276	31	13·4	9·6	278
3·0 „ .	17	24·3	23·8	283	22	23·8	23·3	270	16	27·3	27·2	276	29	14·9	12·3	248	29	13·4	11·6	269	18	11·8	8·1	254
3·6 „ .	17	27·0	26·6	282	21	28·3	27·2	275	5	25.4	24·8	278	22	16·9	14·9	242	27	16·4	14·0	259	1	21·0	21·0	250
4·5 „ .	14	27·4	26·8	278	13	27·6	27·1	281	1	23·0	23·0	295	20	20·0	17·7	258	24	19·2	16·3	255				
5·4 „ .	7	21·0	17·1	290	8	31·5	31·2	278					13	22·5	20·8	268	19	19·8	17·3	267				
6·0 „ .	5	15·4	9·7	293	4	32·0	31·7	276					11	23·2	21·1	279	18	20·6	17·9	267				
7·2 „ .	4	16·3	13·3	315	1	57·0	57.0	280					1	22·0	22·0	325	13	22·6	20·6	273				
9·0 „ .	2	51·0	51·0	313													7	27·6	25·9	267				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	BAMRAULI												BANGALORE							
Time in I. S. T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	2·7	2·3	260	31	9·5	8·2	284	31	10·7	9·8	293	31	2·3	1·0	272	31	5·0	3·2	240	31	6·7	2·8	101
0·15 a. g. .	31	7·7	5·8	290	30	13·4	11·3	290	27	11·4	10·8	293	31	16·4	11·7	305	31	10·5	6·1	228	29	9·6	4·2	094
0·3 a. m. s. l. .	31	9·0	7·0	292	30	13·3	11·8	287	27	11·9	10·7	294	31	17·5	13·0	307								
0·6 ,, .	31	13·3	11·3	304	30	12·4	11·6	285	27	14·2	13·1	289	31	18·2	15·0	309								
0·9 ,, .	31	15·9	14·4	305	30	12·5	11·8	286	27	16·8	15·4	286	31	17·3	15·5	302								
1·5 ,, .	30	16·8	15·4	292	30	14·9	13·9	281	27	17·3	16·4	284	27	17·0	15·9	284	31	11·6	4·1	192	29	10·0	5·4	089
2·1 ,, .	29	18·9	17·3	282	30	17·7	16·5	283	27	18·2	17·6	278	19	18·6	17·4	266	30	11·2	8·0	076	28	10·4	6·2	075
3·0 ,, .	29	22·2	19·1	270	27	23·7	21·7	283	27	20·5	19·7	270	8	18·5	17·6	249	21	15·2	13·9	066	20	9·3	6·3	074
3·6 ,, .	29	24·2	22·6	269	25	24·9	24·0	277	25	23·6	22·8	270	2	27·5	27·2	262	15	21·0	19·7	069	18	11·3	8·9	076
4·5 ,, .	29	27·1	25·1	267	23	29·2	27·5	275	25	27·5	26·1	270					5	8·0	16·0	085	14	14·2	13·0	085
5·4 ,, .	29	27·5	25·4	267	16	34·4	33·0	278	24	27·5	25·6	270					2	15·0	15·0	119	6	15·5	14·6	072
6·0 ,, .	26	28·7	26·7	265	10	35·1	33·0	275	24	28·9	26·6	269					1	8·0	8·0	120	5	16·2	15·0	067
7·2 ,, .	25	35·3	33·3	262	3	37·7	37·3	286	20	37·1	35·1	267									3	12·3	12·1	069
9·0 ,, .	24	45·5	43·5	260	1	51·0	51·0	310	15	53·5	50·5	262									1	25·0	25·0	060

Station	BANGALORE				BAREILLY								BEGUMPET											
Time in I. S. T.	2330				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5·3	1·8	178	31	4·0	2·8	303	31	7·6	6·9	292	31	4·4	2·5	286	31	5·8	1·4	106	31	4·8	3·5	145
0·15 a. g. .	30	13·7	5·6	163	31	15·9	12·8	312	31	15·6	14·8	291	31	12·9	5·4	260	31	8·5	2·2	143	30	12·5	8·8	155
0·3 a. m. s. l. .					31	14·7	11·8	312	31	15·0	14·2	293												
0·6 ,, .					31	19·9	18·5	314	31	17·6	16·8	293	31	9·0	3·9	267	31	8·5	1·7	145	30	8·7	6·1	147
0·9 ,, .					31	20·6	18·7	311	31	17·9	17·3	292	31	15·8	7·8	244	31	8·1	3·0	130	30	14·5	10·3	150
1·5 ,, .	29	15·5	9·3	150	31	21·2	19·3	301	30	17·1	16·5	291	31	13·6	7·3	226	31	6·7	1·9	101	30	10·8	7·2	149
2·1 ,, .	28	11·5	7 6	111	31	12·5	20·2	293	30	18·2	17·2	287	30	8·9	3·8	180	31	6·3	1·9	085	29	9·0	1·9	154
3·0 ,, .	23	12·8	11·2	067	29	22·3	20·3	287	29	18·9	18·2	287	30	10·0	4·1	065	29	7·3	0·8	055	29	9.3	3·5	340
3·6 ,, .	16	16·3	13·4	080	22	19·7	17·2	276	27	20·0	19·1	285	30	11·0	5·5	063	26	7·6	0·3	130	3	12·3	12·2	340
4·5 ,, .	13	14·4	12·1	089	14	22·7	20·6	269	24	20·3	18·7	284	28	10·6	4·9	065	22	8·1	3·2	350				
5·4 ,, .	10	11·1	6·1	110	7	19·4	17·9	268	22	25·6	22·9	282	25	10·7	2·1	113	16	8·9	1·5	056				
6·0 ,, .	5	7·6	6·5	113	4	16·0	14·1	260	15	29·2	26·8	278	25	12·2	1·5	134	15	10·4	0·5	243				
7·2 ,, .	2	4·0	2·7	149	1	19·0	19·0	255	4	38·3	34·0	273	10	9·9	3·5	245	7	12·4	4·7	258				
9·0 ,, .													2	15·5	15·5	270	3	22·7	5·1	350				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	BHAGALPUR								BHUBANESHWAR												BHUJ			
Time in I. S. T.	0530				1730				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·7	1·6	112	31	9·3	6·1	299	31	12·2	11·5	215	31	18·3	17·0	199	31	15·6	14·3	211	31	3·4	3·1	242
0·15 a. g.	31	13·8	1·1	323	31	15·7	11·2	303	27	15·9	15·7	212	31	21·5	21·3	201	25	17·8	16·5	213	31	15·1	12·7	257
0·3 a. m. s. l.	31	13·9	4·3	291	31	17·1	12·3	303	27	15·5	12·0	224	31	21·1	20·8	208	25	19·6	19·1	221	31	16·5	13·4	263
0·6 ,,	30	16·9	7·5	296	30	18·6	15·1	298	27	14·5	12·7	247	31	19·1	17·9	210	23	20·9	19·9	230	31	21·0	16·1	274
0·9 ,,	29	17·7	13·9	293	29	18·9	16·3	297	27	16·0	13·3	265	31	13·7	11·4	220	23	18·5	15·9	234	31	17·9	12·8	280
1·5 ,,	26	19·5	19·2	293	25	18·8	17·0	287	25	12·8	8·4	292	31	10·2	6·2	270	22	11·3	7·4	275	31	14·3	8·8	273
2·1 ,,	23	23·6	23·0	293	20	21·9	21·3	283	23	11·4	7·1	306	30	10·5	7·1	318	20	11·2	7·4	297	31	15·1	8·2	266
3·0 ,,	16	29·5	27·2	290	16	29·4	28·9	281	19	10·8	5·6	315	29	13·7	10·7	322	12	12·3	8·5	332	27	14·9	8·2	251
3·6 ,,	6	29·0	23·0	284	14	29·4	28·8	284	11	9·6	5·2	350	26	15·4	12·9	319	4	15·5	11·4	348	13	11·6	8·4	263
4·5 ,,				73	11	30·0	29·4	285	10	10·0	6·2	300	16	11·7	9·4	314	2	11·5	5·5	354	8	11·4	10·0	266
5·4 ,,					7	26·6	25·4	282	8	13·4	3·4	288	9	15·5	13·6	291					4	15·7	14·7	265
6·0 ,,					6	27·8	26·4	287	7	12·7	5·1	258	3	12·3	9·5	247					4	23·5	22·9	262
7·2 ,,					2	28·5	26·9	294	4	16.5	5·2	215	2	13·5	13·2	185					3	24·0	22·6	276
9·0 ,,									2	8·0	6·1	136	2	11·5	11·2	167					2	53·5	53·2	265

Station	BHUJ								BIKANER												CHIKALTHANA			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	8·0	6·1	257	31	5·8	5·3	239	31	2·5	0·5	173	31	4·7	3·1	260	31	5·3	0·8	308	31	6·4	5·1	278
0·15 a. g.	31	15·1	11·9	256	31	17·4	15·6	252	31	15·1	1·1	070	30	10·5	6·5	260	30	16·7	2·9	313	31	12·8	10·3	306
0·3 a. m. s. l.	31	15·2	12·4	256	31	18·4	16·5	256	31	11·3	1·0	100	30	9·4	6·1	264	30	14·4	2·1	305				
0·6 ,,	31	15·8	13.5	258	31	22·5	19·2	266	31	17·1	0·9	194	30	9·8	6·7	267	30	18·2	4·5	298				
0·9 ,,	31	15·7	13·6	261	31	17·6	13·2	273	31	14·9	1·7	205	30	10·4	6·6	262	30	16·0	5·8	278	31	14·2	12·0	328
1·5 ,,	31	13·3	10·6	278	30	14·4	9·4	283	31	11·2	3·7	265	29	10·8	7·2	269	29	13·1	9·9	252	31	13·6	9·7	335
2·1 ,,	30	13·7	9·6	282	30	14·5	8·1	274	27	11·4	8·8	272	28	9·0	6·7	257	28	13·0	9·5	244	31	11·1	4·6	284
3·0 ,,	30	15·1	11·1	261	26	14·2	10·2	260	25	14·8	10·5	278	26	12·7	9·4	251	21	12·1	10·2	252	29	11·8	5·4	213
3.6 ,,	29	16·5	13·7	257	16	14·6	10·2	253	18	14·7	9·9	280	24	15·0	11·8	258	14	14·9	13·1	260	18	12·8	9·3	205
4·5 ,,	28	19·6	17·4	257	10	14·4	10·8	261	10	16·4	12·5	251	20	20·7	16·0	266	4	17·5	17·0	248	4	8·5	7·9	249
5·4 ,,	28	23·3	21·1	258	7	19·1	15·3	264	8	17·2	11·7	256	16	22·6	19·2	271					1	12·0	12·0	290
6·0 ,,	27	24·6	22·7	268	6	18·0	14·5	268	5	19·0	13·6	246	14	22·7	19·1	271					1	7·0	7·0	275
7·2 ,,	21	29·9	26·7	262	1	23·0	23·0	250	1	27·0	27·0	235	10	27·4	24·6	265								
9·0 ,,	12	41·3	37·9	261									5	31·0	28·2	258								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	CHIKALTHANA								COCHIN												DARJEELING			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	8·4	4·1	271	31	9·7	8·2	303	31	2·2	2·0	094	31	6·0	5·0	295	31	3·5	0·9	017	31	0·3	0·1	225
0·15 a. g.	31	12·4	8·2	278	30	16·5	13·8	311	22	4·1	3·4	055	17	9·0	8·3	291	16	7·4	3·1	311	21	3·5	1·1	239
0·3 a. m. s. l.									22	6·0	3·0	325	17	10·8	10·1	294	16	8·3	4·5	297				
0·6 ,,									22	7·9	5·5	301	17	11·4	10·9	296	16	8·5	5·4	300				
0·9 ,,	31	11·6	7·9	295	30	18·5	15·4	318	22	7·9	9·4	302	17	10·0	9·1	303	16	8·5	5·2	294				
1·5 ,,	31	12·2	8·4	298	30	16·8	13·8	320	22	6·4	2·2	306	17	8·6	4·6	335	16	7·2	3·4	287				
2·1 ,,	29	11·7	9·2	293	29	11·7	7·4	320	20	10·1	4·8	050	17	10·0	4·9	046	12	8·9	1·7	118				
3·0 ,,	26	12·9	11·5	291	27	9·5	4·2	177	15	15·9	11·9	080	14	12·4	6·5	074	7	8·7	1·1	344	21	12·6	12·2	279
3·6 ,,	23	10·4	7·9	273	17	13·8	11·3	184	13	15·0	10·5	079	9	12·7	6·5	071	4	11·2	7·5	242	19	22·8	22·5	286
4·5 ,,	16	10·4	6·0	245	2	13·0	10·0	167	9	14·7	5·3	088	5	9·8	5·0	039	2	8·0	7·1	222	12	28·3	26·0	287
5·4 ,,	7	12·4	6·9	278					6	6·8	4·5	113	3	3·3	1·4	026					7	27·6	26·7	285
6·0 ,,	6	15·0	10·0	249					4	9·7	4·7	118	2	7·5	3·8	085					4	28·5	25·9	283
7·2 ,,	2	20·5	16·7	229					1	22·0	22·0	105	1	10·0	10·0	165					1	18·0	18·0	325
9·0 ,,	2	19·5	19·3	303									1	7·0	7·0	150								

Station	DARJEELING				DUM DUM												GADAG			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·4	4·7	230	31	6·2	5·5	190	31	6·4	5·8	196	31	10·8	9·1	184	31	7·6	6·7	190	31	7·5	6·6	239
0·15 a. g.	15	9·3	8·6	240	31	15·7	14·4	202	31	9·3	8·3	204	31	17·3	15·2	188	31	17·3	16·1	198	31	13·8	10·1	261
0·3 a. m. s. l.					31	15·3	13·5	224	31	9·7	8·8	204	31	18·1	16·5	192	31	20·9	19·3	205				
0·6 ,,					31	15·8	12·8	242	31	9·8	8·0	230	31	14·8	13·9	197	31	23·8	22·3	214				
0·9 ,,					30	15·7	12·6	267	31	9·6	7·8	252	31	12·7	10·9	212	31	21·0	19·5	225	31	14·1	9·5	290
1·5 ,,					30	14·0	12·3	288	29	12·6	11·1	283	31	12·1	10·2	267	30	14·9	13·2	250	30	12·2	5·0	317
2·1 ,,					30	15·3	14·3	072	29	15·2	14·6	287	30	16·5	14·6	293	24	12·3	10·9	283	28	8·1	2·2	111
3·0 ,,	14	15·6	14·8	276	30	16·7	15·2	290	29	20·2	19·6	291	31	23·0	22·2	299	10	17·0	15·6	309	24	11·9	8·7	104
3·6 ,,	11	18·5	18·0	294					28	22·7	21·3	292					2	12·5	11·9	334	19	11·6	8·9	083
4·5 ,,	8	24·4	24·1	288	30	22·2	21·3	293	26	24·5	23·7	292	31	27·1	26·5	295					5	14·4	12·8	072
5·4 ,,	6	34·2	33·9	275	28	21·7	20·7	292	21	23·4	22·5	294	30	24·2	23·0	290					2	21·5	19·9	031
6·0 ,,	4	38·3	38·0	282	27	22·9	21·1	288	19	24·4	22·7	294	30	25·8	23·3	289					2	16·5	15·5	044
7·2 ,,	4	48·7	48·7	285	27	28·6	26·0	283	11	23·2	20·0	284	30	30·5	28·0	287								
9·0 ,,	1	64·0	64·0	285	25	36·4	33·3	283	2	12·0	11·9	267	29	37·3	33·6	285								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	GADAG								GANNAVARAM								GAUHATI			
Time in I. S. T.	1730				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	6·2	2·1	268	31	9·4	7·8	253	31	3·1	1·9	171	31	10·2	9·2	169	31	5·5	4·0	175	31	3·7	2·3	087
0·15 a. g. .	30	9·2	2·0	305	30	16·9	15·2	259	31	9·2	7·8	182	30	11·1	10·5	165	31	11·8	0·3	173	31	8·4	5·2	091
0·3 a. m. s. l. .									31	12·8	11·7	191	30	12·1	11·3	164	31	14·0	11·6	182	31	7·8	3·0	103
0·6 ,, .									30	17·6	16·3	197	30	9·5	8·5	166	31	14·6	12·5	183	31	9·4	0·7	225
0·9 ,, .	30	9·2	1·5	331	30	18·2	15·0	269	29	14·8	12·7	195	30	6·9	4·2	174	31	11·1	8·8	179	31	12·3	6·7	243
1·5 ,, .	30	10·3	2·1	327	30	10·1	2·2	269	29	8·7	4·2	157	30	6·9	1·7	325	29	8·0	2·7	132	30	19·8	17·7	254
2·1 ,, .	30	9·3	3·5	043	29	10·0	6·2	103	28	8·2	2·7	093	29	6·9	2·3	068	29	8·7	3·7	093	30	26·1	25·0	262
3·0 ,, .	21	10·4	7·8	048	26	12·4	10·0	099	27	9·7	6·5	065	29	9·8	7·6	078	27	8·9	5·0	089	30	33·0	32·2	273
3·6 ,, .	15	12·6	10·3	048	19	13·4	11·5	077	26	11·4	6·9	048	29	10·4	8·5	080	18	8·2	3·5	060	29	34·9	34·7	275
4·5 ,, .	6	10·8	8·7	049	2	18·0	17·2	055	19	11·6	6·0	060	29	9·3	3·5	062	13	9·4	5·3	022	28	37·7	37·1	280
5·4 ,, .	4	8·8	7·9	067					17	12·2	5·5	088	26	9·0	2·3	002	5	8·6	6·0	297	27	35·3	34·3	283
6·0 ,, .	3	14·0	11·1	060					10	14·9	8·8	112	24	10·6	3·7	337	4	12·3	3·5	290	27	34·9	33·6	284
7·2 ,, .									2	8·0	7·9	070	19	12·4	2·6	211					23	31·1	29·6	279
9·0 ,, .													10	13·1	2·2	165					19	38·6	35·6	282

Station	GAUHATI												GAYA											
Time in I. S. T.	1130				1730*				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5·0	3·7	027	31	4·0	2·5	063	31	5·0	3·1	048	31	2·2	0·9	211	31	9·7	9·0	306	31	2·4	0·9	096
0·15 a. g. .	28	6·9	5·9	033	31	9·7	4·7	109	27	10·3	4·8	077	31	14·3	10·7	248	31	16·5	15·5	296	31	16·7	9·5	305
0·3 a. m. s. l. .	28	7·0	4·9	045	31	9·0	3·7	070	27	10·8	3·4	075	31	14·8	10·5	267	31	16·9	16·1	297	31	17·9	10·8	305
0·6 ,, .	27	7·8	1·2	360	31	8·6	0·6	131	25	11·3	0·9	187	31	16·2	12·4	294	31	18·4	17·7	297	31	19·5	14·7	310
0·9 ,, .	27	10·0	5·3	240	31	10·7	5·6	240	24	13·0	9·7	236	31	16·8	15·2	294	31	20·6	20·1	294	31	19·3	16·2	306
1·5 ,, .	24	18·2	16·4	243	30	19·5	17·5	246	22	24·3	22·6	248	31	18·6	18·0	293	30	21·4	21·1	292	31	20·3	19·1	295
2·1 ,, .	22	27·0	26·7	255	30	25·3	24·1	260	15	24·9	23·6	262	28	21·9	21·4	288	29	20·4	19·8	287	24	20·3	19·6	290
3·0 ,, .	17	35·4	32·4	267	30	33·5	33·2	272	8	23·3	22·0	268	18	26·2	24·6	284	22	22·5	22·0	278	6	19·3	16·9	272
3·6 ,, .	14	32·9	32·1	273	30	34·4	33·5	279	1	21·0	21·0	245	10	27·4	25·8	283	17	25·6	25·2	278				
4·5 ,, .	7	35·0	34·4	276	30	37·2	36·5	276	1	23·0	23·0	270	2	33·5	31·4	279	6	33·4	33·1	286				
5·4 ,, .	5	26·2	25·2	270	26	32·8	32·3	280									4	36·7	36·2	292				
6·0 ,, .	3	27·7	19·3	290	24	31·7	30·8	280									1	47·0	47·0	295				
7·2 ,, .	1	33·0	33·0	305	20	32·8	31·5	284																
9·0 ,, .					14	46·9	43·7	282																

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	GOPALPUR												GORAKHPUR								GWALIOR			
Time in I. S. T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	13·5	13·3	210	31	16·9	16·4	202	31	14·5	13·7	208	31	3·7	1·0	285	31	6·6	5·9	270	31	4·3	3·3	293
0·15 a. g. .	30	24·4	24·1	212	31	29·7	29·1	205	31	23·8	22·4	214	31	18·7	11·1	299	31	17·7	17·1	275	31	13·9	10·3	302
0·3 a. m. s. l. .	30	21·5	20·9	221	31	27·2	26·2	210	31	21·2	20·1	221	31	22·4	14·7	302	31	20·3	19·6	273	31	10·4	8·0	300
0·6 ,, .	30	13·3	12·6	225	31	15·9	14·1	212	31	13·6	11·7	227	31	24·4	18·9	300	31	26·7	25·7	280	31	16·7	12·6	309
0·9 ,, .	30	12·5	11·2	247	29	10·0	6·4	221	31	10·4	7·3	235	31	24·0	20·9	299	30	25·6	24·9	281	31	15·8	12·5	306
1·5 ,, .	29	11·2	6·5	274	25	7·1	3·4	298	29	8·6	5·0	255	26	24·4	23·5	295	28	23·5	22·5	283	31	15·1	11·6	291
2·1 ,, .	28	9·3	3·5	326	25	8·7	3·6	334	23	8·8	1·4	268	21	29·3	29·0	287	23	25·3	24·7	283	30	16·5	13·1	283
3·0 ,, .	21	9·6	4·8	008	23	10·2	5·1	003	17	9·5	3·5	007	12	30·6	29·5	284	18	31·7	30·9	285	30	19·6	16·2	269
3·6 ,, .	17	12·8	9·1	019	21	9·2	4·1	357					4	26·0	25·7	284	12	32·0	31·3	285	26	21·9	18·0	267
4·5 ,, .	14	9·4	4·7	344	19	11·5	7·1	335					1	41·1	41·0	285	7	30·6	29·6	283	23	24·9	22·4	268
5·4 ,, .	12	9·6	3·8	301	15	12·8	7·4	300									2	35·0	34·5	284	21	28·3	27·0	267
6·0 ,, .	11	10·5	4·7	276	13	14·6	7·6	283													19	32·5	31·1	271
7·2 ,, .	4	13·0	4·3	181	7	20·0	14·1	256													15	41·7	40·5	271
9·0 ,, .	1	12·0	12·0	195	4	25·8	24·2	247													5	37·4	36·1	282

Station	GWALIOR								IMPHAL												JABALPUR			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	4·8	3·5	289	31	2·7	1·7	294	31	4·6	3·5	225	31	5·9	5·1	243	31	3·7	2·4	247	31	1·8	1·0	240
0·15 a. g. .	31	8·9	6·7	291	31	12·6	7·6	305	28	6·9	5·2	225	31	9·5	8·5	248	29	6·5	4·9	245	29	12·6	7·4	255
0·3 a. m. s. l. .	31	8·1	6·0	292	31	9·4	5·5	299																
0·6 ,, .	31	12·1	9·6	288	31	15·2	10·4	304													29	13·3	7·1	254
0·9 ,, .	31	13·4	11·1	287	31	15·4	11·3	297	28	6·1	4·6	220	31	7·5	6·7	247	29	5·8	4·1	23	31	14·3	8·3	305
1·5 ,, .	31	14·7	12·6	285	31	14·6	12·5	281	28	13·9	12·6	257	31	14·6	13·9	260	29	13·0	12·3	260	31	14·2	8·3	283
2·1 ,, .	31	14·0	12·1	278	31	15·3	12·8	269	23	22·3	21·7	267	27	21·8	21·1	262	7	22·7	22·0	267	30	13·6	11·1	290
3·0 ,, .	30	16·2	14·1	266	24	15·7	13·0	261	17	27·8	27·3	282	21	30·0	29·5	274	14	22·9	22·5	280	29	17·1	14·4	269
3·6 ,, .	30	19·6	17·2	266					11	21·4	21·1	285	13	31·5	30·5	279	5	19·0	18·1	282	27	19·0	16·5	265
4·5 ,, .	23	28·9	27·3	265					3	11·0	10·2	267	4	24·0	24·0	287					19	20·0	17·9	266
5·4 ,, .	19	36·4	34·4	272					2	21·5	21·5	266	2	32·0	32·0	288					12	24·4	22·1	272
6·0 ,, .	15	34·3	32·4	271					1	14·0	14·0	250	2	30·0	30·0	278					6	17·7	13·0	271
7·2 ,, .	11	33·2	31·4	274																	3	19·0	18·0	297
9·0 ,, .	2	35.0	32·9	269																				

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TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	JABALPUR								JAGDALPUR												JAIPUR			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·9	3·3	267	31	2·2	0.5	130	31	1·9	1·6	206	31	3·4	1·8	187	31	2·3	1·7	196	31	3·3	2·0	325
0·15 a. g.	31	11·3	8·1	269	31	12·5	4·7	262	31	12·5	11·2	212	31	10·8	6·4	189	31	14·5	12·5	208	31	12·7	6·6	295
0·3 a. m. s. l.																								
0·6 „	31	12·0	9·2	272	31	13·4	5·1	273	31	6·9	6·0	210	31	7·7	4·6	193	31	9·3	7·9	206	31	14·3	9·0	294
0·9 „	31	12·8	10·4	275	31	16·5	7·6	297	31	16·4	15·1	225	31	11·4	6·5	195	31	14·8	12·9	215	31	18·5	12·1	265
1·5 „	31	12·3	10·7	281	31	15·3	10·1	299	31	10·7	8·6	262	30	9·7	5·2	234	31	12·1	9·3	248	31	17·9	11·3	290
2·1 „	31	13·0	11·4	281	31	14·6	11·4	288	31	9.5	5·9	316	30	9·7	4·8	293	29	11·0	6·6	293	28	13·0	10·3	267
3·0 „	30	13·9	12·2	277	28	14·2	12·5	264	31	10·7	6·1	357	25	10·1	3·9	341	26	10·8	4·9	352	24	16·9	11·6	259
3·6 „	27	15·9	13·0	269	12	15·4	14·1	253	31	10.6	5·6	008	20	9·3	2·3	317	12	11·6	7·2	005	21	21·0	14·7	265
4·5 „	26	20·3	17·5	269	2	18·5	18·0	257	25	10·5	4·3	326	12	11·5	6·8	324	4	8·8	8·8	313	13	21·5	15·5	265
5·4 „	23	21·2	19·7	277					22	10·5	3·4	311	4	11·3	2·3	327					7	22·3	16·1	263
6·0 „	21	22·6	20·8	281					19	12·5	4·7	278	2	14·5	7·5	263					3	23·7	21·1	278
7·2 „	15	28·2	25·3	279					10	16·5	8·7	257									1	25·0	25·0	275
9·0 „	4	33·7	27·3	265					1	18·0	18·0	220									1	16·0	16·0	270

Station	JAIPUR				JAMSHEDPUR								JHARSUGUDA											
Time in I. S. T.	1730				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·7	4·7	280	31	1·8	1·1	273	31	5·7	4·8	291	31	3·1	1·6	188	31	6.0	4·5	253	31	5·3	2·9	219
0·15 a. g.	31	11·0	8.4	257	31	7·0	5·2	251	31	8·3	6·6	282	31	9·9	5·5	144	31	10·5	8·5	249	31	12·1	6·3	246
0·3 a. m. s. l.					31	7·0	5·3	244	31	8·3	6·9	283	31	8·0	4·3	205	31	10·5	7·5	248	31	10·9	5·6	235
0·6 „	31	12·3	8·4	262	31	10·9	8·7	265	31	10·3	9·0	285	31	12·2	6·7	256	31	11·8	9·4	256	31	13·4	7·9	254
0·9 „	31	11.7	8·6	265	31	12·0	9·5	282	31	10·9	9·1	288	31	14·8	8·6	269	31	11·3	9·0	264	31	14·3	9·1	263
1·5 „	31	12·9	8·7	267	31	13·7	11·9	297	31	10·7	10·0	286	31	15·0	9·4	070	30	10·4	9·0	277	31	13·4	11·7	267
2·1 „	31	13·7	6·8	252	31	15·5	14·5	294	29	12·4	11·3	288	29	14·1	3·4	359	30	10·6	9·3	289	26	11·5	9·8	282
3·0 „	27	13·9	6·0	255	29	17·6	16·6	284	26	13·3	12·2	295	28	15·9	11·3	292	27	12·0	10·1	301	19	10·5	7·7	296
3·6 „	25	14·9	10·7	258	22	18·1	17·3	289	22	14·8	13·4	295	22	15·8	11·4	293	25	13·0	11·1	306	2	9·5	9·1	328
4·5 „	18	20·9	18·2	275	9	17·3	15·9	298	14	16·9	15·7	288	4	15·5	13·7	320	19	16·4	14·0	300				
5·4 „	14	26·8	24·2	266	5	10·6	9·8	272	9	20·0	18·7	284					10	18·6	15·8	293				
6·0 „	10	26·5	22·9	271	2	11·5	11·5	249	5	21·6	20·4	279					5	23·0	21·9	284				
7·2 „	2	30·5	23·4	240					4	27·3	25·4	274												
9·0 „	1	47·0	47·0	265					1	39·0	39·0	270												

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

MAY 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	JODHPUR												MADRAS							
Time in I. S. T.	0530*				1130				1730*				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·8	3·2	269	31	7·7	5·3	226	31	9·8	7·1	245	31	7·6	3·1	279	31	4·6	4·2	188	31	7·5	6·2	172
0·15 a.g.	31	8·6	5·5	265	31	8·4	6·5	230	31	11·0	9·3	242	30	14·5	7·7	261	31	12·5	11·7	197	31	11·3	9·4	178
0·3 a. m. s. l.	31	7·8	4·5	269	31	7·4	5·5	233	31	10·6	8·8	243	30	15·1	4·7	266	31	13·7	12·7	196	31	12·2	10·2	182
0·6 ,,	31	11·3	7·2	271	31	9·3	7·1	230	31	11·4	10·1	242	30	24·2	12·2	268	31	15·1	13·9	192	31	10·6	8·5	196
0·9 ,,	31	15·1	9·5	266	31	10·2	7·8	238	31	12·2	10·4	245	30	24·2	11·5	273	31	14·6	12·8	190	31	9·2	7·2	199
1·5 ,,	31	14·2	10·2	262	31	12·4	11·5	245	31	13·6	11·7	245	24	20·4	14·9	251	31	8·6	5·3	144	29	7·9	4·1	168
2·1 ,,	30	15·0	12·7	263	31	13·3	11·2	243	30	13·4	9·0	237	13	11·2	6·3	254	31	10·9	6·8	097	27	9·8	7·6	101
3·0 ,,	30	15·5	13·6	253	30	13·3	10·6	245	29	13·0	11·4	256	9	12·8	10·0	246	31	14·7	11·4	083	28	14·1	12·0	096
3·6 ,,	30	17·0	13·8	250	30	15·1	12·0	246	26	14·0	12·1	253	2	6·5	6·3	266	28	15·6	11·8	081	28	16·5	13·8	078
4·5 ,,	30	20·1	16·7	265	25	17·4	15·6	255	25	17·1	14·9	254	1	10·0	10·0	270	26	15·0	10·2	083	23	16·0	13·3	073
5·4 ,,	30	24·3	21·4	256	25	22·0	20·8	257	24	23·4	20·5	257	1	17·0	17·0	265	23	14·5	9·8	097	18	12·2	10·4	096
6·0 ,,	30	27·5	24·7	255	25	25·1	24·0	258	24	28·2	25·1	255					22	15·0	9·4	101	18	12·4	9·3	095
7·2 ,,	28	38·0	35·7	255	20	30·1	27·5	265	20	44·4	40·7	252					20	16·5	7·9	109	17	12·5	8·7	092
9·0 ,,	23	45·3	43·5	358	11	32·1	30·5	270	18	50·1	47·9	250					20	15·0	2·4	045	14	17·7	4·8	054

Station	MADRAS								MANGALORE								MINICOY			
Time in I. S. T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	11·7	10·2	155	31	6·5	6·1	176	31	5·0	3·5	044	31	8·6	7·3	290	31	6·3	3·8	340	31	7·4	6·7	300
0·15 a. g.	31	16.8	13·5	153	31	15·8	14·7	170	28	8·0	6·0	358	31	10·6	9·2	290	28	9·1	4·8	325	30	11·0	10·1	294
0·3 a. m. s. l.	31	14·8	12·4	153	31	17·6	17·0	167	28	8·3	6·9	336	31	11·5	10·1	296	28	8·4	5·5	317	30	10·9	10·2	295
0·6 ,,	31	12·5	9·4	158	31	17·4	15·8	177	28	8·9	7·5	329	31	11·4	9·5	303	28	7·5	4·8	303	30	11·3	10·5	294
0·9 ,,	31	9·9	6·2	160	31	13·6	12·1	177	27	8·3	6·3	323	30	9·0	5·5	321	27	7·1	3·4	293	30	11·4	10·3	293
1·5 ,,	31	8·0	3·0	119	31	9·2	6·0	156	25	7·8	4·0	336	28	8·8	6·0	014	21	6·4	2·1	277	30	10·8	6·1	303
2.1 ,,	31	9·4	5·4	089	31	8·5	4·8	098	18	8·3	4·0	071	23	8·8	5·3	047	14	8·3	2·0	054	29	12·1	4·6	354
3·0 ,,	31	13·0	10·4	077	31	12·3	9·2	086	13	14·4	12·5	079	20	14·3	11·3	073	12	14·8	9·6	100	26	16·3	7·0	054
3·6 ,,	30	14·8	11·3	075	20	15·0	13·4	069	10	14·7	12·9	081	21	15·7	13·3	075	9	14·1	8.9	085	23	15·4	7.1	052
4·5 ,,	25	16·2	12·8	086					4	10·2	9·4	060	20	12·5	10·9	086	3	11·0	9·9	072	22	12·5	5·7	069
5·4 ,,	25	13·7	10·6	103					1	4·0	4·0	005	18	9·2	7·5	105					17	10·2	5·1	083
6·0 ,,	25	12·4	8·6	110									17	9·8	7·4	100					13	10·0	5·7	098
7·2 ,,	24	14·6	5·6	100									13	11·7	8·8	092					6	8·7	1·3	091
9·0 ,,	21	15·4	3·0	075									10	13·1	9·0	093					8	11·7	9·7	074

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	MINICOY								MOHANBARI												MUSSOORIE			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	7·9	6·8	304	31	7·1	6·4	298	31	2·7	2·6	045	31	4·2	3·9	050	31	2·9	2·6	045	31	4·6	3·9	001
0·15 a. g. .	30	12·2	9·9	298	28	10·4	9·6	300	21	9·2	8·5	062	25	10·5	8·9	052	19	9·9	8·1	056	30	11·9	8·9	013
0·3 a. m. s. l. .	30	13·2	10·4	302	28	10·4	9·7	302	21	9·8	8·9	065	25	11·5	9·9	055	19	10·2	8·9	060				
0·6 ,, .	30	13·8	12·8	302	28	10·6	10·0	300	21	10·6	7·1	063	25	11.0	9·3	073	19	10·4	8·5	071				
0·9 ,, .	30	13·4	12·6	302	27	9·8	9·2	295	19	11·7	5·8	057	23	8·7	4·8	086	19	10·7	6·7	100				
1·5 ,, .	28	10·1	8·0	305	27	9·6	6·5	311	17	9·8	2·4	105	21	11·6	7·9	227	17	11·2	5·5	186				
2·1 ,, .	28	12·6	5·6	352	27	13·0	5·6	014	16	10·1	4·9	227	18	17·9	16·3	233	15	15·0	13·4	228	30	11·0	8·0	018
3·0 ,, .	26	17·8	9·5	046	22	17·5	8·5	054	9	11·0	9·0	268	12	23·2	19·1	238	12	15·5	1·46	247	30	9·4	5·9	281
3·6 ,, .	26	19·2	10·5	041	19	17·3	10·2	063	8	15·0	11·8	265	7	10·9	9·1	248	2	7·0	7·0	257	29	11·5	7·0	276
4.5 ,, .	26	15.0	5.4	025	16	15·4	7·2	064	6	16·5	13·0	263	5	9·4	6·4	233					27	11·8	7·3	285
5.4 ,, .	22	13·9	7·0	079	13	12·3	5·6	095	4	15·5	13·8	238	4	20·0	12·8	272					26	16·0	12·9	273
6·0 ,, .	22	14·0	7·2	070	11	10·6	6·9	095	3	20·7	19·0	255	4	25·5	18·7	278					23	26·5	17·1	273
7·2 ,, .	21	14·8	10·7	081	4	10·8	4·3	093	1	18·0	18·0	265	3	61·3	20·4	313					15	28·6	25·2	272
9·0 ,, .	16	14·5	9·9	080	1	14·0	14·0	220	1	9·0	9·0	315	2	53·5	53·5	297					2	43·5	43.0	269

Station	MUSSOORIE				NAGPUR												NANPARA			
Time in I. S. T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·2	2·1	227	31	4·5	2·0	281	31	5·1	2·9	307	31	6·1	3·2	295	31	5·5	1·3	254	31	3·2	0·4	239
0.15 a. g. .	30	6·9	5·1	223	31	7·3	3.4	286	31	7·5	4·6	293	31	7·4	4·5	285	31	13·9	5·2	261	31	15·8	6·4	308
0.3 a. m. s. l. .																					31	16·3	7·0	322
0.6 ,, .					31	9·8	5·4	290	31	7·5	3·9	295	31	7·6	4·6	280	31	14·3	5·3	266	31	19·3	12·2	314
0.9 ,, .					31	14·1	7·8	303	31	7·4	3·9	297	31	8·3	5·9	274	31	13·7	6·2	277	31	20·1	16·1	306
1·5 ,, .					31	13·0	7·5	300	31	7·7	4.4	284	31	8·8	7·2	274	31	11·7	6·7	285	31	19·3	17·9	301
2·1 ,, .	30	7·0	5·4	223	31	10·6	5·8	286	30	9·6	5·3	267	31	9·8	7·7	279	30	9·9	5·6	291	28	22·0	21·6	298
3·0 ,, .	30	7·8	5·3	247	31	10·6	4·9	262	30	11·9	8·0	256	31	10·8	7·8	169	23	9·0	4·3	269	16	21·1	20·0	287
3.6 ,, .	30	9·4	4·0	249	31	11·1	6·1	245	30	12·8	9·1	256	29	11·6	9·4	271	4	9·0	7·1	179	10	25·1	23·9	290
4.5 ,, .	28	12·0	6·8	286	29	12·8	9·3	245	27	15·0	10·7	269	29	13·0	10·9	272	1	15·0	15·0	190	6	26·5	24·8	278
5.4 ,, .	25	17·6	13·6	290	29	15·0	11·3	261	26	14·3	12·1	279	27	15·0	12·7	269					3	28·0	27·9	268
6.0 ,, .	24	22·8	20·2	285	29	17·0	13·1	267	25	17·6	14·8	272	26	16·7	13·5	268					1	23·0	23·0	250
7.2 ,, .	18	33·7	30·2	277	29	22·2	17·3	266	22	21·1	18·0	268	23	21·8	17·9	256					1	26·0	26·0	245
9.0 ,, .	8	46·9	41·0	265	26	29·5	24·1	257	18	30·7	22·9	262	21	31·5	27·1	250								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	NANPARA				NEW DELHI												POONA			
Time in I. S. T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	5·9	5·3	287	31	7·4	5·6	321	31	9·0	7·7	305	30	6·6	5·3	310	31	6·5	4·5	312	31	2·0	1·7	273
0·15 a. g. .	31	13·6	12·7	298	30	15·9	11·8	322	31	11·3	10·0	306	27	12·5	9·8	310	31	16·5	12·2	336	30	7·6	6·4	278
0·3 a. m. s. l..	31	13·9	13·0	296	30	13·2	10·5	326	31	11·3	9·5	298	27	8·1	6·6	310	31	13·5	9·5	332				
0·6 „ .	31	11·2	18·1	302	30	15·6	11.9	324	31	12·3	10·6	305	27	12·5	10·1	310	31	16·6	11·9	336	30	4·6	4·0	275
0·9 „ .	31	18·4	17·5	293	30	14·5	11·3	320	31	13·2	11·6	300	27	12·4	10·5	308	30	13·7	9·8	323	30	9·5	7·4	294
1·5 „ .	31	19·2	18·6	289	30	14·3	12·0	304	30	13·2	10·5	290	27	12·1	10·4	300	30	12·2	9·9	286	30	14·1	9·2	324
2·1 „ .	29	20·7	20·4	287	30	16·2	14·2	291	30	15·3	12·1	284	27	12·9	11·1	294	30	14·5	12·5	272	30	10·5	3·8	285
3·0 „ .	26	21·7	21·2	286	31	18·2	16·4	283	29	18·1	13·9	279	27	14·1	12·0	280	25	15·9	13·9	264	29	9·1	5·4	162
3·6 „ .	23	22·4	21·3	289	31	19·6	17·4	280	29	19·3	14·8	275	27	17·5	15·3	280	14	17·9	16·8	269	28	9·9	7·5	166
4·5 „ .	20	25·0	23·5	290	30	20·6	17·6	275	28	21·3	18·2	258	26	21·0	18·8	273	6	15·3	12·3	288	12	8·8	5·0	195
5·4 „ .	16	24·7	22·9	237	30	23·7	20·7	271	28	24·4	21·7	268	25	23·5	20·8	274	2	6·5	4·6	318	8	10·2	5·9	275
6·0 „ .	12	28·0	25·0	285	29	25·6	22·7	273	28	28·8	25·3	270	25	28·1	25·8	272	2	15·0	14·1	292	7	11·4	7·0	266
7·2 „ .	6	33·4	30·0	281	29	32·2	29·5	270	27	35·9	32·9	269	23	34·6	32·6	266					6	19·5	12·2	271
9·0 „ .	1	58·0	58·0	265	24	43·0	40·1	267	22	50·1	45·5	262	21	42·7	39·7	263					4	24·2	18·4	220

Station	POONA								PORT BLAIR											
Time in I. S. T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	6·4	5·7	300	31	2·8	2·5	267	31	2·2	1·9	249	31	5·9	2·2	185	31	3·9	2·9	235	31	3·5	2·7	253
0·15 a. g. .	31	12·7	11·3	300	30	9·5	8·3	278	31	8·2	6·4	257	29	7·6	4·1	190	31	7·5	5·4	237	31	8·1	6·1	238
0·3 a. m. s. l..									31	8·6	6·6	255	29	7·3	3·9	195	31	7·8	5·5	239	31	8·0	5·8	240
0·6 „ .	31	8·5	7·7	299	30	5·2	4·8	266	31	8·0	5·8	250	29	5·0	2·7	233	31	7·7	5·3	247	31	7·5	5·3	237
0·9 „ .	31	12·9	10·7	301	30	12·0	10·1	287	31	7·1	3·6	246	29	5·0	2·6	243	30	6·9	4·4	260	28	5·5	3·0	214
1·5 „ .	31	11·2	8·3	298	30	15·5	10·8	303	31	6·6	2·4	203	20	4·6	1·2	115	30	6·1	0·8	357	26	5·3	2·2	149
2·1 „ .	31	8·5	3·3	285	30	10·1	2·0	254	31	8·4	3·8	114	18	7·3	5·3	077	29	8·0	2·9	059	25	7·1	5·1	097
3·0 „ .	31	9·2	3·2	145	30	9·8	6·9	137	31	10·1	4·7	082	17	9·7	9·0	077	28	9·6	3·5	050	24	8·5	5·1	086
3·6 „ .	30	9·9	5·0	155	30	11·0	8·4	146	29	9·2	4·2	092	17	10·4	8·9	071	25	9·2	5·4	068	18	8·5	5·1	076
4·5 „ .	29	9·6	6·0	200	9	10·7	4·4	129	29	8·2	4·2	102	13	11·5	9·0	071	22	9·5	6·0	066				
5·4 „ .	26	10·2	6·2	248	1	15·0	15·0	115	29	10·1	4·3	080	13	11·1	6·5	060	21	12·3	7·6	061				
6·0 „ .	24	13·1	10·0	258					26	11·7	4·7	073	12	13·7	7·8	060	20	12·9	6·7	050				
7·2 „ .	21	17·7	13·2	255					26	14·9	6·4	078	10	18·0	7·9	057	19	15·0	6·8	063				
9·0 „ .	14	25·4	21·2	250					23	12·4	2·7	083	5	24·8	4·9	316	19	14·1	2·5	124				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	RAIPUR												SANTA CRUZ											
Time in I. S. T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	4·0	3·2	213	31	5·2	3·9	247	31	6·6	4·3	223	31	2·6	0·9	005	31	8·3	6·3	290	30	10·8	9·6	301
0·15 a. g. .	31	13·2	8·4	246	31	10·1	7·6	258	31	16·1	10·6	237	28	11·2	3·0	348	31	8·9	5·7	251	29	18·0	15·5	305
0·3 a. m. s. l. .													28	11·7	3·7	335	31	7·3	3·6	315	29	16·4	14·0	307
0·6 ,, .	31	16·0	10·6	260	31	11·6	9·1	255	31	17·0	11·2	247	28	12·9	5·9	328	31	8·0	3·9	014	29	14·7	11·3	307
0·9 ,, .	30	16·1	10·8	265	31	11·4	8·7	265	31	15·5	10·4	258	28	13·9	7·7	326	30	10·6	6·2	007	29	12·7	8·8	310
1·5 ,, .	30	15·0	11·0	284	31	11·0	8·2	268	31	10·1	9·9	283	27	14·8	8·7	334	30	12·3	6·3	323	29	12·3	7·4	3.8
2·1 ,, .	28	13·1	9·0	279	31	11·5	7·9	272	30	12·3	8·5	292	27	14·9	7·2	298	28	14·4	8·1	267	28	12·3	7·1	288
3·0 ,, .	28	12·9	7·9	281	28	11·8	8·4	280	28	13·2	9·7	299	27	15·1	8·8	230	27	13·7	10·6	210	28	13·3	9·4	231
3·6 ,, .	23	13·7	7·7	275	27	10·9	8·4	281	13	14·7	12·1	310	27	15·0	10·6	207	25	15.2	13·9	197	27	12·7	9·9	220
4·5 ,, .	16	15·2	7·7	272	22	13·1	11·0	279	1	8.0	8·0	055	26	15·1	11·0	188	22	11·9	10·6	215	25	12·3	10·1	207
5·4 ,, .	12	15·5	7·4	285	18	14·4	13·0	286					26	14·6	9·4	222	22	12·1	10·4	245	25	12·7	9·0	236
6·0 ,, .	7	16·1	9·6	263	17	17·5	15·9	285					26	14·7	8·6	240	22	14·4	11·7	246	23	13·5	8·7	264
7·2 ,, .	3	18·3	11·7	285	10	24·3	23·3	283					24	18·9	14·9	241	19	18·6	16·2	250	24	18·0	13·4	265
9·0 ,, .	1	37·0	37·0	225	6	35·0	32·9	258					19	28·1	23·0	249	17	28·0	25·6	248	18	25·8	19·2	250

Station	SANTA CRUZ				TEZPUR												TIRUCHIRAPALLI							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	5·2	2·8	294	31	3·7	3·4	082	31	4·7	3·5	087	31	5·7	3·8	086	31	4·1	2·7	253	31	5·8	3·8	176
0·15 a. g. .	30	11·0	7·2	301	25	12·6	10·9	085	29	13·7	8·3	088	19	16·7	12·2	094	31	9·6	6·4	243	30	7·9	5·4	174
0·3 a. m. s. l. .	30	12·3	7·6	296	25	13·2	11·4	087	29	13·7	7·3	093	19	16·8	12·1	100	31	10·9	7.2	243	30	8·0	5·4	175
0·6 ,, .	30	11·9	7·1	299	24	11·5	4·8	115	28	11·2	1·9	149	17	9·8	6·1	127	31	12·3	8·0	241	30	8·8	5·7	178
0·9 ,, .	30	11·0	5·1	322	24	11·4	3·0	219	28	12·4	7·2	240	17	9·5	5·6	197	31	10·5	6·9	230	30	8·1	5·3	269
1·5 ,, .	30	12·7	7·1	329	23	16·7	13·2	250	26	19·3	16·8	243	16	14·7	10·7	260	31	8·3	3·8	191	30	7·6	3·1	173
2·1 .	27	12·0	7·6	288	14	19·9	16·7	256	19	23·2	20·4	250	11	15·9	13·1	248	31	11·2	5·4	103	30	9·8	3·1	104
3·0 ,, .	25	12·8	7·9	278	7	18·1	17·7	265	14	25·2	21·9	256	5	18·6	16·6	268	30	16·9	9·7	088	30	14·8	8·8	075
3·6 ,, .	17	12·9	9·2	195	6	18·7	18·6	268	9	17·3	14·3	260	2	22·5	21·7	256	30	17·7	11·0	091	30	17·5	17·0	077
4·5 ,, .	5	7·8	7·1	206	4	21·0	19·1	275	9	15·4	13·2	280					28	16·4	10·5	097	30	16·7	9·7	091
5·4 ,, .	1	11·0	11·0	275	3	16·0	12·8	300	5	22·8	20·8	290					28	16·0	10·8	104	25	13·8	8·2	103
6·0 ,, .	1	13·0	13·0	250	2	13·5	11·5	299	3	27·7	27·3	273					25	15·6	11·3	113	24	14·9	9·8	107
7·2 ,, .	1	14·0	14·0	235	2	17.0	14·7	337	1	29·0	29·0	290					17	12·1	8·1	103	21	15·2	9·4	098
9·0 ,, .					1	53·0	53.0	290									8	12·4	7·3	115	14	13·5	9·7	085

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	TIRUCHIRAPALLI				TRIVANDRUM												UDAIPUR			
Time in I. S. T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	9·0	6·2	183	31	4·6	3·5	338	31	5·8	4·6	322	30	6·8	5·7	299	31	3·7	2.3	356	31	2·1	1·4	278
0·15 a. g.	29	12.5	9·9	181	28	8·6	6·7	330	27	9·2	8·2	308	27	10·1	8·9	295	28	10·7	7·1	325	31	9·1	5·4	283
0·3 a. m. s. l.	29	13·2	10·6	182	28	9·2	7·2	320	27	9·4	8.2	304	27	10·7	9·2	295	28	11·5	8·7	314				
0·6 ,,	29	15·2	12·5	180	28	11·7	8.3	309	27	9·9	8·9	308	27	12·5	10·9	298	28	13·5	10·5	305				
0.9 ,,	29	12·3	9·8	178	28	12·5	9·6	302	24	12·5	10·8	308	27	13·3	11·6	300	27	13·1	10·0	297	31	10·4	6·5	289
1·5 ,,	29	7·8	2·1	170	26	10·2	5·0	299	18	11·2	6·8	327	26	13·2	7·7	309	24	10·9	6·3	302	31	14·6	10·8	276
2·1 ,,	28	9·6	4·6	069	24	13·0	4·4	018	11	13·6	7·7	036	24	15·3	4·2	026	22	13·9	5·7	036	31	11·9	8·1	267
3·0 ,,	26	14·9	10·6	075	22	19·9	10·3	048	3	22·7	13·5	004	22	17·6	2·5	360	19	18·0	10·2	069	31	15·3	11·6	250
3·6 ,,	24	17·4	12·9	078	17	19·3	11·7	058	2	19·5	18·8	337	20	16·7	3.6	057	5	25·4	17·7	070	18	14·2	9·3	246
4·5 ,,	23	18·3	13·2	078	15	14·6	8·5	071	1	12·0	12·0	065	18	14·2	2·3	102	1	15·0	15·0	210	6	17·0	15·5	244
5·4 ,,	15	16.9	12·0	112	15	13·5	8·7	071	1	13·0	13·0	065	16	15.3	4·7	118					3	24·0	22·9	228
6·0 ,,	11	14·8	13·2	107	14	14·1	9·9	072	1	12·0	12·0	080	14	16·2	5·8	130					2	26·5	26·5	238
7·2 ,,	2	7·5	7·5	102	14	16·1	10·1	080					13	16·0	6·0	101								
9·0 ,,	1	10·0	10·0	105	14	12·2	7·6	056					7	14·0	4·6	082								

Station	UDAIPUR								VENGURLA												VERAVAL			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4.8	4·0	255	31	2·0	1·9	262	31	1·3	0·9	019	31	7·6	5·6	289	31	3·8	3·0	317	31	6·9	3·9	300
0·15 a. g.	31	10·8	8·2	262	31	9·7	7·9	268	31	7·9	5·0	006	30	10·7	9·0	296	30	8·0	5·7	326	31	12·3	9·3	292
0·3 a. m. s. l.									31	9·9	6·3	351	30	11·8	9·0	305	30	9·9	7·3	330	31	13·5	10·1	292
0·6 ,,									31	11·7	7·7	340	30	11·8	8·2	319	30	13·3	9·4	341	31	14·1	9·7	292
0·9 ,,	31	11·6	8·9	260	31	12·0	9·9	270	28	14·1	10·4	337	30	11·0	8·0	327	30	14·6	10·6	342	31	13·6	8·6	290
1·5 ,,	31	10·6	8·5	258	31	14·5	12·1	274	24	15·6	11·7	343	27	11·3	9·2	344	26	12·8	9·7	323	27	12·8	8·4	285
2·1 ,,	31	9·7	7·7	262	31	12·8	10·2	274	21	12·4	7·3	009	26	8·6	5·0	002	24	8·1	3·7	333	21	11·9	6·5	280
3·0 ,,	31	13·0	10·1	267	30	12·6	7·5	264	19	10·5	5·7	085	24	9·7	6·3	062	20	11·7	9·0	097	12	12·0	7·8	266
3·6 ,,	31	14·9	11·2	258	21	9·5	2·8	244	7	10·3	8·0	119	23	11·2	9·5	072	2	14·0	12·7	076	3	11·0	9·9	260
4·5 ,,	28	17·3	14·2	261	11	13·1	10·0	234	3	9·0	7·1	147	21	9·1	6·8	087								
5·4 ,,	27	20·4	18·4	258					1	9·0	9·0	295	21	7·4	3·8	094								
6·0 ,,	26	24·9	22·3	259					1	13·0	13·0	295	20	8·5	2·3	095								
7.2 ,,	22	32·5	29·0	257									4	12·0	5·7	220								
9·0 ,,	14	39·3	35·1	253																				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Station	VERAVAL								VISAKHAPATNAM											
Time in I. S. T.	1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	30	11·8	10·1	264	31	8·9	7·1	093	31	3·3	3·2	229	31	12·7	11·8	226	31	6·7	6·7	226
0·15 a. g. .	30	17·7	14·0	267	31	13·6	11·1	103	31	10·3	10·1	234	31	12·0	11·6	214	30	10·0	10·0	226
0·3 a. m. s. l. .	30	19·0	15·5	271	31	14·6	12·0	112	31	13.6	13·5	238	31	12·8	12·3	217	30	12·4	12·3	230
0·6 ,, ·	30	15·6	12·3	279	30	14·2	11·0	113	31	15·6	15·6	240	31	13·3	12·5	230	30	13·3	13·0	239
0·9 ,, ·	30	13·4	9·6	286	28	12·6	8·9	112	31	12·7	12·0	243	31	11·8	10·2	240	30	10·3	9·0	248
1·5 ,, ·	30	12·1	7·5	297	28	11·6	6·6	101	30	6·9	3·4	273	31	7·9	5·5	284	30	5·8	1·3	303
2·1 ,, ·	30	13·4	8·8	291	26	12·3	7·4	269	30	5·5	2·5	357	31	7·0	4·2	348	30	5·8	2·1	023
3·0 ,, ·	29	17.2	11·1	259	20	12·2	5·0	210	26	7·5	4·8	339	27	7·4	5·0	034	29	9·9	6·1	027
6·0 ,, ·	27	18·6	13·6	244	7	13·3	7·6	236	7	9·9	7·2	020	25	9·2	6·0	045	22	10·9	6·6	015
4·5 ,, ·	27	18·8	14·0	240									24	11·2	5·4	023	11	8·9	2·0	301
5·4 ,, ·	27	18·7	13·6	246									14	15·7	5·6	025	2	16·0	16·0	255
6·0 ,, ·	27	19·3	14·8	245									5	17·4	1·9	325	1	17·0	17·0	265
7·2 ,, ·	25	23·6	19·6	244																
9·0 ,, ·	20	30·1	26·5	250																

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Ht. in Km.	n	V	v	D
AHMEDABAD				
1730 hrs.				
10·5	2	16·5	12·0	225
12·0	1	66·0	66·0	240
AMBALA				
0530 hrs.				
10·5	4	54·3	52·1	253
12·0	2	76·0	72·7	258
14·1	1	95·0	95·0	245
16·2	1	92·0	92·0	255
18·0	1	89·0	89·0	200
1730 hrs.				
10·5	1	39·0	39·0	260
12·0	1	68·0	68·0	260
ANANTAPUR				
1730 hrs.				
10·5	1	20·0	20·0	110
12·0	1	35·0	35·0	100
BAGHDOGRA				
0530 hrs.				
10·5	2	39·0	39·0	302
BAIRAGARH				
1730 hrs.				
10·5	4	35·5	32·1	249
12·0	3	28·0	23·0	247
BAMRAULI				
0530 hrs.*				
10·5	19	54·5	50·5	258
12·0	13	59·8	58·5	251
14·1	5	42·8	38·9	256
16·2	1	14·0	14·0	305
1730 hrs.*				
10·5	10	65·2	63·0	258
12·0	2	80·0	79·7	253
14·1	1	65·0	65·0	260

Ht. in Km.	n	V	v	D
BHUBANESHWAR				
0530 hrs.				
10·5	2	9·5	9·5	146
12·0	2	9·0	4·5	151
14·1	1	7·0	7·0	300
1730 hrs.				
10·5	1	6·0	6·0	225
12·0	1	5·0	5·0	360
BHUJ				
1730 hrs.				
10·5	9	61·1	54·4	262
12·0	3	47·0	41·3	254
BIKANER				
1730 hrs.				
10·5	3	47·7	45·4	257
12·0	1	33·0	33·0	275
CHIKALTHANA				
1730 hrs.				
10·5	1	35·0	35·0	225
DUM DUM				
0530 hrs.*				
10·5	21	39·6	35·9	284
12·0	16	38·1	30·8	273
14·1	5	18·4	13·3	295
1730 hrs.*				
10·5	24	41·1	37·3	295
12·0	17	42·4	38·8	283
14·1	6	25·3	22·2	273
GANNAVARAM				
1730 hrs.				
10·5	6	16·7	7·7	245
12·0	3	16·7	12·4	240

Ht. in Km.	n	V	v	D
GAUHATI				
0530 hrs.*				
10·5	15	41·1	39·2	280
12·0	8	49·2	46·4	281
14·1	2	33·0	31·9	259
16·2	2	25·0	24·9	284
1730 hrs.*				
10·5	9	68·2	64·4	272
12·0	4	32·7	30·0	281
14·1	2	38·5	31·9	278
GOPALPUR				
0530 hrs.				
10·5	1	3·0	3·0	260
12·0	1	6·0	6·0	235
1730 hrs.				
10·5	3	19·7	19·7	251
12·0	1	8·0	8·0	260
14·1	1	10·0	10·0	180
16·2	1	19·0	19·0	190
18·0	1	13·0	31·0	160
GWALIOR				
0530 hrs.				
10·5	1	88·0	88·0	280
1730 hrs.				
10·5	1	26·0	26·0	310
12·0	1	27·0	27·0	295
JABALPUR				
1730 hrs.				
10·2	1	25·0	25·0	275
12·0	1	20·0	20·0	300
JAGDALPUR				
0530 hrs.				
10·5	1	10·0	10·0	195

Ht. in Km.	n	V	v	D
JAIPUR				
0530 hrs.				
10·5	1	25·0	25·0	305
JAMSHEDPUR				
1730 hrs.				
10·5	1	39·0	39·0	270
JODHPUR				
0530 hrs.*				
10·5	21	54·3	51·2	256
12·0	19	68·5	65·8	260
14·1	10	62·6	60·5	257
16·2	3	49·7	48·0	235
18·0	2	46·0	39·5	239
21·0	1	13·0	13·0	250
1130 hrs.				
10·5	4	18·5	17·4	282
12·0	3	19·0	18·9	291
14·1	3	16·6	15·5	307
1730 hrs.*				
10·5	13	55·4	53·5	253
12·0	7	60·0	56·9	251
14·1	3	37·0	33·7	260
MADRAS				
0530 hrs. *				
10·5	17	15·5	4·2	294
12·0	12	14·6	3·3	302
14·1	10	13·2	4·6	039
16·2	7	16·3	6·4	074
18·0	4	14·3	7·5	007
21·0	1	19·0	19·0	120

Ht. in Km.	n	V	v	D
MADRAS				
1130 hrs.				
10·5	14	14·7	3·8	070
12·0	11	16·1	13·1	063
14·1	10	21·8	6·1	098
16·2	8	24·6	18·6	091
18·0	1	56·0	56·0	100
1730 hrs.*				
10·5	19	17·5	0·6	146
12·0	16	17·9	2·6	240
14·1	13	17·3	3·5	202
16·2	8	27·5	14·2	094
18·0	7	31·9	24·5	090
21·0	3	31·0	28·0	093
MANGALORE				
1730 hrs.				
10·5	7	14·4	8·4	094
12·0	5	23·8	21·6	097
14·1	3	12·0	10·1	088
MINICOY				
0530 hrs.				
10·5	3	9·7	8·2	125
12·0	2	16·5	8·3	105
1730 hrs.				
10·5	15	11·9	7·9	105
12·0	10	12·6	0·4	220
14·1	4	21·3	8·4	190
2330 hrs.				
10·5	1	13·0	13·0	170
MOHANBARI				
0530 hrs.				
10·5	1	10·0	10·0	010
12·0	1	12·0	12·0	330
14·1	1	37·0	37·0	260
1730 hrs.				
10·5	1	57·0	57·0	285

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9·0 Km. above mean sea level

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Ht. in Km.	n	V	v	D
		MUSSOORIE		
		1730 hrs.		
10·5	3	52·3	52·3	239
12·0	1	70·0	70·0	250
		NAGPUR		
		0530 hrs.*		
10·5	22	38·4	32·7	251
12·0	19	44·1	39·3	252
14·1	15	42·7	39·0	254
16·2	6	25·1	22·2	250
18·0	3	17·7	3·9	291
21·0	1	14·0	14·0	010
		1130 hrs.		
10·5	11	43·2	35·0	274
12·0	6	48·3	38·1	271
14·1	1	38·0	38·0	270
16·2	1	51·0	51·0	260
		1730 hrs. *		
10·5	19	40·0	33·8	255
12·0	15	43·8	37·9	254
14·1	9	47·7	40·1	245
16·2	3	30·3	21·4	225
		NEW DELHI		
		0530 hrs.*		
10·5	20	49·5	31·5	264
12·0	16	56·4	50·1	271
14·1	11	62·1	58·8	270
16·2	6	28·7	22·8	272
18·0	1	24·0	24·0	260
		1130 hrs.		
10·5	17	57·0	54·0	267
12·0	15	70·3	66·4	264
14·1	8	81·5	75·5	264
16·2	2	53·0	53·0	273
18·0	1	19·0	19·0	280
		1730 hrs.*		
10·5	21	50·3	46·3	267
12·0	16	56·7	53·6	270
14·1	6	61·7	57·8	265
16·2	1	43·0	43·0	290

Ht. in Km.	n	V	v	D
		POONA		
		0530 hrs.		
10·5	2	32·0	19·3	205
		1730 hrs.		
10·5	10	32·4	28·5	252
12·0	9	35·0	29·6	253
14·1	3	53·0	33·0	225
16·2	2	53·5	20·7	177
		PORT BLAIR		
		0530 hrs.*		
10·5	22	13·1	4·6	232
12·0	16	14·5	4·8	196
14·1	11	14·5	10·6	073
16·2	5	21·4	15·9	082
18·0	3	23·7	23·7	107
		1130 hrs.		
10·5	3	22·7	7·6	269
12·0	1	39·0	39·0	240
		1730 hrs.*		
10·5	14	16·2	10·2	235
12·0	12	21·3	10·0	235
14·1	10	24·9	3·2	275
16·2	7	37·9	8·0	168
18·0	2	65·0	20·2	237
21·0	1	85·0	85·0	250
		RAIPUR		
		0530 hrs.		
10·5	1	48·0	48·0	215
12·0	1	52·0	52·0	245
		1730 hrs.		
10·5	2	44·5	41·5	241
12·0	2	61·5	57·8	250
14·1	1	75·0	75·0	240
		SANTA CRUZ		
		0530 hrs.*		
10·5	16	35·4	31·3	255
12·0	13	40·6	35·4	248
14·1	5	36·6	30·4	228

Ht. in Km.	n	V	v	D
		SANTA CRUZ		
		1130 hrs.		
10·5	10	35·9	32·0	260
12·0	6	35·7	33·1	250
14·1	3	32·0	30·3	238
16·2	2	30·5	14·3	210
18·0	1	33·0	33·0	125
21·0	1	23·0	23·0	075
		1730 hrs.*		
10·5	14	30 9	23·0	245
12·0	7	28 6	13·4	227
14·1	4	27·7	8·5	169
16·2	1	51 0	51·0	100
		TEZPUR		
		0530 hrs.		
10·5	1	65 0	65·0	285
		TIRUCHIRAPALLI		
		0530 hrs.		
10·5	5	13 8	7·1	148
12·0	4	19·7	9·1	141
14·1	1	51 0	51·0	095
		1730 hrs.		
10·5	13	13·4	3·4	099
12·0	11	13 6	2·3	172
14·1	4	13·3	3·7	340
16·2	3	25·0	8·4	210
18·0	1	53·0	53·0	065
21·0	1	70·0	70·0	040
		TRIVANDRUM		
		0530 hrs.*		
10·5	9	10·8	7·4	054
12·0	9	11·7	4·4	040
14·1	5	11·2	2·4	004
16·2	1	5·0	5·0	225
		1730 hrs.*		
10·5	5	12·4	6·7	340
12·0	5	11·8	9·0	339
14·1	4	10·8	10·4	335
16·2	3	13·0	12·3	039
18·0	1	21·0	21·0	085
21·0	1	26·0	26·0	110

Ht. in Km.	n	V	v	D
		UDAIPUR		
		1730 hrs.		
10·5	6	38·8	33·0	247
12·0	4	46·5	40·6	247
		VERAVAL		
		1730 hrs.		
10·5	17	37·0	32·4	245
12·0	9	45·9	41·4	251
14·1	4	50·2	37·0	236
16·2	2	69·5	21·0	253

RADIOSONDE DATA

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

During the month, observations of upper air temperature, pressure and humidity were made at 12 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I. M. D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

S. No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad	Clock type	1st October 1944	00 and 12	
2	Bombay	Clock type	7th September 1954	00 and 12	
3	Calcutta	Clock type	13th December 1946	00 and 12	Fan type used from 13th December, 1946 to 30th November, 1947.
4	Gauhati	Clock type	22nd July 1955	00 and 12	
5	Jodhpur	Clock type	17th April 1946	00 and 12	
6	Madras	Fan type	29th June 1946	00 and 12	
7	Nagpur	Fan type	1st October 1946	00 and 12	
8	New Delhi	Clock type	3rd December 1943	00 and 12	
9	Port Blair	Fan type	4th December 1949	00 and 12	
10	Trivandrum	Fan type	1st July 1947	00 and 12	
11	Veraval	Fan type	3rd October 1944	00 and 12	
12	Visakhapatnam	Fan type	8th December 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From ascents at 12 hrs. G. M. T.

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Standard pressure surface mbs.	ALLAHABAD Surf. Pr. (989 mb.)						BOMBAY (1004 mb.)						CALCUTTA (1000 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	313·8	318	311	284·8	31	13	304·2	308	303	296·8	31	6	307·1	312	298	299·6
1000	31	−3	...	...	...	...	31	48	...	...	...	...	31	3	...	...	...	...
900	26	957	305·8	313	302	276·6	31	986	300·0	304	294	283·6	31	949	302·4	307	294	290·3
850	26	1466	301·0	308	296	275·0	31	1489	297·7	301	292	279·4	31	1456	299·1	303	292	286·5
800	26	1998	295·5	299	291	272·4	30	2017	294·3	298	289	277·4	31	1986	294·8	300	290	283·4
700	26	3138	286·1	291	281	267·1	30	3158	286·5	290	281	274·4	31	3126	285·1	291	278	277·8
600	25	4410	276·2	283	269	256·7	27	4438	277·5	283	272	262·1	31	4397	275·5	281	265	269·1
500	24	5857	267·2	273	262	...	27	5899	268·8	275	263	...	31	5846	267·2	273	255	...
400	19	7574	256·9	266	248	...	23	7619	257·8	273	249	...	30	7565	256·6	264	242	...
300	15	9675	243·9	251	239	...	15	9779	245·6	254	235	...	27	9692	243·0	252	233	...
250	9	10982	237·2	246	230	...	12	11066	237·9	247	225	...	22	10960	233·7	245	219	...
200	5	12492	228·8	231	227	...	8	12571	226·1	235	212	...	16	12471	223·7	231	211	...
175	5	13409	224·4	225	223	...	7	13495	222·6	231	218	...	9	13267	214·2	225	202	...
150																		
125																		
100																		
80																		

Standard pressure surface mbs.	GAUHATI (995 mb.)						JODHPUR (978 mb.)						MADRAS (1003 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	49	302·3	308	296	300·3	25	218	310·7	313	308	283·8	30	15	305·1	307	303	298·2
1000	29	9	...	...	...	...	25	10	...	...	...	...	30	38	...	...	...	...
900	29	941	296·4	300	291	293·7	25	963	303·7	307	301	279·5	30	981	299·9	303	296	287·3
850	29	1437	293·7	298	290	289·8	25	1468	298·4	303	293	277·5	30	1483	296·9	301	293	283·1
800	29	1959	290·1	296	287	285·8	25	1996	293·1	298	288	275·8	30	2011	293·6	299	286	279·6
700	29	3084	282·6	291	278	276·7	24	3125	282·6	291	275	265·0	30	3148	286·0	289	282	273·9
600	29	4342	274·7	281	269	266·6	23	4381	273·1	280	264	246·2	24	4429	277·9	284	274	264·6
500	29	5792	267·2	275	255	...	23	5817	263·8	270	252	...	23	5894	269·5	273	265	...
400	29	7500	255·2	265	246	...	21	7511	253·4	263	242	...	23	7627	260·1	274	255	...
300	23	9586	240·6	255	229	...	20	9584	239·5	249	229	...	20	9760	246·1	250	240	...
250	22	10846	231·2	247	219	...	19	10852	231·1	242	215	...	18	11050	236·9	243	232	...
200	19	12347	222·5	237	209	...	16	12315	221·8	234	207	...	15	12578	227·1	234	218	...
175	14	13214	214·9	225	203	...	14	13200	218·4	231	205	...	14	13452	220·2	227	209	...
150	7	14137	211·0	221	194	...	11	14230	215·0	225	198	...	13	14442	213·2	222	199	...
125	5	15322	207·8	216	191	...	7	15359	210·6	219	193	...	10	15579	207·8	218	193	...
100							5	16690	206·8	219	191	...	9	16965	201·6	210	193	...
80													7	18327	201·3	207	195	...

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From ascents at 12 hrs. G. M. T.

May 1957 (VAISAKHA 11—JYAISTHA 10, 1879 SAKA)

Standard pressure surface mbs.	NAGPUR Surf. Pr. (967 mb.)						NEW DELHI (978 mb.)						PORT BLAIR (999 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			Dew point	No. of Obs.	Ht. gpm.	Temperature °A			Dew poi t	No. of Obs.	Ht. gpm.	Temperature °A			Dew point
			Mean	Max.	Min.				Mean	Max.	Min.				Mean	Max.	Min.	
Surface	26	311	311·1	314	304	287·7	31	210	310·2	316	303	289·0	24	79	302·0	305	296	297·8
1000	26	3	...	...	...	...	27	3	...	...	...	...	23	67	...	...	...	...
900	26	963	307·5	310	303	282·3	27	959	304·3	311	295	279·6	23	996	295·3	297	293	292·8
850	26	1476	302·4	305	295	280·2	27	1466	299·7	307	292	276·6	23	1491	292·5	295	289	289·6
800	26	2010	297·3	301	290	279·1	27	1996	294·6	302	289	275·8	23	2013	289·7	293	287	285·4
700	26	3155	286·6	291	275	273·3	27	3131	284·5	293	280	270·3	23	3139	284·0	287	279	277·9
600	25	4433	276·8	281	273	265·6	27	4394	274·9	282	271	259·0	23	4409	277·3	280	272	270·7
500	24	5901	267·6	272	263	...	26	5840	265·8	273	261	..	21	5873	269·0	273	262	...
400	22	7618	257·2	262	253	...	25	7547	255·4	269	250	...	20	7601	258·5	264	253	...
300	20	9726	242·9	250	237	...	24	9638	242·0	255	235	...	20	9724	244·5	251	237	...
250	20	11001	233·8	240	226	...	24	10916	233·3	245	227	...	17	11020	236·3	243	228	...
200	15	12506	223·2	229	212	...	19	12418	224·2	237	216	...	15	12525	225·5	235	212	...
175	14	13371	216·9	224	208	...	16	13291	221·6	230	213	...	14	13398	218·6	230	203	...
150	12	14333	211·1	218	201	...	14	14259	217·8	227	207	...	13	14373	211·5	225	193	...
125	8	15460	206·2	211	200	...	12	15437	215·5	224	204	...	10	15558	208·8	221	202	...
100	5	16814	202·8	205	201	...	11	16817	211·6	221	203	...	6	16878	204·5	217	197	...
80							9	18163	212·1	221	204	...						

	TRIVANDRUM (999 mb.)						VERAVAL (1005 mb.)						VISAKHAPATNAM (998 mb.)					
Surface	21	064	301·1	304	298	298·0	30	8	302·8	305	301	300·4	31	48	303·7	305	299	298·5
1000	21	60	...	...	...	...	30	53	...	...	...	...	30	32	...	...	...	...
900	21	988	295·0	297	293	291·5	30	986	299·0	302	296	284·2	30	969	299·8	303	296	290·5
850	21	1482	292·2	295	291	288·9	30	1487	296·6	300	291	280·0	30	1473	297·5	302	294	286·3
800	21	2002	289·8	293	288	285·9	30	2012	293·1	296	290	277·9	30	2002	294·6	299	290	282·5
700	21	3130	283·7	286	281	277·6	30	3149	285·6	290	280	272·7	30	3143	286·8	295	282	275·7
600	20	4398	276·6	279	273	268·5	29	4422	277·3	281	273	264·3	30	4421	277·5	282	274	269·1
500	18	5858	268·1	271	265	...	28	5885	268·5	273	265	...	30	5881	268·6	273	262	...
400	18	7579	258·3	265	254	...	28	7606	256·7	263	251	...	30	7607	258·5	264	251	...
300	12	9709	244·9	251	240	...	26	9719	242·8	251	236	...	26	9721	244·7	251	237	...
250	8	10980	237·0	244	229	...	22	10993	234·3	242	226	...	25	11007	235·8	247	227	...
200	7	12506	225·4	238	217	...	16	12495	223·9	231	213	...	22	12488	224·1	234	212	...
175	7	13371	220·3	233	212	...	16	13366	218·5	225	208	...	13	13346	217·1	226	209	...
150	7	14356	214·1	227	205	...	13	14349	211·9	217	206	...	10	14322	211·9	223	203	...
125	6	15497	208·7	221	200	...	6	15505	208·8	215	203	...	6	15386	203·0	218	196	...
100	6	16856	202·2	210	195	...	5	16870	203·4	213	195	...	5	16680	196·8	213	189	...
80																		

NOTE.— Number of observations refer to those of dynamic height.

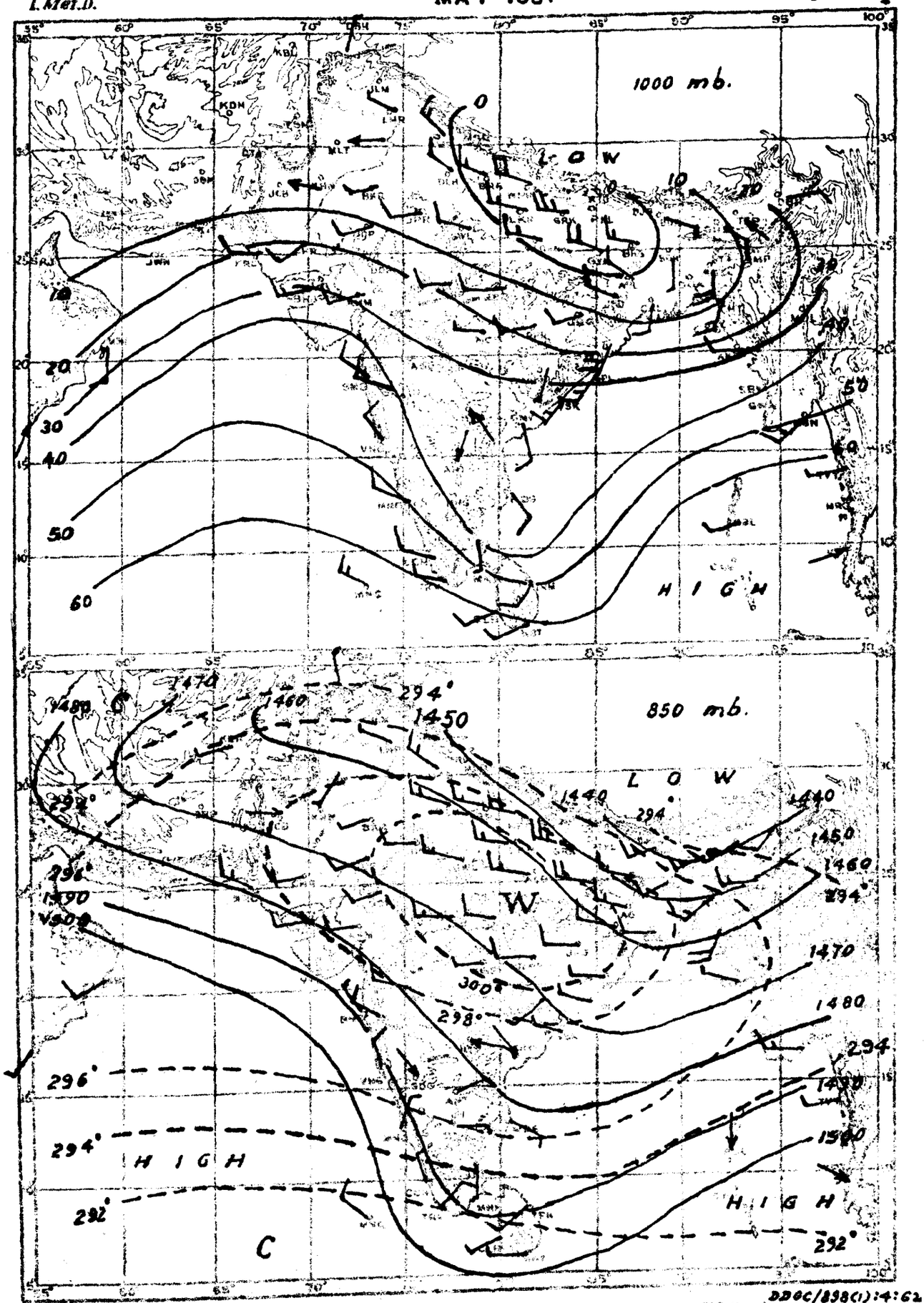
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperatur less than 273° A.

Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—S6—282 D. D. G. Obs. Poona/62—18-7-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I. Met.D. MAY 1957 Plate I



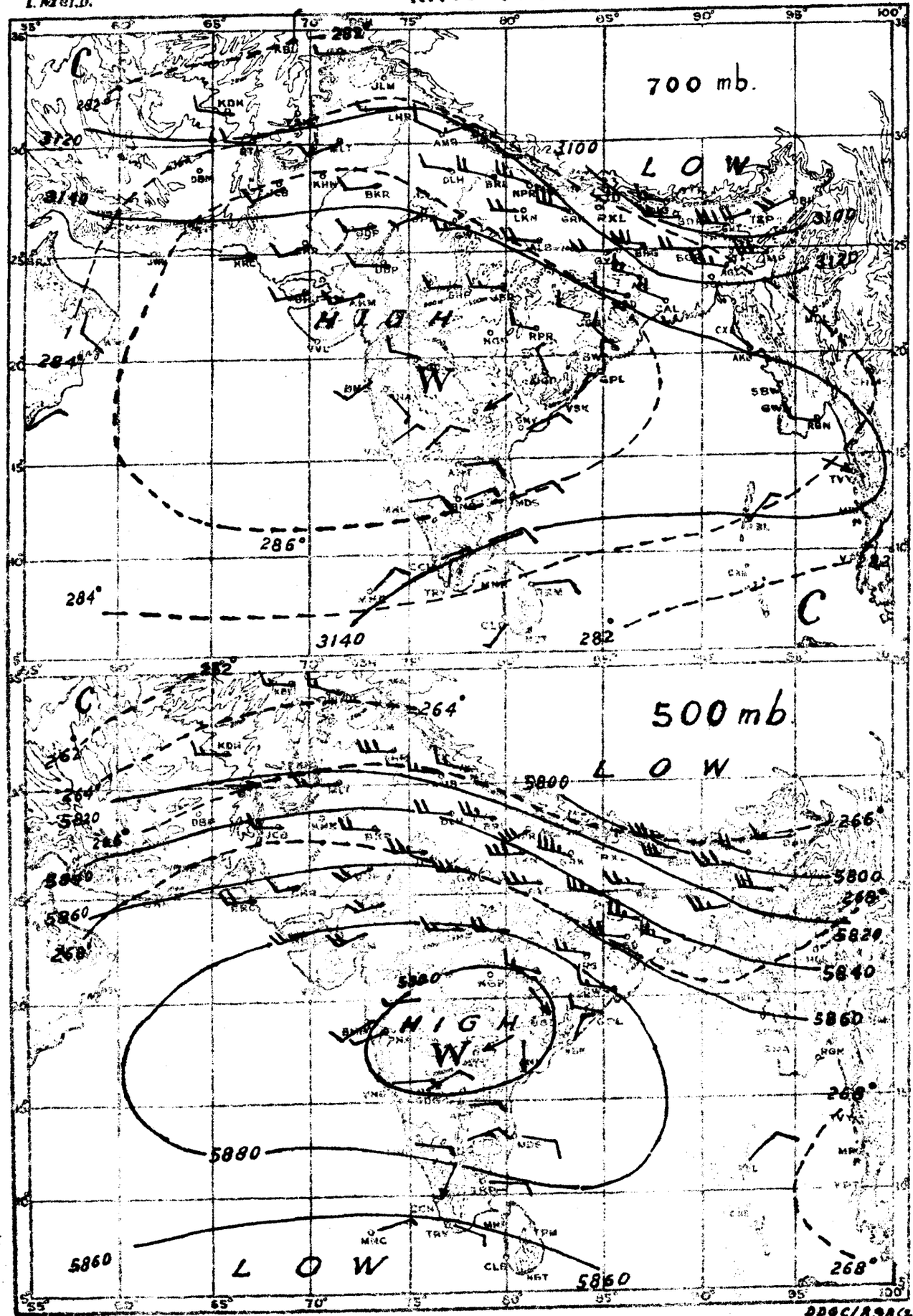
DDOC/898(1):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 30 Knots.

- - - - - Isotherms in degrees absolute. —— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I. Met.D. **MAY 1957** Plate II



DDGC/898(2):4/62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

- - - - - Isotherms in degrees absolute. ———— Contours in geopotential metres.

G.P.Z.P. DURHAM, 1962

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INDIA WEATHER REVIEW, 1957

Monthly Weather Report

June

Published by authority of the Government of India

Chief features :

(1) Appreciable delay in the onset of the monsoon over most parts of the country,

(2) Subnormal activity of the monsoon even after its advance into the country, and

(3) A moderate heat wave in northeast India, east Madhya Pradesh and east Uttar Pradesh during the second and third weeks of the month.

The Arabian Sea branch of the monsoon which had advanced into the Comorin-Maldives area by the end of May, maintained its advance and set in over Kerala on the 1st June. During the course of the next five days, it advanced slowly along the west coast as far as Vengurla as a weak current. Thereafter, there was a lull in the activity of the monsoon which began to recede gradually from the west coast. By the 10th the activity of the monsoon became confined to the extreme south of Kerala. There was fairly widespread rain in Kerala between the 1st and 9th and in coastal Mysore between the 3rd and 8th. The Bay branch of the monsoon advanced as a feeble current into the east central Bay by the 8th but this branch also failed to make further progress for another week. The monsoon, however, revived over Kerala by the 15th and thereafter both the branches of the monsoon began to advance. In association with the formation of an upper air trough over the Gulf of Cambay and neighbourhood on the 19th, the Arabian Sea branch of the monsoon advanced into the south Konkan on the 19th and into the north Konkan and Maharashtra on the 22nd but only as a feeble current. A low pressure area which formed over the west central Bay of Bengal on the 22nd and moved northwestwards as a low pressure wave, served to usher in the monsoon into Andhra Pradesh on the 22nd and into Madhya Pradesh and Vidarbha on the 24th. The Bay branch of the monsoon advanced as a feeble current into Assam on the 21st and into West Bengal and Orissa on the 23rd. It strengthened on the 25th when it extended further inland into Bihar and Chota Nagpur. Under the influence of a trough of low pressure which formed in the east central Arabian Sea off the north Konkan coast on the 24th and moving northwestwards lay off the Kathiawar coast on the 25th, the monsoon extended into south Gujarat on the 24th, Saurashtra and Kutch and north Gujarat on the 27th and into southeast Rajasthan on the 28th. The monsoon was active over Saurashtra and Gujarat on the 28th, when Surat recorded 14 cms and Porbandar 13 cms of rain. According to newspaper reports, rail road and telecommunications over these areas were dislocated due to heavy rains.

There was good thunderstorm activity in northwest India and parts of Uttar Pradesh during the first half of the month. This was in association with the passage of a number of westerly waves across the extreme north of the country. Thundershowers accompanied by severe squalls were reported from a number of places during this period. New Delhi experienced a severe thundersquall on the evening of the 13th (1645 hrs. IST) when a maximum wind speed of 142 km. p. h. (88 m. p. h.) was recorded, the direction of the squall being from westnorthwest.

During the second week of the month, day temperatures rose over northeast India outside Assam and also in east Madhya Pradesh and east Uttar Pradesh. A moderate to severe heat wave prevailed in Orissa from the 10th to 20th, in Bihar, Chota Nagpur and Gangetic West Bengal from the 12th to 20th and in east Madhya Pradesh and east Uttar Pradesh from the 15th to 22nd.

The total rainfall during the month was in large excess in the Bay Islands and Rayalaseema, in moderate excess in Gujarat, north Mysore and Kerala and in slight excess in coastal Andhra Pradesh, Telangana and south Mysore. It was normal in Gangetic West Bengal, Saurashtra and Kutch and the Madras State and in slight defect in Assam, Sub-Himalayan West Bengal, east Rajasthan, the Konkan, Maharashtra, Vidarbha and coastal Mysore. Elsewhere it was in moderate defect except in Uttar Pradesh where it was in large defect.

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Mean maximum temperature was above normal in Gangetic West Bengal, Orissa, Chota Nagpur, Bihar, east Uttar Pradesh, Madhya Pradesh, the Konkan, Maharashtra, Vidarbha and Telangana. It was below normal in Jammu and Kashmir and Rayalaseema and normal elsewhere over the country. Mean minimum temperature was normal over the country, except in the Punjab(I), Jammu and Kashmir and Rayalaseema where it was below normal.

Mean relative humidity was in excess in Rayalaseema and south Mysore, in defect in Chota Nagpur and Uttar Pradesh, and normal elsewhere.

Mean cloud amount was in excess in Jammu and Kashmir, the Madras State and north Mysore, in defect in Gangetic West Bengal, Chota Nagpur, Bihar, east Uttar Pradesh and Saurashtra and Kutch and normal over the rest of the country.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. I. S. T. of the date noted in the succeeding column; similarly the heaviest fall in 24 hours, for any station denotes the amount recorded during the past 24 hours ending at 0830 hrs. I. S. T. of the date given in the succeeding column.

POONA 5,
The 17th September 1959.

B. N. SREENIVASAIAH,
for *Director General of Observatories.*

Errata to I.M.R. for June 1957

(Jyaistha 11 - Asadha 9, 1879 Saka)

Page No.	Station	Hour	Column	For	Read
Table II.					
272	Chubri		12	+112.1	-112.1
"	Baripada		4	43	43.8
273	Bahraich		1	Bahraich	Bahraich *
"	Bahraich		7	+0.7	-0.7
"	Bahraich (Heading)		10	0830-1720	0830-1730
276	Masulipatam		12	-52.7	+52.7
277	Bidar		12	-658	+65.8
"	Shimoga		11	58.2	158.2
"	Balehonnur		11	79.9	379.9
"	Hassan		11	11.5	111.5
"	Mysore		11	28.7	128.7
"	Bangalore (Central Observatory)		11	17.1	117.1
"	Kozhikode		11	1114.5	1114.5
"	Palghat		11	90.3	390.3
"	Fort Cochin		11	034.2	1034.2
"	Cochin (Naval Air Station)		11	196.2	1196.2
"	Alleppey		11	18.1	718.1
"	Punalur		11	62.5	762.5
278	Gorkha		7	1.87	17.8
Table II 282	Heading		20	N	NE
284	Aligarh	0330	1	Nigarh	Aligarh
"	New Delhi	0230	27,28	Blank	10,0
"	New Delhi	0530	25 to 28	Blank	8,1,14,0
"	New Delhi	0830	26 to 28	Blank	3,2,0
"	New Delhi	1130	26 to 28	Blank	7,1,0
"	New Delhi	1730	25 to 28	Blank	4,9,3,0
"	New Delhi	2330	26 to 28	Blank	3,6,0
"	Hissar	0530	26 to 28	Blank	3,8,0
"	Hissar	0830	26 to 28	Blank	0,5,0
"	Hissar	1730	26 to 28	Blank	5,2,0
286	Ajmer	0830	6	-0	-0.1
288	Idar	0830	25	Blank	8
289	Veraval	2330	21	Blank	0
290	Harnai	0830	28	2	0
291	Kolhapur	1130	13	.9	5.9
"	Visakhapatam	0530	28	1	0
292	Ramagundam	0830	5	905.3	985.3
294	Cherrapunji	0830	27	Blank	0
297	Chainpur	1730	3,28	Blank	Data rejected
"	(Heading)		27	Blank	Calm.

P.T.O

Page No.	Station	Hour	Ht.in km.	Existing entry under n	V	v	D	Correct entry under n	V	v	D
300	Amausi	0530	3.6			18.8	315			14.5	295
301	Anantapur	2330	0.15		20.0				20.6		
302	Bareilly	1730	4.5	23	19.7	22.1	295	22	20.4	19.3	301
303	Bhuj	0530	2.1			24.2	269			2.4	270
303	Bikaner	0530	0.9		19.1				22.8		
305	Gaya	0530	5.4			22.7				12.7	
306	Gopalpur	0530	2.1				3 9				309
306	Gorakhpur	1730	0;9				3 6				306
307	Jagdalpur	0530	4.5				26				026
307	Jaipur	0530	7.2				324				325
308	Minicoy	0530	3.0			20.0				19.2	
309	Minicoy	2330	1.5			2.62				26.2	
309	Mohanbari	2330	0.9				1 3				103
311	Santa Cruz	1730*	1.5				240				245
311	Santa Cruz	1730*	2.1				245				2
311	Tezpur	0530	0.15			2.8*		Delete asterisk mark *			
312	Udaipur	2330	5.4		17.5				18.0		

315	New Delhi	NEW DE I	NEW DELHI
317	Bombay	Standard pressure surface mb.400, Ht.gpm.as 76 9	7609
317	Jodhpur	Standard pressure surface mb.400, Ht.gpm.as 564	7564
318	Nagpur	Standard pressure surface mb.400, No.of Observations as 4	24
318	Nagpur	Standard pressure surface mb.250, Ht.gpm.as 1 969	10969
319	Gauhati	Standard pressure surface mb.600, Dew point as 273.8	273.6

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity % 0830 hrs. I.S.T.	Relative humidity % 1730 hrs. I.S.T.	Cloud. 0830 hrs. I.S.T.	Cloud. 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura).	362·7	86	31·5	24·5	85	77	6.5	5·3
	−58·8		+0·3	+0·1	+1		+0·1	
2. West Bengal .	312·3	88	35·4	26·3	77	69	4·4	5·1
	−42·4		+1·8	+0·4	−2		−1·2	
3. Orissa . .	154·4	72	35·5	27·0	74	67	5·1	5·6
	−61·2		+1·3	+0·4	−2		−0·3	
4. Bihar . .	112·1	59	37·5	26·4	64	52	4·0	4·7
	−78·4		+2·6	+0·5	−7		−1·0	
5. Uttar Pradesh .	49·5	40	39·5	27·1	52	35	2·6	3·1
	−73·8		+1·3	−0·2	−7		−0·6	
6. Punjab (I)(Including Himachal Pradesh and Delhi).*	36·9	67	40·5	26·4	45	32	1·7	3·3
	−17·9		+0·1	−1·3	−2		−0·4	
7. Jammu and Kashmir.	26·4	59	25·4	12·9	53	46	3·1	5·0
	−18·3		−2·3	−1·2	−4		+0·6	
8. Rajasthan .	43·3	76	40·0	27·4	54	31	2·4	2·5
	−13·7		+0·5	−0·2	−2		+0·2	
Sub-division								
1. Bay Islands .	925·1	167	29·3	24·4	86	89	6·9	7·3
	+372·6		+0·2	+0·5	+4		+0·2	
2. Assam (Including Manipur & Tripura).	362·7	86	31·5	24·5	85	77	6·5	5·3
	−58·8		+0·3	+0·1	+1		+0·1	
3. Sub-Himalayan West Bengal.	455·4	77	32·7	24·7	82	70	5·1	4·1
	−133·5		+0·5	−0·3	−1		+0·2	
4. Gangetic West Bengal.	258·7	97	36·2	26·8	75	69	4·1	5·4
	−8·3		+2·1	+0·7	−3		−1·7	
5. Orissa . .	154·4	72	35·5	27·0	74	67	5·1	5·6
	−61·2		+1·3	+0·4	−2		−0·3	
6. Chota Nagpur .	118·4	58	37·9	26·0	57	50	4·2	5·9
	−86·2		+3·1	+0·7	−11		−1·1	
7. Bihar . .	109·6	59	37·2	26·6	68	54	3·8	3·8
	−75·2		+2·3	+0·4	−5		−1·0	
8. Uttar Pradesh (East.)	55·2	42	39·5	27·5	54	37	2·8	3·1
	−75·3		+1·5	+0·1	−8		−0·7	
9. Uttar Pradesh, (West).	43·1	37	39·4	26·5	49	34	2·4	3·2
	−72·2		+0·9	−0·5	−6		−0·5	
10. Punjab (India)(Including Delhi).	36·9	67	40·5	26·4	45	32	1·7	3·3
	−17·9		+0·1	−1·3	−2		−0·4	
11. Himachal Pradesh	110·9	..	35·5	20·1	57	39	1·9	4·1
	..		..	..	..		..	
12. Jammu & Kashmir	26·4	59	25·4	12·9	53	46	3·1	5·0
	−18·3		−2·3	−1·2	−4		+0·6	
13. Rajasthan (West)	19·3	50	41·1	27·8	55	27	1·9	1·5
	−19·5		+0·5	−0·1	−1		−0·1	
14. Rajasthan (East)	67·3	89	39·1	27·2	54	35	2·9	3·2
	−7.9		+0·4	−0·3	−2		+0·4	
Division—*Contd.*								
9. Madhya Pradesh	98·8	58	38·3	26·1	57	40	3·8	4·7
	−70·2		+1·6	+0·2	−3		−0·4	
10. Bombay . .	216·2	91	35·4	26·0	74	55	4·4	4·1
	−20·8		+1·0	+0·5	+1		−0·7	
11. Andhra Pradesh .	162·5	164	36·2	26·4	71	56	5·6	5·9
	+63·3		0	−0·1	+4		+0·2	
12. Madras . .	37·3	94	33·5	26·1	68	61	5·5	6·5
	−2·4		−1·0	+0·5	+2		+1·2	
13. Mysore . .	291·5	101	33·7	22·4	81	69	6·3	6·3
	+1·6		−0·1	+0·6	+6		+0·7	
14. Kerala . .	918·5	145	28·8	24·4	91	84	7·2	6·9
	+285·7		−0.4	+0·5	+4		+0·6	
Mean of India (Excluding Jammu & Kashmir and Himachal Pradesh,)	156·1	86	36·4	25·9	66	51	4·2	4·6
	−25·8		+0·9	+0·2	−9		−0·2	
Sub-division—*Contd.*								
15. Madhya Pradesh (West)	90·8	63	38·7	26·0	58	37	3·7	4·2
	−52·4		+1·3	−0·1	−2		−0·1	
16. Madhya Pradesh (East)	110·4	58	37·8	26·3	56	44	3·9	5·5
	−95·5		+2·1	+0·6	−4		−0·9	
17. Gujarat . .	186·9	133	36·4	26·5	74	48	4·7	2·4
	+45·9		+0·1	0	−2		−0·5	
18. Saurashtra and Kutch.	77·2	98	36·1	27·3	77	63	3·5	3·0
	−1·7		+0·3	+0·2	+3		−0·9	
19. Konkan . .	432·3	85	32·1	26·9	82	75	5·2	4·6
	−74·6		+1·1	+1·0	+1		−0·9	
20. Maharashtra .	177·7	89	35·2	23·6	74	47	4·3	5·1
	−20·9		+1·5	+0·7	+2		−0·9	
21. Vidarbha . .	162·1	88	38·9	26·7	79	36	4·5	5·5
	−21·7		+1·4	+0·6	−3		−0·2	
22. Coastal Andhra Pradesh.	118·8	124	36·3	27·1	73	64	5·8	6·5
	+23·0		−0·1	−0·2	+3		+0·1	
23. Telangana . .	168·9	123	36·7	25·7	67	46	5·3	5·9
	+31·4		+1·1	+0·6	+2		+0·3	
24. Rayalaseema .	213·7	360	35·3	25·1	71	50	5·3	5·0
	+176·0		−1·7	−1·1	+9		+0·1	
25. Madras .	37·3	94	34·5	26·1	68	61	5·5	6·5
	−2·4		−1·0	+0·5	+2		+1·2	
26. Coastal Mysore .	838·3	87	29·8	24·1	90	87	6·9	7·3
	−125·8		+0·5	+0·1	+2		+0·1	
27. Mysore (North) .	158·6	142	33·4	23·1	80	60	6·2	6·5
	+46·6		+0·6	+0·8	+5		+1·4	
28. Mysore (South) .	148·4	116	28·4	21·1	87	74	6·2	6·2
	+20·3		−0·9	+0·6	+8		+0·1	
29. Kerala (Including Laccadives)	918·5	145	28·8	24·4	91	84	7·2	6·9
	+285·7		−0·4	+0·5	+4		+0·6	

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

*Data of Himachal Pradesh not included.

Division and station.	Air temperature in °C								Rainfall in millimetre					No. of rainy days(2·5mm. or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours.	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	28·5	..	30·4	21	24·9	..	23·1	13	372·6	778·4	..	131·0	6	21	..	19·8	14·1	..	22	0	0	4	0	0	0	0	0	0
Long Island	30·8	..	33·3	16,17	25·0	..	21·8	7	331·1	754·8	..	111·0	7	23	..	6·5	3·8	..	28	0	0	5	0	0	0	0	0	0
Port Blair	29·3	+0·2	30·6	16,17	24·4	+0·5	22·2	10	273.7	925·1	+372·6	131·6	7	21	−0·5	21·8	17.6	−4·4	29	0	0	10	0	0	0	0	0	0
Car Nicobar	30·4	..	31·4	15	24·9	..	22·6	8	151·6	520·5	..	101·6	1	17	..	8·8	6·1	..	20	0	0	2	0	0	0	0	0	0
Nancowry	29·7	..	30·5	25	25·7	..	23·2	17	164·6	328·1	..	120·4	16	13	..	18·8	15·2	..	16	0	0	2	0	0	0	0	0	0
Kondul	30·0	..	31·6	24	25·6	..	23·3	16,21	99·4	351·5	..	68.3	1	11	..	14·4	12·3	..	11	0	0	0	0	0	0	0	0	0
Assam (Including Manipur & Tripura)																												
Pasighat	30·3	..	34.3	2	23·0	..	20·9	1	155·1	608·3	..	129·3	18	19	..	3·6	4·6	..	22	0	0	2	0	0	0	0	0	0
Digboi	31·4	..	34·4	4	23·2	..	20·6	1	249·0	548·9	..	95·8	13	19	..	6·6	4·6	..	23	0	0	0	0	0	0	0	0	0
Dibrugarh	30·6	0	35·6	4	23·6	+0·2	21·7	1	127·6	587·2	+87·6	68·8	23	19	−0·6	3·2	2·5	+0·6	21	0	0	6	0	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	30·5	..	34·7	13	23·6	..	21·2	1	169·3	588·4	..	70·4	23	20	..	6·8	4·7	..	24	0	0	18	0	0	0	0	0	0
North Lakhimpur	30·3	..	34·7	4	23·5	..	20·9	1	201·8	769·1	..	80·0	28	21	..	..	..	..	24	0	0	8	0	0	0	0	0	0
Sibsagar	31·9	+0·5	35·0	4	25·1	+0.6	21·8	8	71·9	301·8	−82·5	40·4	24	22	+4·9	9·0	4·5	+1·0	27	0	0	16	0	0	0	0	0	0
Jorhat	31·9	..	34·4	4	24.4	..	22·1	10	113·1	369·7	..	83·3	13	19	..	..	..	..	21	0	0	19	0	0	0	0	2	0
Golaghat	31·7	..	35·6	13	21·0	..	19·9	8,18,29	214·0	297·5	..	76·2	22	19	..	..	..	..	21	0	0	0	0	0	0	0	0	0
Gohpur (R)																												
Tezpur	31.4	0	34·4	11	24·6	−0·1	22·7	1	46·0	244·5	−63·9	33·5	15	16	0	..	..	..	25	0	5	6	0	0	0	0	0	0
Tezpur (P.B.O.)	31.2	..	34·3	13	24·3	..	22·8	1	39·5	247·5	..	37·9	2	17	..	..	..	..	25	0	0	15	1	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	175·6	644·1	..	103·6	26	19	..	7·9	5·0	..	20	0	0	8	0	0	0	0	0	0
Chaparmukh	33·2	..	36·6	13	23.6	..	21·5	9	15.7	171.5	..	39.6	9	12	..	..	..	..	17	0	4	10	0	0	0	0	0	0
Tangla	31·9	..	34·7	12	24·1	..	21·0	15	67·1	463·6	..	113·0	26	14	..	6·9	4·9	..	16	0	0	1	0	0	0	0	0	0
Gauhati	31·3	−0·3	34·4	4	25·0	+0·3	22·8	7	52·9	193·9	−118·5	43·2	17	12	−2·7	4·6	3·2	+1·0	16	0	0	3	0	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	31·5	..	34·4	12	24·6	..	22·3	7	72·6	257·7	..	41·9	5	15	..	7·1	4·8	..	17	0	0	19	0	0	0	0	1	0
Rangiya*		..																										
Goalpara	32·0	..	36·7	20	24·0	..	21·6	6	155·9	731·8	..	137.2	30	16	..	0·1	0·3	..	21	0	0	0	0	0	0	0	0	0
Dhubri	30·2	+0·4	34·1	14	24·8	+0·3	22·8	19	63·3	500·3	+112.1	107·0	25	19	+0·9	7·2	7·0	+0·1	22	0	0	10	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome)	31·5	..	34·3	4,12	23·9	..	21·2	7	53·3	385·2	..	64·8	27	16	..	7·0	4·7	..	19	0	0	7	0	0	0	0	0	0
Tura (R)																												
Agartala	32·0	..	34·1	4,7	24·3	..	22·1	14	171·6	377.4	..	94·0	21	19	..	12·6	9·6	..	23	0	2	15	0	0	0	0	0	0
Silchar	31·3	−0·5	33·9	28	24·2	−0·4	22.7	7,9	95·0	313·1	−275·4	64·5	10	22	+0·7	3·1	1·8	−0·9	25	0	0	9	0	0	0	0	0	0
Imphal	29.4	..	31·7	4	21·1	..	19.3	22	80·0	262·8	..	69·1	27	11	..	11·5	7.6	..	18	0	1	6	0	0	0	0	0	0
Haflong	27·5	..	30·2	4	20·6	..	18·8	1	82·6	404·8	..	74·9	17	17	0	..	..	..	25	0	0	4	0	0	0	0	0	0
Lumding	33·8	+1·7	37·2	7	24·1	0	23·1	18	201·3	398·0	+152·9	135·6	30	12	−1·7	2·7	1·2	..	15	0	0	2	0	0	0	0	0	0
Sub Himalayan West Bengal																												
Cooch Behar (C.W.O.)	32.0	..	34·9	11	23·5	..	20·9	7	75·1	520·2	-338·1	91.9	18	20	−0.6	7·4	5·6	..	25	0	0	23	0	0	0	0	0	0
Jalpaiguri	30·5	−0·9	34·0	5	23.5	−0·8	17·0	18	22·5	590·7	−68·2	178.3	23	20	+0·9	8·3	7.8	+4·4	24	0	0	17	0	0	0	0	0	0
Bagdogra	32·0	..	35·0	8	23·2	..	21·1	7	40·8	472·8	..	74·9	2	20	..	8·5	5·6	..	26	0	0	24	0	0	0	.0	2	0
Malda	35·0	+1·9	39·4	7	25·8	+0·1	22·8	9	89·0	255·2	+5·8	73·3	29	9	−2·5	9·3	8·0	−0·7	15	0	0	21	0	0	0	0	1	0
Gangetic West Bengal																												
Dum Dum	35·9	..	41·8	7	26·7	..	23·9	2,8	20·4	146·6	..	60.5	26	7	..	12·0	9·7	..	12	0	0	11	0	0	0	0	0	0
Calcutta	36 0	+2·4	42·3	7	27·0	+1·1	23·2	8	63·1	159·7	−137·2	37·3	26	14	+0·8	9.5	7·5	+0 6	15	0	0	12	0	0	0	0	10	0
Barrackpore	35·6	..	41·1	14	26·5	..	19·9	11	90·0	149·5	..	29·2	12	11	..	..	..	..	19	0	0	17	0	0	0	0	1	0
Saugor Island	32·7	+0·7	34·4	15	28·2	+1·0	23·9	20	18·8	161·7	−133·7	73·6	28	9	−3·1	..	..	..	12	0	0	12	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	82·8	175·0	−24·9	109·5	28	4	−5·4	..	..	..	7	0	0	4	0	0	0	0	0	0
Contai	34·1	..	38·8	14	27·3	..	24·2	13	32·5	170·8	..	58.4	26	10	..	19·7	14·8	..	10	0	0	2	0	0	0	0	0	0
Midnapore	38·0	+3·4	42·8	13	27·0	+0·8	24·4	9	104·4	165·0	−94·3	46·0	26	12	−0·4	9.5	8·1	+2·6	11	0	0	1	0	0	0	0	0	0
Purulia	38·3	..	43·5	19	26·9	..	23·2	3	116·9	177·3	..	47.0	29	9	..	6·8	6·8	..	9	0	0	6	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	197·0	−70·5	60·7	20	7	−4·1	..	..	..	9	..	..	..	..	..	..	..	..	..
Burdwan	36·3	+2·1	40·2	15	26·5	+0.5	23·8	30	108·8	294·7	+27·5	92·2	30	12	−0·4	10·0	6·3	+1·3	12	0	0	1	0	0	0	0	0	0
Krishnagar	36·5	−2.7	42·6	1	26·3	+0·5	23·9	2	197·2	332·5	+70·1	91·2	30	12	−0.7	13·0	(b) 9·2	+1·2	17	0	0	15	0	4	0	0	0	0
Asansol	37·5	+0·9	43·3	20	26·7	+0·5	23·9	30	109·5	393·5	+152·0	174.5	29	10	−1·7	9·0	7.6	−0. 9	15	0	0	19	0	0	0	0	0	0
Suri	37·3	..	41·8	7	26.2	..	23·0	22	158·6	268·0	..	69·4	30	11	..	11·8	9·8	..	15	0	0	2	0	0	0	1	0	0
Berhampore	26·5	+2.8	40·5	7	26·0	+0·2	22·9	5	140·7	265·3	+119·7	130·8	22	12	−0·3	6·7	5·3	−0·7	17	0	0	4	0	0	0	0	0	0
Orissa																												
Bar pada	37·9	..	43·	14	..	..	..	..	39·8	119·7	..	24·1	17	10	..	5·1	3·9	..	13	0	0	17	0	0	0	0	0	0
Balasore	34·9	+0·9	42·8	14	27·1	+0·9	24·1	12	137·8	179·0	−53·9	64.3	27	10	−1·1	17.5	10·4	+2.7	13	0	0	18	0	0	0	0	0	0
Chandbali	32·9	−1·5	38·3	13	26·5	0	21·1	11	172·7	259·5	+37·5	53·3	27	9	−2·3	17·0 (m)	12·6 (l)	−0·3	9	0	0	4	0	0	0	0	0	0
Cuttack	38·6	+3·3	44·0	14	27·1	+0·7	24·0	8,11,28	61·8	100·6	−152·1	29·2	20	8	−3·4	6.9	5·6	+0·8	12	0	0	7	0	0	0	0	0	0
Bhubaneswar	37·3	..	43·5	14	26·8	..	22·2	3	110·7	204·2	...	62.2	3	10	..	18·7	16·7	..	15	0	0	12	0	0	0	0	4	0

* Data not reliable. (R) Register not received. (m) Mean of 18 days. (l) Mean of 19 days. (b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm. or more)		Wind speed Km. per hour			Weather phenomena—No. of days with										
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1720 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	9
Orissa—(contd.)																												
Puri	32·5	+0·8	34·4	13	28·1	+0·9	24·3	11	15·6	30·9	−158·6	9·9	27	4	−4·1	22·8	21·1	+1·6	8	0	0	5	0	0	0	0	0	0
Gopalpur	33·1	+1·0	34·8	5,14	26·8	0	23·8	6,20	23·3	144.2	+5·5	42.9	20	9	+1·4	..	..	...	10	0	0	10	0	0	0	0	3	0
Koraput	30·7	..	35·6	13	22·8	..	18·9	4	42·9	102 0	..	13·2	15	11	..	..	..	..	12	0	0	0	0	0	0	0	0	0
Titilagarh	35·5 (j)	..	41·7	13	27·1 (n)	..	22·2	29	40·7	155·1	..	42·7	28	12	..	6·9	5·6	..	13	0	0	12	0	5	0	0	0	0
Bolangir	39·8	..	..	..	23·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angul	37·7	+2·2	43·4	13	26·6	+0·5	21·3	16	50·2	120·6	−96·3	38·9	16	10	−1·6	12.1	10·0	+1·6	12	0	0	15	0	0	0	0	0	0
Sambalpur	38·5	+2·1	43·7	18	26·9	0	22·7	7	38·9	246·0	−10·3	58·4	21	11	+0·3	8·3	6 8	+0·4	12	0	0	11	0	1	0	0	0	0
Jharsuguda	39·2	..	44 3	13	25·5	..	21·8	27,28	61·5	101·1	..	42·9	26	8	..	12·5	9·9	..	12	0	0	15	0	1	0	0	1	0
Chota Nagpur																												
Jamshedpur	38·9	+2·8	44·0	20	28·0	+1·3	25·0	28,29	31·6	92·6	−98.1	55·1	28	5	−5·7	12·4	9·5	+2·1	9	0	0	10	0	4	0	0	0	0
Jamshedpur (P. B.O.)	39·4	..	44·5	13	28·0	..	24·1	28	48·2	101·3	..	74·4	28	5	..	12·3	8·0	..	8	0	0	13	0	0	0	0	3	0
Chaibasa	38·9	+2·8	44·0	19	27·1	+0·9	22.2	3,15	87·7	193·1	−4·8	82·5	3	8	−2·7	6·3	4·4	+0·1	11	0	0	6	0	2	0	0	0	0
Ranchi	37·4	+4·1	41·0	18	23·9	−0.2	14·8	5	83·8	120·1	−98·1	63·7	29	7	−4·4	6·0 (h)	4·3	−4·6	7	0	0	0	0	0	0	0	0	0
Ranchi (C. W.O.)	35·4	..	40·3	18	25·1	..	21·3	10	125·7	129·3	..	34·0	29	7	..	13·9	11·5	..	11	0	0	10	0	0	0	0	0	0
Daltonganj	40 0	+2·1	44·2	18	28·6	+1·4	23·1	28	35·2	75·8	−77·1	35·1	28	5	−3·2	9·1	6·2	−1·2	6	0	0	6	0	1	0	0	0	0
Hazaribagh	36·4	+2·5	41·2	18	25·1	+0·6	21·7	5	34·1	67·7	−143·9	15·0	8	7	−3·7	11·9	9·5	−1·4	12	0	0	16	0	0	0	0	1	0
Dhanbad	37·8	..	43·4	18	25·9	..	21·9	26	60·3	133·8	..	44·2	30	10	..	..	..	..	13	0	0	13	0	0	0	0	0	0
Bihar																												
Purnea	35·5	+2·5	39·8	7	25·5	+0·3	22·3	2	44·1	135·9	−123·9	65·3	9	8	−3·8	8·5	6 8	+2·0	10	0	0	14	0	0	0	0	0	0
Forbesganj	36·0	..	40·1	7	24·0	..	21·1	13	54·4	115·6	..	35·1	26	8	..	11·1	9·3	..	14	0	0	15	0	0	0	0	1	0
Darbhanga	35·9	+2·1	39·9	16	26·2	+0·4	22·8	2	69·7	184·8	−7·7	66·0	25	5	−3·8	6·6	4·0	−2·9	6	0	0	1	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	129·6	−66·0	39·4	21,25	4	−4·1	..	..	..	4	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	25·2	−125·4	9·1	8	3	−4·2	..	..	..	6	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	104.6	−52·9	62.2	28	5	−2·5	..	..	..	5	..	..	..	..	..	..	..	..	..
Patna	38·6	+2·9	44·0	17	27·3	+0·7	23·9	2	53·3	31·8	−149·6	18·5	29	3	−5·0	9·9	8·7	+0·7	5	0	0	7	0	3	0	0	0	0
Patna (Aerodrome)	38·4	..	43·4	18	26·9	..	23·6	2	33·2	51·2	..	17·0	29	6	..	9·3	7·4	..	7	0	0	11	0	1	0	0	3	0
Dehri	40·4	..	44·8	18	28·3	..	20·8	11	69·6	84·3	−52·1	52·3	26	5	−1·9	9·4	6·3	..	7	0	0	0	0	0	0	0	0	0
Gaya	40·3	+2·8	45·4	18	28·4	+1·0	23·8	2	41·2	78·3	−85·5	49·8	30	3	−4·5	11·3	8·4	−1·4	5	0	0	8	0	1	0	0	3	0
Jamui	38·1	..	43.9	18	27·6	..	24·1	25	126·8	132·9	..	81·3	25	5	..	9·5	7·7	..	10	0	0	6	0	0	0	0	0	0
Dumka	36·8	+2·3	41·6	7	26·0	+0·2	22·2	8	71·3	111·5	−142·5	31·0	29	6	−5·9	..	..	..	7	0	0	11	0	0	0	0	0	0
Bhagalpur	36·5	..	41·8	17	26·6	..	21·1	2	123·7	237·0	..	66·0	28	10	..	9·1	7·4	..	12	0	0	14	0	0	0	0	0	0
Sabour	36·2	+1·5	41·8	17	26·2	0	21·2	2	131·5	210·4	+53·4	45·2	22	10	+2·2	9·7	8·8	−0·4	11	0	0	17	0	0	0	0	3	0
U. P. (East)																												
Gonda	38·1	+1·5	43·8	17	25·8	−0.9	21·1	3	26·8	127·2	−58·5	72·4	3	7	−1·3	6·3	4·3	−3·7	8	0	0	0	0	0	0	0	0	0
Nautanwa	36·2	..	40·1	17	25·1	..	20·6	4	140.1	140.7	..	45·7	23	8	..	10·3	7·4	..	8	0	0	0	0	3	0	0	0	0
Gorakhpur	37·4	+1·3	43·0	17,19	26·7	+0.5	21·0	2	38·7	53·2	−138.6	28·5	2	3	−5·3	3·9	2·8	−1·7	4	0	0	1	0	0	0	0	0	0
Azamgarh	40·5	..	45·4	18	27·7	..	24·1	9	0	24·9	..	17·3	27	2	..	..	..	..	2	0	0	0	0	0	0	0	0	0
Ballia	39·4	..	44·2	18	25·4	..	21·6	7,25	6·3	83.6	..	48·3	30	4	..	8·3	7·0	..	5	0	0	0	0	0	0	0	0	0
Varanasi *(Banaras)	40·1	+2·4	45·0	18	28·6	+0·8	24·0	3	6·9	9·4	−106·4	6·9	24	2	−4·0	..	..	..	2	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome).	40·2	..	45·1	18	28·6	..	25·2	2	0	38·1	..	35·8	29	1	..	16·0	11·6	..	3	0	0	4	0	1	0	0	0	0
Allahabad (Bamrauli)	41·0	+1·7	45·6	17	28·8	+0·5	23·7	2	6·3	77·2	−50·8	46·7	29	3	−1·3	8·8	6·8	−1·7	4	0	0	8	0	4	0	0	2	0
Banda	42·1	..	45·6	18	28·8	..	21·7	4	11·2	12·7	..	6·9	3	2	..	5·5	3·1	..	4	0	0	0	0	1	0	0	0	0
Fatehpur	39·8	+0·4	43.9	19	28·5	+0·2	23·9	4	4·1	17·6	−69·8	13·5	29	2	−5·8	13·4	8·1	+0·9	2	0	0	1	0	1	0	0	0	0
Kanpur	40·8	+1·5	44·7	18	28·6	+0·3	22·8	4	9·4	11·2	−69·8	9·4	2	1	−3·5	18·3	12·7	−0·5	3	0	0	2	0	4	0	0	0	0
Lucknow	40·4	+2·5	44·9	19	27·5	−0·1	21·9	4	6.6	13·2	−100·1	6·6	2	2	−3·5	..	..	..	3	0	0	1	0	1	0	0	0	0
Lucknow (Amausi Aerodrome).	39·6	+1·7	44·2	4 days	27·3	+0·1	21·1	4	1·5	22·1	−91·2	17·0	26	2	−3·5	16·4	11·5	..	3	0	0	6	0	5	0	0	0	0
Hardoi	39·8	..	44·2	19	27·4	..	22·2	4	24·1	68·1	..	61·0	29	3	..	11·0	7·4	..	4	0	0	0	0	3	0	0	0	0
Lakhimpur Kheri	38·5	..	43·9	18	25·8	..	21·4	3	57·2	53·9	..	20·1	30	4	..	6·3	4·1	..	8	0	0	8	0	2	0	0	0	0
Bahraich	38·0	+0·9	44·0	18	26·0	+0·7	20.0	14	12·7	165·3	+7·8	78·5	28	4	−2·1	..	..	..	9	0	0	3	0	0	0	0	0	0
U. P. (West)																												
Orai	41·1	..	45·6	19	24·5	..	15·6	7	21·7	53·1	..	16·3	29	4	..	12·7	10·4	..	10	0	0	0	0	0	0	0	0	0
Jhansi	40·7	+0·7	43·7	17,23	28·7	−0·5	22·8	3	8·1	47·3	−58·6	14·0	29	4	−1·5	8·1	6·9	−1·1	5	0	0	8	0	0	0	0	0	0
Agra	40·2	+0·2	43·8	19	27·5	−1·1	22·0	4,7	24·4	19·8	−42·2	18·0	30	1	−2·8	7·1	6·9	−1·1	2	0	0	3	0	3	0	0	0	0
Mainpuri	41·3	+0·9	45.9	19	28·3	+0·1	22·8	4	0	18·1	−49·0	8·9	29	2	−1·8	8·2	6·0	+1·5	3	0	0	0	0	0	0	0	0	0
Aligarh	40·4	+1·4	44·2	18,19	..	..	..	..	2·3	18·6	−118·3	5·1	8,24	3	−1·6	10·0	8.2	−0·8	7	0	0	10	0	4	0	0	0	0
Bareilly	39·7	+1·8	44·6	19	27·0	+0·1	21·6	2	5·8	40·8	−92·0	20·8	30	3	−2·4	9·7	6·5	+1·8	4	0	0	5	0	2	0	0	0	0
Meerut	39·5	+1·0	43·9	19	26·5	−0·5	20·6	2	..	12·5	−73·9	10·2	2	1	−3·1	..	7·3	..	2	0	0	0	0	0	0	0	0	0
Najibabad*	38·8	..	43.0	4 days	24·8	..	20·0	2	14·2	26·5	..	14·2	24	3	..	..	..	..	4	0	0	1	0	0	0	0	0	0
Roorkee	39.2	+1·3	44·2	19	25·1	−0·9	20·0	2	31·9	51·7	−62·6	19·8	24	4	−1·4	9·2	6·6	+1·5	7	0	0	5	0	4	0	0	0	0

(j) Mean of 21 days. (n) Mean of 17 days. (R) Register not received. * Data extracted from Indian Daily Weather Report. (h) Mean of 23 days.

Division and station	Air temperature in °C								Rainfall in millimetres.					No. of rainy days (2·5mm or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with										
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24hours	Date	Total in the month	Departure from normal	Mean between 0831-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
U. P. (West—*contd.*																												
Dehra Dun	34·5	+0·2	39·3	18	22·6	−0·8	18·7	2	74·6	135·9	−81·3	33·5	29	7	−2·4	5·9	4·1	+1·0	8	0	0	11	0	2	0	0	0	0
Punjab (India) (Including Delhi)																												
New Delhi	39·8	−0·4	43·1	18	27·6	−1·1	22·3	2	35·8	50.0	−27·0	32·3	14	4	−0·2	13·5	11·5	−3·3	6	0	1	13	1	3	0	1	10	0
Hissar	41·7	+0·8	45·8	18	26·5	−1·4	20·3	4	19·4	40·6	+8·6	15·8	6	5	+2·1	..	..	..	7	0	0	13	0	6	0	0	0	0
Karnal	39·5	..	43·6	18	25·1	..	19.0	4	1·3	11·2	..	8·9	4	1	..	—	..	..	2	0	0	8	1	5	0	0	0	0
Patiala	40·3	..	45·1	19	25·7	..	19·8	4	8·1	14·2	−15·8	4·3	2	4	+2·0	9·9	7·5	..	6	0	0	6	0	2	0	0	0	0
Ambala	38·9	−0·9	43·4	18,19	25·8	−1·3	19·7	4	19·0	46·4	−30·8	15·2	2	6	+1·6	9·3	7·7	+1·4	6	0	0	0	0	0	0	0	0	0
Chandigarh	38·3	..	41·5	20	25·7	..	18·0	4	26·7	74·2	..	26·2	4	4	..	..	..	..	6	0	0	1	0	2	0	0	0	0
Ludhiana	41·4	+1·0	45·6	19	25·8	−1·4	20·4	2	11·9	33·3	−24·6	24·4	2	2	−1·5	7·7	5·2	+1·3	2	0	0	0	0	0	0	0	0	0
Ferozepur	40.5	..	43·6	18,19	25·0	..	20·1	2,4	0	18·3	..	18·3	2	1	..	4·4	3·5	..	1	0	0	2	0	5	0	0	0	0
Amritsar	39·5	..	44·3	9	23·7	..	19·6	6	2·8	16·3	..	12·2	6	2	..	11·1	9·4	..	4	0	0	9	0	8	0	0	0	0
Pathankot	38·2	..	41.9	1	24·0	..	18·3	4	28·8	40·0	..	23·9	2	4	..	5·8	4·6	..	6	0	0	1	0	3	0	0	0	0
Himachal Pradesh																												
Bilaspur	36·9	..	40·6	1,20	21·6	..	17.8	4	44·2	70·2	..	49·8	2	4	..	4·8	6·5	..	6	0	0	8	0	0	0	1	3	0
Mandi	34·2	..	38.2	1	18·5	..	15·9	4	94·0	151·7	..	35·6	30	9	..	4·2	3·0	..	13	0	6	6	0	0	0	0	0	0
Jammu and Kashmir																												
Srinagar	26·1 (d)	−3·6 (d)	31·4 (d)	21	14·1 (d)	0 (d)	11·4 (d)	4	9·1 (d)	42·4 (d)	+6·8 (d)	19·3 (d)	1	3	−0·4	2·0 (c)	2·7 (d)	−1·5	9	0	0	12	0	0	0	0	1	0
Gulmarg	17·4	−2.5	22·2	10	4 7	−2·6	2·2	4	37·2	81·4	−8·8	17.5	13	9	+1·2	9·1	6·4	+0.4	15	0	0	24	0	0	0	0	0	0
Sonamarg *	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..
Dras*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kargil	..	..	..	..	..	..	..	..	..	6·3	+0·7	6.3	29	1	+0.3	..	..	..	1	1	.	..	..	..	..	..	..	..
Leh	18·8	−3·0	22·9	11,12	6·5	−0·3	4·6	3	0	0·6	−4·0	0·5	2	0	−0·7	9·5	7·0	+3·0	2	0	0	1	0	0	0	0	0	0
Skardu (R)																												
Gurez	..	..	..	..	..	..	..	..	..	12·7	−48·5	12·7	26	1	−4·8	..	..	..	1	..	..	..	..	.	..	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	39·3	+0·1	43.2	19	26·3	−1·8	20·8	6	..	15·0	−56·1	8·9	6	1	−2·8	..	..	..	6	0	0	2	0	1	0	0	0	0
Gund	..	..	..	..	..	..	..	..	..	85·1	..	24·9	13	7	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	35·8	..	24·6	1	2	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	38·4	..	6·3	30	6	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Khangral	..	..	..	..	..	..	..	..	..	2.9	..	1·0	12	0	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	11·4	..	2·5	2,13,21	3	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	2·0	..	1·5	1	0	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	41·7	+0·1	44·4	17,18	26·7	−0·7	21·8	2	0	6·3	−69·6	5·8	2	1	−1·7	6·1	6·6	−7·1	2	0	0	2	0	6	0	0	0	0
Churu	40·4	..	44·2	18	27·4	..	21·1	3	2·1	40·4	..	17·0	2	3	..	16·6	12·6	..	8	0	0	13	0	9	0	0	0	0
Bikaner	41·2	−0·1	44·9	18	28·6	−0·7	22·1	2	3·1	33·6	+2·9	12·2	28	5	+2·8	12·2	11·9	−0·2	6	0	0	4	0	2	0	0	0	0
Jaisalmer	41·9	..	44·7	17	26·6	..	20·5	10	0	5·1	..	5·1	26	1	..	22·5	21·6	..	1	0	0	0	0	0	0	0	0	0
Phalodi	39·4	..	44·4	25	28·3	..	24·7	5,30	4·8	25·6	+2·2	11·9	28	3	+1·4	25·3	22·2	..	3	0	0	0	0	1	0	0	0	0
Jodhpur	40·6	+0·8	44·6	25	28·4	+0·5	24·4	30	0	24·9	−11·2	9·7	28	5	+2·9	18·0	16·9	−3·4	6	0	0	12	0	5	0	0	0	0
Barmer	40·8	+1·1	43·9	25	27·4	+0·6	24·4	10	0.5	6·0	−21·9	2·5	29	1	−0·5	19·9	15.6	+2·4	4	0	0	6	0	3	0	0	0	0
Rajasthan (East)																												
Alwar	39·2	..	42·8	18	..	..	..	..	22·6	118·1	..	38·6	30	5	..	..	..	..	6	0	0	7	0	0	0	0	0	0
Sikar	38·6	..	41·2	24,26,27	26.7	..	21·2	6	35·5	74·6	..	22·9	3.6	7	..	16·1	11·2	..	8	0	0	0	0	0	0	0	0	0
Jaipur	39·3	−0·2	42·2	17	26·5	−0·4	20·7	3	14·3	29.0	−27·9	5·6	15	5	+1·1	13·1	9·1	−0·4	12	0	0	14	0	4	0	0	0	0
Jaipur (Sanganer Aerodrome).	39·1	..	41·9	18	26·1	..	20·1	2	12·2	55·7	..	24·4	30	5	..	..	..	..	9	0	0	8	0	7	0	0	0	0
Dholpur	40·8	..	44·7	20	..	..	..	..	12·5	24·8	..	11·7	29	3	..	12·6	9·9	..	4	0	0	3	1	2	0	0	0	0
Ajmer	38·1	+0·1	41·7	24	26·5	−1·2	19·4	2	30·5	77·8	+16·1	35·1	2	5	+2·3	15·1	13·1	+1·4	10	0	0	9	0	1	0	0	0	0
Kotah	41·9	+1·5	43·0	9	30·2	+0·7	23·8	30	55·1	73·4	+6·3	20·6	20	6	+1·9	11·8	10·3	+2·3	11	0	0	9	1	7	0	1	0	0
Chambal	39·8	..	42·8	9	25·2	..	16·3	6	19·0	71·6	..	32·8	27	7	..	15·1	10·8	..	9	0	0	13	3	2	0	0	0	0
Jhalawar	39·9	+1·2	42·7	9	27·6	+0·3	23·3	6,27,30	17·5	57·8	−55·0	17·3	21	4	−3·1	14·2	12·5	+2·4	8	0	0	0	0	0	0	0	0	0
Udaipur	36·2	−0·4	39·3	23	25·0	−1·1	21·4	25	35·8	98·4	+21·2	21·2	25	7	+2·4	8·3	6·4	..	8	0	0	8	0	0	0	0	0	0
Erinpura (Jawai Dam).	37·9	..	40·8	24	26·9	..	20·6	3	4·9	64·7	..	29·0	25	5	..	13·2	12·7	..	7	0	0	1	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P. B. O.)	40·8	−0·4	44·1	1,18	28·8	−1·5	23·6	4	38·7	87·5	+41·5	31·0	24	6	+2·2	12·3	10·4	..	9	0	0	14	0	1	0	0	0	0
Sheopur Kalan	40·7	..	43·5	23	27·9	..	22·4	3	7·1	64·9	..	28·2	30	4	..	14·5	10·9	..	5	0	0	6	0	4	0	0	0	0
Guna	39·4	+1·5	41·6	11	26·5	+0·3	21·7	6	8·5	71·7	−81·5	16·0	29	7	−0·2	15·2	11·2	−0·4	8	0	0	8	0	0	0	0	0	0
Rajgarh	40·3	..	43·6	9	27·5	..	22·8	27	2·0	20·8	..	10·2	24	3	..	17·6	15·9	..	5	0	0	4	0	0	0	0	0	0
Neemuch	37·4	+0·5	40·6	23	26·0	+0·6	23·3	29,30	84·3	104·1	−3·3	66·3	30	5	+0·2	15·6	15·2	+0·1	9	0	0	6	0	1	0	0	0	0

(d) Mean or total for 27 days. * Data not reliable. (R) Register not received. (c) Mean of 28 days.

Division and station	Air temperature in °C.								Rainfall in millimetres					No. of rainy days (2·5mm. or more).		Wind speed, Km. per hour.			Weather phenomena—No. of days with										
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madhya Pradesh (West)—*contd.*																												
Ratlam	36·5	..	40·6	22	25·2	..	21·5	29	35·6	74·1	..	29.2	30	5	..	16·4	13·4	..	8	0	0	3	0	0	0	0	0	0
Alirajpur	36·6	..	39·2	5	25·7		21·5	29	37·9	152·3	..	68·6	30	6	..	18·9	16·4	..	9	0	0	0	0	0	0	0	0	0
Indore	36·5	+0·7	39·1	8,9,19	24·8	+0·7	21·7	29	9·0	94·1	−53·2	38·1	26	6	−1·3	25·1	23·0		8	0	0	9	0	0	0	0	0	0
Bhopal (Bairagarh)	37·9	+1·4	41·3	9	25·1	+0·1	19·5	6	21·1	159·6	−15·9	76·7	27	9	−0·4	20·6	17·9	+3·7	11	0	0	12	0	0	0	0	3	0
Khandwa	38·6	+1·5	41·2	9	26·2	+0·2	18·7	26	106·6	200·4	+58·2	82·5	28	8	+1·0	16·6	14·1	+0·9	10	0	0	1	0	0	0	0	0	0
Hoshangabad	39·4	+2.3	42·8	9	27·0	+0·5	22·8	29	0	26·4	−122·7	10·9	23	2	−6·2	8·1	5·6	−0·7	7	0	0	3	0	0	0	0	0	0
Betul	36·0	..	38·9	9,18	24·2	..	20·6	12	15·6	81·1	..	38·1	23	7	..	11·3	8·1	..	8	0	0	5	0	0	0	0	0	0
Chhindwara	37·1	..	39·4	1,2	23·5	..	20·6	27	51·8	133·7	..	48·3	27	7	..	10·8	9·2	..	8	0	0	8	0	0	0	0	0	0
Seoni	37·7	+2·6	40·9	1	25·3	+1·2	22·4	27	48·3	51·9	−165·5	12·7	26,28	5	−6·1	9·2	7·3	+0·2	12	0	0	11	0	0	0	0	0	0
Sagar	38·1	+1·4	40·6	23	25·2	−0·1	21·8	30	51·9	78·9	−78·3	17·8	29	9	+0·9	11·0	8·7	..	10	0	0	15	0	0	0	0	0	0
Nowgong	40·9	+1·6	43·9	1,17	25·1	−3·1	18·4	9	38·9	33·0	−105·2	22·9	9	3	−3·1	10·6	7·8	+2·0	3	0	0	0	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	40·2	+2·1	43·6	18	27·6	−0·1	23·6	7	16·5	28·4	−112·3	17·5	3	2	−4·3	12·2	8·0	−1·2	5	0	0	10	0	2	0	0	0	0
Umaria	39.5	+2·9	42·6	18	26·8	+0·4	23·2	10	5.6	15·7	−165·1	7·1	26	2	−8·0	8·8	6·8	−0·3	6	0	0	6	0	4	0	0	0	0
Jabalpur	39·5	+2·8	41·7	16,17	26·7	+0·8	23·3	27	57·8	71·5	−107·1	36·8	26	5	−3·8	10·8 (b)	7·2	+1·4	7	0	0	9	0	0	0	0	0	0
Mandla	38·7	..	41·7	2,7,17	25·1	..	22·7	8,29,30	49·0	60·0	..	19·3	25	6	..	9·3	5·3	..	8	0	0	15	0	2	0	0	0	0
Pendra	35·8	+1·9	40·5	1	25·0	+0·7	20·3	4	111·9	130·7	−70·7	26·4	23	8	−3·7	12·3	9·7	..	11	0	0	18	0	0	0	0	0	0
Ambikapur	36·9	..	40·6	2,18	25·0	..	21·0	3	51·4	97·8	..	32·5	26,28	7	..	12·4	9·6	..	15	0	0	15	0	0	0	0	0	0
Champa	39·5	..	44·1	18	27·7	..	21·8	8	87·6	128·8	..	36·6	3	7	..	7·8	5·2	..	9	0	0	15	0	5	0	0	0	0
Raigarh	40·1	..	44·0	19,20	28·2	..	24·4	30	30·0	49·2	..	14·2	21	5	..	7·9	5·8	..	8	0	0	0	0	2	0	0	0	0
Raipur	39·3	+2·7	43·6	18	27·5	+1·3	21·2	8	32·6	113·1	−117·0	28·7	24	7	−2·7	12·7	12·1	−1·3	13	0	0	13	0	1	0	0	0	0
Kanker	36·6	+1·7	41·1	17	27·1	+1·6	22·9	29	63·7	147·5	−116·7	36·3	22	10	−0·3	10·4	7·8	−0·7	11	0	0	8	0	0	0	0	0	0
Jagdalpur (P.B.O.)	33.9	0·7	38·7	12,13	23·5	−0·2	21·1	9	96·6	257·7	+12·1	52·3	15	12	+0·7	8·0	6·2	..	18	0	0	16	1	0	0	0	0	0
Gujarat																												
Deesa	39·3	..	42·2	5,24	27·3	..	21·8	30	68·8	100·4	..	63·8	30	3	..	14·7	13·3	..	4	0	0	3	0	9	0	0	0	0
Idar	38·0	..	41·1	24	25·6	..	22·4	30	60·7	111·5	..	48·0	30	5	..	12·7	10·7	..	5	0	0	1	1	0	0	0	0	0
Ahmedabad	38·3	−0·5	41·2	7	26·9	−0·2	22.8	3,5	25·0	110·4	+17·4	45·5	3	7	+2·3	11·5	9·9	−1·4	8	0	0	8	0	0	0	0	2	0
Dohad	35·7	−0·5	38·3	22	25·2	−0.6	21·1	3	27·2	127·0	+37·3	59·4	30	6	+1·0	27·6	27·4	..	9	0	0	7	0	0	0	0	0	0
Baroda	37·2	+0·7	41·1	5	26·5	−0·1	21·5	5	57·5	203·3	+40·5	68.1	29	7	+0·3	8·9	8·4	−2·2	9	0	0	5	0	1	0	0	0	0
Baroda (Aerodrome)	36·9	..	40·7	5	26·7	..	21·2	5	49·7	177·3	..	57·1	29	7	..	14·7	15·3	..	9	0	0	6	0	0	0	0	0	0
Broach	35·9	..	38·7	23	27·2	..	22·3	5	98·5	192·6	..	48·8	29	7	..	14·5	12·0	..	8	0	0	0	0	0	0	0	0	0
Surat	34·3	+0·5	37·5	24	27·4	+0·8	23·7	5	173·9	307·1	+88·2	137·2	28	6	−2·0	14·9	13·3	+1·4	7	0	0	3	0	0	0	0	0	0
Saurashtra and Kutch																												
Bhuj	37·3	+1·0	41·6	5	27·2	+0·7	25·4	30	0	0·5	−34·6	0·5	30	0	−1·9	18·6 (c)	17·3	−1·5	1	0	0	1	0	0	0	0	0	0
Bhuj (Aerodrome)	37·5	..	41·1	5	27·5	..	26·1	30	18·5	18·5	..	18·5	28	1	..	23·1	21·6	..	1	0	0	1	0	1	0	0	0	0
Kandla	34·8	..	37·2	26	27·6	..	24·3	29	40·9	54·7	..	41·7	29	3	..	33·6	30·3	..	5	0	0	4	0	0	0	5	0	0
Mandvi	32·8	..	33·7	24	28·5	..	26·6	16	0	0	..	0	..	0	..	32·3	32·3	..	0	0	0	1	0	0	0	1	0	0
Dwarka	32·2	+0·4	33·5	24	28·3	+0.3	26·3	25	1·0	1·0	−50·1	1·0	25	0	−2·3	22·1	22·1	+1·0	1	0	0	0	0	0	0	0	0	0
Porbander	32·2	..	33·0	9	28·1	..	25·1	28	53·4	200·1	..	129·8	28	5	..	17·9	16·6	..	6	0	0	3	0	0	0	0	0	0
Porbander (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	2	0	0	0	0	0	0
Jamnagar	..	..	..	..	26·8	+0·1	23·8	28	59·7	104·2	+38·9	61·3	28	2	−1·0	..	..	..	2	0	0	7	0	1	0	1	0	0
Rajkot (Aerodrome)	37·5	+0·1	39·9	4,5,10	25·6	−0·1	22·8	29	56·1	71·9	−32·2	43·9	28	6	+1·2	29·6	27·9	..	7	0	0	7	0	0	0	1	0	0
Surendranagar	39·4	..	42·6	7	27·1	..	23·2	29	19·6	72·4	..	43·9	29	4	..	18·4	18·4	..	5	0	0	2	0	1	0	1	0	0
Bhavnagar	37·6	−0·1	42·8	7,8	26·9	+0·1	21·5	30	19·9	131·7	+32·6	67·1	29	6	+1·3	15·6	15·7	+3·0	7	0	0	6	0	0	0	0	0	0
Bhavnagar (Aerodrome).	37·3	..	42·6	7,8	27·3	..	22·1	30	..	132·1	..	61·7	29	5	..	..	26·2	..	6	0	0	2	0	0	0	0	0	0
Mahuva	34·1	..	36·5	23	26·4	..	22·9	12	54·0	84·8	..	46·2	25	5	..	28·8	23·5	..	6	0	0	0	0	0	0	1	0	0
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	28·5	23·9	..	..	0	0	5	0	0	0	0	0	0
Veraval	31·7	..	32·7	24	27·8	..	23·7	29	44·4	153·7	+35·3	108·0	28	4	+0·1	24·8	24·9	..	5	0	0	1	0	0	0	0	0	0
Konkan																												
Dahanu	33·0	+0·4	35·0	19	27·1	+0·3	24·3	27,29	108·2	337·5	+93·9	124·5	27	7	−2·0	21·4	19·6	−0·2	9	0	0	5	0	0	0	0	0	0
Bombay (Colaba)	33·2	+1·8	34·8	15	27·2	+1·3	24·3	29	109·6	293·0	−201·1	62·0	29	11	−3·6	14·5	12·2	−2·9	13	0	0	9	0	0	0	0	6	0
Bombay (Santacruz Aerodrome).	32.7	+1·3	34·0	4	27·0	+1.1	24·2	22	192·1	432·1	−52·0	85·1	28	12	−2·6	17·6	13·3	..	14	0	0	7	0	0	0	0	0	0
Alibag	31.8	+1·2	33·4	11	27·2	+1·4	24·2	22	..	333·4	−265·8	73·7	26	9	−7·7	..	20·5	+0·4	15	0	0	5	0	0	0	0	0	0
Harnai	30·7	+0·8	31·7	2,12,21	26·8	+1·5	24·1	28	97·2	335·8	−171·2	61·0	26	11	−8·0	16·6	15·5	+0·2	16	0	0	1	0	0	0	0	0	0
Ratnagiri	31·7	..	34·7	12	26·0	..	22·9	21	194·4	714·3	−58·9	166·8	24	16	−4·5	..	..	..	17	0	0	2	0	0	0	0	0	0
Devgad	31·2	+0·8	34·4	18	26·0	+0·3	23·7	14	182·2	589·9	+132·7	146·5	22	18	−0·6	18·9	17·8	−2·6	21	0	0	10	0	0	0	0	0	0
Vengurla	30·9	..	33·5	4	25·3	..	23·8	29	121·1	654·6	..	104·7	23	20	..	..	..	..	25	0	0	15	0	0	0	0	0	0
Maharashtra																												
Jalgaon	39·3	..	42·7	9	26·2	..	22·3	30	80·5	136·3	+6·8	34·0	22	8	+0·7	26·0	25·0	..	9	0	0	0	0	0	0	1	0	0
Malegaon	37·5	+1·8	41·7	8	24·7	+0·8	21·3	23	1·5	97·5	−13·0	41·9	23	5	−1·7	15·5	14·2	−0·9	6	0	0	2	0	0	0	0	0	0

(b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm. or more)		Wind speed Km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Maharashtra —*contd.*																												
Deolali	33·7	..	37·4	8	23·1	..	20·7	29	78·9	192·3	..	49·5	23	9	..	19·5	18·5	..	9	0	0	6	0	0	0	0	0	0
Aurangabad	36·6	+2·0	40·8	12	23·6	+0·8	21·7	24	9·4	133·0	−5·2	44·5	22	7	−0·7	19·7	19·6	+1·6	9	0	0	7	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	36·3	..	40·1	8,9	23·4	..	21·8	27,29	5·6	94·7	..	29·7	22	7	..	20·0	19·9	..	12	0	0	8	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	667·1	−174·4	163·6	28	10	−10·3	..	..	..	13	..	..	..	..	..	..	..	..	..
Ahmednagar	34·7	+1·2	40·4	8	22·9	+0·7	21·0	23	9·4	112·2	−20·6	52·8	21	7	−0·5	11·4	9·8	−3·6	7	0	0	0	0	0	0	0	0	0
Parbhani	38·1	..	42·1	9	25·4	..	22·8	20	15·6	87·8	−52·1	26·4	20	10	+2·2	16·0	13·8	..	14	0	0	6	0	1	0	0	0	0
Poona	33·7	+1·8	37·1	7	23·3	+0·2	21·2	29	44·3	171·7	+57·6	60·2	28	11	+3·7	8·0	6·1	−9·7	11	0	0	4	0	0	0	0	1	0
Poona (Lohagaon Aerodrome)	33·1	..	36·8	7	22·5	..	20·7	29	56·1	165·6	..	49·4	28	9	..	..	..	..	11	0	0	7	0	0	0	0	0	0
Baramati	35·1	..	39·5	3,8	23·5	..	21.4	29	25·9	89·0	..	30·2	21	8	..	14·2	13·9	..	10	0	0	1	0	1	0	0	0	0
Jeur	36·2	..	40·8	8	23·6	..	20·7	30	36·0	106·7	..	41·0	22	4	..	17·9	17·2	..	6	0	0	2	0	0	0	0	0	0
Sholapur	36·1	+1·0	39·9	10	24·4	+1·2	21·2	30	8·6	134·3	+21·5	41·9	6	6	−0·5	13·3	11·9	−3·7	11	0	0	10	0	0	0	0	0	0
Miraj	32·7	+1·5	36·7	3	22 9	+0·7	21·1	15	32·0	59·7	−9·1	15·7	15	7	+1·1	16·7	13·5	−2·3	12	0	0	4	0	0	0	0	0	0
Kolhapur	31·8	..	34·8	11	22·4	..	20·8	30	49·6	107·1	..	41·1	30	9	..	19·0	15·7	..	12	0	0	6	0	0	0	0	0	0
Vidarbha																												
Buldhana	34·7	..	37·9	8	23·5	..	21·0	24	19·3	164·3	..	54·9	27	8	..	16·2	15·5	..	8	0	0	0	0	0	0	0	0	0
Akola	38·8	+1·6	42·4	9	26·9	+1·2	23·0	28	39·9	272·5	+132·0	96.0	27	8	−0·1	17·0	14·4	+2·0	8	0	0	6	0	0	0	0	0	0
Amravati	38·6	+1·8	42·5	9	26·3	+0·9	22·6	28	26·4	117·8	−48·6	43·2	24	8	−0·7	17·2	13·6	+1.7	10	0	0	8	0	0	0	0	0	0
Yeotmal	38·4	..	42·6	8	25·8	..	22·2	21,29	14·5	151·8	..	28·5	30	10	..	20·0	17·1	..	12	0	0	8	0	1	0	1	1	0
Nagpur	39·1	+0·8	42·9	11	26·7	−0.2	23·1	23	4·1	101·7	−122·3	46·0	26	8	−2·2	19·7	15·2	..	9	0	0	13	0	0	0	0	9	0
Gondia	39·3	..	42·8	18	29·6	..	21·7	21	35·8	59·2	..	31·7	27	4	..	9·0	6·6	..	9	0	0	6	0	5	0	0	0	0
Brahmapuri	38·7	..	43·3	18	24·7	..	20·5	29	54·4	172·0	..	53·1	27	10	..	10·1	8·2	..	11	0	0	6	0	0	0	0	0	0
Chanda	39·1	+1·5	43·8	11	27·1	+0·5	22·5	29	3·6	172·1	−32·4	50·8	29	9	−0·8	13·4 (m)	9·5 (m)	+1.0	17	0	0	14	0	0	0	0	0	0
Sironcha	39·2	..	43·4	11	27·4	..	23·2	27,28	13·8	178·1	..	69·3	26	8	..	3·8	2·8	..	14	0	0	11	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	36·5	−2·1	39·5	13	27·2	−0.7	23.3	9	11·4	102·0	+69•7	47·0	3	7	+4·1	11·6	8·8	−0·5	10	0	0	8	0	0	0	0	0	0
Ongole	36·0	..	40·6	12	28·1	..	23·3	3	0	126·8	..	55·1	3	6	..	12·4	9·6	..	10	0	0	5	0	0	0	0	0	0
Rentachintala	37·4	−0·2	42·8	12	27·0	−0·8	23·9	22	21·3	117·5	+25·3	54.9	14	8	+1·4	13·6	10·5	−6·4	9	0	0	4	0	0	0	0	0	0
Gannavaram	36.6	..	42·8	1	26·1	..	21·9	9	22·6	300.6	..	66·8	28	15	..	20·1	15·8	..	15	0	0	6	0	0	0	0	0	0
Masulipatam	36·7	−0·1	42.7	12	27·3	+0·2	23·8	28	16·2	159·9	−52·7	25·4	21	8	+1·8	17·1	13·9	+1·8	11	0	0	13	0	1	0	0	0	0
Nidadavolu	37·1	..	43·8	12	26·3	..	23.3	28	3.8	164·7	..	56·4	21	10	..	18·2	12·3	..	14	0	0	9	0	1	0	0	0	0
Kakinada	37·0	+1.0	43·3	12,13	26.7	−0.5	22·1	23	14·0	113·9	−5·0	22·9	4	11	+3·9	15·7	12·2	+2·4	16	0	0	2	0	1	0	0	0	0
Visakhapatnam	36·1	+0.8	43·4	13	27·5	+0.5	23·4	4	66·1	133·1	−27.9	49·3	23	6	−0·5	19·7	13·7	+1·8	9	0	0	10	0	1	0	0	3	0
Calingapatam	34·0	+0·2	40·9	14	27·2	+0·3	23·9	6	20.3	86·3	−32·8	22·9	27	7	+0·7	20·5	15·3	+2·4	8	0	0	4	0	1	0	0	0	0
Telangana																												
Ramagundam	38·9	..	43.7	9	27·7	..	23·3	27	16·3	126·1	..	43.2	27	10	..	8·7	8·3	..	11	0	0	7	0	1	0	0	0	0
Nizamabad	37·5	+1·4	42·1	9,11	26·5	+1·3	23·3	27,28,30	38·9	184·1	+36·5	73.9	27	10	+1·3	10·4	9·3	0	13	0	0	0	0	0	0	0	0	0
Mahbubnagar	34·2	..	38·5	11	24·7	..	21·6	4	2·1	157·0	..	42.4	24	9	..	15·3	13·8	..	13	0	0	6	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	34·9	+0·6	39·5	9	24·3	+0·7	21·1	28	26·7	118·6	+6·6	27·9	23	9	+2·5	23·9	21·1	+1·3	17	0	0	10	0	0	0	0	7	0
Hakimpet	35·2	..	38·9	9,10	23·8	..	20·6	28	6·6	106·0	..	37·6	28	9	..	..	..	..	12	0	0	11	0	0	0	0	0	0
Hanamkonda	37·7	+1·4	41.7	3	26·2	−0·2	21·5	5	24·4	203·9	+51·2	69·1	27	11	+2·8	15·4	12·7	+1·3	17	0	0	12	0	0	0	0	0	0
Bhadrachallam	38·2	..	43·5	13	25·7	..	23·4	24.	28·9	149·5	..	37·3	23	11	..	11·2	9·3	..	14	0	0	9	0	1	0	0	0	0
Khammameth	37·2	..	42·8	1	25·9	..	22·1	23	17·8	279·5	..	82·1	23	9	..	12·8	9·2	..	14	0	0	4	0	1	0	0	0	0
Rayalaseema																												
Arogyavaram	31·2	..	33·4	12	22·2	..	18·9	4	14·5	86·1	..	53 9	3	3	..	15·0	12·3	..	4	0	0	3	0	0	0	0	0	0
Cuddapah	35·3	−2·4	38·6	1,12	25·6	−1·3	21·7	3	5·1	390·4	+315·5	152·4	1	9	+4·2	6·3	5·5	−5·4	9	0	0	1	0	0	0	0	0	0
Anantapur	34·0	..	36·9	1	24·4	..	20·8	4	17·8	177·5	+123·6	59·9	3,4	7	+3·7	16·5	15·0	..	12	0	0	7	0	0	0	0	0	0
Kurnool	35·2	−1.0	38·4	3	24·5	−0·8	21·7	3,4	2·5	163·2	+88·8	55·9	12	8	+2·5	19·1	18·4	+2.1	10	0	0	4	0	0	0	1	0	0
Madras																												
Palayamcottai	35·5	..	37·9	13	26·7	..	24·1	8	4·3	17·6	+7·2	10·7	8	2	+0·9	19·8	14·6	..	3	0	0	0	0	0	0	0	0	0
Tuticorin	36·2	..	38·1	12	26·7	..	23·9	8	0	2·1	..	1·3	8	0	..	24·5	17·7	..	2	0	0	0	0	0	0	0	0	0
Pamban	30·5	−1·8	32·8	2	27·7	+0·9	26·7	7	0	0	−3·8	0	..	0	−0·3	19·3	18·8	−0·4	0	0	0	0	0	0	0	0	0	0
Mathurai	37·1	+0·9	39·3	11,13	26·5	+0·9	24·7	8	2·0	19·0	−20·9	17·0	1	1	−1·5	11·3	8·9	+1·0	2	0	0	0	0	0	0	0	0	0
Nagapattinam	36·7	+0·2	39.2	1	27·2	+0·6	25·4	28	27·4	29·5	−1·7	22·6	28	2	−0·2	16·6	13·3	+2·8	4	0	0	0	0	0	0	0	0	0
Tiruchirapalli	35·2	−1·9	38·5	11	26·7	+0·6	25·3	17	0·8	4·9	−36·2	2·0	17	0	−2·4	28·4	25·1	−1·0	5	0	0	7	0	0	0	0	0	0
Coimbatore	28·7	−2·9	33·2	10	22·9	+0·7	21·4	19	14·3	35·2	−3·4	10·0	8	6	+1·8	21·2	17·2	+7·2	8	0	0	0	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	30·8	..	35·1	16	22·7	..	21·1	29	7·9	22·9	..	10·9	8	2	..	36·7	31·4	..	8	0	0	1	0	0	0	0	0	0
Salem	34·6	−0·6	37·4	12	24·5	+0·7	23·3	19,30	26·0	52·9	−26·6	13·2	1	8	+2·6	10·3	9·5	+1·9	11	0	0	11	0	0	0	0	0	0
Kallakurichi	36·2	..	39·3	11	26·5	..	23·3	17	14·0	44.2	..	17·5	17	5	..	..	..	..	8	0	0	8	0	0	0	0	0	0
Cuddalore	36·9	−0·1	39·9	11,12	27.1	+0·3	24·1	17	13·0	36·4	+1.1	13·2	22	5	+3·4	11·2	8·8	+0·3	8	0	0	3	0	0	0	0	0	0

(m) Mean of 18 days

Division and station.	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm. or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with									
	Mean maximum.	Departure from normal.	Highest.	Date.	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830-1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830-1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0·3 mm. or more).	Snow or sleet.	Hail.	Thunder heard.	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras—*Contd.*																												
Vellore	34·5	−1·7	37·9	1	25.6	−0·3	23·4	1	14·6	117·9	+47·5	37·5	1	10	+5·1	10·6	9·2	+0·7	15	0	0	10	0	0	0	0	0	0
Madras	36·1	−1·5	38.9	12,13	27·1	−0 2	22·3	9	13·9	61 6	+14·4	19·5	7	5	+1·3	18·9	14·4	−3·1	7	0	0	9	0	0	0	0	3	0
Madras (Nungambakkam).	36·1	..	38·9	12	27·1	..	22·7	9	..	35·3	..	9·7	3	4	..	..	8·4	..	9	0	0	7	0	0	0	0	0	0
Coastal Mysore																												
Karwar	29·4	..	32·2	1,2	25·4	..	23·3	15	286·3	830·9	−109·7	101·3	8	20	−3·0	13·8	11·7	..	23	0	0	0	0	0	0	0	0	0
Honavar	29·8	+0 3	31·8	2,8	24·3	+0·2	22·8	15	415·8	940 3	−129·8	98·5	23	23	−2·8	10 0	8·3	+2·7	26	0	0	3	0	0	0	0	0	0
Mangalore	29·8	+0 6	31·6	2,11,17	23·9	+0·1	21·5	23	352·2	803 8	−138·0	110·2	21	25	+0 4	11 7	9 6	+0·9	28	0	0	15	0	0	0	1	8	0
Mangalore (Bajpe Aerodrome)	29·1	..	32·2	1	22·9	..	21·2	9	411·9	971·7	..	133·6	7	27	..	..	..	..	30	0	0	6	0	0	0	0	0	0
Mysore (North)																												
Bidar	34·4	+0 6	39·1	9,11	23·5	+1·1	21·1	28, 30	60·9	182·9	−65·8	52·6	28	13	+5 9	19·3	18 8	−1·5	15	0	0	0	0	0	0	0	0	0
Gulbarga	36·2	+0·8	40 6	9	24·6	+1·2	22·2	30	13·5	62·6	−50·2	24·9	19	7	+0·1	22·4	18 6	+2·3	10	0	0	4	0	0	0	0	0	0
Bijapur	34 0	+0·6	38·6	10	22·8	+0·5	21·6	30	58·4	94 3	+17·6	51·1	23	4	−1·4	12·6	12·2	−1·6	12	0	0	6	0	0	0	0	0	0
Belgaum	28·5	+0·9	31·8	3	21 1	+0·9	20·2	29	110·9	332·5	+126·8	56 1	4	12	−0 9	10·8 (b)	7·8 (b)	−1·7	15	0	0	0	0	0	0	0	0	0
Belgaum (C. T. O.)	28 3	+0·6	30·7	4 days	21·8	+1·5	19·7	4	99·4	202·9	+0·2	50 3	29	10	−2·9	13·7	10 6	−2·4	14	0	0	3	0	0	0	0	0	0
Belgaum (Sambre Aerodrome).	29·4	..	32·6	17	20 6	..	19·7	13,14	202·7	366·4	..	53 6	20	11	..	27·3	22·9	..	17	0	0	2	2	0	0	0	0	0
Gadag	31·8	+0 7	35·3	10	22·4	+0·6	21·3	8,23	109.5	113·4	+45·6	49·5	8	5	−0 6	16·3	15·5	−1·9	12	0	0	12	0	0	0	0	0	0
Raichur	35·3	+0·1	38·5	9,10	24 2	+0·4	21·8	4	20·1	165·9	+74·0	42·9	3	9	+3·0	18 8	17 4	+1·1	10	0	0	6	0	0	0	0	0	0
Mysore (South)																												
Bellary	33·3	1 5	36·6	3	24.7	+0·3	20,2	8	25·4	57.1	+13·9	33·8	8	3	−0·3	12·6	11·7	1 0	4	0	0	1	0	0	0	0	0	0
Chitaldrug	29·3	1·3	32·9	3	21·7	+0·5	19·2	8	35·6	96·3	+30·5	34·5	8	7	+1·8	13·3	12·7	+0·3	12	0	0	1	0	0	0	0	0	0
Shimoga	29·2	..	32·5	3	22·2	..	18·9	8	79·2	158 2	..	52·9	7	10	..	8·9	6 0	..	19	0	0	3	0	0	0	0	0	0
Balehonnur	25·7	+0 8	28·6	3	19·4	+0·6	17.7	8	..	179·9	−52·9	81 0	7	18	−3·1	..		..	23	0	0	0	0	0	0	0	0	0
Hassan	25·9	1.3	28·8	17	19·6	+0·5	17·3	8	42·5	11·5	+19·8	33·8	8	8	−1·3	15 3	12 8	+1·5	15	0	0	4	0	0	0	0	0	0
Mysore	28·3	-1·1	31·7	17	20·8	+0·7	18·8	8	112·1	28·7	+66·2	34 3	10	6	+0·2	17 9	13·9	-0·3	12	0	0	5	0	0	0	0	0	0
Bangalore (Central Observatory).	27·9	-1·2	31·1	11	20·1	+0·8	18·4	20	64·3	17·1	+44·5	33·8	17	10	+4 1	17·6	15·1	+1·9	26	0	0	4	0	0	0	0	4	0
Bangalore (Aerodrome).	28·5	..	31·1	11	19·6	..	17.8	20	12·0	47·4	..	13 7	4	7	..	..	..	..	13	0	0	6	0	0	0	0	3	0
KERALA (Icluding Laccadives)																												
Kozhikode	28·5	−0·8	31·9	13	23·8	-0·1	22·7	8,19	383·7	114·5	+274·3	344 0	7	27	+2 9	9·1	10·0	+1·1	29	0	0	14	0	0	0	0	0	0
Palghat	29·1	..	31·8	12, 18	23·5	..	21·7	9	44·4	90·3	.	41 9	28	23	..	15 9	12·8	..	25	0	0	1	0	0	0	0	0	0
Fort Cochin	28·8	0·2	31·5	13	25·5	+1·6	23·8	7	232·8	024·2	310·8	07·2	4	26	+1 7	9·0	8·3	+0·7	28	0	0	3	0	0	0	0	0	0
Cochin (Naval Air Station)	29·2	..	31·3	12	24·2	..	22 8	3,19	317·3	196 2	..	14·3	17	26		8·6	6·3	..	29	0	0	14	0	0	0	0	10	0
Alleppey	29·7		31·0	15	24 2	..	22·3	19	96·1	18·1	..	76 2	8	25		16·1	15·8	..	26	0	0	14	0	0	0	0	3	0
Punalur	30·6	..	32·4	11	23 0	..	21·9	3	282·1	62·5	..	10 4	8	26		7·5	3·5	..	28	0	0	0	0	0	0	0	0	0
Trivandrum	29·2	-0·3	30·6	1,13,26	23 8	+0·1	21·9	19	52·6	306 7	271·9	67 1	1,27	23	+5·9	12·7	9·1	+0·6	26	0	0	5	0	0	0	0	0	0
Trivandrum (Aerodrome)	29·7	..	30·9	13	24·1	..	22·1	19	..	310·8	..	94·2	1	22	..	..	6·7	..	26	0	0	5	0	0	0	0	1	0
Hill Stations excluding Kashmir																												
Walong (R)																												
Kohima	24·6	..	27·3	15	18·7	..	17·1	9	83 5	311·4	..	105 9	29	22		..	..	..	25	0	0	0	3	0	0	0	0	0
Aijal*																												
Shillong	23·8	+0·2	26·6	18	17 0	−0·2	13 4	6	15 4	21 8	+60·5	65·5	8	23		3·4	3·0	-1·5	27	0	0	9	0	0	0	0	0	0
Cherrapunji	22·5	+0·3	24·7	14	17·7	−0·2	13·2	18	989·7	172 3	621·3	307 9	26	22	3·0	11·8	10·3	+1·1	23	0	0	0	0	0	0	0	0	0
Mawsynram		..	..		..	..	..	..		974 5	..	344.8	25 0	28		..	..	..	28	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan)	19 4	+0·6	20·7	5	14·1	−0·4	11·1	8	95 9	90 3	223·9	32 5	12	19	2·3	1·2	1·3	-1·9	24	0	0	1	26	0	0	0	0	0
Kalimpong	25 2	+1·2	26·8	16,	17 1	2·0	15 7	6 days	25·2	52•7	115·9	27·9	25	19	+2·6	5·2	4 4	4·9	19	0	0	0	0	0	0	0	0	0
Katmandu	30·1	+0 8	32·9	17	18·3	−1·0	15 4	13	10 5	25·6	120·3	44•9	1	8	-7 8	2·9	1·5	-0·6	16	0	0	4	0	0	0	0	2	0
Mukteswar (Kumaon)	23·1	+0·2	26·8	19	13·6	−0·8	9 1	2,3	49 1	65·0	−81·4	26·9	2	10	-0 1	16·7	15·3	+5·3	15	0	0	21	5	0	0	0	0	0
Nainital	23·5	..	27·3	18	15·3	..	11·1	7	92·4	93·9		78·5	2	11		8·1	6•2	..	17	0	0	0	0	0	0	0	0	0
Tapoban	24·8	..	28•9	18,19	13·9	..	7·2	30	..	41·6		35.6	2	3	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Badrinath (R)																												
Lokpal	7·1	..	9·4	23	0·4	..	−2·2	1	..	25•5	..	4 6	29	6	..	..	..	..	9	3	0	0	8	0	8	0	0	0
Jamuna Chetty	..	..	..	..	..	..	..	..	..	182·4	..	25•4	2,3,13	11	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Mussooree	24·0	+0·1	28·6	17,18	15·2	−0·9	5·3	2	41·4	127·2	−95·8	34·3	28	9	−1·2	8·0	7.1	−1·8	10	0	0	15	0	0	0	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	52·2	..	29 5	19	3	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	319·8	..	42·7	5	15	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Simla	23·8	−0·1	27·2	19,20	15 3	−0·3	8·3	2	45·4	119·1	−34·3	57·4	2	6	−3·8	4·8	3·7	−1·3	13	0	1	15	0	0	0	0	1	0
Dharampore	.	..	..	..	..	..	..	..	..	222·5	+95·5	80·0	2	6	−0·5	..	..	..	8	..	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	40·4	+15·5	26·7	1	2	−0·4	..	..	..	6	..	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	45·9	..	29·2	1	4	..	..	..	..	5	..	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	86·9	..	51·6	1	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..	..

*Temporarily closed. (R) Register not received. (b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, Km. per hour.			Weather phenomena—No. of days with									
	Mean maximum.	Departure from normal.	Highest.	Date.	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830-1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830-1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0·3 mm. or more).	Snow or sleet.	Hail.	Thunder heard.	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations excluding Kashmir—Contd.																												
Koksar	..	..	..	..	..	..	..	..	..	117·1	..	36·8	1	6	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Dalhousie	26·3	..	30·1	19	16·2	..	10·8	1	14·8	38·4	−91·4	12·2	2	4	−2·9	4·8	5·3	..	4	0	0	0	0	0	0	0	0	0
Dharamshala	30·9	..	34·4	1,19	20·8	..	14·5	6	104·4	138·7	..	44·5	10	9	..	4·3	3·2	..	12	0	0	10	0	0	0	0	0	0
Abu	29·1	+0·4	32·8	23	20·5	+0·2	16·7	20	80·8	147·6	+29·5	39·4	30	8	+2·2	..	..	..	9	0	0	6	3	0	0	0	0	0
Pachmarhi	33·2	+2·2	36·3	17	23·2	+1·0	19·0	27	32·2	120·2	−109·4	35·1	27	8	−2·3	10·6	9·8	−0·2	11	0	0	13	3	0	0	0	0	0
Mahabaleshwar	26·3	+4·9	28·9	3,12,13	17·0	+0·1	15·6	6	358·4	950·6	−133·7	278·1	29	15	−7·2	13·5	14·1	−2·3	15	0	0	10	16	0	0	0	0	0
Nandi Hills	23·9	..	26·7	1,2	16·2	..	15·1	22,24,30	..	78·9	..	43·2	12	6	..	..	..	..	7	0	0	0	0	0	0	1	0	0
Mercara	22·1	−0·2	26·2	12	18·0	+0·7	17·1	9	218·2	546·8	−101·1	83·3	7	24	+0·8	13·2	11·7	+2·5	27	0	0	0	0	0	0	0	0	0
Kodaikanal	18·9	+0·8	22.2	15	12 6	+0·8	11·1	25	56·3	105·7	−2·0	28·2	1	9	−0·9	14·4	14·8	−0·3	21	0	0	5	5	0	0	5	0	0
Ootacamund	18·5	+0·7	21·7	12	10·9	−0·4	8·3	1	49·7	116·5	−50·4	27·0	8	10	−4·1	10·3	8·4	−0·1	24	0	0	0	0	0	0	0	0	0
Coonoor	22·5	−0·1	24·4	1,10	15·7	+0·6	13·7	28	..	114·3	+42 9	40·6	10	12	+6·0	..	6·6	−0·5	17	0	0	2	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	72 4	..	18·0	21	10	..	..	..	..	21	..	.	.	..	.	.	.	..	..
Chungthang	..	..	..	..	..	..	..	..	..	101·9	..	73·1	21	24	..	.	..	..	25	..	.	.	.	.	.	.	.	.
Lachen	17·9	..	18·9	6 days	6·1	..	1 1	1	..	203 3	..	20·3	13	23	..	.	..	..	23	..	.	.	.	.	.	.	.	.
Tibet																												
Yatung	19·7	+1·9	21·1	12,27,28	8·1	−1·2	4·6	1	..	130·9	−14·4	15·2	20	16	+2·1	.	..	..	16	0	0	0	0	0	0	0	0	0
Lhasa	23·0	..	27·1	18	9·5	..	7·2	26	..	66·6	..	17·8	24	7	..	..	6·5	..	8	0	0	3	0	0	0	0	0	0
Ceylon																												
Colombo	29·7	−0·3	30·0	21 days	24 4	−0·8	23 0	4 days	54·3	247·1	+34·5	63·0	18	18	+4·0	.	..	..	22	0	0	0	0	0	0	0	0	0
Trincomalee	34·1	+0·5	36 0	4 days	26 8	+1·0	26·0	6 days	0·5	0·5	−23·4	0·5	28	0	−1 6	.	..	..	1	0	0	0	0	0	0	0	0	0
Batticoloa	33·3	..	36·0	12,24	25·7	..	24·0	30	2·5	9 9	..	7·1	15	2	..	..	..	..	3	0	0	3	0	0	0	0	0	0
Hambantota	30·1	−0·3	35·0	26	25·3	+0·4	24 0	18	10·5	38·2	−14·9	5·9	4	5	−0·8	..	..	..	9	0	0	0	0	0	0	0	0	0
Mannar	31·4	..	32·0	12 days	27·6	..	27·0	11 days	0	0·8	..	0·8	2	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																												
Damodar Catchment																												
Bokaro	38·0	..	43·7	18	26·1	..	22·4	8	60·9	134·8	.	46·7	30	7	..	9·6	8·1	..	11	0	0	14	0	0	0	0	0	0
Hazaribagh	36·7	..	40·6	18	24·5	..	21.4	27	41·1	61.5	..	17·2	27	6	..	10·8 (n)	6·6 (o)	..	11	0	0	0	0	0	0	0	0	0
Tilaiya	37·3	..	42·4	18	27·1	..	24·1	30	96·1	148·1	..	69·6	30	5	..	11·6	8.9	..	8	0	0	16	0	0	0	0	0	0
Ramgarh	39·2	..	45·2	17	26·5	..	23·6	3	56·9	61·8	..	18·8	27	6	..	7·4	4·8	..	12	0	0	17	0	0	0	0	0	0
Panchet Hills	38·3	..	45·9	18	26·9	..	23·7	5	97·4	228 4	..	90·9	29	9	..	12·0	10·5	..	13	0	0	16	0	4	0	0	0	0
Durgapur	38·1	..	43·6	16	28·5	..	25·3	30	..	280·6	..	132·1	30	7	..	..	..	..	9	0	0	0	0	0	0	0	0	0
Asansol	..	..	.	..	..	..	..	..	..	393·5	..	174·7	29	10	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	165·5	..	82·5	30	5	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Dumri	..	..	.	..	..	..	..	..	..	239·7	..	69·9	29	8	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	109·2	..	42·4	30	10	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	312·3	..	85·3	5	10	..	..	..	..	14	..	..	.	..	..	..	..	..	..
Chandwa	..	..	.	..	..	..	.	..	..	79 6	..	22·9	28	7	..	..	..	..	12	..	..	.	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	297·8	..	87·9	22	8	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Subarnarekha Catchment																												
Baramul	38·3	..	43·6	13	25·4	..	20·6	18	9·9	120·6	..	42·2	20	12	..	5·1	3·4	..	13	0	0	6	0	0	0	0	0	0
Hirakud	38·7	..	43·3	18,19	27·6	..	23·9	28	99·6	290·6	..	106·7	21	9	..	7·8	6·5	..	12	0	0	19	0	3	0	0	0	0
Khijrawan	37·5	..	47·6	6	..	..	..	..	56·1	111·0	..	23·9	28	10	..	15·9	9·5	..	12	0	0	9	0	0	0	0	0	0
Senepur	36·8	..	43·6	12,18	26 1	..	23·3	28	..	76·5	..	27·2	27	4	..	..	9·8	..	8	..	..	..	..	..	..	..	..	..
Ginabahar	38·5	..	43·3	1	24 8	..	21·1	5	..	96·3	..	35·1	28	8	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Narbada Catchment																												
Punasa	39·3	..	43·2	9	27·0	..	22·9	30	37·8	107·1	..	39·6	25	5	..	15·2	12·7	..	11	0	0	6	0	1	0	0	0	0
Bagra Tawa	39·5	..	43·0	9	26·8	..	22·6	27	55·5	88·8	..	27·9	29	7	..	12·4	8·9	..	12	0	0	1	0	0	0	0	0	0
Thikri	39·2	..	42·0	7	27·7	..	25·7	28	..	95 5	..	26·4	24	7	..	..	11·5	..	8	..	..	..	..	..	..	..	..	..
Tapti Catchment																												
Nandurbar	36·9	..	39·9	9	..	..	..	..	..	192·3	..	57·1	23	8	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																												
Jhadol	35·0	..	39·2	24	24·1	..	18·6	1	..	184·6	..	61·0	28	8	..	..	..	..	8	0	0	0	0	0	0	0	0	0
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	63·5	..	43·2	28	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	177·1	..	63·5	28	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	167·0	..	77·5	29	7	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	154·6	..	54·6	30	8	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Dharoi	39·4	..	41·4	23	26·7	..	20·4	30	12·7	114·4	..	38·1	28	4	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Mukhim	24·1 (c)	..	27·9 (c)	18	15·5	..	10·5	2	62·1	104·7	..	18·3	2	11	..	..	..	..	19	0	0	11	0	0	0	0	0	0
Tehri	34·9	..	39·6	19	19·5	..	12·1	24	20·3	47·3	..	17·8	2	5	..	..	..	..	12	0	0	5	1	0	0	0	0	0
Mandak Catchment																												
Korba	29·1	..	32·0	17	20·4	..	1·87	21	..	227·0	..	82·5	1	11	..	..	..	..	18	0	0	0	0	0	0	0	0	0

(c) Mean of 26 days. (n) Mean of 17 days. (o) Mean of 16 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5mm. or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hour	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
HYDROMETEOROLOGICAL OBSERVATORIES—*Contd.*																												
Gandak Catchment—*Contd.*																												
Pokhara	30·4		32·8	18	(b) 20·0	..	16·2	14	73·1	414·4	..	173·2	26	17	..	..	..	..	24	..	..	..	..	..	..	..	..	..
Nawakot	(h) 32·0	..	37·9	1	(e) 19·1	..	14·3	1	..	177·4	..	48·3	1	12	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh	(b) 28·2	..	32·3	18,19	..	..	..	..	22·9	195·3	..	42·7	25	11	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	25·3	..	29·6	19	15·7	..	11·8	7	50·0	164·0	..	59·9	2	11	..	..	..	..	17	..	..	..	..	..	..	..	..	..
Munsiyari	24·6	..	30·2	21	16·1	..	11·6	5	86·8	125·3	..	16·2	2	14	..	..	..	..	22	..		..	..	..	..	..	..	..
Sallyana	..	..	..	..	..	..	..	..	47·5	67·3	..	32·0	4	3	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Butwal	(b) 35·2	..	39·4	19	(b) 24·7	..	20·0	4	178·4	270·3	..	35·4	30	14	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	28·9	..	32·2	17	17·9	..	15·4	14	8·5	122·3	..	44·7	1	8	..	2·8	1·6	..	16	0	0	19	0	0	0	0	0	0
Kosi Catchment—																												
Chautara	(c) 28·5	..	31·4	19	21·3	..	18·1	2	41·5	221·5	..	66·5	29	11	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Okhaldhunga	24·2	..	25·9	17,20	16·0	..	13·4	2	96·0	226·8	..	79·5	29	17	..	3·8	3·2	..	22	0	0	9	3	0	0	0	0	0
Barahkshetra	34·5	..	38·4	6	24·9	..	22·7	8	57·5	247·6	..	48·2	23	13	..	12·2	7·9	..	17	0	0	18	0	0	0	0	0	0
Angbung	28·4	..	30·6	19	19·8	..	17·6	1,8	..	409·7	..	103·1	20	15	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Taplejung	24·2	..	25·9	17	16·4	..	13·7	8	19·2	268·1	..	39·4	1	19	..	..	..	..	24	0	0	7	9	0	0	0	0	0
Taplethok	28·3	..	30·6	15	17·4	..	15·2	5	.	327·0	..	37·9	23	22	..	..	..	..	24	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)	(e)																											
Bhojpur	24·0	..	26·1	6	16·7	..	14·8	2	76·2	255·2	..	57·1	11	14	..	..	..	..	18	..	..	..	..	..	..	..	..	..
Chainpur	28·3	..	31·2	3	18·3	..	15·6	11	..	146·4	..	45·2	29	12	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	22·0	..	24·4	19	15·1	..	12·7	8	44·4	382·8	..	43·7	26	26	..	10·1	8·4	..	28	0	0	3	6	0	0	0	0	0
Geyzing	25.3	..	27·9	29	17·3	..	13·6	8	35·8	340·4	..	52·6	17	17	..	..	..	..	22	..	..	..	..	..	..	..	..	..

(R) Register not received. (c) Mean of 28 days. (b) Mean of 29 days. (e) Mean of 26 days. [(h) Mean of 23 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in s.p.m. of normal ground-level isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Mean wind speed, km. per hour.	Wind speed (km. p. h.): 62 or more.	Wind speed (km. p. h.): 20 to 61.	Wind speed (km. p. h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1007·2	994·6	..	27·9	26·3	25·6	32·7	87	..	6·1	..	9·8	0	3	23	0	0	0	0	1	25	0	0	4	0
	1730	,,	1005·2	1002·6	..	27 2	26·1	25·8	32·9	91	..	5·8	..	8·3	0	0	26	0	0	0	0	0	26	0	0	4	0
Long Island	0830	32	1007·9	1004·2	..	27·5	26·0	25·2	32·7	88	..	6·5	..	2·8	0	0	20	0	0	0	2	3	15	0	0	10	0
	1730	,,	1006·0	1002·4	..	27.4	25·5	24·6	30.9	85	..	6.5	..	2·7	0	0	21	0	0	0	1	2	15	3	0	9	0
Port Blair	0530	79	1006·7	997.8	..	25·6	24·7	24.4	30·6	93	..	6·9	..	11.3	0	3	26	0	0	0	0	3	23	3	0	1	0
	0830	,,	1007·9	999.1	+0·6	27·5	25.7	24·9	31.9	86	+4	6·9	+0·2	15·2	0	7	22	0	0	0	0	2	21	6	0	1	0
	1130	,,	1007·0	998·1	..	28·0	25·8	24.8	31·3	83	..	7·3	..	18·2	0	11	18	0	0	0	0	1	22	6	0	1	0
	1730	,,	1005·9	997·0	..	26·7	25·3	24·7	31·2	89	..	7·3	..	16·9	0	11	18	0	0	0	0	0	27	2	0	1	0
	2330	,,	1007·2	998·3	..	25·7	25·0	24·6	30·8	94	..	6·4	..	11·7	0	3	25	0	1	0	0	1	24	2	0	2	0
Car Nicobar	0830	10	1009·0	1007·8	..	28·1	25·8	24·8	30·3	83	..	5·9	..	6·1	0	0	28	0	0	0	0	2	20	5	1	2	0
	1730	,,	1006·8	1005·6	..	27·5	25·3	24·3	30·4	83	..	6·2	..	3·3	0	0	21	0	0	0	0	1	18	2	0	9	0
Nancowry	0830	26	1009·6	1006·7	..	28·2	25·4	24·3	30·2	79	..	5·7	..	9·1	0	3	27	0	0	0	0	1	26	3	0	0	0
	1730	,,	1007·7	1004·8	..	27 5	25 0	23·8	29·6	81		5·7	..	8·7	0	3	25	0	0	0	0	1	25	2	0	2	0
Kondul	0830	8	1009·6	1008·7	..	28·7	26·1	25·1	32·1	82	..	5·1	..	10·1	0	2	26	0	1	7	16	0	0	0	0	2	4
	1730	,,	1007·5	1006·6	..	28·0	25·8	24·9	31·3	83	..	6·1	..	11·7	0	2	22	1	1	10	6	0	0	0	0	6	6
Assam (Including Manipur & Tripura																											
Pasighat	0830	..	..	..	..	26 1	24 0	23·0	28·1	84	..	7·0	..	2·9	0	0	12	3	2	1	0	0	0	0	6	18	0
	1730	..	..	..	..	28·0	25 1	23.8	29·4	79	..	5·8	..	1·5	0	0	8	1	0	0	0	1	0	1	5	22	0
Digboi	0830	..	..	..	..	26·9	24 7	23 6	29·5	83	..	6·7	..	3·2	0	0	30	2	14	0	3	1	1	0	9	0	0
	1730	..	..	..	..	28 8	25·0	23·4	28·9	74	..	6·4	..	3·1	0	0	30	4	8	2	5	2	3	2	4	0	0
Dibrugarh	0830	106	1003·0	991·1	−0·2	26·7	24·8	24.2	29.7	89	+2	7·1	+0.9	1·8	0	0	17	10	4	2	0	1	0	0	0	13	0
	1730	,,	999·3	987·5	..	28·5	25·8	24·6	31·1	80	..	5·4	..	1·6	0	0	14	2	3	3	0	2	3	0	1	16	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1001.3	988·8	..	24 6	23.9	23 6	29·1	95	..	6·5	..	1·7	0	0	7	0	3	3	0	0	0	1	0	23	0
	0530	,,	1002·1	989 5	..	24·7	23·9	23·6	29·0	94	..	7·0	..	3·6	0	0	18	1	9	4	0	1	1	2	0	12	0
	0830	,,	1003·1	990·7	..	26·6	24·7	23·7	29·5	85	..	7·1	..	3·7	0	0	22	3	13	4	0	0	1	1	0	8	0
	1130	,,	1002·3	989·5	..	28·5	25·2	23·7	29·3	76	..	6·3	..	5 9	0	0	24	4	15	3	0	0	0	0	2	6	0
	1730	,,	999·4	987·1	..	28·8	25·5	24·0	29·9	76	..	5·8	..	3·7	0	0	20	1	8	2	0	3	4	1	1	10	0
	2330	,,	1001·5	989.0	..	25·6	24·7	24.2	30·5	92	..	6·4	..	3 2	0	0	11	1	4	3	0	1	1	1	0	19	0
North Lakhimpur	0830	102	1002·9	991·4	..	26.2	24·6	23·9	30.1	88	..	7·1	..	..	0	0	18	7	6	2	0	1	0	0	2	12	0
	1130	,,	1002·0	990·6	..	28 2	25·5	24.1	30·4	81	..	6·5	..	..	0	0	18	5	6	4	0	1	2	0	0	12	0
	1730	,,	991·1	987·8	..	28 8	26·0	24·8	31·4	80	..	6·2	..	..	0	0	22	7	5	4	0	3	3	0	0	8	0
Sibsagar	0830	97	1003·2	992·5	+0·4	27 8	25·7	24·7	31·2	84	−1	7·1	+0.1	2·7	0	0	24	6	7	2	1	2	2	3	1	6	0
	1730	,,	999·8	989·1	..	29 3	26·3	24·6	31·6	77	..	6·1	..	3·5	0	0	24	5	7	3	2	3	2	2	0	6	0
Jorhat	0530	90	1001·4	991.3	..	25 4	24·9	24·7	31·0	96	..	6·4	..	6·0	0	0	21	7	5	2	0	2	3	0	2	9	0
	0830	,,	1002·6	992·6	..	27·9	25·6	24·6	30·8	83	..	6·6	..	8.2	0	2	21	3	6	2	0	3	8	0	1	7	0
	1130	,,	1001·4	991·4	..	30·0	26·8	25·2	32·8	75	..	6.0	..	10·3	0	2	27	6	5	3	0	4	2	2	7	1	0
	1730	..	998·8	988·9	..	28·9	25·9	24·5	31·0	78	..	5·2	..	6.9	0	1	23	12	5	1	1	2	0	2	1	6	0
Golaghat	0830	...	..	..	..	27·9	25 5	24·5	30·6	82	..	7·2	..	..	0	0	1	0	0	0	1	0	0	0	0	29	0
	1730	..	..	..	..	29.8	26.4	25·1	31·8	75	..	6·9	..	..	0	0	3	0	0	0	3	0	0	0	0	27	0
Gohpur (R)	0830	...	..	..	..	..	..	..	..				..	..													
(R)	1730	...	..	..	..	..	..	..	..				.	..													
Tezpur	0830	79	1003 4	994·6	+0.2	26·7	25.4	24·9	31·4	90	+6	6·2	0	1·5	0	0	14	0	0	8	0	1	4	1	0	16	0
	1730	,,	999 5	990·8	..	29·4	26·3	25·1	31·6	79	..	4·7	..	1·2	0	0	10	1	1	6	0	0	0	2	0	20	0
Tezpur (P.B.O.)	0230	78	1001 2	992·3	..	25·3	24·5	24·0	30·2	94	..	5·9	..	..	0	0	7	1	3	3	0	0	0	0	0	23	0
	0530	,,	1002 0	993·1	..	25·2	24·5	24·0	30·2	94	..	6·9	..	..	0	0	12	3	1	3	1	3	0	1	0	18	0
	0830	,,	1003.4	994·5	..	27·0	25·3	24.4	30.9	86	..	7·0	..	..	0	0	11	1	0	5	0	2	1	1	1	19	0
	1130	,,	1002 3	993.5	..	28.8	26·0	24·8	31·3	79	..	6·4	..	..	0	0	23	5	2	5	2	4	1	4	0	7	0
	1730	,,	999·5	990.8	..	29·2	25·9	24·5	30·7	76	..	5·7	..	..	0	0	9	1	2	2	0	1	1	2	0	21	0
	2330	,,	1001·7	992·8	..	26·1	25·0	24·5	30·8	91	..	5·7	..	..	0	0	9	1	3	5	0	0	0	0	0	21	0
Majbat	0830	..	..	..	..	..	..	..	..	..	..	7·3	..	6·3	0	0	24	2	4	7	3	1	5	2	0	6	0
	1730	..	..	..	..	..	..	..	..	..	..	6·9	..	5·7	0	0	22	1	1	4	2	3	6	5	0	8	0
Chaparmukh	0830	66	1003.5	996.2	..	28.7	25·7	24·5	30.4	79	..	5·8	..	..	0	0	20	2	6	2	7	0	3	0	0	10	0
	1730	,,	999·6	992·3	..	29.3	26·2	24.9	31·5	78	..	5·6	..	..	0	0	16	0	2	1	7	0	5	0	1	14	0
Tangla	0830	78	1002·5	993·8	..	27·4	25.0	23·9	29·7	82	..	5·0	..	5·5	0	0	29	3	2	4	3	4	6	6	1	1	0
	1730	,,	998·6	990·1	...	29·5	26·2	25·0	31·3	76	..	3·9	..	6.0	0	0	29	0	3	1	4	7	8	6	0	1	0
Gauhati	0830	55	1002·8	996·5	+0·3	27·4	25·1	24·1	29·8	83	+1	6·3	+0·1	3·2	0	0	30	1	7	4	9	2	4	3	0	0	0
	1730	,,	998·7	992·5	..	29.5	25·8	24·1	30·2	73	..	5·3	..	2·8	0	0	26	1	3	4	7	3	7	0	1	4	0
Gauhati (Kalkuchi Aerodrome)	0230	49	1001·0	995·4	..	25·3	24·4	24·0	30·0	93	..	6·3	..	3·6	0	0	16	2	6	1	0	1	3	3	0	14	0
	0530	,,	1001·7	996·1	..	25·3	24·4	24·0	30.0	93	..	6·6	..	2·2	0	0	15	3	7	1	0	1	1	1	1	15	0

(R) Register not received.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount Oktas		Mean wind speed, km. per hour.	Wind speed (Kms. p.h.)			No. of observations.										
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam. (Including Manipur & Tripura)—*Contd.*																											
Gauhati (Kaikuchi Aerodrome)—*Contd.*	0830	49	1002.8	997.2	..	27.7	25·2	24·1	30·1	81	..	6·6	..	6·4	0	1	26	3	10	3	2	2	3	2	2	3	0
	1130	,,	1001.9	996·3	..	29.2	25·6	23·8	29·8	74	..	6·3	..	7·1	0	1	26	1	10	4	1	2	2	3	4	3	0
	1730	,,	998·9	993.4	..	29.4	25·8	24·1	30·3	74	..	5·8	..	4·1	0	0	23	4	7	0	3	4	2	1	2	7	0
	2330	,,	1001·5	995·9	..	26·4	25·1	24·6	30·8	89	..	5·8	..	4·5	0	0	22	2	12	0	1	2	3	0	2	8	0
Rangjya . . *	0830	,,																									
*	1730	,,																									
Goalpara . .	0830	38	1002·5	998·2	..	26.8	25·0	24·3	30·2	86	..	6·6	..	1·5	0	0	13	0	0	4	5	0	2	0	2	17	0
	1730	,,	998.6	994·6	..	30·1	26·3	24·8	31·2	74	..	5·6	..	1·8	0	0	16	0	3	1	3	0	5	2	2	14	0
Dhubri . . .	0830	35	1002·8	998·9	+0·7	26 8	25·2	24·6	30 6	89	+3	5·7	—0·4	6·5	0	0	27	0	23	0	1	1	2	0	0	3	0
	1730	,,	999·1	995·2	..	28·6	26·2	25·3	32.2	83	..	5·0	..	5·5	0	0	28	0	11	3	2	6	6	0	0	2	0
Dhubri (Rupsi Aerodrome)	0830	36	..		..	27·1	25·2	24·3	30·4	85	..	6·5	..	3·8	0	0	24	4	5	7	6	1	1	0	0	6	0
	1130	,,			..	29·3	26·2	24 8	31·2	78	..	6·2	..	3·8	0	0	22	2	2	5	8	0	4	1	0	8	0
	1730	,,	..		..	29.0	26·2	24·9	31·8	80	..	6·1	..	2·1	0	0	20	4	1	3	7	4	1	0	0	10	0
Tura . . . (R)	0830	370			...						..		..	..													
(R)	1730	,,			..						..		..														
Agartala . . .	0230	16	1000·6	998 8	..	25 4	24·6	24·4	30·3	93	..	5·1	..	7·5	0	0	26	0	1	1	18	5	0	1	0	4	0
	0530	,,	1001·2	999·4	..	25 5	24·7	24·5	30·4	94	..	6·4	..	7·4	0	0	27	0	0	4	17	5	1	0	0	3	0
	0830	,,	1002·3	1000·5	..	28·3	26·1	25·3	32·0	83	..	6·8	..	11·0	0	0	30	0	2	2	16	8	1	0	1	0	0
	1130	,,	1001·6	999 9	..	29·8	26·6	25·4	32·1	78	..	6·7	..	12·7	0	0	30	1	1	2	7	14	2	1	2	0	0
	1730	,,	999·3	997 3	..	28 3	26·0	25·3	31·7	84	..	6·7	..	9·9	0	1	25	0	1	2	9	9	2	1	2	4	0
	2330	,,	1001·3	999·5	..	25·8	24·9	24·5	30·9	93	..	5·3	..	9·1	0	0	26	0	0	3	19	3	1	0	0	4	0
Silchar . . .	0830	29	1003·9	1000·6	+0·4	27·7	25·6	24·7	31·0	84	0	6·3	+0·2	1·5	0	0	15	2	3	2	3	1	2	2	0	15	0
	1730	,,	1000·1	996·8	..	29·3	26·5	25·3	32·3	79	..	5·3	..	0·8	0	0	8	0	0	1	1	0	2	2	2	22	0
Imphal . . .	0530	801	1003·9	916·5	..	21·9	21·0	20·6	24·1	92	..	5·9	..	2·6	0	0	14	0	2	2	2	4	0	1	3	16	0
	0830	,	1003·7	917·3	..	25·4	22·2	20·8	24·3	75	..	6·2	..	5·3	0	1	20	0	0	1	4	3	10	2	1	9	0
	1130	,,	1001·9	916·2	..	27·7	22·7	20·3	22·6	65	..	5.8	..	12·3	0	3	25	3	0	1	3	5	14	4	1	0	2
	1730	,,	1000·0	914·1	..	26·4	22·1	20·1	23·2	69	..	5·9	..	9·6	0	1	25	3	0	0	2	4	14	4	2	4	0
	2330	,,	1003·1	916·2	..	23·2	21·5	20·6	24·3	86	..	5·4	..	5·1	0	1	16	0	1	0	3	4	6	1	2	13	0
Hallong . . .	0830	682	1003·1	928.6	..	24.0	22.1	21·3	25·0	86	..	6·1	..	..	0	0	30	0	2	0	0	13	15	0	0	0	0
	1730	,,	999.5	925·5	..	25·7	22·8	21.3	25·4	78	..	5 3	..	..	0	0	30	0	1	0	0	6	23	0	0	0	0
Lumding . . .	0830	149	1003.1	986.5	..	28·3	25·4	24·3	30·0	78	—3	6·6	..	..	..	..	..	0	0	0	0	1	1	1	0	27	0
	1730	,,	999·4	983.3	..	30.0	25·8	24·1	29·9	71	..	6·2	..	..	..	..	..	1	2	2	0	2	1	2	1	19	0
Sub-Himalayan West Bengal																											
Cooch Behar (C.W.O.) .	0830	43	1001·5	996·6	..	27·3	25·1	24·1	30 0	84	..	6·3	..	8·3	0	0	27	1	6	16	4	0	0	0	0	3	0
	1130	,,	1001·9	997·1	..	29·8	26·5	25·1	31·8	77	..	5·9	..	9·7	0	1	26	0	6	12	2	1	1	0	0	3	5
	1730	,,	997.8	992·9	..	30·1	26·7	25·3	32·4	77	..	5·2	..	7·9	0	0	26	0	3	11	6	1	4	0	0	4	1
Jalpaiguri . . .	0830	83	1002·9	993·5	+0·7	25·8	24·1	23·2	29·4	87	+1	5·1	+0·3	6·9	0	0	28	4	11	11	2	0	0	0	0	2	0
	1730	,,	998·8	989·6	..	30·3	26·2	24·1	30.4	71	..	3·0	..	8·1	0	0	29	3	5	10	6	3	1	1	0	1	0
Bagdogra . . .	0230	131	1000·3	985·6	..	24·9	24·1	23·7	29·4	94	..	6·6	..	6·3	0	0	24	1	14	5	3	0	1	0	0	6	0
	0530	,,	1001·0	986·2	..	24·4	23·6	23·1	28·5	94	..	6·1	..	3·8	3	0	17	3	6	6	0	1	1	0	0	13	0
	0830	,,	1002 0	987·3	..	27 2	24·7	23·4	30·1	81	..	6·1	..	7·7	0	0	29	1	10	10	6	0	1	0	1	1	0
	1130	,,	1001·0	986·5	..	29·9	25·7	23·8	29·7	70	..	5·6	..	9·4	0	0	29	0	2	12	11	3	0	1	0	1	0
	1730	,,	997·7	983·3	..	30·3	26·1	24·2	30·4	71	..	5·0	..	7·9	0	0	27	1	7	10	7	1	1	0	0	3	0
	2330	,,	1001 1	985·6	..	26·0	24·9	24·4	30·6	91	..	6·3	..	6·9	0	1	25	4	14	5	3	0	0	0	0	4	0
Malda . . .	0830	31	1001·4	997·9	+0.3	29·8	26·5	25.2	31·8	77	—4	5·1	+0·1	9·2	0	0	30	1	5	10	5	8	1	0	0	0	0
	1730	,,	997·6	994·1	..	30·9	26·3	24·2	30·1	69	..	5·3	..	9·0	0	1	29	0	4	7	12	2	3	1	1	0	0
Gangetic West Bengal																											
Dum Dum . .	0230	6	999·4	998·7	..	27·7	26·9	26·6	34·1	94	..	4·4	..	6·9	0	1	23	0	1	0	9	11	2	1	0	6	0
	0530	,,	999·9	999·2	..	27·4	26·8	26·5	34·9	95	..	6·0	..	5·7	0	0	23	0	2	3	4	11	3	0	0	7	0
	0830	,,	1001·0	1000·3	..	30·8	28·0	26·9	35·6	80	..	5·4	..	10·1	0	3	25	0	3	0	5	11	7	2	0	2	0
	1130	,,	1000·3	999·6	..	33·9	28·9	27.0	35·7	69	..	4·7	..	10·0	0	2	27	0	0	2	6	12	3	5	1	1	0
	1730	,,	997·9	997·2	..	31·9	27·8	26·2	33·8	74	..	6·1	..	13·1	0	6	23	0	1	0	7	14	2	4	1	1	0
	2330	,,	1000·4	999·7	..	28·3	27·2	26·8	35·3	91	..	4·7	..	7.8	0	1	25	0	0	0	10	11	4	1	0	4	0
Calcutta . . .	0830	6	1001·4	1000·7	+0·8	31·1	27·2	25·5	32·8	73	—6	5·4	—0·7	9·0	0	1	29	0	2	3	8	5	6	5	1	0	0
	1130	,,	1000·4	999·7	..	33·7	27·4	24·8	31·0	61	..	5·2	..	9·1	0	0	28	0	0	0	10	6	5	4	3	2	0
	1730	,,	998·2	997·5	..	31·9	26·7	24·3	30·5	67	..	6·2	..	9·9	0	0	29	0	1	2	9	9	4	3	1	1	0
Barrackpore . . .	0530	7	1000.1	999·3	..	27·2	26·2	25·7	32·8	93	..	6·0	..	6·5	0	0	22	0	0	5	4	6	6	0	1	8	0
	0830	,,	1001·3	1000·6	..	30·9	27·4	26·1	33·3	76	..	5·3	..	11·1	0	3	22	0	2	1	3	7	9	3	0	5	0
	1130	,,	1000·4	999·7	..	33·4	27·9	25·6	34.6	66	..	4·6	..	10·6	0	1	27	0	0	1	4	10	7	2	4	2	0
	1730	,,	997·8	997·1	..	31·1	26·7	25·0	31·6	72	..	5·9	..	11·0	0	2	25	1	1	3	3	11	4	3	1	3	0

(R) Register not received. * Data not reliable

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed Km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction. N	N	E	SE	S	SW	W	NW	Calm	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal —*Contd.*	2330	7	1000·5	999·8	..	27·8	2·2	25·5	32·5	89	..	4·4	..	6·6	0	0	22	0	0	1	6	6	8	0	1	8	0
Barrackpore—*Contd.*																											
Saugor Island	0830	3	1001·1	1000·8	+0·6	30·7	28·8	28·1	37·9	86	+8	5·3	−1·2	14·3	0	4	26	0	0	0	3	11	12	3	1	0	0
	1730	,	998·7	998·4	..	31·0	28·8	27·9	37·7	84	..	4·8	..	17.4	0	7	23	0	0	0	5	13	11	1	0	0	0
Sandheads	0530	10	999·6	998·5	..	29·5	27·5	26·6	35·2	84	..	6·1	..	..	0	13	15	0	0	0	2	7	13	4	2	2	0
	0830	,,	1001·4	1000·3	+0·4	30·2	27·7	26·7	35·1	81	+1	5·6	−0·1	..	0	9	20	0	0	0	4	7	13	4	1	1	0
	1130	,,	1001·1	1000 0	..	30·6	27·9	26·9	35·1	81	..	5·0	..	..	0	10	20	0	0	1	4	7	15	1	1	0	1
	1730	,,	998·2	997·1	..	30·2	27·7	26·8	35·1	82	..	5·4	..	..	0	14	16	0	0	0	5	10	13	2	0	0	0
	2330	,,	1000·6	999·5	..	29·4	27·4	26·6	35·0	85	..	4·0	..	..	0	9	21	0	1	1	2	11	12	2	1	0	0
Contai	0830	11	1001·2	999·9	..	31·1	27.1	25·8	32·8	72	..	4·5	..	6·3	0	0	25	1	0	0	2	10	12	0	0	5	0
	1730	,,	998 7	997·5	..	30·4	27·5	26·3	34·7	79	..	5·9	..	8·0	0	0	27	0	0	0	4	16	7	0	0	3	0
Midnapore	0830	45	1000·8	995·8	+0·5	31·7	26·6	24·3	30·9	66	−12	3·2	−1·8	7·0	0	1	26	0	3	1	1	10	8	3	1	3	0
	1730	,,	997·4	992·4	..	32·8	25·8	22·6	27·6	60	..	4·7	..	9·3	0	1	25	0	2	1	4	5	13	0	1	4	0
Purulia	0830	255	1000·5	972·7	..	30·8	25·7	22·3	29·1	63	..	3·6	..	3·0	0	0	27	2	0	0	9	4	11	0	1	3	0
	1730	,,	996·1	968·7	..	32·9	24·4	19·2	23·3	50	..	6·0	..	3·8	0	1	16	0	0	0	7	3	2	1	4	13	0
Burdwan	0830	32	1000·9	997·2	+0·4	30·6	..	..	..	..	..	3·3	−2·6	1·1	0	0	9	1	0	3	0	3	2	0	0	21	0
	1730	,,	997·8	994·3	..	32·3	..	..	..	..	..	6·1	..	5·1	0	0	19	0	0	3	4	9	2	1	0	11	0
Krishnagar	0830	15	1001·4	999·8	+0·5	30·8	27·3	26·1	33·1	76	−3	3·5	−2·2	3·5	0	0	24	0	0	2	3	18	0	1	0	6	0
	1730	,,	998·0	996·4	..	31·4	26·6	24·8	31·1	70	..	4·0	..	3·0	0	0	26	0	0	2	4	18	0	2	0	4	0
Asansol	0230	126	998·9	984·9	..	27·6	25·3	24·4	30·5	84	..	3·6	..	5·0	0	0	18	0	0	3	7	6	1	1	0	12	0
	0530	,,	999·6	985·5	..	27·2	25·5	24·7	31·3	87	..	5·1	..	5·5	0	0	22	0	1	3	8	5	3	2	0	8	0
	0830	,,	1000·4	986·5	+0·5	30·9	26·8	24·9	31·7	72	−2	3·6	−1·7	8·3	0	0	23	0	0	3	13	6	2	2	2	2	0
	1130	,,	999·5	985·7	..	34·3	27·3	23·9	30·7	59	..	3·6	..	7·6	0	0	28	0	1	7	8	3	4	3	2	2	0
	1730	,,	996·6	982.9	..	32·7	26·4	23·5	29·0	63	..	6·0	..	9.4	0	2	24	1	4	6	8	3	1	1	2	4	0
	2330	,,	999·8	985·7	..	28·4	25·4	23·9	29·8	78	..	4·2	..	7·4	0	0	21	0	1	3	7	6	0	4	0	9	0
Suri	0830	77	1001·0	992·4	..	30·4	26·3	24·6	30·7	72	..	4·0	..	10·3	0	3	26	0	3	6	8	6	3	2	1	1	0
	1730	,,	997·7	989·1	..	31·5	25·5	22·5	27·5	63	..	6·5	..	12·2	0	2	28	1	7	9	5	1	3	3	1	0	0
Berhampore	0830	19	1008·8	998·7	+0·1	29·5	26·9	25·9	33·6	80	−1	4·7	−1·4	5·1	0	0	28	0	0	9	1	12	4	1	1	2	0
	1730	,,	997·8	995·7	..	30·7	25·9	23·3	29·6	69	..	5·7	..	5·0	0	0	24	0	0	14	1	3	4	2	0	6	0
Orissa																											
Baripada	0830	54	1001·1	995·1	..	30·8	26·9	25·1	32·2	73	..	4·4	..	3·9	0	0	22	3	3	0	6	2	6	1	1	8	0
	1730	,,	998·1	992·1	..	32·3	27·9	26·1	34 0	73	..	5·8	..	5·6	0	0	30	1	1	5	8	4	6	2	0	0	3
Balasore	0830	20	1000·9	998.7	+0·6	31·0	27·0	25·4	32·7	73	−4	6·0	+0 6	12·2	0	6	23	2	1	0	4	9	10	1	2	1	0
	1730	,,	998·0	995·8	..	30·9	26·7	24·9	31·7	72	..	6·8	..	12·6	0	7	19	1	0	0	11	9	5	0	0	4	0
Chandbali	0830	6	1001·4	1000·7	+0·5	30·5	27·7	26·7	35·0	79	0	4·7	−1·1	5·3	0	0	30	0	2	0	8	0	14	0	6	0	0
	1730	,,	998·5	997·8	..	30·7	27·1	25·7	33 0	75	..	5·4	..	7·4	0	0	30	0	0	1	25	0	2	2	0	0	0
Cuttack	0830	27	1001·3	998·3	+0·2	31·0	26·9	25·0	32·0	71	−4	4·7	−1·0	0·2 (l)	0	0	1	0	0	0	0	1	0	0	0	18	0
	1730	,,	998·0	995·1	..	34·0	26·6	23·4	28·5	57	..	5 6	..	1·8 (m)	0	0	8	0	0	1	3	2	1	1	0	10	0
Bhubaneswar	0230	46	999·8	994·6	..	27·9	26·1	25·4	32.7	86	..	5·6	..	9·6	0	3	19	0	2	1	0	7	9	2	1	8	0
	0530	,,	1000·1	994 9	..	27·5	26·0	25·3	32·7	88	..	5·8	..	7·4	0	2	19	1	1	0	3	5	6	3	2	9	0
	0830	,,	1001·3	996·1	..	30·7	26·7	25·0	32·0	72	..	5·5	..	10·5	0	2	26	0	1	0	2	9	11	4	1	2	0
	1130	,,	1000·5	995·3	..	34·5	26·6	22·9	28·1	54	..	4·7	..	9·7	0	2	25	0	1	0	3	4	11	4	4	3	0
	1730	,,	998·1	993·0	..	32·3	26 2	23·4	28·9	62	..	6 0	..	18 6	0	14	14	1	1	0	4	11	7	4	0	2	0
	2330	,,	1000·9	995·7	..	28·6	26·4	25·5	32·5	84	..	5·0	..	13·2	0	8	21	0	1	1	4	10	8	4	1	1	0
Puri	0830	6	1001·8	1001·1	+0·7	30·2	28 0	27·1	35·9	84	+3	4·9	−0·4	21·0	0	18	11	0	0	1	2	4	16	5	1	1	0
	1730	,,	999·0	998·3	..	30·4	28·5	27·9	37·2	87	..	5·6	..	25·2	0	21	9	0	1	0	4	6	18	0	1	0	0
Gopalpur	0530	17	1000·6	998.7	..	27·5	26·2	25 7	32·7	90	..	5·5	..	5·9	0	2	14	1	1	1	0	4	8	0	1	14	0
	0830	,,	1001·9	1000·0	+0·8	29·9	27·1	25·9	33·7	80	−1	4·9	+0·4	4·0	0	3	25	1	4	0	3	10	8	2	0	2	0
	1130	,,	1001·3	999·4	..	32·0	28·1	26·5	34·9	73	..	3·8	..	11·9	0	2	28	1	1	1	6	14	6	0	1	0	0
	1730	,,	999·0	997·1	..	29·9	27·2	26·3	33·7	81	..	5·2	..	17·4	0	10	20	1	0	2	3	13	9	1	1	0	0
	2330	,,	1001·5	999·6	..	28·4	26.6	25·9	32·9	87	..	4·3	..	14·2	0	6	20	0	3	1	0	9	12	0	1	4	0
Koraput	0830	913	1471·9	905·5	..	24·2	21·1	19·5	22·8	76	..	4·6	..	..	0	0	30	2	0	0	0	2	8	17	1	0	0
	1730	,,	1444·8	902·9	..	27·3	21·7	18·9	21·9	63	..	5·9	..	..	0	0	30	7	1	3	1	3	3	7	5	0	0
Titilagarh	0830	211	1001·6	978·0	..	30·4	24·4	21·2	25·4	59	..	4·8	..	4·4	0	0	30	1	0	1	3	8	15	1	1	0	0
	1730	,,	997·3	974·5	..	35·1	25·2	19·1	23·7	45	..	4·3	..	2·6	0	0	25	0	1	1	8	4	8	2	1	5	0
Bolangir (R)	0830	..																									
(R)	1730	..																									
Angul	0830	129	1001·6	986·2	+1·1	30·1	25·2	22·8	27·7	68	−4	6·3	+0·5	6·0	0	1	23	4	5	1	2	2	1	5	4	6	0
	1730	,,	997·3	982·2	..	34·9	25·3	20·1	24·1	47	..	6·2	..	8·9	0	0	29	0	0	2	6	5	7	6	3	1	0
Sambalpur	0830	148	1001·5	985.2	+1·0	31·1	25·5	22·4	28·2	64	−2	3·9	−1·3	4·2	0	0	28	0	0	1	4	7	11	4	1	2	0
	1730	,,	996·9	981·2	..	35·7	26·9	23·1	27·9	53	..	4·2	..	3·4	0	0	16	3	1	1	1	4	4	0	2	14	0

(l) Mean of 19 days. (m) =Mean of 18 days. (R) Register not received.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km. p.h.)			No. of observations.										
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.					Wind direction.										
															62 or more.	21 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—*Contd.*																											
Jharsuguda	0230	230	999·1	973·7	..	28·4	23·5	21·3	24·8	67	..	5·0	..	6.7	0	0	23	3	1	0	6	6	6	1	0	7	0
	0530	,,	999·8	974·3	..	27·7	23·7	21·7	26·2	71	..	5·6	..	4·9	0	2	16	1	0	2	4	6	1	2	2	12	0
	0830	,,	1000·9	975·7	..	31·4	24·6	21·2	25·0	57	..	4·1	..	6·5	0	0	26	1	1	1	2	2	13	4	2	4	0
	1130	,,	999·9	974·9	..	35·3	25·3	20·3	23·8	45	..	3·9	..	9·8	0	1	25	1	1	2	0	5	3	10	4	4	0
	1730	,,	996·2	971·4	..	34·7	24·3	18·1	22·1	43	..	5·7	..	9.1	0	1	25	1	3	5	0	5	3	4	5	4	0
	2330	,,	999·9	974·6	..	29·6	23·9	20.9	25·3	63	..	5·5	..	9.6	0	1	25	0	1	2	6	7	7	2	1	4	0
Chota Nagpur																											
Jamshedpur	0830	129	1000·6	986·5	+0·7	31·8	25·3	21·9	27·2	58	—12	3·2	—2·2	9·2	0	1	26	0	0	3	3	1	7	11	2	3	0
	1730	,,	997·1	982·9	..	33·7	24·9	20·0	24·0	51	..	6·4	..	13·1	0	5	23	0	3	6	7	1	3	4	4	2	0
Jamshedpur (P.B.O.)	0530	145	999·8	983·6	..	28·5	24·4	22·5	27·0	71	..	5·2	..	4·1	0	0	19	1	3	2	1	1	2	7	2	11	0
	0830	,,	1000·5	984 5	..	31·3	25·1	21·9	27·0	60	..	4·4	..	6·7	0	0	26	0	1	2	3	1	10	9	0	4	0
	1130	,,	999·3	983·7	..	36·1	25·1	19·2	22·5	41	..	4·4	..	8·1	0	0	24	0	1	0	2	1	8	9	3	6	0
	1730	,,	996·8	981·0	..	33·9	24·5	19·4	22·9	48	..	6·7	..	10·4	0	1	26	0	5	0	10	1	2	4	5	3	0
	2330	,,	999·8	984 0	..	29·8	24·6	22·1	26.5	65	..	4·4	..	5·4	0	0	25	0	5	4	5	1	5	4	1	5	0
Chaibasa	0830	226	1000 3	975 5	+0·7	31·7	25·1	21·6	26·2	59	—10	4·8	—0·3	2·3	0	0	20	0	0	0	1	0	13	1	5	10	0
	1730	,,	996.7	972 3	..	33·2	24 5	19·3	23·8	49	..	6·5	..	3·0	0	0	19	1	2	0	2	0	9	0	5	11	0
Ranchi	0830	655	1000·4	930·0	+1·4	30·4	23·7	20·7	24·4	58	—10	4·2	—0·8	1·5	0	0	13	0	1	0	0	8	2	2	0	17	0
	1730	,,	996·9	927·1	..	30·8	22·7	18·4	21·7	53	..	5·0	..	0·7	0	0	6	0	0	0	1	3	1	1	0	24	0
Ranchi (C. W. O.)	0530	652	999·4	928·7	..	25·6	21·7	19·5	23·1	73	..	4·8	..	7·4	0	1	24	0	1	1	4	7	9	2	1	5	0
	0830	,,	999 5	929·7	..	29.9	22·9	19·2	22·9	57	..	5·6	..	8·2	0	0	30	1	1	2	4	5	9	5	3	0	0
	1130	,,	998 3	929·3	..	32·8	23·1	18 3	21·1	46	..	4·4 (h)	..	12·8 (h)	0	2	27	2	1	2	3	5	1	6	9	1	0
	1730	,,	996·0	926.2	..	31·0	22·1	16·8	20·1	50		5 3	..	8·5	0	1	20	2	2	1	1	2	4	5	4	2	0
Daltonganj (R)	0830	221																									
(R)	1730	,,																									
Hazaribagh	0830	611	999 7	934·1	+0·5	30·1	22·8	18·9	22·5	55	—10	4·7	—1·0	8·0	0	0	26	1	0	0	2	6	5	4	8	4	0
	1730	,,	995·7	930·8	..	32·5	22·7	17·1	20·6	46	..	5·7	..	8·9	0	2	24	2	2	0	3	5	3	1	10	4	0
Dhanbad	0830	257	999 9	971·7	..	30·8	26·0	23·9	29·8	68	..	4·5	..	..	0	0	29	1	0	3	6	11	1	6	1	1	0
	1730	,,	996 0	967·8	..	33·3	25·3	21·0	25·5	55	..	5·9	..	..	0	2	27	4	2	5	6	3	3	5	1	1	0
Bihar																											
Purnea	0830	38	1001 5	997·3	+0·5	29·2	25·9	24·5	30·5	76	—6	4·7	—0·7	4·6	0	0	29	0	7	19	0	0	1	1	1	1	0
	1730	,,	997 2	993·0	..	33.0	26·9	24·3	30·4	62	..	3·7	..	4·7	0	0	28	1	6	13	2	2	1	3	0	2	0
Forbesganj	0830	61	1001 6	994·8	..	29·2	25·2	23·3	29·0	72	..	5·7	.	9·0	0	0	30	0	1	27	1	1	0	0	0	0	0
	1730	,,	997 2	990·6	..	33·7	26·8	24·0	29·4	57	..	3 8	..	8·0	0	0	30	2	1	20	3	0	0	4	0	0	0
Darbhanga	0830	49	1001·1	995·6	+0·7	29·6	25·7	24·0	29·8	73	—4	3·0	—1·8	4·5	0	0	29	0	3	16	9	0	0	0	1	1	0
	1730	,,	996 9	991·5	..	34·7	27·1	23·7	29·9	57	..	1·6	..	2·5	0	0	24	1	5	12	1	1	1	3	0	6	0
Motihari (R)	0830	65																									
(R)	1730	,,																									
Patna	0830	53	1000 4	994·4	+0·4	31·5	26·1	23·8	29·0	65	—7	3·6	—0 9	11·1	0	2	27	1	9	15	2	0	0	0	2	1	0
	17.0	,,	996.2	990 4	..	35·5	26·2	21·8	26·0	47	..	3·6	..	8·0	0	0	29	3	5	11	0	0	0	1	9	1	0
Patna (Aerodrome)	0530	60	998·7	991 9	..	27·9	25·3	24·0	29·8	80	..	3·1	..	9·3	0	0	27	3	6	14	3	1	0	0	0	3	0
	0830	,,	999·8	993·1	..	31·4	26·2	24·1	29·5	66		3·1	..	12 0	0	3	26	2	1	19	3	1	0	1	2	1	0
	11 0	,,	999.7	992·5	..	35·0	26·6	22·7	28·1	51	..	3·3	..	13·5	0	3	26	5	5	10	5	1	1	1	1	1	0
	17.0	,,	995 3	988·8	..	36·3	25·6	20·8	23 6	43	..	3·5	..	14·4	0	3	27	7	5	9	2	1	1	2	3	0	0
	2330	52	999 1	993·3	..	30·9	26·1	23·6	30·1	67	..	2·1	..	7·2	0	2	16	1	3	6	6	1	0	1	0	12	0
Dehri	0830	107	999 5	987·7	..	33·7	25·4	20·5	25·5	50	..	3·8	..	3·4	0	0	28	1	1	1	6	4	7	6	2	2	0
	1730	,,	995·4	983·8	..	3 ·4	25·3	18·8	22·0	38	..	4·0	..	3·6	0	0	29	5	4	2	4	0	4	2	8	1	0
Gaya	0230	116	998·1	985·3	..	30 1	24·5	21·2	26·7	62	..	3.7	..	4·1	0	0	16	2	1	0	8	2	2	1	0	14	0
	0530	,,	998·7	985·8	..	28·9	24·3	21·8	26·4	67	..	4·8	..	3·0	0	1	12	0	0	2	4	4	1	1	1	17	0
	0830	,,	999·9	987 1	+0·7	33·9	24·7	19·6	23·8	47	—6	3·7	0	9·7	0	2	24	1	1	3	6	2	3	7	3	4	0
	1130	,,	998·9	986·3	..	37·7	25·2	18·9	21·8	36	..	3·3	..	9·9	0	2	25	6	3	4	3	0	0	4	7	3	0
	1730	,,	995·6	983·0	..	36·8	24·7	17·5	20·9	38	..	4·4	..	14·5	0	8	20	3	4	6	2	1	3	2	7	2	0
	2330	,,	998·9	986·0	..	31·0	24·3	20·7	25·0	57	..	3·6	..	4·7	0	2	11	0	1	1	5	2	2	2	0	17	0
Jamui	0830	82	1000·6	991·4	..	33·2	26·7	23·7	30·0	60	..	3·6	..	4·8	0	0	28	1	2	15	6	0	0	0	4	2	0
	1730	,,	996·9	987·7	..	35·4	26·9	21·7	27·7	50	..	4.8	..	5·8	0	0	27	2	1	11	3	0	0	2	8	3	0
Dumka	0830	149	1000·8	984·4	+0·7	30·1	26·1	24·2	30·8	72	—3	3·3	—1·4	..	0	0	29	1	1	10	14	1	1	0	1	1	0
	1730	,,	997·7	981·4	..	31·6	25·1	22·2	26·8	60	..	5·1	..	..	0	0	27	0	0	9	12	0	1	4	1	3	0
Bhagalpur	0530	49	999·7	994·2	..	27·0	25·2	24·5	27·2	87	..	4·8	..	6·9	0	0	27	0	2	17	5	1	1	1	0	3	0
	0830	,,	1001·0	995·6	..	30·5	26·6	24·8	31·7	73	..	3·8	..	7·1		0	27	0	3	12	9	2	0	1	0	3	0
	1130	,,	1000·3	994·9	..	33·0	27·0	24·4	30·4	63	..	3·9	..	6·7	0	0	27	1	3	15	5	1	0	0	2	3	0
	1730	,,	996·6	991·5	..	33·6	26·8	23·8	30·0	59	..	4·4	..	6·2	0	0	26	2	2	15	3	1	1	0	2	4	0
	2330	,,	999·8	994·3	..	29·2	25·9	24·5	30·5	77	..	4·5	..	5·4		0	24	0	0	10	10	3	1	0	0	6	0

(h)—Mean of 23 days.

(R)—Register not received.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.		Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km.p.h.)			No. of observations.									
			At mean sea level or height of nearest standard isobaric level.	At station level.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.					Wind direction.									
														62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Jhansi — *Contd.*																											
Sabour	0830	37	1000·9	996·7	+0·3	30·5	27·0	25·4	32·5	75	−2	4·6	−1·2	8·1	0	0	28	1	6	8	7	3	2	0	1	2	0
	1730	,,	996·5	992·5	..	33·7	27·2	24·4	31·0	61	..	4·6	..	3·9	0	0	28	4	6	7	7	1	0	2	1	2	0
U.P., (East)																											
Gonda	0830	110	1000·2	988·0	..	30·9	25·4	22·8	28·2	65	−4	2·5	−1·9	2·0	0	0	13	0	0	10	0	0	0	1	2	17	0
	1730	,,	995.4	983·6	..	36·6	25·2	18·8	22·9	42	..	1·4	..	2·6	0	0	14	0	0	5	0	0	0	5	4	16	0
Nautanwa	0830	99	1000·4	989·5	..	30·2	25·8	22·8	29·1	65	..	3·3	..	7·9	0	0	29	0	2	13	11	1	1	1	0	1	0
	1730	,,	996·2	985·3	..	33·3	25·1	22·2	24·9	52	..	3·1	..	6·8	0	0	29	2	5	7	10	1	3	0	1	1	0
Gorakhpur	0830	77	1000·5	992·2	+0·8	31·1	25·6	22·2	28·2	65	−8	3·4	0	2·5	0	0	21	0	5	11	2	1	1	1	0	9	0
	1730	,,	995·7	987·2	..	35·9	25·6	21·2	24·2	45	..	3·0	..	2·2	0	0	18	1	1	2	2	2	0	7	3	12	0
Gorakhpur (P.B.O.)	0230	78	998·2	989·3	..	28·3	24·9	23·3	29·0	75	..	2·4	..	4·7	0	0	18	1	8	5	2	1	1	0	0	12	0
	0530	,,	999·0	990·3	..	27·2	24·4	23·2	28·4	78	..	4·1	..	4·8	0	0	26	6	13	4	2	0	0	1	0	4	0
	1130	,,	999·6	991·0	..	35·0	26·6	22·7	28·1	51	..	3·1	..	6·7	0	0	29	3	4	3	10	4	1	2	2	1	0
‡	2330	,,	993·6	989·3	..	29·9	25·6	23·8	29·1	71	..	1·8	..	4·2	0	1	19	0	8	6	4	0	0	1	1	9	0
Azamgarh	0830	78	999·5	991·0	..	32·6	27·3	25·2	31·8	66	..	3·4	..		0	0	24	1	0	18	3	1	0	1	0	6	0
	1730	,,	994·8	986·5	..	38·3	27·8	23·3	30 5	45	..	1·5	..		0	1	17	1	0	11	0	0	1	5	0	12	0
Ballia	0830	64	998·6	991·6	..	30.3	25·5	23 0	28·8	67	..	3·7	..	4•5	0	0	27	3	9	2	12	0	0	1	0	3	0
	1730	,,	994·4	987.5	..	37·7	26·0	20·0	24·0	39	..	4·6	..	5·2	0	0	28	0	7	2	6	0	1	1	11	2	0
Varanasi (Banaras)*	0830	76	999·5	991·1	+0·3	34•0	26·3	22·6	27·5	53	−8	2·8	−1·2	7 2	0	0	23	0	2	4	2	0	7	4	4	7	0
	1730	,,	995·3	987·1	..	38•1	26 3	20·4	24·3	39	..	3·0	..	10·0	0	1	25	3	1	4	3	0	5	2	8	4	0
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	998·9	989·4	..	28·8	2.·8	21·2	25·6	64	..	4·1	..	4·6	0	0	22	2	2	9	0	1	5	3	0	8	0
	0830	,,	1000·2	990·8	..	33·9	2.·5	21·7	25·6	53	..	2·4	..	13·2	0	3	27	2	6	6	2	2	4	5	3	0	0
	1130	,,	999·6	990·4	..	37•2	25.9	20·2	23·9	39	..	2·7	..	16·6	0	8	22	4	2	4	2	2	3	5	8	0	0
	1730	,,	995.6	986·5	..	38·3	25·7	19·3	23·0	35	..	3·0	..	15·4	0	5	25	5	5	1	3	1	2	4	9	0	0
	2330	,,	999·0	989·6	..	31·7	24·5	20·6	24·7	53	..	3·3	..	9·5	0	1	25	1	3	4	6	1	8	2	1	4	0
Allahabad (Bamrauli)	0230	98	997·5	986·7	..	30·7	2.·8	20·1	24·1	56	..	2 9	..	5·2	0	1	17	1	1	5	3	0	2	5	1	12	0
	0530	,,	997·9	987·3	..	29·4	2.·5	20 2	24•1	60	..	3·8	..	5·2	0	0	21	2	3	4	0	1	4	7	0	9	0
	0830	,,	999·6	988.9	+0·7	33·6	2.·5	19 7	23·2	46	−10	2·8	−1·0	9·8	0	1	26	0	3	4	3	0	5	10	2	3	0
	1130	,,	999·2	988·6	..	38 0	25·4	18·8	21·9	35	..	2·5	..	13·5	0	6	23	0	6	2	1	2	3	10	5	1	0
	1730	,,	995 0	984·4	..	39·2	25·1	17·2	20·1	30	..	4·0	..	11 4	0	3	25	3	4	2	1	1	2	5	10	2	0
	2330	,,	998·1	987·2	..	31·8	2.·3	20·3	24·4	53	..	2·7	..	5·6	0	0	21	2	5	4	2	2	4	2	0	9	0
Banda	0830	121	999·7	986·5	..	34·8	3.·7	22 6	28·3	50	..	2·2	..	1·7	0	0	11	0	2	0	0	0	5	0	4	19	0
	1730	,,	995·3	982·3	..	33·5	26·9	21 1	25·9	41	..	3·0	..	4·3	0	0	20	0	2	0	3	0	3	1	11	10	0
Fatehpur	0830	114	999·6	987·2	..	33·9	24·6	20 2	22·9	46	−16	3·0	0·6	2·6	0	0	12	0	1	0	4	0	0	3	4	18	0
	1730	,,	995 7	983.4	..	38 5	25·6	18 9	21·5	34	..	4·0	..	·9	0	0	12	0	2	0	2	0	0	1	7	18	0
Kanpur	0830	126	1000·0	986·3	+1 3	33·7	2.·2	19 0	22·9	44	−14	2·8	0·6	1 ·0	0	7	22	1	3	4	3	2	4	9	3	1	0
	1730	,,	995·5	982·0	..	38·5	24·7	16 8	19·3	31	..	4·1	..	13·4	0	4	25	4	3	2	0	1	3	9	7	1	0
Lucknow	0830	113	999·7	987·5	+0·9	32·7	24·8	20 8	25 6	53	—8	1·8	−1·5	..	0	0	30	1	5	6	2	0	2	6	8	0	0
	1730	,,	996 3	984·2	..	38 0	26·2	19 7	23·0	36	..	2·4	..	.	0	0	28	2	4	4	0	2	1	6	9	2	0
Lucknow (Amausi Aerodrome)	0230	128	997·2	983·2	..	29·3	22·9	19 1	23·0	56	..	2·7	..	6·9	0	0	25	1	3	7	4	2	1	3	4	5	0
	0530	,,	998·4	984·0	..	27·9	22·6	19 8	23·0	63	..	3·3	..	5·2	0	0	19	0	2	9	1	0	0	4	3	11	0
	0830	,,	999·5	985·5	+0·5	31·4	23·6	19·3	23·3	47	−9	2·6	−0.7	15·3	0	7	20	1	2	6	5	0	1	4	8	3	0
	1130	,,	999·1	985·2	..	35·5	24·3	17·6	21·6	36	..	2·5	..	16 8	0	10	18	1	3	5	4	0	3	3	9	2	0
	1730	,,	995·1	981·6	..	37·9	24·2	15·9	19·0	30	..	3·4	..	15·4	0	8	20	1	4	4	1	1	0	6	11	2	0
	2330	,,	997·8	983·7	..	29 9	23·3	19·6	23·3	52	..	2·1	..	6·2	0	0	22	2	0	5	4	2	4	3	2	8	0
Hardoi	0830	142	999·6	984·0	..	31·9	24·9	21·6	27·1	57	..	2 6	..	7·4	0	1	27	1	1	6	8	0	2	7	3	2	0
	1730	,,	995·0	979·7	..	37·4	26·2	20 5	24·9	41	..	2·2	..	5·9	0	1	25	5	2	2	2	0	4	7	4	4	0
Lakhimpur Kheri	0830	147	1000·1	983·8	..	30 0	24·9	22 5	27 6	66	..	3·4	..	3·9	0	0	16	0	4	4	5	1	0	2	0	14	0
	1730	,,	995·1	979·3	..	36 4	26 5	21·8	26·8	46	..	1·6 (c)	..	2·6 (c)	0	0	23	0	0	5	0	0	0	17	1	7	0
Bahraich*	0830	124	1000·0	986·3	+0·8	30·8	26·4	23·9	30·7	68	+1	3·3 (b)	0 4	6·0 (c)	0	1	22	1	3	1	12	2	1	0	3	5	0
	1730	,,	995·8	982·4	..	35 7	25·3	19·9	23·6	44	..	2·4	..	5·1	0	1	19	0	2	0	10	0	2	1	5	8	0
U P. (West)																											
Orai	0830	141	1000·7	985·3	..	33·5	25·9	22·2	26·4	54	..	2·2	..	5·6	0	0	30	2	0	0	0	3	7	5	13	0	0
	1730	,,	996·0	980·9	..	38·1	27·1	21·8	27·8	42	..	1·9	..	4·7	0	0	30	3	4	0	2	1	6	3	11	0	0
Jhansi	0830	251	999·8	972·4	+0·4	31·9	24·1	19·9	24·3	50	0	3·3	+0·6	3·5	0	0	24	2	0	1	0	1	4	12	4	6	0
	1730	,,	995·5	968·6	..	38·3	25·6	19·2	22·3	36	..	3·8	..	4·3	0	0	27	3	1	0	3	1	6	4	8	3	1
Agra	0830	169	999·9	981·5	+1·2	32·9	23·5	18·2	21·0	44	−1	3·2	+0·6	5·2	0	0	20	1	1	0	0	2	6	9	1	10	0
	1730	,,	995·8	977·7	..	37·4	24·7	17·2	20·2	33	..	2·7	..	3·2	0	0	19	4	3	0	1	2	1	4	4	11	0
Mainpuri	0830	157	1000·1	983·0	+1·6	33·7	24·4	20·2	24·4	46	—7	1·7	−1·3	2·9	0	0	26	0	0	5	3	3	5	7	3	4	0
	1730	,,	996·1	979·2	..	38·6	24·8	17·5	20·0	31	..	2·3	..	3·4	0	0	29	0	1	4	3	1	2	11	7	1	0
Ii arh	0830	187	999·3	979·0	..	32·0	24·2	20·1	23.8	49	—7	2·7	+0·4	2·7	0	0	21	1	0	7	0	1	0	11	1	9	0
	1730	,,	995·3	975·3	..	37·7	24·6	16·7	20·5	31	..	3·8	..	3·2	0	0	25	2	1	4	0	1	0	8	9	5	0

(‡) Observations for 29 days.

(c) Mean of 28 days.

(b) Mean of 29 days.

*Data extracted from Indian Daily Weather Reports.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—JUNE, 1957 (JYAISTHA 11—ASADHA 9, 1879 SAKA)

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km. p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
U. P., (West)—*Contd.*																											
Bareilly	0830	175	999·5	980·6	+0·5	31·9	23·7	19·1	21·9	50	−14	2·5	−0·8	8·9	0	1	25	3	2	8	3	0	2	5	3	4	0
	1730	,,	994·8	976·2	..	38·0	24·5	16·3	19·0	30	..	3·1	..	6·0	0	1	21	1	1	6	1	0	3	10	0	8	0
Bareilly (P. B. O.)	0230	172	997·3	978·3	..	29·8	23·5	20·6	23·9	59	..	1·9	..	4·1	0	0	19	1	1	8	3	1	1	3	1	11	0
	0530	,,	998·4	979·3	..	28·2	22·8	20·3	23·9	64	..	3·0	..	9·8	0	2	22	1	2	13	1	0	0	5	2	6	0
	1130	,,	999·3	980·6	..	35·5	24·7	19·0	23·2	41	..	2·3	..	12·5	0	5	23	0	2	7	5	2	0	3	9	2	
	2330	,,	997·6	978·7	..	31·3	24·1	20·9	25·5	56	..	1·3	..	4·4	0	0	20	1	1	5	7	1	0	2	3	10	
Meerut	0830	222	999·6	975·3	+0·5	32·5	24·1	19·7	23·8	48	−8	0·5	−2·6	5·2	0	0	22	0	4	10	2	0	1	5	0	8	
Najibabad	0830	270	1000·2	970·5	..	29·7	23·1	19·7	22·7	55	..	0·6	..	5·1	0	0	25	0	4	2	14	2	0	0	3	5	
	1730	,,	996·7	967·8	..	36·6	24·0	17·0	19·9	32	..	1·0	..	4·3	0	0	21	3	4	0	2	1	0	0	11	9	0
Roorkee	0830	274	1000·3	969·7	+0·6	30·6	23·2	18·6	22·6	59	−7	3·3	+0·4	1·9	0	0	19	0	1	0	12	0	0	0	6	11	
	1730	,,	995·6	966·2	..	36·2	24·1	17·3	19·7	35	..	4·1	..	2·6	0	0	24	0	0	0	4	0	3	9	20	6	
Dehra Dun	0530	682	999·4	924·5	..	23·5	19·1	16·2	18·8	65	..	3·0	..	2·5	0	0	16	6	7	0	0	0	0	1	2	14	
	0830	,,	999·7	926·3	+0·5	28·2	21·2	17·5	19·8	54	−6	1·7	1·7	1·9	0	0	19	0	4	0	5	1	6	1	2	11	
	1130	,,	998·8	926·3	..	32·0	21·9	17·0	18·7	43	..	2·9	..	2·6	0	0	26	1	3	0	3	9	8	2	0	4	
	1730	,,	995·4	923·2	..	32·2	21·8	15·8	18·0	41	..	2·7	..	3·3	0	0	28	4	3	0	1	3	9	4	4	2	
	2330	,,	998·6	924·6	..	25·7	20·3	17·3	19·5	61	..	2·2	..	2·5	0	1	18	6	10	1	0	1	1		0	11	
Punjab (India) (Including Delhi)																											
New Delhi	0230	216	997·4	973·5	..	29·7	22·2	17·7	20·6	51	..	2·3	..	5·9	0	2	18	2	0	2	4	1	6	5	0		
	0530	,,	998·0	974·0	..	28·5	21·9	17·8	20·5	55	..	2·7	..	6·0	0	0	16	0	0	2	3	0	2				
	0830	,,	999·3	975·5	+0·3	31·9	23·1	18·1	20·7	45	−1	2·4	−0·1	11·9	0	6	22	1	2	6	4	0	2	10	3		
	1130	,,	998·9	975·6	..	36·4	24·0	17·1	19·4	33	..	2·4	..	15·1	0	8	21	4	2	2	2	1	3	8	7		
	1730	,,	995·2	971·0	..	37·0	23·3	14·7	18·0	30	..	4·0	..	15·5	1	6	20	6	1	2	2	0	3	4	9	3	0
	2330	,,	997·6	973·9	..	31·3	22·5	17·3	19·7	46	..	2·4 (b)	..	9·5	0	0	24	1	0	1	1	3	10	5	3	6	
Hissar	0530	221	997·6	973·4	..	27·6	21·7	18·7	21·3	61	..	1·5	..	4·7	0	0	22	0	0	6	4	3	5	1			
	0830	,,	999·0	974·8	+0·9	32·3	23·4	18·4	21·4	45	−3	2·1	+0·6	7·8	0	0	25	1	1	1	5	4	6	7		
	1130	,,	998·5	974·8	..	38·6	24·5	17·4	21·7	31	..	1·4	..	7·4	0	0	25	1	0	0	5	2	7	5	5	5	
	1730	,,	995·3	971·7	..	38·1	24·0	16·7	18·0	31	..	4·3	..	10·1	0	2	26	6	1	1	4	2	3	6			
	2330	,,	997·7	973·4	..	30·1	22·4	18·1	20·5	47	..	1·6	..	4·1	0	1	16	4	0	1	1	5	2	3	1		0
Karnal	0830	249	998·6	971·3	..	30·2	23·1	19·2	21·8	53	..	2·1	..	0·3	0	0	3	0	0	1	0	0	0	1			
	1730	,,	996·0	969·3	..	37·2	23·1	14·1	16·6	29	..	3·8	..	1·5	0	0	9	0	3	0	2	0	0	2	2		
Patiala	0830	251	999·6	971·6	..	31·7	22·8	17·9	20·5	44	..	1·3	..	5·1	0	0	25	3	0	2	14	0	0	1	5		
	1730	,,	995·3	968·5	..	36·8	23·6	15·8	17·8	31	..	2·7	..	8·7	0	0	27	7	2	2	6	1	0	1	8		0
Ambala	0830	272	999·2	969·3	+0·6	31·2	23·1	18·3	21·5	48	+1	1·1	−1·1	4·4	0	1	21	0	2	0	5	0	7	0			
	1730	,,	995·0	966·2	..	36·8	23·5	15·7	18·1	31	..	3·3	..	4·8	0	0	23	0	0	0	5	0	2				
Ambala (P. B. O.)	0230	278	996·6	996·2	..	28·2	21·4	17·6	20·0	55	..	1·4	..	5·7	0	0	25	1	2	4	12	3	1	2			
	0530	,,	997·4	966·9	..	27·1	20·8	17·7	19·5	57	..	1·8	..	7·2	0	1	26	2	1	3	12	5	2	1			
	1130	,,	998·2	968·4	..	35·3	22·9	16·5	17·9	35	..	1·5	..	8·5	0	2	27	3	5	3	11	3	2	1	1	1	0
	2330	,,	996·8	966·6	..	30·1	21·5	16·8	18·5	48	..	1·2	..	5·8	0	0	28	2	6	3	5	4	3	3	2	2	0
Chandigarh	0830	347	998·5	960·9	..	32·3	22·8	17·1	20·0	41	..	0·5	..	..	0	0	16	0	0	1	13	1	0	0	1	14	
	1730	,,	996·0	959·0	..	35·5	22·4	14·7	16·6	31	..	0·7	..	..	0	0	24	2	2	0	8	0	2	0	10	6	
Ludhiana	0830	247	999·3	972·3	+1·0	32·6	23·5	18·0	21·7	44	−5	1·0	−0·9	5·2	0	0	28	1	5	2	9	0	2	5	4	2	0
	1730	,,	995·2	968·8	..	37·9	26·0	19·4	23·5	37	..	1·5	..	4·2	0	0	23	2	2	6	0	3	1	4	5	7	0
Ferozepur	0830	200	998·6	976·6	..	30·9	23·5	19·3	23·0	52	..	1·5	..	1·5	0	0	14	1	5	0	4	0	1	1	2	16	0
	1730	,,	994·3	972·8	..	38·9	24·9	17·2	20·3	29	..	1·7	..	1·6	0	0	12	0	5	0	1	0	1	0	5	18	0
Amritsar	0530	234	998·1	971·9	..	24·6	20·1	17·4	20·0	66	..	2·2	..	5·2	0	0	20	3	4	7	1	1	2	1	1	10	0
	0830	,,	999·0	973·2	..	30·9	22·0	16·8	19·3	44	..	2·7	..	10·7	0	4	24	1	4	8	8	0	2	0	5	2	0
	1130	,,	998·7	973·5	..	35·8	23·2	15·6	18·0	31	..	2·0	..	11·6	0	5	22	1	3	6	6	2	2	3	4	3	0
	1730	,,	995·0	970·1	..	38·0	23·2	14·1	16·6	25	..	1·4	..	12·6	0	2	27	1	2	5	2	0	4	3	12	1	0
Pathankot	0830	344	999·4	961·9	..	30·9	21·8	16·4	18·9	42	..	2·3	..	2·7	0	1	14	1	4	2	4	2	0	1	1	15	0
	1730	,,	996·7	960·0	..	36·4	23·6	16·2	18·7	33	..	2·7	..	8·1	0	3	23	3	4	3	1	0	2	9	4	4	0
Himachal Pradesh																											
Bilaspur	0830	493	999·6	946·0	..	28·1	20·7	16·7	18·5	51	..	2·2	..	2·0	0	0	19	5	6	1	1	3	1	0	1	11	1
	1730	,,	996·0	943·4	..	33·6	21·5	14·7	15·9	35	..	4·2	..	6·8	0	1	29	2	6	1	0	2	4	4	8	0	3
Mandi	0830	761	1000·3	917·7	..	24·2	19·4	16·7	19·5	63	..	1·5	..	0·7	0	0	7	1	1	0	0	0	0	1	4	23	0
	1730	,,	995·8	915·1	..	30·1	20·4	15·1	16·7	44	..	4·1	..	4·6	0	0	25	2	3	2	1	1	1	4	11	5	0
Jammu and Kashmir																											
Srinagar	0830	1587	1459·2	837·6	+1·4	18·2	14·7	12·4	14·4	70	−5	3·3	+1·1	0·3	0	0	3	0	0	0	1	0	0	0	2	27	0
	1130	,,	1454·7	836·8	..	22·6	16·6	13·0	14·7	56	..	3·2	..	0·8	0	0	8	0	0	0	1	0	0	3	4	22	0
	1730	,,	1434·1	835·5	..	24·3	16·7	12·0	13·9	48	..	4·5	..	2·3	0	1	10	1	0	0	1	0	0	5	4	19	0

(R) Register not received.

(b) Mean of 29 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km. p.h.).			No. of observations.									
			At mean sea level or height in kilos of pressure standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Jammu and Kashmir—*Contd*																											
Gulmarg	0830	2655	3393·9	737·7	+0·4	13·5	10·0	7.2	9·7	67	−1	3·0	+0·3	2·6	0	0	13	4	7	0	1	0	1	0	0	15	0
*	1730	,,	3383 1	737·0	..	14·9	11·0	7·8	10·3	65	..	5·3	..	8·2	0	2	20	2	7	1	2	1	3	4	2	6	0
Leh ⊙	0530	3541	3047.7	661·9	..	7·6	2·3	−4·5	4·4	43	..	3·4	..	5·1	0	0	19	0	18	0	0	0	1	0	0	10	0
	0830	,,	3043 6	662·2	−3·3	11·9	4·5	−7·0	4·3	33	−9	3·7	+0·6	1·6	0	0	5	1	0	0	0	2	2	0	0	25	0
	1730	,,	3000 2	659·4	..	15·9	6·9	−3·7	5·2	25	..	5·1	..	11·3	0	0	30	6	3	0	1	2	6	5	7	0	0
Skardu (R)	0830	2288																									
(R)	1730	,,																									
Gilgit (R)	0830	1491																									
(R)	1730	,,																									
Misgar (R)	0830	3106																									
(R)	1730	,,																									
Jammu	0830	..	..	..	..	29·5	20·7	15·1	17·6	43	−1	2·6	+0·4	10·4	0	0	30	0	26	0	0	0	4	0	0	0	0
Rajasthan, (West)																											
Sri Ganganagar	0530	177	997 3	977·6	..	28·0	21 4	16·8	19·6	52	..	1·5	..	5·5	0	1	26	0	5	6	4	3	7	1	1	3	0
	0830	,,	998·7	979·3	..	32·3	22·5	16 6	19·3	41	−5	1·8	+1·1	6·0	0	0	25	0	2	2	4	1	7	6	3	5	0
	1130	,,	998 3	979 2	..	37·4	24 1	16·7	18·7	30	..	1·2	..	7·7	0	0	27	0	2	3	5	1	12	3	1	3	0
	1730	,,	994·3	975·3	..	39·8	23·3	12·7	15·7	2	..	1·2	..	5·8	0	1	27	6	2	3	1	2	4	6	4	2	0
	2330	,,	997·2	977·8	..	32·4	21 6	15·1	17 0	36	..	0·3	..	2·7	0	0	14	2	1	3	0	1	5	2	0	16	0
Churu	0830	293	999·7	967·8	..	31·2	23·4	19·6	23 0	51	..	1·9	..	10 2	0	3	23	1	0	2	1	1	6	14	1	1	0
	1730	,,	995 8	964 7	..	38·1	24·0	15·6	18·5	29	..	4·0	..	15 0	0	6	24	3	0	1	1	2	6	11	6	0	0
Bikaner	0830	221	999·2	974 8	0.8	31·3	24·7	21·1	25 2	56	5	0·7	−0 6	10·6	0	0	30	0	1	1	2	0	24	0	2	0	0
	1750	,,	995 1	971 2	..	39 6	24·5	15 6	18 4	28	..	1·5	..	11·9	0	2	27	0	1	0	4	1	14	1	8	1	0
Bikaner (P.B.O.)	0533	224	997·5	972·8	..	29·4	23 6	20·2	24·1	61	..	1·0	..	9·0	0	0	29	0	0	1	2	0	2	15	4	6	0
	1130	,,	998·7	974 5	..	36 6	25·5	19·9	23·5	40	..	0·9	..	13 8	0	5	24	1	0	0	0	3	18	6	2	0	0
	2330	,,	997·2	972·8	..	32·6	23·9	18·8	22·7	46	..	2·9	..	9·4	0	1	25	1	1	0	3	13	7	0	1	4	0
Jaisalmer	0830	242	999·1	972·4	..	30·0	23·8	20·3	24·7	57	..	0·3	..	27·0	0	13	11	0	0	0	1	0	28	0	0	1	0
	1730	,,	994·5	968·8	..	40·7	25·1	15·3	18·9	25	..	1·9	..	13.6	0	9	21	0	1	0	0	0	28	0	1	0	0
Phalodi	0830	231	1000·3	971·5	..	29·9	25·9	23·9	30·4	72	..	2.6	..	25·1	0	24	7	1	0	0	1	2	24	2	0	0	0
	1730	,,	995·9	971·0	..	39·6	26·8	20·5	21 5	35	..	3·5	..	22 3	0	15	15	0	3	0	3	1	29	1	2	0	0
Jodhpur	0230	224	998·3	973·9	..	31·1	23·4	19·1	22·3	50	..	2·5	..	13 0	0	6	24	0	1	1	1	2	15	5	1	4	0
	0530	,,	999·5	974·6	..	29·2	23·6	20·8	25·1	62	..	2·6	..	14·3	0	7	24	0	0	1	2	3	15	5	0	4	0
	0830	,,	1001·3	975·3	2·2	30·9	21·1	21·4	25·2	60	0	2·2	−0 6	18·1	0	11	17	0	0	0	0	1	19	6	2	2	0
	1130	,,	1000·6	976·2	..	35·8	25·2	20·2	24·5	43	..	1·6	..	17·5	0	11	13	0	0	0	0	0	18	7	2	3	0
	1730	,,	996·2	972·2	..	39·2	24·8	17·9	19·9	28	..	2·2	..	17.7	0	11	13	1	3	1	0	0	17	5	3	0	0
	2330	,,	999·0	974·5	..	32·8	24·2	18·1	21·1	45	..	2·6	..	8·8	0	3	25	1	1	0	1	3	16	3	2	1	0
Barmer	0530	194	999·7	978·2	..	28·2	24·3	22·6	28·2	72	..	2·1	..	15 5	3	1	25	0	1	0	1	9	15	3	1	0	0
	0830	,,	1001·8	979·6	1·1	29·8	24·9	22·5	27·6	65	−5	2·7	0 3	16·1	0	9	21	1	0	0	0	10	15	3	1	0	0
	1130	,,	1000·5	979·4	..	35·7	25·7	20·8	24 8	43	..	1·0	..	17 0	0	20	29	0	0	0	1	12	15	2	0	0	0
	1730	,,	996·2	975·5	..	39·9	25·3	17·5	20·1	28	..	1·2	..	14 4	0	1	23	0	1	0	3	19	14	1	0	1	0
	2330	,,	999·2	978·0	..	33·1	24 8	20·7	24·9	49	..	1·2	..	15.0	0	5	25	1	1	0	0	8	16	2	0	2	0
Rajasthan, (East)																											
Alwar †	0830	271	999·8	970 0	..	31·1	25 3	22 4	27 4	61	—	(d) 3·5	.	..	0	0	3	0	0	0	0	1	1	2	1	19	3
††	1730	,,	995·9	966·8	..	36·4	27 1	22·9	28·6	47	..	(e) 3·8	—	..	0	0	17	1	2	5	0	1	1	4	3	9	0
Sikar	0830	435	999·0	952 5	..	30·2	24·3	21·1	25·4	60	..	2·9	..	4 4	0	0	29	2	0	1	5	3	7	9	4	1	0
	1730	,,	995·8	949·8	..	36·1	26·1	21·1	25·7	44	..	4·2	..	2·8	0	0	28	0	2	4	2	0	4	12	4	2	0
Jaipur	0830	436	1000·1	952 8	+0·3	30·7	22·9	18·5	21·9	50	4 1	3·8	1·6	9·7	0	3	23	0	1	2	2	2	2	14	3	4	0
	1130	,,	999·2	952·7	..	35·9	23·8	16·9	20 0	34	..	2·6	..	12 6	0	6	22	2	0	0	1	2	4	14	5	2	0
	1730	,,	995·6	949·3	..	36·3	23·9	16·6	19·8	35	..	3·6	.	10 1	0	2	25	4	1	2	1	2	3	9	5	3	0
Jaipur (Sanganer Aerodrome)	0230	390	998·2	955.5	..	28·6	22·5	19·1	22·7	58	..	3·3	..	9·3	0	2	27	0	2	8	2	1	4	9	3	1	0
	0530	,,	998·8	955·9	..	27·4	22·2	19·4	23·0	68	..	4·1	..	5·2	0	0	24	2	1	4	0	1	0	8	8	6	0
	0830	,,	999·8	957 3	..	30·9	23·6	19·5	26·5	52	..	3·5	..	11·6	0	3	25	1	1	0	4	2	2	11	7	2	0
	1130	,,	999·1	957·2	..	35·1	24·3	18·7	21·3	40	..	2·4	..	13·2	0	2	28	1	1	2	0	3	1	12	10	0	0
	1730	,,	995·2	953·6	..	35·9	24·2	17·4	22·1	36	..	3·5	..	10·3	0	2	21	1	3	1	0	1	3	9	5	7	0
	2330	,,	998·6	956·0	..	29 9	23·0	19·0	22·5	52	..	2·6	..	7·4	0	0	26	2	3	3	1	3	3	5	6	4	0
Dholpur	0830	176	999·5	980·2	..	32·8	24·9	20·9	25·3	51	..	3·6	..	12·6	0	5	23	2	2	3	1	4	5	9	2	2	0
	1730	,,	996·0	977·1	..	37·8	25·5	18·8	22 7	38	..	2·9	..	9·5	0	1	26	8	3	1	1	3	2	5	4	3	0
Ajmer	0830	486	1000·2	947·5	−0·	29·9	22·7	18·8	22·4	54	−2	2·8	+0·6	14·4	0	4	26	1	0	1	2	4	11	9	2	0	0
	1730	,,	996·4	944·6	..	36·5	23·0	15·6	18·3	32	..	3·0	..	11·5	0	0	30	5	1	2	0	0	5	9	5	0	0

(R) Register not received.
† Wind observations for 27 days.
⊙ Observations for 29 day
(d) Mean of 27 days.
†† Wind observations for 26 days
* Observations for 28 days.
(e) Mean of 26 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas).		Wind speed (Km.p.h.)				No. of observations.									
			At mean sea level or height in c.p.m. of the nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.	Mean wind speed, km. per hour.	62 or more.	20 to 61	1 to 19.	Wind direction.								Calm.	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East)—*contd.*																											
Kotah	0530	257	998·9	970·8	..	29·7	23·2	19·6	23·0	56	..	3·3	..	8·3	0	0	24	2	0	0	2	0	9	10	1	6	0
	0830	,,	1000·4	972·3	+0·5	32·5	24·7	19·0	23·1	47	0	2·4	−0·2	8·5	0	0	28	0	1	0	0	2	8	17	0	2	0
	1130	,,	999·6	972·0	..	37·0	24·8	18·1	22·2	36	..	2·0	..	11·3	0	2	27	1	0	0	1	0	6	13	3	1	0
	1730	,,	995·8	968·4	..	37·7	24·2	16·4	20·8	33	..	4·1	..	7·4	0	0	28	0	2	0	0	0	5	11	10	2	0
	2330	,,	998·9	970·9	..	32·3	23·5	18·6	21·3	47	..	3·7	..	9·8	0	3	20	1	0	2	1	1	7	7	4	7	0
Chambal	0830	351	1001·1	962·8	..	30·7	24·8	21·8	26·6	61	..	2·6	..	10·6	0	0	28	3	0	0	0	2	6	12	5	2	0
	1730	,,	996·1	958·7	..	36·4	25·5	19·9	23·3	42	..	4·3	..	10·0	0	0	30	5	1	0	2	1	5	8	8	0	0
Jhalawar	0830	321	1001·0	965·8	+0·6	29·1	23·5	19·4	24·1	56	−7	2·6	−0·5	11·8	0	0	28	1	1	0	0	3	7	15	1	2	0
	1730	,,	995·9	961·8	..	37·2	23·4	14·4	17·3	30	..	2·7	..	8·4	0	0	29	2	4	3	0	2	4	11	3	1	0
Udaipur	0230	582	1000·2	936·9	..	27·3	22·1	19·6	22·5	65	..	2·0	..	6·8	0	0	25	0	0	0	0	1	15	7	2	5	0
	0530	,,	1000·8	937·2	..	25·8	21·9	19·2	23·5	71	..	2·6	..	4·1	0	0	17	0	0	0	0	0	14	2	1	15	0
	0830	,,	1001·7	938·6	+0·2	28·5	22·8	19·9	23·5	61	−2	2·9	+0·5	5·6	0	0	21	0	1	0	0	5	12	5	0	9	0
	1130	,,	1000·9	938·6	..	32·1	23·7	19·5	23·5	51	..	2·6	..	7·7	0	0	27	1	1	1	2	1	13	7	1	3	0
	1730	,,	997·5	935·6	..	33·2	23·6	18·5	21·4	46	..	3·4	..	9·0	0	1	26	1	1	1	1	2	14	7	0	3	0
	2330	,,	1000·7	937·7	..	28·5	22·5	19·3	21·8	58	..	2·4	..	5·0	0	0	15	1	0	0	0	1	9	4	0	15	0
Bhimpura (Jawai Dam	0830	295	1001·5	969·1	..	29·4	25·9	24·7	30·3	76	..	2·6	..	12·5	0	5	24	0	1	0	1	14	8	5	0	1	0
	1730	,,	997·2	965·5	..	35·5	27·2	23·4	29·3	51	..	3·6	..	11·3	0	6	24	1	0	2	4	6	7	8	2	0	0
Madhya Pradesh (West)																											
Gwalior (P.B.O.)	0230	210	997·5	974·5	..	30·6	22·5	17·6	20·7	48	..	3·3	..	7·9	0	0	24	1	0	0	4	2	8	6	3	6	0
	0530	,,	998·1	975·0	..	29·7	22·3	17·8	20·8	52	..	4·3	..	7·9	0	2	21	0	1	0	0	4	10	3	2	7	0
	0830	,,	999·6	976·7	+1·0	32·8	23·0	17·2	20·2	43	0	4·1	+1·6	5·4	0	2	22	1	5	0	0	0	5	9	4	6	0
	1130	,,	999·1	976·5	..	36·7	23·9	16·3	19·2	33	..	3·5	..	9·4	0	1	28	2	2	0	1	1	4	7	12	1	0
	1730	,,	995·2	972·8	..	37·6	23·6	15·0	17·8	30	..	3·8	..	10·1	0	0	30	4	4	0	1	0	3	6	12	0	0
	2330	,,	998·5	975·5	..	31·5	23·1	18·3	21·5	49	..	3·6	..	6·6	0	1	18	1	1	0	3	0	7	4	3	11	0
Sheopur Kalan	0230	235	1000·5	974·7	..	31·7	23·5	19·9	22·3	51	..	4·3	..	11·0	0	5	25	2	2	0	0	6	9	4	3	0	4
	1730	,,	994·2	969·6	..	37·6	23·9	15·1	18·6	31	..	4·2	..	15·1	0	7	23	6	5	1	2	2	4	5	5	0	0
Guna	0530	479	1000·0	947·6	..	27·1	21·7	18·7	20·0	63	..	4·2	..	3·9	0	0	16	1	0	1	0	2	6	6	0	14	0
	0830	,,	1000·9	948·9	+0·6	30·0	22·8	19·3	22·4	55	−1	3·3	+0·7	5·7	0	0	29	1	0	1	0	4	2	21	0	1	0
	1130	,,	999·9	948·3	..	34·6	23·7	18·1	21·3	41	..	3·1	..	9·0	0	1	27	2	0	0	0	2	3	16	3	2	0
	1730	,,	995·5	944·9	..	37·0	23·0	15·1	17·9	30	..	4·8	..	8·7	0	1	29	5	1	0	1	5	3	1	..	0	0
	2330	,,	999·8	947·7	..	29·4	22·4	18·7	21·9	56	..	4·0	..	4·2	0	0	17	0	0	1	1	..	4	9	..	1	0
Rajgarh	0830	332	1001·2	959·5	..	30·0	23·1	19·0	22·5	55	..	3·4	..	13·5	0	5	24	1	0	0	1	2	1	22	..	1	0
	1730	,,	996·3	955·5	..	36·3	22·6	13·8	16·6	32	..	4·6	..	15·2	0	7	23	6	1	1	1	0	2	1	0	1	0
Neemuch	0830	496	1002·1	948·1	+0·3	28·0	23·7	21·7	25·7	67	0	3·2	−0·1	18·7	6	11	19	0	2	0	1	0	10	16	1	0	0
	1730	,,	996·7	944·5	..	34·8	23·5	18·0	20·7	41	..	3·1	..	16·2	0	8	21	1	1	0	0	2	6	18	1	1	0
Ratlam	0830	486	1002·8	949·5	..	26·6	23·4	21·9	26·4	73	..	4·8	..	15·7	0	1	29	0	0	1	0	1	14	13	1	0	0
	1730	,,	997·5	945·8	..	31·7	23·4	16·9	20·6	39	..	3·6	..	15·8	0	4	26	1	1	0	0	1	11	11	..	0	0
Alirajpur	0830	293	1003·8	971·1	..	27·7	24·6	23·7	28·5	79	..	5·3	..	18·3	9	12	18	1	0	0	1	1	9	16	0	0	0
	1730	,,	998·7	967·1	..	35·0	25·6	21·0	25·0	47	..	2·9	..	18·3	9	10	20	0	0	1	0	0	5	22	2	0	0
Indore	0530	567	1001·5	939·3	..	25·3	21·6	19·8	23·0	73	..	3·9	..	24·5	0	17	13	1	1	0	1	2	10	13	2	0	0
	0830	,,	1002·6	940·3	+0·5	27·4	23·0	20·9	24·9	69	−6	3·7	−0·9	28·2	0	21	9	0	0	1	0	1	9	15	4	0	0
	1130	,,	1001·2	940·3	..	31·8	22·9	18·3	21·4	47	..	3·0	..	26·6	0	19	11	2	0	0	0	2	8	14	4	0	0
	1730	,,	996·8	936·7	..	34·3	22·0	14·7	17·4	36	..	3·8	..	25·6	0	23	7	2	2	1	0	1	8	11	5	0	0
	2330	,,	1001·6	939·6	..	28·3	21·3	17·2	20·3	55	..	3·0	..	18·5	0	6	24	1	1	0	1	2	11	11	3	0	0
Bhopal (Bairagarh)	0230	523	999·8	942·7	..	27·3	21·0	17·3	20·6	59	..	3·6	..	13·1	0	2	27	3	0	1	1	4	6	9	5	1	0
	0530	,,	1000·7	943·5	..	26·2	21·2	18·5	21·5	65	..	4·2	..	15·1	0	9	19	2	2	0	0	2	4	13	5	2	0
	0830	,,	1001·8	944·9	+0·6	28·5	22·6	19·7	23·1	61	−2	3·3	−0·8	20·9	0	15	13	0	1	0	1	0	7	14	5	2	0
	1130	,,	1000·3	944·5	..	33·5	23·4	18·3	21·6	43	..	2·8	..	17·3	0	14	16	1	0	1	0	1	3	12	12	0	0
	1730	,,	996·1	940·8	..	35·2	22·7	15·3	18·4	36	..	3·7	..	19·9	0	13	17	1	1	2	1	1	7	8	9	0	0
	2330	,,	1000·3	943·5	..	28·5	21·2	16·8	20·0	54	..	3·8	..	13·4	0	6	23	2	1	1	0	3	6	11	5	1	0
Khandwa	0830	318	1003·1	968·1	+0·9	28·8	24·0	21·6	25·9	67	+2	3·9	−0·3	15·4	0	9	20	0	0	0	0	1	5	16	7	1	0
	1730	,,	997·5	963·3	..	36·1	24·1	17·4	20·3	39	..	4·4	..	18·3	0	4	24	3	1	0	0	0	9	10	5	2	0
Hoshangabad	0830	302	1002·5	969·1	+0·7	30·2	24·6	21·0	26·5	60	−3	3·7	−0·7	7·2	0	0	26	2	0	2	0	1	4	17	0	4	0
	1730	,,	996·2	963·9	..	37·4	25·9	19·8	24·0	39	..	3·8	..	6·9	0	0	27	1	1	0	0	3	6	13	3	3	0
Betul	0830	653	1002·7	931·9	..	27·7	24·0	22·4	27·2	74	..	4·5	..	11·7	0	0	30	2	0	0	1	0	3	14	10	0	0
	1730	,,	996·7	927·7	..	33·4	25·8	22·7	27·7	56	..	4·7	..	11·7	0	0	30	2	2	5	1	0	4	8	8	0	0
Chhindwara	0830	685	1004·9	930·9	..	28·3	22·3	19·3	22·4	58	..	3·1	..	3·0	0	0	30	0	5	6	2	0	2	8	7	0	0
	1730	,,	995·9	923·7	..	33·1	22·8	16·9	20·1	41	..	4·8	..	4·0	0	0	30	1	1	1	6	1	3	3	14	0	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km. p.h.)			No. of observations.									
			At mean sea level or height in station of nearest standard isobaric level.	At station eve.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (West) —*Contd.*																											
Seoni	0830	618	999·9	933·7	−0·1	30·7	23·3	19·7	23·3	55	−5	5·3	+1·0	5·3	0	0	27	4	1	0	3	2	9	2	6	3	0
	1730	,,	996·4	931·0	..	33·3	23·8	19·6	22·6	49	..	6·3	..	5·2	0	0	29	3	3	1	1	4	10	2	5	1	0
Balaghat	0830	551	1000·5	940·8	+0·6	28·7	22·1	18·7	21·6	57	−1	3·3	−0·5	11·3	0	2	25	0	0	2	0	0	1	13	11	3	0
	1730	,,	995·4	937·0	..	34·6	22·8	15·9	19·1	37	..	4·0	..	6·4	0	0	26	0	3	3	1	0	6	8	5	4	0
Nowgong	0830	229	999·8	975·1	+0.7	32·4	23·5	18·4	22·4	46	−8	2·7	−1·3	5·9	0	0	29	4	0	1	0	4	12	5	3	1	0
	1730	,,	995.4	971·0	..	38·3	24.3	15·9	20·0	29	..	4·2	..	7·4	0	1	27	2	3	2	0	3	6	3	9	2	0
Madhya Pradesh, (East)																											
Sutna	0530	317	998.9	963·9	..	28·1	22·3	18·9	22·1	59	..	4·2	..	3·2	0	0	19	1	0	2	0	2	7	5	2	11	0
	0830	,,	999 4	965·0	+0·5	33·0	23·5	18·2	21·2	44	−8	3·5	−0.5	4·9	0	0	30	0	1	2	1	1	11	10	4	0	0
	1130	,,	998·6	964·7	..	37·1	24·4	17·1	20·3	34	..	3·8	..	8.6	0	0	25	1	0	0	0	0	8	7	9	5	0
	1730	,,	995·2	961·2	..	36·8	23·9	16·0	19.4	34	..	4·8	..	6·0	0	0	30	1	1	2	1	1	7	4	13	0	0
	2330	,,	998.7	964·0	..	30·8	23·2	18.8	22.5	51	..	3·9	..	4·5	0	0	17	0	0	3	0	4	5	4	1	13	0
Umaria	0830	459	999·9	950·3	..	31·4	23·1	19·0	23·1	59	−8	3·1	−2.0	7·3	0	1	23	0	0	1	2	3	10	6	2	6	0
	1730	,,	995·4	946·6	..	35·4	23.6	18·0	20·2	39	..	4·7	..	4·9	0	1	15	1	1	1	0	1	2	4	6	14	0
Jabalpur	0530	393	999·6	956·5	..	27·4	21·6	18·0	21·0	59	..	4·2	..	3·2	0	0	17	0	0	1	3	2	5	5	1	13	0
	0830	,,	1000·6	958·0	+0·7	31·5	23·1	18·3	21·6	49	−6	3·1	−0·8	7·0	0	0	27	0	0	0	1	3	8	14	1	3	0
	1130	,,	999·3	957·4	..	36·4	24·1	17·0	20·1	35	..	2·5	..	8·3	0	0	30	4	0	1	2	2	6	11	4	0	0
	1730	,,	995.7	953·8	..	36.0	23·6	16·1	19·1	35	..	4·7	..	8·5	0	1	29	2	2	4	2	1	9	4	6	0	0
	2330	,,	999·6	956.6	..	29·3	22·5	18.6	21·7	55	..	4.5	..	4.9	0	0	22	1	0	1	1	9	6	3	1	8	0
Mandla	0830	443	1000·7	952·7	..	30·9	23·2	18·8	22.0	52	..	3·1 (b)	..	6·0 (b)	0	0	27	4	0	1	3	9	1	2	4	3	0
	1730	,,	996 0	948·8	..	34.2	23·1	16·1	19·1	40	..	5.2	..	5·8	0	0	29	5	2	1	3	5	2	3	7	0	1
Pendra	0530	625	999·8	931·8	..	25·6	21·0	18·3	21·6	68	..	4·4	..	4·9	0	0	25	3	1	1	2	9	7	1	1	5	0
	0830	,,	1000·5	933·3	+0·7	29·5	23·4	18·7	21.9	57	−5	3·7	−0.6	8·8	0	0	30	3	0	2	1	10	7	2	5	0	0
	1130	,,	999·1	932·8	..	33·1	22·9	17·4	20·4	44	..	3·5	..	8·7	0	1	28	3	2	0	1	8	5	6	4	1	0
	1730	,,	996.4	930·0	..	31·4	22·3	17·2	21·4	50	..	5·6	..	10·3	0	0	30	6	2	0	2	4	8	5	2	0	1
	2330	,,	999·9	932·3	..	27·2	21·5	18·4	21·4	63	..	4·0	..	7·5	0	2	25	2	3	2	1	9	6	3	1	3	0
Ambikapur	0830	611	1000·5	934·7	..	29·7	22·6	18·7	21·9	55	..	3·6	..	8·0	0	0	27	0	0	0	2	6	9	8	2	3	0
	1730	,,	995·9	931·2	..	33·5	23·3	18·0	21·2	46	..	3·6	..	10·7	0	1	29	10	4	0	0	5	4	4	3	0	0
Champa	0830	245	1001·0	974·1	..	30·8	24.1	20·8	24·6	57	..	4.9	..	4·1	0	0	20	0	0	1	1	2	3	10	3	10	0
	1730	,,	996·4	970·0	..	36·1	24·6	18·1	21·5	40	..	5·6	..	6·3	0	0	24	6	0	4	1	2	2	2	7	6	0
Raigarh	0830	220	1000·9	976·8	..	32·3	24·9	20·6	25·4	53	..	4·0	..	3·6	0	0	24	0	0	0	3	2	6	6	6	6	1
	1730	,,	996.1	972·3	..	36·4	24·9	18·6	22·2	41	..	5·5	..	4·7	0	0	22	1	5	0	3	1	4	3	2	3	3
Raipur	0530	298	999·8	967·0	..	28 2	22·9	19·8	20·6	63	..	5·5	..	3·1	0	2	26	0	1	1	2	6	11	5	2	2	0
	0830	,,	1001·1	968·5	+0.6	31·2	23·9	19·9	23·8	54	−7	4·3	−0·7	9·7	0	2	26	0	0	0	2	1	9	13	3	2	0
	1130	,,	999·9	967·7	..	35·3	24·4	17·8	21·8	40	..	4·1 (b)	..	11.1	0	0	30	2	1	1	0	3	2	15	6	0	0
	1730	,,	996 1	964·1	..	35·5	23·8	16·6	20·0	37	..	6·0	..	13.5	0	3	26	4	1	2	4	1	3	7	7	1	0
	2330	,,	1000·0	967·4	..	30·2	23.3	19·3	22·9	56	..	5·4	..	12·1	0	7	23	1	0	2	5	8	8	6	0	0	0
Kanker	0830	402	1001·9	958·0	+0 6	30·1	25·1	22·4	27·7	65	+2	3·8	−2·2	2·3	0	0	18	0	0	0	0	0	12	2	4	12	0
	1730	,,	997.1	954·0	..	33·6	25·6	21·7	26·1	53	..	5.6	..	1.3	0	0	12	0	1	0	1	0	7	1	2	18	0
Jagdalpur (P.B.O.)	0530	553	1001·6	940·9	..	24·1	22·1	21·2	25.2	84	..	6·4	..	3.6	0	0	16	1	0	1	2	3	4	3	2	14	0
	0830	,,	1002·7	942·5	+0·6	27·2	23.4	21·8	25.8	74	+3	5.8	+0·8	3·4	0	0	19	0	0	1	2	2	7	6	1	11	0
	1130	,,	1001·3	941·9	..	30·8	24·1	20·7	25.2	58	..	4.4	..	5.4	0	0	27	3	1	0	2	4	5	8	4	3	0
	1730	,,	998.6	939·2	..	29·8	23.8	21.1	24·9	62	..	6.8	..	5·6	0	0	24	1	0	1	3	1	7	9	2	6	0
	2330	,,	1001·9	941·4	..	25·5	22·8	21.6	25·7	80	..	4·9	..	2·2	0	0	12	0	0	1	2	3	4	1	1	18	0
Gujarat																											
Deesa	0830	136	1002·7	987·5	+0·7	29·2	25·9	24·5	30·6	76	..	5·1	..	10·2	0	2	28	0	0	0	4	8	10	7	1	0	0
	1730	,,	997·4	982·7	..	37·8	25·9	19·9	23·8	39	..	2·9	..	9·9	0	1	28	0	1	0	3	6	9	7	3	1	0
Idar	0830	219	1003·2	978·8	..	28·0	24·8	23·2	28·6	77	..	5·9	..	10·5	0	0	30	0	0	1	2	2	14		3	0	0
	1730	,,	997·8	974·2	..	36·2	26·0	21·0	25·3	44	..	3·3	..	11·9	0	1	29	1	2	0	1	1	15	9	1	0	0
Ahmedabad	0230	55	1001·4	995·2	..	28·6	24·9	23·1	28.5	73	..	2·9	..	14·7	0	3	27	1	0	0	1	7	9	11	1	0	0
	0530	,,	1001·8	995·6	..	27·5	24·7	23·4	28·8	79	..	3·9	..	12·2	0	2	28	0	0	2	1	7	11	8	1	0	0
	0830	,,	1003·4	997·2	+0·5	29·0	25·5	23·9	29·8	74	−5	4·7	−0·1	14·8	0	1	28	0	0	0	3	2	12	11	1	1	0
	1130	,,	1002·8	996·7	..	32·8	25·9	22·7	27·8	57	..	4.1	..	17.3	0	7	23	0	0	0	3	3	9	13	2	0	0
	1730	,,	998·3	992·3	..	37·4	25·5	19·3	22·8	37	..	2·7	..	19.8	0	11	19	0	0	0	1	9	6	13	1	0	0
	2330	,,	1001·7	995·6	..	30·1	25·4	23·3	28·6	68	..	2·6	..	15·0	0	5	25	0	1	0	3	10	9	6	1	0	0
Dohad	0830	333	1003·3	956·4	..	27·5	23·8	22·1	26·6	73	−2	4·2	−1·2	25.6	0	24	6	0	0	1	0	0	15	14	0	0	0
	1730	,,	999 0	963·2	..	34.4	24·0	18·1	21.3	42	..	1·9	..	21·6	0	19	11	0	0	0	0	0	19	11	0	0	0
Baroda	0530	35	1002·4	998·4	..	27·2	25·2	24·3	30·3	84	..	3·0	..	3·4	0	0	20	0	0	0	0	2	15	2	1	10	0
	0830	,,	1003·8	999·9	..	29·9	25·7	24·1	30·1	75	−1	4·3	−0·3	7·0	0	0	28	0	1	0	0	0	21	5	1	2	0

(b) Mean of 29 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Wind speed (Km. p. h.)			No. of observations.										
			At mean sea level of light in stn. nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed, Km. per hour.	62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																	N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat—*Contd.*																											
Baroda (*Contd.*)	1130	35	1003·4	999·5	..	32·8	25·9	22·7	27·7	58	..	3·7	..	8·2	0	0	28	0	0	9	0	1	18	7	2	2	0
	1730	,,	999·1	995·3	..	36·1	26·3	21·6	26·1	46	..	2·6	..	9·1	0	0	26	0	0	0	1	1	15	7	2	4	0
	2330	,,	1002·4	998·5	..	29·3	26·1	24·7	31·3	77	..	2·8	..	11·8	0	0	30	0	0	0	0	2	26	2	0	0	0
Baroda (Aerodrome)	0830	38	1003·9	999·7	..	29·5	26·3	25·0	31·5	77	..	4·8	..	12·3	0	2	28	1	1	0	0	3	15	9	1	0	0
	1130	,,	1003·4	999·2	..	32·7	26·7	24·1	30·2	62	..	4·0	..	11·9	0	0	30	1	0	0	0	4	15	8	2	0	0
	1730	,,	999·1	994·9	..	35·6	27·1	23·3	28·8	52	..	2·7	..	13·9	0	6	22	0	0	0	1	2	19	5	1	2	0
Broach	0830	17	1003·8	1001·8	..	29·0	25·9	24·1	31·0	76	..	4·4	..	8·7	0	1	29	0	0	0	0	1	26	3	0	0	0
	1730	,,	999·6	997·7	..	33·9	26·4	22·7	28·5	54	..	2·3	..	13·6 (b)	0	4	26	0	0	0	0	1	24	5	0	0	0
Surat	0530	12	1002·8	1001·5	..	27·9	25·9	25·0	31·7	84	..	4·1	..	6·8 (b)	0	0	25	0	0	1	2	3	16	3	0	4	0
	0830	,,	1004·4	1003·1	+0·9	29·9	26·4	25·0	31·6	75	+1	5·4	−0·3	7·5	0	0	29	0	0	1	2	5	16	4	1	1	0
	1130	,,	1004·2	1002·9	..	32·3	26·8	24·5	30·7	65	..	5·0	..	12·0	0	1	29	0	1	1	0	5	15	8	0	0	0
	1730	,,	1001·0	999·7	..	32·5	27·2	25·0	31·8	66	..	2·5	..	15·2	0	6	23	0	0	0	0	7	17	5	0	1	0
	2330	,,	1003·5	1002·2	..	29·1	26·6	25·5	32·7	81	..	3·6	..	17·7	0	8	22	0	0	0	1	4	22	2	1	6	0
Saurashtra & Kutch																											
Bhuj	0830	105	1002·1	990·4	+0·7	29·7	25·2	23·1	28·5	67	−3	3·1	−1·0	11·8	0	2	28	0	0	0	1	1	13	14	1	0	0
	1730	,,	998·6	987·3	..	35·1	26·2	22·1	26·7	47	..	1·9	..	22·0	0	16	14	0	0	1	0	1	18	10	0	0	0
Bhuj (P.B.O.)	0230	106	1000·6	988·9	..	28·4	25·6	24·3	30·5	79	..	1·7	..	14·3	0	6	22	0	0	0	0	1	22	5	0	2	0
	0530	,,	1000·8	989·1	..	27·8	25·4	24·3	30·5	81	..	2·3	..	11·9	0	2	26	0	0	1	0	0	21	5	1	2	0
	1130	,,	1001·4	989·9	..	34·4	26·1	22·1	26·9	49	..	2·6	..	13·6	0	8	20	0	0	1	2	0	16	8	1	2	0
	2330	,,	1001·3	989·9	..	29·2	25·6	24·0	29·8	74	..	1·3	..	15·4	0	7	22	0	0	0	1	0	21	7	0	1	0
Bhuj (Aerodrome)	0830	80	1001·6	992·6	..	30·0	27·0	25·7	33·3	78	..	2·7	..	17·0	0	11	16	0	0	0	1	0	14	10	2	3	0
	1130	,,	1001·1	992·3	..	34·6	28·4	25·8	33·8	61	..	2·4	..	19·5	0	13	16	0	1	0	1	1	14	10	2	1	0
	1730	,,	998·1	989·3	..	35·5	28·9	26·2	34·6	60	..	2·4 (c)	..	23·0 (c)	0	16	10	0	0	0	0	2	15	6	3	0	0
Kandla	0830	5	1002·7	1002·2	..	29·5	26·6	25·3	32·5	78	..	4·4	..	25·2	0	17	13	0	0	0	0	1	21	7	1	0	0
	1730	,,	999·4	998·9	..	33·2	27·1	24·5	30·9	61	..	3·3	..	42·0	2	26	2	0	0	0	1	1	24	4	0	0	0
Mandvi	0830	9	1002·4	1001·4	..	29·9	28·1	27·5	36·7	87	..	3·6	..	29·0	0	24	5	0	0	0	0	0	12	16	1	1	0
	1730	,,	1000·0	999·0	..	31·1	28·9	28·2	33·2	85	..	2·4	..	37·3	0	29	1	0	0	0	0	1	13	16	0	0	0
Dwarka	0830	11	1003·0	1001·7	+0·7	29·5	27·2	26·2	34·3	82	0	3·9	−0·4	18·7	0	12	18	1	0	1	0	0	17	11	1	0	0
	1730	,,	1000·6	999·3	..	30·7	27·6	26·4	34·2	78	..	4·2	..	24·2	0	8	22	0	0	0	0	0	11	18	1	0	0
Porbandar	0830	7	1003·2	1002·4	..	29·5	26·7	25·5	32·6	79	..	4·1	..	16·5	0	6	24	2	0	0	0	0	9	17	2	0	0
	1730	,,	1000·9	1000·1	..	31·1	26·9	25·3	32·1	71	..	5·6	..	20·7	0	13	17	0	0	0	0	2	15	12	1	0	0
Probandar (Aerodrome)	0830	7	1003·2	1002·4	..	30·5	26·7	25·4	31·9	74	..	4·2	..	20·8	0	18	12	0	0	1	1	0	17	9	2	0	0
	1130	,,	1003·5	1002·7	..	32·5	27·4	25·6	32·4	68	..	4·3	..	23·9	0	23	7	1	0	0	1	0	21	7	0	0	0
Jamnagar	0530	23	1001·5	998·9	..	27·4	25·6	24·7	31·2	85	..	2·6	..	12·2	0	4	24	0	0	1	0	3	21	2	1	2	0
	0830	,,	1002·6	1000·1	+0·8	30·2	26·4	24·7	31·3	73	+6	4·1	+0·3	22·4	0	19	11	0	0	1	0	2	11	15	1	0	0
	1130	,,	1002·5	1000·0	..	34·2	27·1	24·0	30·0	57	..	3·2	..	26·2	0	22	8	1	1	0	1	0	5	19	3	0	0
	1730	,,	999·6	997·1	..	32·9	27·3	24·9	31·6	64	..	2·4	..	36·2	0	28	2	1	0	0	1	2	1	22	3	0	0
Rajkot (Aerodrome)	0830	134	1003·0	988·1	+0·6	28·9	26·1	24·9	31·4	79	+5	2·4	−2·6	24·1	0	18	12	0	0	0	2	1	1	5	1	0	0
	1130	,,	1002·3	987·6	..	33·9	26·3	22·8	28·0	53	..	2·0	..	24·8	0	17	13	1	1	0	1	2	19	6	0	0	0
	1730	,,	998·6	984·1	..	34·7	26·0	21·5	26·5	49	..	2·2	..	33·4	0	25	5	0	0	0	3	3	12	9	3	0	0
Surendranagar	0830	74	1003·3	994·9	..	29·4	26·9	25·8	33·5	80	..	4·5	..	18·6	0	11	18	0	0	0	3	1	18	4	3	1	0
	1730	,,	998·5	990·4	..	38·1	28·6	24·5	31·4	48	..	3·0	..	20·4	0	15	14	0	0	0	2	1	11	3	12	1	0
Bhavnagar	0830	17	1004·3	1002·4	+1·2	29·2	25·8	24·3	30·5	75	+8	3·1	−1·9	9·1	0	3	29	1	0	0	1	2	12	13	0	1	0
	1730	,,	999·6	997·7	..	35·4	27·1	23·4	28·9	52	..	2·4	..	7·3	0	1	29	0	1	0	6	0	15	3	5	0	0
Bhavnagar (Aerodrome)	0830	11	1003·7	1002·5	..	30·2	25·7	23·7	29·4	69	..	3·5	..	17·4	0	8	20	1	0	0	1	2	13	11	0	2	0
	1130	,,	1003·3	1002·1	..	33·5	25·7	21·9	26·7	53	..	4·0	..	20·2	0	11	18	0	0	3	1	2	10	12	1	1	0
Mahuva	0830	16	1003·9	1002·2	..	29·5	27·3	26·6	34·4	84	..	4·4	..	15·4	0	9	18	0	0	1	0	3	13	8	2	3	0
	1730	,,	1000·6	998·9	..	31·8	28·9	27·9	37·5	80	..	2·5	..	37·0	0	27	2	0	0	0	1	13	13	2	0	1	0
Keshod	0830	51	1003·8	998·0	..	29·9	26·0	24·5	30·5	74	..	6·2	..	19·3	0	13	16	1	1	0	0	2	16	9	0	1	0
	1130	,,	1003·8	998·1	..	33·6	26·5	23·8	28·9	58	..	5·7	..	27·7	0	24	5	1	0	0	1	4	13	9	1	1	0
	1730	,,	1001·1	995·4	..	33·0	26·4	23·9	30·0	60	..	5·1	..	35·7	0	27	3	0	1	0	1	1	10	17	0	0	0
Veraval	0230	8	1002·3	1001·4	..	28·5	27·3	26·9	35·4	90	..	3·0	..	23·7	0	21	6	0	0	0	0	1	5	20	1	3	0
	0530	,,	1002·2	1001·3	..	28·2	26·9	26·4	34·5	90	..	3·8	..	23·4	0	20	9	1	1	0	0	1	10	16	0	1	0
	0830	,,	1003·8	1002·9	+0·4	29·1	27·4	26·7	35·2	87	+5	4·7	0	21·1	0	14	15	1	0	1	0	0	6	19	2	1	0
	1130	,,	1004·2	1003·3	..	30·6	28·1	27·1	35·9	82	..	4·0	..	20·5	0	14	16	1	0	0	0	1	10	18	0	0	0
	1730	,,	1001·4	1000·5	..	30·4	28·3	27·4	36·9	85	..	4·9	..	26·8	0	24	6	0	0	0	1	1	6	21	1	0	0
	2330	,,	1003·6	1002·7	..	28·9	27·5	27·1	35·6	89	..	3·8	..	24·7	0	20	10	0	1		0	1	5	21	2	0	0
Konkan																											
Dahanu	0830	5	1004·3	1003·8	+0·4	29·6	27·1	25·9	33·7	82	−1	4·7	−1·4	14·9	0	3	27	0	1	3	4	1	4	17	0	0	0
	1730	,,	1002·1	1001·5	..	31·2	27·9	26·5	34·8	77	..	3·3	..	25·6	0	22	8	0	0	0	1	0	4	24	1	0	0

(c) Mean of 26 days.

(b) Mean of 29 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km.p.h.).			No. of observations.									
			At mean sea level or height in c.p.m. of greatest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Konkan—*Contd.*																											
Bombay (Colaba)	0830	11	1005·1	1003·9	..	30·0	26·4	24·8	31·5	74	−5	4·7	−1·1	11·2	0	4	26	2	0	0	5	1	5	14	3	0	0
	1130	,,	1005·2	1004·0	..	31·5	26·9	24·9	31·7	69	..	3·9	..	11·9	0	5	25	0	0	0	1	4	7	13	5	0	0
	1730	,,	1002·8	1001·6	..	31·1	26·8	24·9	32·0	71	..	4·0	..	16·5	0	6	24	0	0	0	1	1	8	15	5	0	0
Bombay (Santacruz Aerodrome)	0230	8	1003·7	1002·8	..	28·8	25·8	24·4	30·7	78	..	4·5	..	7·1	0	1	24	1	0	0	0	4	13	7	0	5	0
	0530	,,	1003·7	1002·8	..	28·2	25·7	24·4	31·0	80	..	4·7	..	11·3	0	2	22	0	0	0	2	3	9	9	1	6	0
	0830	,,	1005·2	1004·3	+0·1	29·4	26·1	24·6	31·1	77	0	5·4	−0·4	7·9	0	1	23	0	0	0	3	5	7	6	3	6	0
	1130	,,	1005·2	1004·3	..	31·2	26·1	24·2	29·7	66	..	4·6	..	15·3	0	2	28	0	0	0	0	3	11	11	5	0	0
	1730	,,	1002·6	1001·7	..	30·9	26·3	24·2	30·8	69	..	4·7	..	18·6	0	10	19	0	0	0	0	2	11	14	2	1	0
	2330	,,	1005·1	1004·2	..	28·2	25·9	24·8	31·2	77	..	4·3	..	9·7	0	1	27	0	0	0	0	6	14	7	1	2	0
Alibag	0830	7	1005·3	1004·5	−0·2	29·5	28·2	27·7	37·1	90	+10	4·7	−1·7	14·6	0	6	24	2	0	2	2	3	7	12	2	0	0
Harnai	0830	20	1005·3	1003·0	+0·5	28·8	26·6	25·7	33·0	84	+1	6·1	..	12·6	0	5	24	1	1	2	9	5	2	6	3	1	2
	1730	,,	1003·2	1000·9	..	29·8	27·2	26·1	34·1	81	..	5.6	..	23·3	0	17	13	0	0	0	0	4	8	16	2	0	0
Ratnagiri	0830	35	1006.0	1002·0	0	28·2	26·0	25·0	31·8	84	..	5·2	..	..	0	6	24	0	0	9	2	0	7	12	0	0	0
	1730	,,	1004·1	1000·2	..	30·1	27·0	25·7	33·2	78	..	5·4	..	..	0	8	22	0	0	0	0	0	9	21	0	0	0
Devgad	0830	36	1006·2	1002·2	+0.5	28·0	26·1	25·3	32·1	86	0	6·3	+0·1	14·2	0	5	24	1	2	6	5	2	1	7	5	1	0
	1730	,,	1004·0	1000·1	..	29·7	26·8	25·6	32·9	79	..	6·3	..	20·8	0	13	17	0	0	0	0	6	7	13	4	0	0
Vengurla	0230	9	1005·1	1004·1	..	26·5	25·3	24·9	31·4	90	..	6·2	..	..	0	3	9	0	0	2	0	1	7	1	1	18	0
	0530	,,	1005·1	1004·1	0	26·1	25·1	24·6	30·9	93	..	6·1	—	..	0	3	10	0	0	4	1	0	7	0	1	17	0
	0830	,,	1006·7	1005·7	..	27·9	25·9	25·0	31·9	85	..	6·2	..	..	0	0	18	0	0	1	1	1	10	3	2	12	0
	1130	,,	1006·7	1005·7	..	29·2	26·4	25·2	32·1	79	..	6·3	..	..	0	0	22	0	0	3	0	0	11	7	1	8	0
	1730	,,	1004·7	1003·7	..	29·1	26·3	25·1	31·9	79	..	6·6	..	..	0	2	18	0	0	0	1	3	9	6	1	10	0
	2330	,,	1006·7	1005·7	..	27·1	25·7	25·0	31·9	89	..	7·0	..	..	0	1	16	0	0	2	3	3	5	3	1	13	0
Maharashtra																											
Jalgaon	0830	201	1004·1	981·7	..	28·9	24·3	22·2	26·6	70	..	3·5	..	24·7	0	18	11	1	0	0	0	4	1	10	13	1	0
	1730	,,	997·8	976·2	..	37·4	24·8	17·7	20·9	37	..	4·1	..	25·4	1	20	9	2	2	1	0	2	1	12	10	0	0
Malegaon	0830	457	1003·9	956·0	+0·7	28·2	23·4	20·9	25·0	66	−2	2·8	−1·7	9·3	0	1	29	1	1	0	0	0	3	16	9	0	0
	1730	,,	998·1	951·4	..	34·8	24·0	17·7	21·0	40	..	4·3	..	12·6	0	2	26	2	0	1	0	2	5	6	12	2	0
Deolali	0830	571	1004·8	942·2	..	26·2	22·4	20·6	24·3	71	..	5·1	..	19·5	0	18	12	1	0	0	2	0	15	10	2	0	0
	1730	,,	1000·7	939·2	..	30·4	22·8	19·0	22·1	55	..	4·6	..	23·4	0	23	7	0	0	1	0	0	15	13	1	6	0
Aurangabad	0830	581	1004·7	941·1	+0·3	25·9	22·4	20·8	24·6	74	+2	4·3	−1·2	20·8	0	16	14	1	0	0	0	0	9	19	1	0	0
	1730	,,	998·1	936·6	..	34·8	22·8	15·8	18·9	37	.	5·2	..	22·6	0	15	15	2	0	3	0	0	4	17	4	0	0
Aurangabad (Chikalthana Aerodrome)	0230	579	1002·4	939·0	..	25·0	21·8	20·2	23·7	75	..	3·3	..	14·9	0	10	13	1	0	0	0	0	3	13	11	2	0
	0530	,,	1003·1	939·4	..	23·9	21·4	20·0	23·7	79	.	4·0	..	13·5	0	8	19	0	0	1	0	0	1	10	15	3	0
	0830	,,	1003·7	940·6	..	26·7	22·8	21·1	24·9	72	..	3·7	..	16·4	0	9	20	2	0	0	0	0	2	8	17	1	0
	1130	,,	1002·3	940·1	..	31·5	23·6	19·8	25·3	52	..	3·5	..	12·8	0	6	23	3	0	1	0	0	1	3	13	1	0
	1730	,,	997·5	936·2	..	34·3	23·7	18·6	21·6	44	..	5·0	..	15·6	0	11	17	4	2	2	0	0	2	10	8	2	0
	2330	,,	1002·7	939·7	..	27·0	22·4	20·0	23·8	68	..	3·3	..	16·8	0	12	14	1	0	0	0	0	0	14	11	4	0
Ahmednagar	0830	657	1004·3	932·7	0	25·7	22·0	20·1	23·4	72	+1	3·3	−1·2	8·7	0	0	27	1	0	0	1	0	11	0	14	3	0
	1730	,,	998·7	929·0	..	32·4	22·5	16·9	19·2	44	..	4·8	..	6·3	0	0	28	0	2	0	2	0	12	0	12	2	0
Parbhani	0830	423	1004·1	957·6	..	27·8	24·4	22·5	27·9	73	..	4·0	..	17·9	0	14	16	1	0	0	0	0	3	16	8	0	0
	1730	,,	998·0	952·8	..	34·7	25·7	21·0	25·6	49	..	5·1	..	12·8	0	5	25	2	0	1	1	3	3	12	8	0	0
Poona	0530	559	1004·0	942·3	..	23·7	21·7	20·8	24·6	84	..	3·6	..	2·3	0	0	13	0	0	0	0	2	7	3	1	17	0
	0830	,,	1004·8	943·6	+0·3	26·3	22·7	21·1	24·9	74	+1	4·5	−0·9	3·8	0	0	21	1	0	0	0	3	11	5	1	9	0
	1130	,,	1003·5	943·1	..	30·5	23·5	20·2	23·9	56	..	4·0	..	5·6	0	0	21	0	0	0	0	0	5	10	6	9	0
	1730	,,	1000·7	940·5	..	30·5	23·6	20·3	24·0	57	..	4·3	..	9·8	0	0	27	0	0	0	0	0	10	11	6	3	0
	2330	,,	1004·9	943·4	..	24·9	22·1	20·8	24·6	78	..	2·8	..	5·1	0	0	21	0	0	0	0	0	5	13	3	9	0
Poona (Lohagaon Aerodrome)	0230	593	1003·7	938·3	..	23·5	21·8	20·9	25·0	85	..	3·6	..	15·9	0	9	20	0	0	0	0	0	1	23	5	1	0
	0530	,,	1004·1	938·6	..	23·0	21·5	20·7	24·6	87	..	4·4	..	11·5	0	2	27	0	0	0	0	0	0	23	6	1	0
	0830	,,	1005·0	939·9	..	25·6	22·3	20·7	24·5	75	..	5·3	..	18·0	0	10	20	0	0	0	0	0	2	23	5	0	0
	1130	,,	1003·5	939·4	..	29·9	22·9	19·2	22·9	55	..	5·0	..	22·2	0	18	12	0	0	0	0	0	4	21	3	0	0
	1730	,,	1000·7	936·7	..	29·6	23·0	19·7	23·2	59	..	4·9	..	31·7	0	26	4	0	0	0	0	0	2	21	7	0	0
	2330	,,	1005·0	939·6	..	24·4	22·0	20·7	24·6	81	..	3·9	..	20·3	0	14	16	0	0	0	0	0	1	26	3	0	0
Baramati	0830	551	1004·8	944·4	..	26·1	22·9	21·5	25·6	76	..	4·5	..	10·6	0	1	28	1	0	0	0	1	5	14	8	1	0
	1730	,,	999·6	940·6	..	31·9	23·8	20·0	23·6	53	..	5·5	..	21·0	0	14	15	1	0	0	0	1	10	13	4	1	0
Jeur	0830	521	1004·1	947·1	..	26·7	23·4	22·0	26·3	76	..	3·7	..	9·3	0	1	29	0	0	0	0	0	2	17	11	0	0
	1730	,,	998·7	943·1	..	33·2	23·4	18·7	21·7	46	..	4·5	..	7·9	0	1	29	0	0	0	0	0	1	16	13	0	0
Sholapur	0530	479	1004·0	951·1	..	24·9	22·2	20·9	24·7	79	..	5·7	..	8·6	0	0	30	1	0	0	0	0	12	10	7	0	0
	0830	,,	1005·1	952·4	+0·3	26·8	23·0	21·3	25·3	72	+4	5·1	+0·1	9·5	0	0	30	0	0	0	0	0	10	4	16	0	0
	1130	,,	1003·6	951·8	..	31·4	23·7	20·3	23·5	53	..	4·5	..	12·2	0	2	28	2	1	0	0	0	0	7	11	0	0

Division and station.	Hour of observation I.S.T.	Height of Barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (km. p.h.).			No. of observations.									
			At mean sea level or height in g.p.m. of nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra—*Contd.*																											
Sholapur (*Contd.*) .	1730	479	998·8	947·7	..	34·3	23·6	18·1	21·3	42	..	5.6	..	10·3	0	4	25	2	0	0	0	1	17	3	4	1	0
	2330	,,	1004·3	951·8	..	27·1	23·0	21·1	25·1	71	..	5·0	.	13·1	0	4	26	1	0	0	0	1	16	11	1	0	0
Miraj	0830	554	1005·7	944·8	−0·2	25·2	23·3	22·5	27·2	85	+5	5·8	−0·5	10·5	0	0	30	0	0	0	0	1	8	14	7	0	0
	1730	,,	1001·6	941·7	..	29·6	23·6	21·0	24·7	62	..	6·4	..	20·5	0	14	16	0	0	0	0	1	10	14	5	0	0
Kolhapur . . .	0530	570	1004·6	941·7	..	23·4	22·0	21·4	25·3	89	..	5·5	..	7·6	0	1	25	1	0	0	0	0	2	22	1	4	0
	0830	,,	1005·6	943·0	..	25·4	22·9	21·8	26·1	81	..	6·2	..	12·6	0	3	26	0	0	0	0	0	4	19	6	1	0
	1130	,,	1004·6	942·8	..	28·9	23·4	20·9	24·7	63	..	·9	..	17·5	0	9	21	0	0	0	0	0	8	18	4	0	0
	1730	,,	1002·1	940·3	..	28·2	23·1	20·8	24·4	66	..	5·8	..	25·8	0	7	23	0	0	0	0	0	2	27	1	0	0
Vidarbha																											
Buldhana . . .	0830	650	1003·6	952·6	..	25·4	22·5	21·2	25·1	77	..	2·9	..	4·5	0	0	30	0	1	0	1	0	5	0	23	0	0
	1730	,,	997·5	928·6	..	33·1	24·9	21·3	25·5	53	..	3·1	..	2·3	0	0	22	0	0	0	0	0	4	0	18	8	0
Akola	0830	282	1002·7	971·6	+0·1	29·4	23·9	21·2	25·1	63	−1	1·5	−0·2	14·9	0	8	22	0	0	1	0	1	3	17	8	0	0
	1130	,,	1001·2	970·6	..	33·6	24·3	19·6	22·9	46	..	3·1	..	12·3	0	4	26	0	0	0	0	1	6	14	9	0	0
	1730	,,	996·5	966·4	..	37·2	23·6	14·7	18·0	31	..	3·9	..	9·6	0	1	29	1	0	0	0	0	4	13	12	0	0
Akola (Aerodrome) .	0530	309	1001·8	967·5	..	27·0	22·4	19·6	23·5	66	..	4·7	..	15·0	0	5	24	2	1	0	0	0	5	9	12	1	0
	2330	,,	1001·9	967·9	..	29·9	22·1	16·9	20·3	53	..	4·1	..	11·5	0	3	26	1	0	1	3	2	6	7	9	1	0
Amravati . .	0830	370	1002·5	962·0	+0·4	29·2	23·1	19·6	23·2	60	−5	4·2	−0·4	15·0	0	5	25	1	0	1	1	0	9	14	4	0	0
	1730	,,	996·6	957·1	..	25·7	23·6	16·2	19·3	37	..	5·9	..	10·6	0	0	30	1	3	0	1	1	9	4	11	0	0
Yeotmal . . .	0830	451	1002·3	953·0	..	29·0	24·0	21·6	25·8	67	..	1·1	..	20·8	0	16	14	1	0	1	0	1	7	15	5	0	0
	1730	,,	996·6	948·7	..	35·7	24·8	19·1	22·5	41	..	4·9	..	16·9	0	8	21	1	1	2	0	1	4	10	10	1	0
Nagpur . . .	0230	310	999·8	965·5	..	28·0	22·5	19·3	22·8	63	..	5·2	..	9·3	0	3	22	2	0	1	0	2	7	2	11	5	0
	0530	,,	1000·5	966·1	..	27·3	22·4	19·5	23·0	66	..	5·4	..	9·8	0	3	21	2	0	0	1	0	9	3	9	6	0
	0830	,,	1001·8	967·8	+0·4	31·0	23·9	20·0	23·9	55	−4	4·5	−0·3	20·5	0	13	15	4	1	0	1	0	6	5	11	2	0
	1130	,,	1000·5	967·0	..	35·1	25·3	19·5	24·4	43	..	4·4	..	18·1	0	13	17	3	2	0	2	2	4	5	12	0	0
	1730	,,	996·4	963·2	..	36·1	24·2	17·3	20·4	38	..	6·2	..	17·5	0	11	18	5	2	2	2	1	2	7	8	1	0
	2330	,,	1000·5	966·4	..	29·6	23·1	19·3	22·9	58	..	5·3	..	10·2	0	4	20	0	2	1	1	5	4	7	4	6	0
Gondia . . .	0830	313	1001·7	967·5	..	31·1	25·9	20·1	23·7	55	..	4·3	..	6·2	0	0	30	1	2	0	3	3	14	2	4	0	1
	1730	,,	997·1	963·5	..	35·7	24·1	17·3	20·4	39	..	5·0	..	9·3	0	1	28	2	1	0	0	2	11	2	9	1	2
Brahmapuri . .	0830	229	1002·1	970·9	..	30·8	24·6	21·3	25·9	61	..	4·3	..	10·8	0	1	28	1	2	0	1	3	16	3	3	1	0
	1730	,,	997·1	972·5	..	35·8	24·9	19·1	22·7	33	..	1·9	..	10·6	0	3	27	0	7	2	2	2	8	5	4	0	0
Chanda . . .	0830	193	1002·5	981·2	−0·3	30·7	23·9	20·3	24·1	58	−1	4·7	0	9·3	0	0	28	1	0	0	1	3	7	11	5	2	0
	1730	,,	997·0	976·3	..	36·7	24·8	18·3	23·0	38	..	5·9	..	6·3	0	1	26	2	1	2	2	3	4	7	6	3	0
Sironcha . .	0830	123	1003·1	989·4	..	30·5	25·4	23·0	28·3	67	..	5·4	..	4·0	0	0	22	3	0	2	4	4	3	2	4	8	0
	1730	,,	997·6	984·3	..	36·9	26·3	21·3	25·6	44	..	5·5	..	2·9	0	0	15	1	1	2	2	2	3	2	2	15	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1003·1	1000·9	..	28·0	24·7	23·0	28·4	76	..	6·8	..	4·2	0	1	19	0	0	0	1	0	4	14	1	10	0
	0830	,,	1004·8	1002·6	+0·2	30·3	25·3	23·1	28·1	66	+10	6·4	+0·8	7·2	0	0	30	0	0	0	1	2	7	17	3	0	0
	1130	,,	1004·2	1002·0	..	33·7	25·8	22·1	26·7	51	..	6·1	..	10·4	0	0	30	0	0	0	0	0	9	19	2	0	0
	1730	,,	1001·1	998·9	..	34·4	26·3	22·6	27·8	51	..	6·2	..	8·1	0	1	29	0	0	1	2	3	11	12	1	0	0
	2330	,,	1003·9	1001·7	..	29·4	25·8	24·2	30·6	74	..	4·5	..	3·0	0	0	18	0	0	0	2	4	9	3	0	12	0
Ongole	0830	12	1004·1	1002·8	..	30·7	28·6	27·9	37·4	85	..	5·6	..	9·6	0	2	24	0	0	0	1	0	6	15	4	4	0
	1730	,,	1000·0	998·7	..	35·2	31·7	30·4	44·0	77	..	6·0	..	8·1	0	1	28	0	0	0	2	3	11	6	7	1	0
Rentachintala . .	0830	106	1004·1	992·3	..	29·7	25·7	24·1	29·8	72	+9	6·3	−0·3	6·7	0	0	28	1	0	0	0	3	1	22	1	2	0
	1730	,,	999·2	987·5	..	35·4	27·0	22·6	28·9	50	..	6·1	..	6·5	0	0	29	2	0	1	1	4	5	15	1	1	0
Gannavaram . .	0230	23	1001·3	998·7	..	28·0	24·9	23·4	29·1	78	..	5·5	..	6·5	0	2	15	0	0	0	0	2	6	7	2	13	0
	0530	,,	1002·1	999·5	..	27·1	24·5	22·8	28·7	80	..	6.7	..	6·1	0	0	15	1	0	1	0	0	1	9	3	15	0
	0830	,,	1003·6	1001·1	..	29·6	25·2	23·0	28·4	70	..	6·2	..	11·1	0	5	17	0	0	0	0	1	3	15	3	8	0
	1130	,,	1002·7	1000·2	..	33·5	26·0	22·5	27·5	55	..	5·7	..	17·9	0	8	22	1	0	0	0	0	4	19	6	0	0
	1730	,,	999·4	996·9	..	34·8	26·1	21·9	26·8	50	..	6·3	..	10·5	0	2	23	0	1	0	1	3	4	10	6	5	0
	2330	,,	1002·5	1000·0	..	28·7	25·3	23·6	29·6	76	..	6·1	..	6·6	0	1	17	0	0	0	0	1	5	11	1	12	0
Masulipatam . . .	0830	3	1003·8	1003·5	+0·2	29·6	25·9	24·3	30·6	75	+4	6·0	+1·2	11·1	0	6	24	1	0	0	0	0	3	13	13	0	0
	1730	,,	999·7	999·4	..	34·3	27·1	24·0	30·0	58	..	7·0	..	15.9	0	7	23	1	1	1	0	9	5	5	8	0	0
Nidadavolu . . .	0830	12	1003·7	1002·3	..	29·5	25·9	24·3	30·3	75	..	6·3	..	14·6	0	8	22	0	0	0	0	0	6	20	4	0	0
	1730	,,	999·5	998·1	..	34·6	26·8	23·3	29·2	55	..	6·1	..	14·5	0	2	28	1	0	4	0	1	8	15	1	0	0
Kakinada . . .	0830	8	1003·2	1002·3	+0·2	30·5	26·6	25·1	31·7	74	+2	5·6	0	9·5	0	0	30	0	0	0	0	0	17	3	10	0	0
	1730	,,	999·7	998.8	..	29·5	27·8	25·6	35·9	69	..	5·9	..	9·3	0	0	30	0	0	0	13	1	14	2	0	0	0
Visakhapatnam . .	0230	3	1000·7	1000·3	..	28·7	26·9	26·2	34·1	87	..	5·3	..	6·7	0	0	18	0	0	0	0	0	12	2	4	12	0
	0530	,,	1001·3	1000·9	..	28·1	26·7	26·2	33·8	89	..	5·9	..	5·7	0	1	17	0	1	0	1	1	10	4	1	12	1
	0830	,,	1002·4	1002·0	+0·2	31·1	27·5	26·0	33·8	76	−5	4·9	−1·3	11·0	0	4	22	1	0	0	1	0	16	4	4	4	0
	1130	,,	1001·4	1001·1	..	34·2	28·8	27·0	35·6	67	..	5·2	..	14·3	0	9	18	2	0	2	2	3	16	1	1	3	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.		Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km. p.h.).			No. of observations.									
			At mean sea level or height in g.p.m. of nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh																											
—*Contd.*																											
Visakhapatnam (*Contd.*) .	1730	3	999·5	999·1	..	31·3	28·3	27·0	36·2	79	..	6·1	..	16·9	0	9	20	0	1	1	1	4	18	3	1	1	0
	2330	,,	1002·3	1001·9	..	29·1	27·4	26·7	35·2	87	..	5·1	..	9·6	0	2	24	0	0	0	2	2	18	2	2	4	0
Calingapatam . .	0830	6	1002·3	1001·6	+0·7	30·3	26·9	25·5	32·9	75	0	5·5	+0·5	7·6	0	0	30	0	1	2	0	6	11	7	3	0	0
	1730	..	999·2	998·5	..	30·8	27·4	26·0	33·8	76	..	6·3	..	10·9	0	0	30	0	0	15	15	0	0	0	0	0	0
Telangana																											
Ramagundam . .	0830	156	1002·6	905·3	..	30·9	24·5	21·1	25·5	59	..	5·6	..	8·5	0	0	30	0	1	0	1	1	5	15	7	0	0
	1730	,,	997·9	981·0	..	36·7	25·2	19·0	22·6	40	..	4·8	..	6·2	0	2	23	2	4	1	1	5	8	3	1	5	0
Nizamabad . . .	0830	381	1003·7	961·7	0	28·5	23·4	20·6	24·9	65	−1	5·0	+0·4	5·7	0	0	29	0	0	0	0	1	10	16	2	1	0
	1730	,,	998·0	957·1	..	34·8	24·6	19·3	22·4	44	..	5·8	..	5·0	0	0	27	2	4	0	1	2	8	6	4	3	0
Mahbubnagar . .	0810	505	1005·0	949·5	..	26·0	23·1	21·8	26·3	82	..	6·8	..	7·5	0	1	29	1	0	0	0	0	11	11	7	0	0
	1730	,,	999·6	945·5	..	32·7	24·2	20·4	25·8	51	..	6·2	..	11·7	0	4	25	2	0	0	0	0	12	11	4	1	0
Hyderabad . . .	0230	545	1002·7	943·1	..	25·9	22·4	20·7	24·3	74	..	6·5	..	17·0	0	7	22	0	0	0	0	1	8	16	4	1	0
(Begumpet Aerodrome)	0530	,,	1003·3	943·4	..	25·1	22·2	20·6	24·5	74	..	6·7	..	16·6	0	6	23	0	0	0	0	0	4	19	6	1	0
	0830	,,	1004·1	944·6	+0·5	27·0	22·8	20·8	24·3	70	−1	6·2	+0·8	21·9	0	14	16	1	0	0	0	0	3	19	7	0	0
	1130	,,	1002·8	944·1	..	30·7	23·5	20·0	23·1	55	..	5·8	..	20·6	0	14	16	1	0	0	0	0	2	15	12	0	0
	1730	,,	991·1	940·7	..	31·6	23·3	18·8	21·3	51	..	6·8	..	14·8	0	8	21	1	0	2	1	1	7	8	9	1	0
	2330	,,	1003·6	943·9	..	27·3	22·7	20·4	22·3	68	..	6·5	..	20·7	0	16	11	0	0	0	1	1	8	10	7	3	0
Hakimpet . . .	0830	613	1003·4	936·8	..	26·9	22·5	20·5	24·0	69	..	6·0	..	25·5	0	20	10	0	0	0	0	0	6	20	4	0	0
	1730	,,	999·1	933·6	..	30·1	23·2	19·1	23·3	52	..	6·3	..	20·1	0	13	17	3	1	0	0	1	10	10	5	0	0
Hanamkonda . .	0830	269	1003·4	973·7	−0·1	29·3	24·3	21·7	26·4	66	+7	4·8	−0·3	14·3	0	5	24	1	0	0	1	4	7	10	6	1	0
	1730	,,	999·0	970·0	..	35·1	24·8	19·2	22·8	43	..	5·0	..	7·5	0	1	29	2	1	1	2	0	4	10	10	0	0
Bhadrachallam . .	0830	111	1003·6	991·2	..	30·1	25·1	22·5	27·6	69	..	5·7	..	8·8	0	0	28	1	1	0	3	2	11	6	4	2	0
	1730	,,	998·7	986·7	..	35·2	25·8	21·1	25·5	49	..	6·6	..	10·4	0	0	30	2	5	2	2	1	9	5	4	0	0
Khammameth . .	0830	112	1003·7	991·9	..	29·3	25·3	23·3	29·1	72	..	6·4	..	6·0	0	0	24	0	0	0	1	1	0	18	4	6	0
	1730	,,	999·0	986·8	..	34·8	26·3	22·5	27·1	52	..	5·8	..	5·3	0	0	21	1	1	1	2	1	1	12	2	9	0
Rayalaseema																											
Arogyavaram . .	0830	701	1005·9	929·4	..	24·8	21·1	19·3	22·4	71	..	6·8	..	6·3	0	0	27	2	0	0	0	1	5	7	12	3	0
	1730	,,	1001·6	926·4	..	28·8	22·4	19·2	22·5	57	..	7·1	..	7·3	0	0	30	1	0	0	0	0	8	9	12	0	0
Cuddapah . .	0830	130	1006·3	991·8	+0·6	29·1	24·8	22·7	27·9	69	10	4·8	−0·3	4·8	0	0	21	0	0	0	0	0	0	21	0	9	0
	1730	,,	1001·3	967·1	..	34·0	26·2	22·7	27·7	53	..	4·2	..	7·5	0	0	25	0	0	1	0	0	0	23	1	5	0
Anantapur . .	0530	350	1004·5	965·5	..	24·7	22·4	21·4	25·4	85	..	5·7	..	7·6	0	2	26	0	0	1	0	1	4	21	1	2	0
	0830	,,	1005·7	966·9	..	26·6	23·1	21·5	25·6	74	..	6·4	..	11·2	0	0	29	0	0	0	1	0	7	18	3	1	0
	1130	,,	1004·6	966·4	..	30·3	24·0	20·9	24·7	58	..	6·4	..	16·5	0	8	21	0	0	0	0	0	4	21	4	1	0
	1730	,,	1000·9	962·9	..	31·7	24·1	20·2	24·1	52	..	6·4	..	17·8	0	9	21	0	0	0	0	1	3	21	5	0	0
	2330	,,	1005·0	966·2	..	26·9	23·4	21·7	26·1	75	..	5·6	..	17·8	0	9	19	0	0	0	0	0	6	21	1	2	0
Kurnool . . .	0830	281	1006·3	975·0	+0·9	27·3	23·8	22·2	26·7	74	+8	5·8	+0·5	20·3	0	15	13	0	1	0	0	1	9	11	7	1	0
	1730	,,	1001·1	970·5	..	33·6	24·2	19·5	22·4	47	..	5·8	..	17·2	0	10	17	0	2	0	0	2	12	5	6	3	0
Madras																											
Palayamcottai . .	0830	51	1007·6	1001·8	..	30·2	24·0	20·9	24·8	58	..	5·9	..	8·7	0	3	25	0	0	0	0	2	6	22	4	2	0
	1730	,,	1004·5	998·8	..	32·1	24·3	20·4	24·0	50	..	5·5	..	19·9	0	14	16	0	0	0	0	0	7	20	3	0	0
Tuticorin . . .	0830	4	1007·8	1007·4	..	30·3	24·4	21·5	25·9	60	..	2·7	..	16·4	0	8	22	0	0	0	0	0	9	21	0	0	0
	1730	,,	1004·5	1004·1	..	33·3	24·3	19·9	23·1	46	..	3·0	..	25·4	0	22	8	0	0	0	0	0	5	25	0	0	0
Pamban . . .	0830	4	1007·5	1006·2	+0·3	29·5	26·3	25·0	31·5	77	+2	3·7	+0·8	16.7	0	7	22	0	0	0	0	2	22	5	0	1	0
	1730	,,	1004·3	1003·0	..	29·3	26·9	26·0	33·5	82	..	5·2	..	21·8	0	16	14	0	0	0	2	9	19	0	0	0	0
Mathurai . . .	0830	133	1006·5	991·8	−0·4	30·4	23·9	20·6	25·0	56	−1	5·4	−0·2	3·0	0	0	30	2	0	0	0	1	4	2	21	0	0
	1730	,,	1003·0	988·4	..	34·1	24·1	18·8	22·7	41	..	5·5	..	3·0	0	0	30	1	2	0	0	3	2	13	9	0	0
Nagapattinam . .	0830		1006·8	1005·7	+0·1	30·5	24·5	21·7	25·9	59	−4	5·4	+1·2	12·9	0	0	30	0	0	0	0	1	11	18	0	0	0
	1730		1003·3	1002·3	..	32·0	26·0	23·1	28·5	61	..	5·8	..	14·0	0	0	30	1	0	0	4	13	11	1	0	0	0
Tiruchirapalli . .	0230	88	1004·9	995·0	..	27·6	23·5	21·5	25·8	69	..	3·4	..	27·8	0	21	9	0	0	0	0	0	0	29	0	1	0
	0530	,,	1005·2	995·1	..	27·2	23·3	21·4	25·5	71	..	5·4	..	18·0	0	12	14	0	0	0	0	0	0	26	0	4	0
	0830		1006·6	996·7	−0·3	29·6	24·3	21·7	26·5	63	+5	5·0	+0·7	28·0	0	24	5	0	0	0	0	0	2	26	1	1	0
	1130		1005·8	996·9	..	33·4	25·1	21·1	25·6	49	..	5·5	..	30·3	0	23	7	0	0	0	0	1	2	25	2	0	0
	1730	,,	1002·8	993·2	..	33·3	24·8	20·5	25·2	49	..	6·6	..	32·1	0	27	3	1	0	0	0	3	2	22	2	0	0
	2330	,,	1006·3	996·4	..	28·5	23·9	21·7	26·5	67	..	3·9	..	26·9	0	20	8	0	0	0	0	0	1	27	0	2	0
Coimbatore . . .	0830	409	1007·5	992·1	+0·2	25·2	22·6	21·3	25·3	78	0	6·9	+2·4	17·3	0	6	24	0	0	0	0	13	16	0	1	0	0
	1730	,,	1004·8	959·7	..	27·1	22·8	20·7	24·3	69	..	7·0	..	18·6	0	8	22	0	0	0	0	12	17	1	0	0	0
Coimbatore (Peelamedu Aerodrome).	0530	398	1005·9	962·1	..	23·2	21·9	21·2	25·6	89	..	6·2	..	25·6	0	20	10	0	0	0	0	6	24	0	0	0	0
	0830	,,	1007·2	962·9	..	25·4	22·6	21·2	25·2	78	..	6·3	..	30·2	0	29	1	0	0	0	0	2	28	0	0	0	0
	1130	,,	1006·3	962·6	..	28·6	23·5	20·8	24·9	63	..	6·1	..	36·1	0	29	1	0	0	0	0	3	26	1	0	0	0
	1730	,,	1004·2	960·4	..	27·3	23·0	20·7	24·7	68	..	6·6	..	38·8	0	29	1	0	0	0	0	6	22	2	0	0	0
	2330	,,	1007·2	962·7	..	23·8	22·1	21·3	25·4	86	..	3·4	..	34·6	0	28	2	0	0	0	0	7	22	1	0	0	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperatur in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed km. per hour.	Wind speed (Km.p.h.)			No. of observations									
			At mean sea level onheight in g.p.m. of nearest standa rd isobaric level.	At station level	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction								Calm.	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Salem	0530	278	1005·6	974·5	..	24·9	23·7	23·1	28·4	90	..	6·9	..	4·9	0	0	25	0	0	0	0	0	19	5	1	5	0
	0830	,,	1006·9	975·9	−0·1	26·9	24·6	23·6	29·0	82	+8	5·9	+1·0	6·9	0	0	30	0	0	0	0	0	24	6	0	0	0
	1130	,,	1006·1	975·6	..	30·8	24·9	22·3	26·8	60	..	5·6	..	7·8	0	1	29	0	0	0	0	2	16	9	3	0	0
	1730	,,	1002·9	972·4	..	30·6	26·1	24·1	30·2	71	..	7·1	..	5·5	0	0	21	0	0	0	0	0	6	14	1	9	0
	2330	,,	1006·7	975·8	..	27·1	24·6	23·5	28·8	80	..	5·8	..	4·7	0	0	21	0	0	0	1	7	9	3	1	9	0
Kallakurichi	0830	127	1005·8	992·0	..	30·0	25·0	22·7	27·6	65	..	4·7	..	2·0	0	0	13	1	1	0	1	10	0	0	0	17	0
	1730	,,	1002·1	988·2	..	32·8	25·5	22·1	26·8	54	..	6·3	..	2·0	0	0	16	2	0	0	0	11	2	0	1	14	0
Cuddalore	0530	12	1004·4	1003·1	..	27·5	24·1	22·6	27·3	75	..	4·5	..	3·0	0	0	20	0	0	0	0	3	16	0	1	10	0
	0830	,,	1006·1	1004·8	0	30·4	25·0	22·7	27·2	63	−1	4·9	+0·6	4·8	0	0	28	1	0	0	1	2	21	2	1	2	0
	1130	,,	1005·5	1004·2	..	34·4	25·9	21·9	26·6	49	..	5·7	..	6·5	0	0	25	0	0	0	0	2	17	5	1	5	0
	1730	,,	1002·6	1001·3	..	31·8	26·1	23·6	29·0	64	..	7·2	..	5·7	0	0	22	1	0	1	9	2	7	1	1	8	0
	2330	,,	1005·6	1004·3	..	28·9	25·1	23·5	28·3	73	..	4·6	..	5·2	0	1	19	0	0	0	0	10	10	0	0	10	0
Vellore	0530	214	1004·7	980·7	..	26·1	22·8	21·3	25·2	74	..	7·4	..	4·6	0	0	20	1	0	1	0	3	4	8	3	10	0
	0830	,,	1006·0	982·2	+0·2	28·1	23·7	21·5	25·6	67	+4	6·3	+2·3	7·7	0	0	28	2	0	0	0	0	2	18	6	2	0
	1130	,,	1005·1	981·6	..	31·5	24·6	21·4	25·2	55	..	6·8	..	11·9	0	0	30	1	0	0	0	3	5	16	5	0	0
	1730	,,	1002·0	978·6	..	32·2	24·8	21·2	25·3	53	..	7·2	..	1·8	0	0	11	0	0	1	0	4	3	3	0	19	0
	2330	,,	1005·5	981·6	..	27·3	23·5	21·7	25·8	72	..	6·5	..	5·7	0	2	16	0	0	0	0	1	8	7	2	12	0
Madras	0230	16	1003·4	1001·7	..	28·2	24·8	23·0	28·7	74	..	5·6	..	10·8	0	2	26	0	0	0	0	3	19	6	0	2	0
	0530	,,	1004·0	1002·3	..	27·7	24·3	22·6	27·7	75	..	6·4	..	11·2	0	4	25	0	0	0	0	3	16	9	1	1	0
	0830	,,	1005·6	1003·9	+0·3	29·7	24·7	22·2	27·1	65	+9	6·4	+1·6	16·9	0	8	22	0	0	0	1	3	10	15	1	0	0
	1130	,,	1005·1	1003·4	..	33·3	25·2	21·3	25·5	50	..	5·4	..	20·2	0	11	19	0	0	0	0	1	9	16	4	0	0
	1730	,,	1002·2	1000·5	..	32·9	25·9	22·6	27·8	56	..	6·6	..	13·5	0	3	27	2	0	2	2	7	8	6	0	0	3
	2330	,,	1005·0	1003·3	..	28·8	25·2	23·6	29·5	74	..	5·5	..	11·4	0	3	26	0	0	0	0	12	11	4	2	1	0
Madras (Nungambakkam)	0830	6	1005·1	1004·4	..	30·2	24·4	21·6	25·9	60	..	7·2	..	6·6	0	0	30	0	0	0	0	4	15	8	3	0	0
Coastal Mysore																											
Karwar	0830	4	1007·0	1006·5	−0·2	27·0	25·6	25·1	31·7	89	..	6·9	..	8·2	0	2	24	0	4	2	8	0	8	1	3	4	0
	1730	,,	1005·1	1004·6	..	28·2	25·8	24·8	31·4	82	..	7·0	..	14·6	0	7	22	0	1	2	5	3	11	3	4	1	0
Honavar	0830	26	1007·2	1004·2	−0·8	26·1	25·0	24·6	30·8	92	+3	7·2	+0·4	3·7	0	0	18	0	1	7	1	3	4	1	1	12	0
	1730	,,	1005·3	1002·5	..	27·5	25·9	24·8	32·2	88	..	7·2	..	6·7	0	0	26	0	1	0	4	6	13	2	0	4	0
Mangalore	0230	22	1006·4	1003·9	..	25·5	24·6	24·1	30·2	93	..	6·4	..	9·7	0	3	24	0	1	6	7	1	8	4	0	3	0
	0530	,,	1006·4	1003·9	..	25·0	24·2	23·8	29·5	93	..	7·3	..	11·2	0	5	22	0	0	8	10	0	4	3	2	3	0
	0830	,,	1007·9	1005·4	−0·4	26·3	24·8	24·1	30·0	88	+1	6·7	−0·1	10·2	0	1	28	2	0	3	10	2	6	5	1	1	0
	1130	,,	1008·2	1005·7	..	27·3	25·4	24·4	30·8	83	..	6·9	..	11·4	0	3	26	0	0	1	0	10	14	4	0	1	0
	1730	,,	1006·3	1003·7	..	27·3	25·4	24·5	30·8	85	..	7·5	..	11·0	0	3	26	1	0	0	4	2	16	3	3	1	0
	2330	,,	1008·1	1005·6	..	25·7	24·7	24·3	30·2	92	..	7·0	..	10·7	0	3	26	0	0	8	8	0	10	2	1	1	0
Mangalore (Bajpe Aerodrome)	0530	103	1006·8	995·2	..	24·1	23·7	23·4	29·2	97	..	7·3	..	6·1	0	1	16	1	0	6	4	1	1	4	0	13	0
	0830	,,	1008·1	996·5	..	25·5	24·4	23·8	29·7	91	..	6·9	..	9·4	0	2	22	1	0	6	9	1	0	6	1	6	0
	1730	,,	1006·5	994·9	..	26·1	24·5	23·7	29·4	88	..	7·3	..	11·3	0	3	20	1	0	2	2	3	7	8	0	7	0
Mysore (North)																											
Bidar	0830	664	1004·0	931·8	..	25·9	22·3	20·5	23·5	73	+2	6·3	+1·7	22·3	0	19	11	0	0	0	0	0	6	22	2	0	0
	1730	,,	998·4	927·8	..	31·4	22·2	17·1	19·3	49	..	6·9	..	17·4	0	10	20	3	1	1	1	3	6	7	8	0	0
Gulbarga	0830	458	1005·0	954·6	+0·3	27·1	22·8	20·6	24·6	69	−2	6·3	+1·5	16·8	0	8	22	1	0	0	0	0	8	5	16	0	0
	1730	,,	999·1	949·9	..	33·1	23·1	17·8	20·9	44	..	7·0	..	17·5	0	8	22	2	1	1	2	1	9	7	7	0	0
Bijapur	0830	594	1005·4	940·3	+0·3	25·7	23·1	21·9	25·9	80	+7	6·3	+1·3	13·7	0	0	30	1	0	0	0	0	11	15	3	0	0
	1730	,,	999·8	936·2	..	31·1	24·0	21·1	24·4	59	..	6·2	..	9·9	0	0	26	1	0	0	0	2	8	10	5	4	0
Belgaum	0830	781	..	..	..	22·9	21·5	20·8	24·7	88	+2	..	..	2·9	0	0	21	1	0	0	1	5	8	3	3	9	0
	1730	,,	..	..	..	25·2	21·9	20·2	24·1	75	..	..	..	5·1	0	0	24	2	0	1	1	2	5	9	4	6	0
Belgaum (C.T.O.)	0830	753	1006·2	924·1	+0·1	23·8	21·7	20·8	24·8	83	0	6·0	−0·4	6·5	0	0	28	0	0	0	0	0	9	14	5	2	0
	1730	,,	1003·6	922·1	..	25·2	21·9	20·3	22·5	75	..	(b) 7·0	..	(b) 15·2	0	0	29	0	0	0	0	0	6	22	1	0	0
Belgaum (Sambre Aerodrome)	0530	761	1005·3	921·9	..	21·6	20·8	20·5	23·9	93	..	6·5	..	6·7	0	1	24	0	0	0	0	0	4	21	0	5	0
	0830	,,	1006·2	923·3	..	23·8	21·9	20·8	24·8	84	..	6·3	..	9·2	0	1	29	0	0	0	0	0	7	20	3	0	0
	1130	,,	1005·0	923·1	..	27·3	22·6	20·4	23·9	67	..	6·0	..	20·3	0	10	20	1	0	0	0	1	7	18	3	0	0
	1730	,,	1003·3	920·9	..	25·2	22·1	20·8	24·4	77	..	6·2	..	17·8	0	8	22	0	0	0	0	2	7	19	2	0	0
Gadag	0830	650	1006·4	935·2	0	24·8	23·4	22·8	27·7	89	+8	6·5	+1·1	11·7	0	1	29	0	0	0	0	1	6	22	1	0	0
	1730	,,	1002·6	932·3	..	27·4	24·3	22·9	28·2	78	..	6·1	..	12·8	0	1	29	0	0	0	0	2	7	19	2	0	0
Gadag (P.B.O.)	0530	661	1005·1	932·5	..	22·8	21·7	21·2	25·2	91	..	6·4	..	15·9	0	6	24	0	0	0	0	0	19	11	0	0	0
	0830	,,	1006·1	933·9	..	25·0	22·6	21·6	25·5	82	..	6·7	..	14·6	0	3	27	0	0	0	0	0	20	10	0	0	0
	1130	,,	1004·9	933·6	..	28·7	23·5	21·6	25·3	66	.	6·0	..	13·8	0	5	23	0	0	0	0	1	15	12	0	2	0
	1730	,,	1002·6	931·1	..	27·1	22·8	21·2	24·5	71	..	6·8	..	18·7	0	10	20	0	0	0	0	0	19	10	1	0	0
	2330	,,	1006·3	933·7	..	23·6	22·0	21·4	25·2	87	..	5·4	..	20·3	0	13	17	0	0	0	0	2	21	7	0	0	0

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars. At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars. At station level.	Mean pressure in millibars. Departure from normal.	Mean temperature in °C. Dry bulb.	Mean temperature in °C. Wet bulb.	Mean temperature in °C. Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas). Mean amount.	Cloud amount (Oktas). Departure from normal.	Mean wind speed, Km. per hour.	Wind speed (Km. p.h.). 62 or more.	20 to 61.	1 to 19.	No. of observations. Wind direction. N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh —*Contd.*																											
Visakhapatnam (*Contd.*)	1730	3	999·5	999·1	..	31·3	28·3	27·0	36·2	79	..	6·1	..	16·9	0	9	20	0	1	1	1	4	18	3	1	1	0
	2330	,,	1002·3	1001·9	..	29·1	27·4	26·7	35·2	87	..	5·1	..	9·6	0	2	24	0	0	0	2	2	18	2	2	4	0
Calingapatam	0830	6	1002·3	1001·6	+0·7	30·3	26·9	25·5	32·9	75	0	5·5	+0·5	7·6	0	0	30	0	1	2	0	6	11	7	3	0	0
	1730	..	999·2	998·5	..	30·8	27·4	26·0	33·8	76	..	6·3	..	10·9	0	0	30	0	0	15	15	0	0	0	0	0	0
Telangana																											
Ramagundam	0830	156	1002·6	905·3	..	30·9	24·5	21·1	25·5	59	..	5·6	..	8·5	0	0	30	0	1	0	1	1	5	15	7	0	0
	1730	,,	997·9	981·0	..	36·7	25·2	19·0	22·6	40	..	4·8	..	6·2	0	2	23	2	4	1	1	5	8	3	1	5	0
Nizamabad	0830	381	1003·7	961·7	0	28·5	23·4	20·6	24·9	65	−1	5·0	+0·4	5·7	0	0	29	0	0	0	0	1	10	16	2	1	0
	1730	,,	998·0	957·1	..	34·6	24·6	19·3	22·4	44	..	5·8	..	5·0	0	0	27	2	4	0	1	2	8	6	4	3	0
Mahbubnagar	0830	505	1005·0	949·5	..	26·0	23·1	21·8	26·3	82	..	6·8	..	7·5	0	1	29	1	0	0	0	0	11	11	7	0	0
	1730	,,	999·6	945·5	..	32·7	24·2	20·4	25·8	51	..	6·2	..	11·7	0	4	25	2	0	0	0	0	12	11	4	1	0
Hyderabad (Begumpet Aerodrome)	0230	545	1002·7	943·1	..	25·9	22·4	20·7	24·3	74	..	6·5	..	17·0	0	7	22	0	0	0	0	1	8	16	4	1	0
	0530	,,	1003·3	943·4	..	25·1	22·2	20·6	24·5	74	..	6·7	..	16·6	0	6	23	0	0	0	0	0	4	19	6	1	0
	0830	,,	1004·1	944·6	+0·5	27·0	22·8	20·8	24·3	70	−1	6·2	+0·8	21·9	0	11	16	1	0	0	0	0	3	19	7	0	0
	1130	,,	1002·8	944·1	..	30·7	23·5	20·0	23·1	55	..	5·8	..	20·6	0	14	16	1	0	0	0	0	2	15	12	0	0
	1730	,,	991·1	940·7	..	31·6	23·3	18·8	21·3	51	..	6·8	..	14·8	0	8	21	1	0	2	1	1	7	8	9	1	0
	2330	,,	1003·6	943·9	..	27·3	22·7	20·4	22·3	68	..	6·5	..	20·7	0	16	11	0	0	0	1	1	8	10	7	3	0
Hakimpet	0830	613	1003·4	936·8	..	26·9	22·5	20·5	24·0	69	..	6·0	..	25·5	0	20	10	0	0	0	0	0	6	20	4	0	0
	1730	,,	999·1	933·6	..	30·1	23·2	19·1	23·3	52	..	6·3	..	20·1	0	13	17	3	1	0	0	1	10	10	5	0	0
Hanamkonda	0830	269	1003·4	973·7	+0·1	29·3	24·3	21·7	26·4	66	+7	4·8	−0·3	14·3	0	5	24	1	0	0	1	4	7	10	6	1	0
	1730	,,	999·0	970·0	..	35·1	24·8	19·2	22·8	43	..	5·0	..	7·5	0	1	29	2	1	1	2	0	4	10	10	0	0
Bhadrachallam	0830	111	1003·6	991·2	..	30·1	25·1	22·5	27·6	69	..	5·7	..	8·8	0	0	28	1	1	0	3	2	11	6	4	2	0
	1730	,,	998·7	986·7	..	35·2	25·8	21·1	25·5	49	..	6·6	..	10·4	0	0	30	2	5	2	2	1	9	5	4	0	0
Khammameth	0830	112	1003·7	991·9	..	29·3	25·3	23·3	29·1	72	..	6·4	..	6·0	0	0	24	0	0	0	1	1	0	18	4	6	0
	1730	,,	999·0	986·8	..	34·8	26·3	22·5	27·1	52	..	5·8	..	5·3	0	0	21	1	1	1	2	1	1	12	2	9	0
Rayalaseema																											
Arogyavaram	0830	701	1005·9	929·4	..	24·8	21·1	19·3	22·4	71	..	6·8	..	6·3	0	0	27	2	0	0	0	1	5	7	12	3	0
	1730	,,	1001·6	926·4	..	28·8	22·4	19·2	22·5	57	..	7·1	..	7·3	0	0	30	1	0	0	0	0	8	9	12	0	0
Cuddapah	0830	130	1006·3	991·8	+0·6	29·1	24·8	22·7	27·9	69	+10	4·8	−0·3	4·8	0	0	21	0	0	0	0	0	0	21	0	9	0
	1730	,,	1001·3	987·1	..	34·0	26·2	22·7	27·7	53	..	4·2	..	7·5	0	0	25	0	0	1	0	0	0	23	1	5	0
Anantapur	0530	350	1004·5	965·5	..	24·7	22·4	21·4	25·4	85	..	5·7	..	7·6	0	2	26	0	0	1	0	1	4	21	1	2	0
	0830	,,	1005·7	966·9	..	26·6	23·1	21·5	25·6	74	..	6·4	..	11·2	0	0	29	0	0	0	1	0	7	18	3	1	0
	1130	,,	1004·6	966·4	..	30·3	24·0	20·9	21·7	58	..	6·4	..	16·5	0	8	21	0	0	0	0	0	4	21	4	1	0
	1730	,,	1000·9	962·9	..	31·7	24·1	20·2	24·1	52	..	6·4	..	17·8	0	9	21	0	0	0	0	1	3	21	5	0	0
	2330	,,	1005·0	966·2	..	26·9	23·4	21·7	26·1	75	..	5·6	..	17·8	0	9	19	0	0	0	0	0	6	21	1	2	0
Kurnool	0830	281	1006·3	975·0	+0·9	27·3	23·8	22·2	26·7	74	+8	5·8	+0·5	20·3	0	15	14	0	1	0	0	1	9	11	7	1	0
	1730	,,	1001·1	970·5	..	33·6	24·2	19·5	22·4	47	..	5·8	..	17·2	0	10	17	0	2	0	0	2	12	5	6	3	0
Madras																											
Palayamcottai	0830	51	1007·6	1001·8	..	30·2	24·0	20·9	24·8	58	..	5·9	..	8·7	0	3	25	0	0	0	0	2	0	22	4	2	0
	1730	,,	1004·5	998·8	..	32·1	24·3	20·4	24·0	50	..	5·5	..	19·9	0	14	16	0	0	0	0	0	7	20	3	0	0
Tuticorin	0830	4	1007·8	1007·4	..	30·3	24·4	21·5	25·9	60	..	2·7	..	16·4	0	8	22	0	0	0	0	0	9	21	0	0	0
	1730	,,	1004·5	1004·1	..	33·3	24·3	19·9	23·1	46	..	3·0	..	25·4	0	22	8	0	0	0	0	0	5	25	0	0	0
Pamban	0830	4	1007·5	1006·2	+0·3	29·5	26·3	25·0	31·5	77	+2	3·7	+0·8	16.7	0	7	22	0	0	0	0	2	22	5	0	1	0
	1730	,,	1004·3	1003·0	..	29·3	26·9	26·0	33·5	82	..	5·2	..	21·8	0	16	14	0	0	0	2	9	19	0	0	0	0
Mathurai	0830	133	1006·5	991·8	−0·4	30·4	23·9	20·6	25·0	56	−1	5·4	−0·2	3·0	0	0	30	2	0	0	0	1	4	2	21	0	0
	1730	,,	1003·0	988·4	..	34·1	24·1	18·8	22·7	41	..	5·5	..	3·0	0	0	30	1	2	0	0	3	2	13	9	0	0
Nagapattinam	0830		1006·8	1005·7	+0·1	30·5	24·5	21·7	25·9	59	−4	5·4	+1·2	12·9	0	0	30	0	0	0	0	1	11	18	0	0	0
	1730		1003·3	1002·3	..	32·0	26·0	23·1	28·5	61	..	5·8	..	14·0	0	0	30	1	0	0	4	13	11	1	0	0	0
Tiruchirapalli	0230	88	1004·9	995·0	..	27·6	23·5	21·5	25·8	69	..	3·4	..	27·8	0	21	9	0	0	0	0	0	0	29	0	1	0
	0530	,,	1005·2	995·1	..	27·2	23·3	21·4	25·5	71	..	5·4	..	18·0	0	12	14	0	0	0	0	0	0	26	0	4	0
	0830		1006·6	996·7	−0·3	29·6	24·3	21·7	26·5	63	+5	5·0	+0·7	28·0	0	24	5	0	0	0	0	0	2	26	1	1	0
	1130		1005·8	996·9	..	33·4	25·1	21·1	25·6	49	..	5·5	..	30·3	0	23	7	0	0	0	0	1	2	25	2	0	0
	1730	,,	1002·8	993·2	..	33·3	24·8	20·5	25·2	49	..	6·6	..	32·1	0	27	3	1	0	0	0	3	2	22	2	0	0
	2330	,,	1006·3	996·4	..	28·5	23·9	21·7	26·5	67	..	3·9	..	26·9	0	20	8	0	0	0	0	0	1	27	0	2	0
Coimbatore	0830	409	1007·5	992·1	+0·2	25·2	22·6	21·3	25·3	78	0	6·9	+2·4	17·3	0	6	24	0	0	0	0	13	16	0	1	0	0
	1730	,,	1004·8	959·7	..	27·1	22·8	20·7	24·3	69	..	7·0	..	18·6	0	8	22	0	0	0	0	12	17	1	0	0	0
Coimbatore (Peelamedu Aerodrome).	0530	398	1005·9	962·1	..	23·2	21·9	21·2	25·6	89	..	6·2	..	25·6	0	20	10	0	0	0	0	6	24	0	0	0	0
	0830	,,	1007·2	962·9	..	25·4	22·6	21·2	25·2	78	..	6·3	..	30·2	0	29	1	0	0	0	0	2	28	0	0	0	0
	1130	,,	1006·3	962·6	..	28·6	23·5	20·8	24·9	63	..	6·1	..	36·1	0	29	1	0	0	0	0	3	26	1	0	0	0
	1730	,,	1004·2	960·4	..	27·3	23·0	20·7	24·7	68	..	6·6	..	38·8	0	29	1	0	0	0	0	6	22	2	0	0	0
	2330	,,	1007·2	962·7	..	23·8	22·1	21·3	25·4	86	..	3·4	..	34·6	0	28	2	0	0	0	0	7	22	1	0	0	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperatur in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed km. per hour.	Wind speed (Km.p.h.)			No. of observations									
			At mean sea level or height of given station of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction								Calm.	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Salem	0530	278	1005·6	974·5	..	24·9	23·7	23·1	28·4	90	..	6·9	..	4·8	0	0	25	0	0	0	0	0	19	5	1	**5**	**0**
	0830	,,	1006·9	975·9	−0·1	26·9	24·6	23·6	29·0	82	+8	5·9	+1·0	6·9	0	0	30	0	0	0	0	0	24	6	0	**0**	**0**
	1130	,,	1006·1	975·6	..	30·8	24·9	22·3	26·8	60	..	5·6	..	7·8	0	1	29	0	0	0	0	2	16	9	**3**	**0**	**0**
	1730	,,	1002·9	972·4	..	30·6	26·1	24·1	30·2	71	..	7·1	..	5·5	0	0	21	0	0	0	0	0	6	14	1	**9**	**0**
	2330	,,	1006·7	975·8	..	27·1	24·6	23·5	28·8	80	..	5·8	..	4·7	0	0	21	0	0	0	1	7	9	3	1	**9**	**0**
Kallakurichi	0830	127	1005·8	992·0	..	30·0	25·0	22·7	27·6	65	..	4·7	..	2·0	0	0	13	1	1	0	1	10	0	0	**0**	**17**	**0**
	1730	,,	1002·1	988·2	..	32·8	25·5	22·1	26·8	54	..	6·3	..	2·0	0	0	16	2	0	0	0	11	2	0	1	**14**	**0**
Cuddalore	0530	12	1004·4	1003·1	..	27·5	24·1	22·6	27·3	75	..	4·5	..	3·0	0	0	20	0	0	0	0	3	16	0	1	**10**	**0**
	0830	,,	1006·1	1004·8	0	30·4	25·0	22·7	27·2	63	−1	4·9	+0·6	4·8	0	0	28	1	0	0	1	2	21	2	1	**2**	**0**
	1130	,,	1005·5	1004·2	..	34·4	25·9	21·9	26·6	49	..	5·7	..	6·5	0	0	25	0	0	0	0	2	17	5	1	**5**	**0**
	1730	,,	1002·6	1001·3	..	31·8	26·1	23·6	29·0	64	..	7·2	..	5·7	0	0	22	1	0	1	9	2	7	1	1	**8**	**0**
	2330	,,	1005·6	1004·3	..	28·9	25·1	23·5	28·3	73	..	4·6	..	5·2	0	1	19	0	0	0	0	10	10	0	0	**10**	**0**
Vellore	0530	214	1004·7	980·7	..	26·1	22·8	21·3	25·2	74	..	7·4	..	4·6	0	0	20	1	0	1	0	3	4	8	3	**10**	**0**
	0830	,,	1006·0	982·2	+0·2	28·1	23·7	21·5	25·6	67	+4	6·3	+2·3	7·7	0	0	28	2	0	0	0	0	2	18	6	**2**	**0**
	1130	,,	1005·1	981·6	..	31·5	24·6	21·4	25·2	55	..	6·8	..	11·9	0	0	30	1	0	0	0	3	5	16	5	**0**	**0**
	1730	,,	1002·0	978·6	..	32·2	24·8	21·2	25·3	53	..	7·2	..	1·8	0	0	11	0	0	1	0	4	3	3	0	**19**	**0**
	2330	,,	1005·5	981·6	..	27·3	23·5	21·7	25·8	72	..	6·5	..	5·7	0	2	16	0	0	0	0	1	8	7	2	**12**	**0**
Madras	0230	16	1003·4	1001·7	..	28·2	24·8	23·0	28·7	74	..	5·6	..	10·8	0	2	26	0	0	0	0	3	19	6	0	**2**	**0**
	0530	,,	1004·0	1002·3	..	27·7	24·3	22·6	27·7	75	..	6·4	..	11·2	0	4	25	0	0	0	0	3	16	9	1	**1**	**0**
	0830	,,	1005·6	1003·9	+0·3	29·7	24·7	22·2	27·1	65	+9	6·4	+1·6	16·9	0	8	22	0	0	0	1	3	10	15	1	**0**	**0**
	1130	,,	1005·1	1003·4	..	33·3	25·2	21·3	25·5	50	..	5·4	..	20·2	0	11	19	0	0	0	0	1	9	16	4	**0**	**0**
	1730	,,	1002·2	1000·5	..	32·9	25·9	22·6	27·8	56	..	6·6	..	13·5	0	3	27	2	0	2	2	7	8	6	0	**0**	**3**
	2330	,,	1005·0	1003·3	..	28·8	25·2	23·6	29·5	74	..	5·5	..	11·4	0	3	26	0	0	0	0	12	11	4	2	**1**	**0**
Madras (Nungambakkam)	0830	6	1005·1	1004·4	..	30·2	24·4	21·6	25·9	60	..	7·2	..	6·6	0	0	30	0	0	0	0	4	15	8	3	**0**	**0**
Coastal Mysore																											
Karwar	0830	4	1007·0	1006·5	−0·2	27·0	25·6	25·1	31·7	89	..	6·9	..	8·2	0	2	24	0	4	2	8	0	8	1	3	**4**	**0**
	1730	,,	1005·1	1004·6	..	28·2	25·8	24·8	31·4	82	..	7·0	..	14·6	0	7	22	0	1	2	5	3	11	3	4	**1**	**0**
Honavar	0830	26	1007·2	1004·2	−0·8	26·1	25·0	24·6	30·8	92	+3	7·2	+0·4	3·7	0	0	18	0	1	7	1	3	4	1	1	**12**	**0**
	1730	,,	1005·3	1002·5	..	27·5	25·9	24·8	32·2	88	..	7·2	..	6·7	0	0	26	0	1	0	4	6	13	2	0	**4**	**0**
Mangalore	0230	22	1006·4	1003·9	..	25·5	24·6	24·1	30·2	93	..	6·4	..	9·7	0	3	24	0	1	6	7	1	8	4	0	**3**	**0**
	0530	,,	1006·4	1003·9	..	25·0	24·2	23·8	29·5	93	..	7·3	..	11·2	0	5	22	0	0	8	10	0	4	3	2	**3**	**0**
	0830	,,	1007·9	1005·4	−0·4	26·3	24·8	24·1	30·0	88	+1	6·7	−0·1	10·2	0	1	28	2	0	3	10	2	6	5	1	**1**	**0**
	1130	,,	1008·2	1005·7	..	27·3	25·4	24·4	30·8	83	..	6·9	..	11·4	0	3	26	0	0	1	0	10	14	4	0	**1**	**0**
	1730	,,	1006·3	1003·7	..	27·3	25·4	24·5	30·8	85	..	7·5	..	11·0	0	3	26	1	0	0	4	2	16	3	3	**1**	**0**
	2330	,,	1008·1	1005·6	..	25.7	24·7	24·3	30·2	92	..	7·0	..	10·7	0	3	26	0	0	8	8	0	10	2	1	**1**	**0**
Mangalore (Bajpe Aerodrome)	0530	103	1006·8	995·2	..	24·1	23·7	23·4	29·2	97	..	7·3	..	6·1	0	1	16	1	0	6	4	1	1	4	0	13	**0**
	0830	,,	1008·1	996·5	..	25·5	24·4	23·8	29·7	91	..	6·9	..	9·4	0	•2	22	1	0	6	9	1	6	6	1	**6**	**0**
	1730	,,	1006·5	994·9	..	26·1	24·5	23·7	29·4	88	..	7·3	..	11·3	0	3	20	1	0	2	2	3	7	8	0	**7**	**0**
Mysore (North)																											
Bidar	0830	664	1004·0	931·8	..	25·9	22·3	20·5	23·5	73	+2	6·3	+1·7	22·3	0	19	11	0	0	0	0	0	6	22	2	**0**	**0**
	1730	,,	998·4	927·8	..	31·4	22·2	17·1	19·3	49	..	6·9	..	17·4	0	10	20	3	1	1	1	3	6	7	8	**0**	**0**
Gulbarga	0830	458	1005·0	954·6	+0·3	27·1	22·8	20·6	24·6	69	−2	6·3	+1·5	16·8	0	8	22	1	0	0	0	0	8	5	16	**0**	**0**
	1730	,,	999·1	949·9	..	33·1	23·1	17 8	20·9	44	..	7·0	..	17·5	0	8	22	2	1	1	2	1	9	7	7	**0**	**0**
Bijapur	0830	594	1005·4	940.3	+0·3	25·7	23·1	21·9	25·9	80	+7	6·3	+1·3	13·7	0	0	30	1	0	0	0	0	11	15	3	**0**	**0**
	1730	,,	999·8	936·2	..	31·1	24·0	21·1	24·4	59	..	6·2	..	9·9	0	0	26	1	0	0	0	2	8	10	5	**4**	**0**
Belgaum	0830	781	..	..	..	22·9	21·5	20·8	24·7	88	+2	..	..	2·9	0	0	21	1	0	0	1	5	8	3	3	**9**	**0**
	1730	,,	..	..	..	25·2	21·9	20·2	24 1	75	..	..	..	5·1	0	0	24	2	0	1	1	2	5	9	4	**6**	**0**
Belgaum (C.T.O.)	0830	753	1006·2	924·1	+0·1	23·8	21·7	20·8	24·8	83	0	6·0 (b)	−0·4	6·5 (b)	0	0	28	0	0	0	0	0	9	14	5	**2**	**0**
	1730	,,	1003·6	922·1	..	25·2	21·9	20·3	22·5	75	..	7·0	..	15·2	0	0	29	0	0	0	0	0	6	22	1	**0**	**0**
Belgaum (Sambre Aerodrome)	0530	761	1005·3	921·9	..	21·6	20·8	20·5	23·9	93	..	6·5	..	6·7	0	1	24	0	0	0	0	0	4	21	0	**5**	**0**
	0830	,,	1006·2	923·3	..	23·8	21·9	20·8	24·8	84	..	6·3	..	9·2	0	1	29	0	0	0	0	0	7	20	3	**0**	**0**
	1130	,,	1005·0	923·1	..	27·3	22·6	20·4	23·9	67	..	6·0	..	20·3	0	10	20	1	0	0	0	1	7	18	3	**0**	**0**
	1730	,,	1003·3	920·9	..	25·2	22·1	20.8	24·4	77	..	6·2	..	17·8	0	8	22	0	0	0	0	2	7	19	2	**0**	**0**
Gadag	0830	650	1006·4	935·2	0	24·8	23·4	22·8	27·7	89	+8	6·5	+1.1	11·7	0	1	29	0	0	0	0	1	6	22	1	**0**	**0**
	1730	,,	1002·6	932·3	..	27·4	24·3	22·9	28·2	78	..	6·1	..	12·8	0	1	29	0	0	0	0	2	7	19	2	**0**	**0**
Gadag (P.B.O.)	0530	661	1005·1	932·5	..	22·8	21·7	21.2	25·2	91	..	6·4	..	15·9	0	6	24	0	0	0	0	0	19	11	0	**0**	**0**
	0830	,,	1006·1	933·9	..	25·0	22·6	21·6	25 5	82	..	6·7	..	14·6	0	3	27	0	0	0	0	0	20	10	0	**0**	**0**
	1130	,,	1004·9	933·6	..	28·7	23·5	21·6	25·3	66	.	6·0	..	13·8	0	5	23	0	0	0	0	1	15	12	0	**2**	**0**
	1730	,,	1002·6	931·1	..	27·1	22·8	21·2	24·5	71	..	6·8	..	18·7	0	10	20	0	0	0	0	0	19	10	1	**0**	**0**
	2330	,,	1006·3	933·7	..	23 6	22.0	21·4	25·2	87	..	5·4	..	20·3	0	13	17	0	0	0	0	2	21	7	0	**0**	**0**

(b) Mean of 29 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km. p.h.).			No. of observations									
			At mean sea level or hight in g.p.m of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (North)—*Contd.*																											
Raichur	0830	400	1005·8	961.6	+0·5	26·9	24·2	22·9	27·9	79	+10	5·5	+1·5	14·6	0	4	26	0	0	0	0	0	8	15	7	0	0
	1730	„	1000·3	957·0	..	32·9	25·4	21·6	26·3	54	..	6·1	..	13·6	0	5	25	2	0	0	0	1	9	11	7	0	0
Mysore (South)																											
Bellary	0830	449	1005·7	956·2	0	26·7	24·8	24·2	29·7	86	+25	5·2	—0·1	8·4	0	1	23	0	1	0	0	0	8	0	15	6	0
	1730	„	1000 9	952·6	..	31.0	27·3	25·8	33·4	75	..	5.1	..	9·9	0	1	29	0	0	0	0	1	19	2	8	0	0
Chitaldrug	0830	733	1006·4	926·1	0	23·4	21·2	20·1	23·6	81	+4	6·1	—0·1	10·4	0	0	29	0	0	0	0	0	7	22	0	1	0
	1730	„	1002·9	923·8	..	27·1	22·2	19.6	22·9	64	..	6·5	..	13·1	0	2	28	0	0	0	0	0	6	24	0	0	0
Shimoga	0830	571	1007·0	944·1	..	24·3	22·1	21·2	25·0	83	..	6·8	..	2·2	0	0	15	0	0	0	1	5	6	3	0	15	0
	1730	„	1004·3	941·9	..	26·1	22·9	21·6	25·8	76	..	6·9	..	6·2	0	0	28	0	0	0	0	8	15	4	1	2	0
Balehonnur	0830	..	..	..	..	20·9	20·3	19·9	23·0	94	+2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1483·6	903·3	..	21·2	20·0	19·6	22·5	90	+8	7·1	+0·9	11·7	0	0	30	0	0	0	0	0	9	21	0	0	0
	1730	„	1469·6	901 5	..	22·9	20·8	19·9	22·7	83	..	7·2	..	13·7	0	2	28	0	0	0	0	0	12	18	0	0	0
Mysore	0830	767	1007·9	923·9	+0·2	22·9	20·9	19·8	23·4	83	+5	4·9	+1·3	13·1	0	1	29	3	0	0	0	3	18	1	5	0	0
	1730	„	1005·0	921·7	..	25·3	21·4	19·5	22·7	71	..	5·0	..	18·2	0	9	20	0	0	0	0	3	17	9	0	1	0
Bangalore (Central Observatory)	0230	921	1465·4	905·6	..	20·7	19·8	19·4	22·5	92	..	6·6	..	15·2	0	3	27	0	0	0	0	0	12	17	1	0	0
	0830	„	1482.7	907·1	0	22·1	20·4	19·6	22·8	86	+6	7·5	+1·2	17·2	0	8	22	1	0	0	0	0	11	16	2	0	0
	1130	„	1486·6	907·0	..	25·0	21·2	19·3	23·7	71	..	7·0	..	16·8	0	3	27	0	0	0	0	0	7	19	4	0	0
	1730	„	1465·2	904·8	..	25·0	21·6	19·9	22·7	75	..	7·3	..	15·5	0	1	29	0	1	0	0	1	8	18	2	0	0
Bangalore (Aerodrome)	0530	897	1466·6	908·2	..	20·7	19·8	19·4	22·6	92	..	7·0	..	18.7	0	9	21	0	0	0	0	0	10	19	1	0	0
	0830	„	1483·1	909·6	..	22·5	20·5	19·5	22·7	83	..	6·9	..	21·2	0	19	11	0	0	0	0	0	8	19	3	0	0
	1130	„	1488·5	909·5	..	25·7	21·2	19·1	22·0	67	..	6 8	..	24.0	0	22	8	0	0	0	0	0	6	22	2	0	0
	1730	„	1465·6	907·2	..	25·5	21·3	19·1	21·3	69	..	7·0	..	22·6	0	20	10	0	0	0	0	0	7	20	3	0	0
	2330	„	1481·9	909·6	..	21·9	20·3	19·5	22·6	86	..	5·6		18·8	0	12	17	0	0	0	0	0	10	19	0	1	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1007·7	1007·2	..	24·6	23·9	23·7	29·2	94	..	7·3	..	9.3	0	2	27	2	5	14	2	0	2	1	3	1	0
	0830	„	1009·1	1008·6	+0·3	25·5	24·5	24·0	29·9	91	+2	7·0	+0·2	8·5	0	1	29	1	5	13	3	1	4	1	2	0	0
	1130	„	1009·3	1008·8	..	27·3	25·6	24·9	31·5	87	..	7·3	..	10·4	0	1	28	3	2	4	1	5	8	3	3	1	0
	1730	„	1007·2	1006·7	..	27·4	25 3	24·5	30·4	84	..	7·0	..	11·2	0	1	29	1	2	1	1	4	6	7	8	0	0
	2330	„	1009·1	1008·6	..	25·2	24·3	23·9	29·8	93	..	7·3	..	10·7	0	0	28	4	11	7	0	0	1	1	4	2	0
Palghat	0830	97	1008·9	997·9	..	25·0	24·0	23 3	29·1	92	..	6·5	..	13·3	0	2	28	0	0	0	0	0	3	25	2	0	0
	1730	„	1006·5	995·6	..	26·3	24·8	23·5	30·5	84	..	7·1	..	15·8	0	3	27	0	0	0	0	0	2	27	1	0	0
Fort Cochin	0830	3	1009·5	1009·2	—0·3	26·4	24·9	24·2	30·2	89	+3	7·6	+1·2	6·3	0	3	15	1	3	3	2	0	3	4	2	12	0
	1730	„	1006·9	1006·6	..	27·5	25·4	24·3	30·7	84	..	7·6	..	10·5	0	3	19	0	1	0	0	0	6	9	6	8	0
Cochin (Naval Air Station)	0230	3	1008·6	1008·3	..	25·2	24·4	24·0	30·1	93	..	6·9	..	5·6	0	0	20	2	0	4	7	0	3	3	1	10	0
	0530	„	1008·4	1008·1	..	25·1	24·4	24·0	30·2	94	..	7.3	..	8·1	0	1	26	0	6	9	4	1	0	7	0	3	0
	0830	„	1009·4	1009·1	..	25·9	24·6	24·0	29.7	89	..	7·1	...	10·2	0	4	21	2	3	4	7	1	0	7	1	5	0
	1130	„	1009·7	1009·4	..	27·3	25·2	24.3	30·3	84	..	7·2	..	10·9	0	4	24	2	1	3	1	3	9	6	3	2	0
	1730		1007·8	1007·5	..	27·6	25·2	24·1	30·0	81	..	7·2	..	11·2	0	3	23	1	0	0	1	2	5	10	7	4	0
	2330	„	1009·6	1009·3	..	25·5	24·6	24·2	30·1	92	..	6·8	..	5·0	0	0	19	0	1	7	3	2	0	5	1	11	0
Alleppey	0830	4	1009·3	1008·9	..	26·7	25·5	34·9	31·7	90	..	7·0	..	12·1	0	5	25	2	3	3	1	0	4	9	8	0	0
	1730	„	1007·0	1006 6	..	27·7	25·8	25·0	30·0	86	..	6·9	..	19·2	0	12	18	2	1	1	0	0	2	14	10	0	0
Punalur	0830	34	1009·7	1005·8	..	25·5	24·5	24·1	30·2	95	..	6·0	..	0·8	0	0	8	0	2	0	1	0	3	0	2	22	0
	1730	„	1007·3	1003·5	..	28·1	25·3	24·1	30·2	79	..	6·2	..	3·7	0	0	25	2	1	0	0	1	10	2	9	5	0
Trivandrum	0230	64	1008·0	1000·7	..	24·7	24·2	24·0	29·8	96	..	6·4	..	7·7	0	1	28	13	1	0	1	0	1	4	9	1	0
	0530	„	1008 0	1000.7	..	24·3	23·9	23·7	29·4	97	..	6·6	..	6·3	0	1	24	9	5	2	1	0	1	1	6	5	0
	0830	„	1009·6	1002·3	+0·1	25·5	24·6	24·2	30·2	93	+7	7·0	+0·4	8·2	0	0	30	4	4	0	0	0	1	1	20	0	0
	1130	„	1009·3	1002·1	..	27·7	25·3	24·2	30·4	82	..	7·2	..	13·3	0	4	26	2	2	0	0	0	1	8	17	0	0
	1730	„	1007·3	1000 0	..	27·4	25·2	24·2	30·3	83	..	6·0	..	11·1	0	1	28	2	0	0	0	0	2	10	15	1	0
	2330	„	1009·5	1002·2	..	25·0	24·3	24·1	29·8	95	..	5·6	..	6·9	0	0	27	6	3	2	1	0	1	3	11	3	0
Trivandrum (Aerodrome)	0830	8	1009·5	1008·6	..	26·4	24·7	24·1	29·8	87	..	6·4	..	9·8	0	0	28	8	3	1	0	0	2	4	10	2	0
Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1490·4	858·3	..	22·4	19·7	18·3	20·9	78	..	7·5	..	..	0	0	29	3	1	2	2	0	0	2	19	1	0
	1730	„	1477·6	857·6	..	21·7	19·9	18·9	22·1	86	..	7·2	..	..	0	0	26	3	0	2	0	3	0	0	18	4	0
Aijal*	0830	1097																									
	1730	„																									
Shillong	0830	1500	1453·0	845·6	+0·7	20·9	18·7	17·4	19·9	81	+3	6·3	—0·3	2·4	0	0	10	0	0	0	0	1	7	2	0	20	0
	1730	„	1427·9	843·1	..	20·8	18·8	17·6	20·3	82	..	6·8	..	2·5	0	0	12	0	0	0	0	3	8	1	0	18	0
Cherrapunji	0830	1313	1451·6	863·8	+0·2	20·0	19·3	18·8	22·0	93	+5	5·8	—1·4	4·2	0	0	30	0	0	0	0	0	30	0	0		0
	1730	„	1428·8	861·2	..	20·5	19·7	19·0	22·3	92	..	5·8	..	4·3	0	0	30	0	0	0	0	0	30	0	0	0	0

(R) Register not received.

(g) Mean of 24 days.

*Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Mean wind speed, km. per hour.	Wind speed (Km.p.h.): 62 or more.	Wind speed (Km.p.h.): 20 to 61.	Wind speed (Km.p.h.): 1 to 19.	No. of observations. Wind direction. N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations excluding Kashmir—*Contd.*																											
Darjiling (Raj Bhawan)	0830	2128	1466·8	787·6	+2·5	17·3	16.1	15·4	17·7	89	+1	7·0	+0·1	0·2	0	0	2	0	0	0	0	0	0	2	0	28	0
	1730	,,	1440·4	785·1	..	17·3	16·2	15·5	17·7	89	..	7·1	..	0·6	0	0	5	1	0	0	0	0	2	2	0	25	0
Kalimpong	0830	1209	1478.6	877·1	+3·8	21·3	19·5	17·9	21·6	83	−5	3·6	−2·6	2·9	0	0	29	0	0	0	0	0	0	0	29	1	0
	1730	,,	1463·8	875·5	..	22·3	19·9	18·4	21·3	80	..	4·0	..	3·0	0	0	30	0	0	0	30	0	0	0	0	0	0
Katmandu	0830	1337	1458·4	862·0	..	24·1	20·0	17·8	20·1	68	−5	4·6	−0·8	0·9	0	0	9	2	3	1	1	0	1	0	1	21	0
	1730	,,	1427·9	858·9	..	25·9	20·8	18·1	21·0	63	..	4·7	..	2·1	0	0	11	2	0	3	0	0	3	0	3	19	0
Mukteswar (Kumaon)	0830	2311	3110·9	769·6	+0·5	16·7	12·8	9·8	12·3	68	0	3·3	−0·8	10·3	0	3	23	1	2	3	0	0	1	11	8	4	0
	1730	,,	3098·1	767·7	..	19·6	14·8	11·6	13·7	63	..	3·6	..	18·8	0	14	16	0	1	2	1	0	3	14	9	0	0
Naini Tal	0830	1953	1435·0	800·8	..	19·4	14·9	11·6	14·2	62	..	4·1	..	4·8	0	0	20	2	6	6	2	0	0	3	1	10	0
	1730	,,	1413·3	799 3	..	21·4	16·1	12·6	15·2	60	..	2·8	..	5·1	0	0	24	6	4	2	1	1	0	9	1	6	0
Tapoban	0830					16·8	12·7	9·1	12·1	61																	
Badrinath (R)	0830																										
Lokpal	0830					1·4	0·8	0·1	6·2	90																	
Mussoorie	0830	2042	1431·3	792·4	−1·0	19·6	15·7	13·3	15·2	69	+1	2·6	−1·4	3·3	0	1	20	3	1	0	1	6	7	0	3	9	0
	1730	,,	1412·9	791·0		20·7	16·7	14·4	16·5	69		4·8		3·4	0	1	23	4	2	0	2	7	5	1	3	6	0
Simla	0830	2202	1431·2	778·2	0	20·0	13·2	8·5	10·6	46	−9	2·2	−1·3	2·8	0	0	28	3	2	6	6	5	2	2	2	2	0
	1730	,,	1417·5	777·0	..	20·5	14·2	9·6	12·0	52	..	4·4	..	3·7	0	0	29	5	2	1	2	4	2	2	11	1	0
Dalhousie	0830	1959	1392·7	796·2	..	19·1	14·2	10·6	12·7	61	..	1·5	..	1·2	0	0	3	0	3	0	0	0	0	0	0	27	0
	1730	,,	1397·2	797·2	..	22·9	16·6	12·6	14·0	55	..	2·3	..	0·7	0	0	3	0	3	0	0	0	0	0	0	27	0
Dharamshala	0830	1212	1475·7	875·6	..	25·9	18·1	13·2	15.4	47	..	2·3	..	2·1	0	0	21	2	5	4	1	1	3	2	3	9	0
	1730	,,	1467·4	875·0	..	27·3	19·2	14·1	16·3	46	..	3·7	..	3·6	0	0	28	2	3	0	1	0	14	5	3	2	0
Abu	0830	1195	1455·1	875.6	+0·6	23·0	19·1	16·9	19·3	71	0	3.5	−1·0					0	0	0	1	7	9	3	0	10	0
	1730	,,	1443·5	873·3	..	27·7	20·8	16·7	18·4	54	..	2·5	..					0	1	0	0	7	6	4	0	12	0
Pachmarhi	0830	1075	1459·7	888·2	+0·7	26·1	20·3	17·1	19·5	60	−8	3·5	−1·4	12·1	0	2	27	0	0	1	0	1	0	20	7	1	0
	1730	,,	1435·8	885·1	..	30·8	21·3	15·6	18·5	45	..	4·0	..	10·1	0	2	26	2	0	2	0	0	1	20	3	2	0
Mahabaleshwar	0830	1382	1476·5	859·6	+0·1	19·3	18·9	18·5	21·6	96	+2	7·4	+0·3	10·8	0	1	29	2	0	0	0	1	8	10	9	0	0
	1730	,,	1454·0	857·3	..	21·1	20·0	19·4	22·6	91	..	7·2	..	10·9	0	0	30	1	0	0	0	0	12	5	12	0	0
Nandi Hills	0830	..	..	..	..	17·8	17.2	17·1	19·3	97	..	7·3	..	21·7	0	0	30	1	2	0	0	1	12	11	3	0	0
Mercara	0830	1152	1487·4	884·0	+0·5	19·2	18·9	18·7	21.7	94	+1	6·1	−0·9	7.2	0	0	30	0	0	1	0	0	4	14	11	0	0
	1730	,,	1471·6	882·2	..	19·9	19·6	19.4	22·6	97	..	6·6	..	7.8	0	0	30	0	0	1	0	0	3	14	12	0	0
Kodaikanal	0830	2343	3142·9	770·1	+1·0	15·4	12·9	11·1	13·3	77	+5	6·1	+0·9	10·4	0	4	23	1	0	0	0	1	2	7	15	3	1
	1130	,,	3148·7	770·2	..	17·4	14·4	12·4	14·5	74	..	6·6	..	10·1	0	3	25	1	3	0	1	1	3	8	11	2	0
	1730	,,	3124·9	768·5	..	15·0	13·7	12·8	14·9	87	..	7·5	..	12·6	0	5	23	0	0	0	0	0	3	11	14	2	0
Ootacamund	0830	2249	1488·7	778·1	+0·5	14·6	13·3	12·8	14·5	88	+4	5·8	−0·4	4·0	0	0	20	0	0	0	0	1	13	6	0	10	0
	1730	,,	1470·6	776·6	..	15·3	13·8	13·1	14·8	86	..	6·8	..	5·0	0	0	24	0	0	0	0	1	17	6	0	6	0
Coonoor	0830	1747	1486·6	825·2	..	19·6	16·2	14·3	16·3	72	+8	5·7	0	4·6	0	0	20	1	0	0	3	3	4	2	7	10	0
Sikkim. Lachen	0830	..	..	..	..	13·5	12·6	12·2	14·1	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet Yatung	0830	..	..	..	..	13·9	13·3	12.5	14·9	93	+7	0·5	−3·7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa	0830	3685	3064·2	651·5	..	16·3	11·5	8·3	10·8	59		4·5	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Ceylon. Colombo	0830	7	1010·0	1009·1	+0·1	27·3	25·1	23·9	30·1	83	−1	7·1	+0·7	12·2	0	0	30	0	0	0	1	5	16	8	0	0	0
	1730	,,	1007·8	1007·0	..	27·3	24·9	23·5	29·4	81	..	7·0	..	13·0	0	0	0	0	0	1	0	1	21	7	0	0	0
Trincomalee	0830	3	1007·5	1007·1	+0·7	28·8	24·9	22·9	28·3	71	−6	5·4	+1·2	23.9	0	24	6	0	0	0	0	0	30	0	0	0	0
	1730	,,	1005·0	1004·6	..	31·6	25·1	22·0	26·8	57	..	5·3	..	23·8	0	28	2	0	0	0	0	0	30	0	0	0	0
Batticoloa	0830	3	1007·9	1007·6	..	29·1	23·8	20·7	25·3	62	..	4·9	..	5·9	0	2	22	0	0	0	4	6	4	5	5	6	0
	1730	,,	1005·3	1005·0	..	30·4	25·2	22·4	27·2	63	..	5·4	..	13·9	0	5	24	0	2	7	11	3	0	4	2	1	0
Hambantota	0830	15	1009·3	1007·6	+0·9	27·3	25·4	24·5	31·0	85	−1	5·3	+1·0	20·9	0	21	9	0	0	0	0	1	5	24	0	0	0
	1730	,,	1006·8	1005·0	..	28·1	25·3	23·8	30·3	79	..	5·1	..	28·6	0	28	2	0	0	0	1	0	6	22	1	0	0
Mannar	0830	4	1008·0	1007·6	..	29·3	26·3	24·6	31·7	77	..	6.1	..	17·3	0	9	21	0	0	0	0	3	27	0	0	0	0
	1730	,,	1005·0	1005·5	..	29·3	26·2	24·7	31·4	76	..	6·3	..	20·5	0	21	9	0	0	0	0	4	26	0	0	0	0
Hydrometeorological Observatories Damodar Catchment																											
Bokaro	0830	239	1000·1	973·9	..	31·3	24·9	21.7	26·3	59	..	4.4	..	6·3	0	0	28	2	0	1	10	2	10	3	0	2	0
	1730	,,	996·0	970.2	..	34·0	24·4	18·9	22·8	48	..	5·7	..	8·3	0	0	28	2	0	2	9	1	5	3	6	2	0
Hazaribagh	0830	615	999·0	933·2	..	30·8	23·3	20.0	23·1	53	..	2·5	..	9·5	0	1	26	0	0	1	1	2	7	13	3	3	0
	1730	,,	996·5	930·6	..	29·8	22·7	19·1	22·4	54	..	2·4	..	14·2	0	9	21	1	0	0	1	1	7	18	2	0	0
Tilaiya	0830	..	..	..	..	31·1	24·0	19·9	24·0	55	..	4·1	..	7·7	0	1	26	1	0	8	2	0	2	12	2	3	0
	1730	..	..	..	..	34·3	23·8	17·7	20·7	45	..	5·1	..	7·3	0	0	28	2	1	4	4	5	1	5	6	2	0

(R) Register not received

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Wind speed (Km.p.h.)				No. of observations.										
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed, km. per hour.	62 or more.	20 to 61.	1 to 19.	Wind direction.										
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories (Contd.)																											
Damodar Catchment —*Contd.*	0830	..	..	..	..	31·8	24·4	20·5	24·8	54	..	5·0	..	5·8	0	0	27	0	0	1	6	1	3	9	7	3	0
Ramgarh	1730	..	..	..	..	33·7	23·7	17·7	21·0	47	..	6·1	..	5.3	0	0	26	1	0	3	5	1	4	7	5	4	0
Panchet Hills	0830	..	..	..	..	31·5	25·9	23·2	28.9	63	..	5·0	..	5·0	0	0	30	0	1	10	1	4	11	2	1	0	0
	1730	..	..	..	..	32·9	25·0	20·9	25·2	54	..	6·8	..	7·5	0	2	27	1	3	11	2	1	9	1	1	1	0
Durgapur	0830	..	..	..	..	32·2	26·6	23·8	30·2	63	..	3·2	..	18·6	0	11	18	0	4	10	7	2	3	1	2	1	0
	1730	..	..	..	..	33.8	26·1	22·4	27·5	53	..	2·9	..	19·1	0	11	16	0	5	7	8	0	1	3	3	3	0
Mahanadi Catchment																											
Baramul	0830	64	1002·2	995·1	..	30·4	25·9	23·8	29·7	69	..	4.6	..	3 0	0	0	13	0	1	0	3	3	5	0	1	17	0
	1730	,,	998·2	991·2	..	34·6	25·8	21·3	26·0	50	..	5·5	..	2·6	0	0	13	2	3	0	2	1	4	1	0	17	0
Hirakud	0830	159	1001·4	983·9	..	31·3	25·1	22·0	26·7	60	..	3·9	..	4·4	0	0	23	0	0	3	2	2	11	5	0	7	0
	1730	,,	996·7	979·5	..	35.9	25·8	20·9	25·0	45	..	4·8	..	4·9	0	1	18	0	0	2	2	2	3	7	3	11	0
Khijrawan	0830	..	..	..	..	30.9	24·1	20·6	24·4	58	..	3·1	..	9·9	0	3	20	0	0	1	0	0	14	8	0	7	0
	1730	..	..	..	..	32·2	24·0	19·2	23·1	51	..	3·0	..	9·0	0	3	22	0	2	1	0	0	13	9	0	5	0
Sonepur	0830	..	..	..	..	31.4	27·4	25·6	25·5	73	..	..	..	11·8	0	1	29	1	4	3	1	0	18	3	0	0	0
Ginabahar	0830	..	..	..	..	31·2	25·4	22·2	27·7	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Narbada Catchment																											
Punasa	0830	..	..	..	..	29·9	24·4	21·7	27.7	63	..	4.2	..	11·1	0	3	26	1	1	0	0	0	13	13	1	1	0
	1730	..	..	..	..	36·9	24·3	16·9	20·0	37	..	(g) 4·3	..	7·6	0	0	27	0	2	1	0	3	8	11	2	3	0
Bagra Tawa	0830	..	..	..	..	30·9	23·9	20·1	24·0	56	..	2·6	..	8·8	0	0	30	0	2	0	1	3	16	8	0	0	0
	1730	..	..	..	..	35·8	23·4	15·7	18·7	37	..	2·9	..	6·5	0	0	30	4	0	1	2	2	10	6	5	0	0
Thikri	0830	..	..	..	..	30·0	26·5	25·1	31·8	76	..	3·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapti Catchment																											
Nandurbar	0830	..	..	..	..	27·8	24·7	22·7	28·5	74	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	27.3	26·1	25·4	32·7	90	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..
Dharoi	0830	..	..	..	..	28·6	24·8	23·1	28·1	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	37·1	25·0	18·6	21·8	36	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim	0830	..	..	..	..	19·1	15·0	12·4	14·7	65	..	2·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·1	15·2	12·1	14·6	61	..	1·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri	0830	..	..	..	..	25·9	19·8	16·4	18·6	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	30·9	22·4	18·1	20·8	47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment							(b)	(b)	(b)	(b)																	
Gorkha	0830	..	..	..	..	22·9	20·9	20·1	23·3	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·0	21·3	18·8	21·8	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara	0830	..	..	..	..	25·4	21·7	19·7	23·3	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·2	22·4	20·7	24·4	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	25·5	22·3	20·8	24·7	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	27·5	21·7	18·6	21·7	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh	0830	..	..	..	..	22·8	18·9	16·7	19·1	68	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	(o) 23·4	19·4	(o) 16·2	(o) 18·4	(o) 64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment											..																
Dandeldhura	0830	..	..	..	..	18·9	15·3	12·8	15·0	69		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·2	17·3	14·4	16·5	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari	0830	..	..	..	..	20·4	16·4	14·1	16·1	67	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·6	16·0	13·1	15·2	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sallyana	0830	..	..	..	..	23·1	17·8	14·6	16·6	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	23·7	17·6	13·7	15·7	53	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal	0830	..	..	..	..	29·3	(d) 25·7	(d) 24·3	(d) 30·0	(d) 73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	32·1	(b) 25·5	(b) 22·5	(b) 27·2	(b) 57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1443·3	861·8	..	22·8	19·3	17·3	19·8	72	..	4·3	..	0·6	0	0	7	2	3	1	0	0	1	0	0	23	0
	1130	,,	1437·7	861·2	..	26·6	20·3	16·9	19·2	56	..	4·4	..	1·6	0	0	13	4	2	3	1	0	0	1	2	17	0
	1730	,,	1414·0	858·9	..	25·2	20·4	17·8	20·4	64	..	4·6	..	1·7	0	0	12	3	0	4	1	0	1	0	3	18	0
Kosi Catchment																											
Chautara	0830	..	..	..	..	21·1	18·7	17·3	20·0	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	24·1	19·2	16·6	19·1	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldunga	0830	..	..	..	..	19·7	17·7	16·7	19·0	83	..	5·0	..	1·1	0	0	11	0	0	2	1	2	4	2	0	19	0
	1130	..	..	..	..	21·2	18·4	16·9	19·4	77	..	5·8	..	2·4	0	0	17	1	0	0	1	1	8	4	2	13	0
	1730	..	..	..	..	19·5	17·5	16·4	18·7	83	..	6·1	..	3·8	0	0	21	0	0	1	1	1	6	12	0	9	0
Barahkshetra	0830	146	1001·7	985·4	..	28·6	24·5	22·7	27·4	72	..	5·1	..	3·8	0	0	13	0	1	0	1	3	2	5	1	17	0
	1130	,,	1000·4	984·6	..	31·1	25·5	22·7	28·1	63	..	6·5	..	12·6	0	2	26	0	0	4	0	0	11	13	0	2	0
	1730	,,	997·5	981·4	..	31·4	25·7	23.2	28·2	62	..	5·6	..	8·4	0	1	21	0	0	1	0	0	9	12	0	8	0

(b) Mean of 29 days.

(d) Mean of 27 days.

(g) Mean of 24 days.

(o) Mean of 16 days.

Division and Station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Km. Mean wind speed, per hour.	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW		Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES—*Contd.*																											
Kosi Catchment(*Contd.*)																											
Angbung	0830	..	..	..	..	21·8	20·8	20·4	23·9	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung	0830	..	..	..	..	19·6	17·9	17·1	19·5	86	..	6·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	21·8	18·8	17·6	19·9	77	..	6·7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·8	18·0	16·5	18·8	77	..	6.6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok	0830	..	..	..	..	20·9	19·3	18·2	21·2	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallungchung Gola(R)																											
Bhojpur	0830	..	..	..	..	20·3	18·6 (c)	17·8 (c)	20·3 (c)	85 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·3	17·9 (f)	16·7 (f)	19·0 (f)	80 (f)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur	0830	..	..	..	..	21·9	19·4	18·1	21·1	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730																										
Tista Catchment*																											
Gangtok	0830	1812	1446·0	814·9	..	18·3	17·3	16·7	19·0	89	..	6·5	..	11·2	0	0	27	1	1	0	3	4	10	6	2	3	0
	1130	,,	1440·6	814·5	..	20·2	18·3	17·5	19·8	84	..	6·6	..	6·1	0	0	29	1	0	0	1	7	13	7	0	1	0
	1730	,,	1418·0	812·4	..	19·2	17·9	17·2	19·7	89	..	6·5	..	6·3	0	2	24	4	4	1	4	6	4	3	0	4	0
Gyzing	0830	..	..	..	..	20·6	19·1	18·3	21·1	87	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·6	18·5	17·6	20·0	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R) Register not received. (c) Mean of 28 days. (f) Mean of 25 days.

*Data not reliable.

MONTHLY MEANS OF UPPER WINDS, JUNE, 1957

During the month, observations of velocity and direction of upper winds were made at 53 stations in India. Out of these, 43 stations recorded observations by means of pilot balloons only and the remaining 10 stations made some observations by means of radiowind method and the other observations by the pilot balloon method. Particulars of these stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data up to 9·0 km. a.m.s.l. are given under Table IV and data above 9·0 km. a.m.s.l. under Table V.

In Tables IV and V :

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0·15 km. a.g., 0·3, 0·6, 0·9, 1·5, 2·1, 3·0, 3·6, 4·5, 5·4, 6·0, 7·2, 9·0, 10·5, 12·0 14·1, 16·2, 18·0, 21·0, 24·0, 27·0, 30·0, 33·0 and 36·0 km. a.m.s.l. Of these the levels 1·5, 3·0 5·4, 7·2, 9·0, 12·0, 14·1 and 16·2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

Station	Lat. N	Long. E	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November, 1951	0530	1730	2330	
Ahmedabad	23°04′	72°38′	60	19th May, 1928	0530	1730	2330	
Amausi	26°45′	80°53′	132	20th November, 1950	0530	1730	2330	
Ambala	30°23′	76°46′	283	1st April, 1941	0530	1730	2330	
Anantapur	14°41′	77°37′	364	12th February, 1946	0530	1730	2330	
Asansol	23°41′	86°59′	136	29th May, 1942	0530	1730	2330	
Baghdogra	26°38′	88°19′	140	7th June, 1953	0530	1730	2330	
Bairagarh	23°17′	77°21′	532	26th February, 1943	0530	1730	2330	
Bamrauli	25°27′	81°44′	103	28th February, 1930	0530*	1130	1730*	2330
Bangalore	12°58′	77°35′	936	19th May, 1915	0530	1730	2330	
Bareilly	28°22′	79°24′	180	12th January, 1943	0530	1730		
Begumpet	17°27′	78°28′	553	1st September, 1929	0530	1730	2330	
Bhagalpur	25°14′	86°57′	61	19th May, 1950	0530	1730		
Bhubaneshwar	20°15′	85°50′	55	5th December, 1942	0530	1730	2330	
Bhuj	23°15′	69°48′	111	14th September, 1937	0530	1730	2330	
Bikaner	28°00′	73°18′	229	18th October, 1945	0530	1730	2330	
Chikalthana	19°51′	75°24′	583	7th October, 1951	0530	1730	2330	
Cochin†	09°56′	76°14′	3	16th March, 1942	0530	1730	2330	
Darjeeling	27°03′	88°16′	2115	21st May, 1956	0530	1730		
Dum Dum	22°39′	88°27′	19	14th May, 1921	0530*	1130	1730*	2330
Gadag	15°25′	75°38′	650	3rd May, 1943	0530	1730	2330	
Gannavaram	16°32′	80°48′	24	8th April, 1942	0530	1730	2330	
Gauhati	26°05′	91°43′	51	12th March, 1955	0530*	1130	1730*	2330
Gaya	24°45′	84°57′	119	19th March, 1937	0530	1730	2330	
Gopalpur	19°16′	84°53′	24	15th February, 1945	0530	1730	2330	
Gorakhpur	26°45′	83°22′	83	5th January, 1943	0530	1730		
Gwalior	26°14′	78°15′	219	7th May, 1938	0530	1730	2330	
Imphal	24°51′	93°58′	805	8th March, 1952	0530	1730	2330	
Jabalpur	23°10′	79°57′	402	30th July, 1928	0530	1730	2330	
Jagdalpur	19°05′	82°02′	562	25th March, 1948	0530	1730	2330	
Jaipur	26°49′	75°48′	404	6th June, 1953	0530	1730		
Jamshedpur	22°49′	86°11′	147	23rd July, 1942	0530	1730		
Jharsuguda	21°55′	84°05′	234	1st May, 1944	0530	1730	2330	
Jodhpur	26°18′	73°01′	229	15th October, 1934	0530*	1130	1730*	2330
Madras	13°00′	80°11′	29	8th April, 1926	0530*	1130	1730*	2330
Mangalore	12°52′	74°51′	40	4th June, 1928	0530	1730	2330	
Minicoy	08°18′	73°00′	16	14th April, 1941	0530	1730	2330	
Mohanbari	26°29′	95°01′	110	1st June, 1948	0530	1730	2330	
Mussoorie	30°27′	78°05′	2050	3rd November, 1955	0530	1730		
Nagpur	21°06′	79°03′	316	23rd April, 1943	0530*	1130	1730*	2330
Nanpara	27°50′	81°30′	141	23rd April, 1957	0530	1730		
New Delhi	28°35′	77°12′	227	20th October, 1935	0530*	1130	1730*	2330
Poona	18°32′	73°51′	593	5th January, 1925	0530	1730	2330	
Port Blair	11°40′	92°43′	93	29th October, 1945	0530*	1130	1730*	2330
Raipur	21°14′	81°39′	308	15th July, 1944	0530	1730	2330	
Santa Cruz	19°07′	72°51′	12	14th May, 1933	0530*	1130	1730*	2330
Tezpur	26°37′	92°47′	79	12th August, 1932	0530	1730	2330	
Tiruchirapalli	10°46′	78°43′	96	22nd June, 1936	0530	1730	2330	
Trivandrum	08°29′	76°57′	73	8th December, 1928	0530*	1130	1730*	2330
Udaipur	24°35′	73°42′	587	24th June, 1947	0530	1730	2330	
Vengurla	15°52′	73°38′	8	22nd November, 1941	0530	1730	2330	
Veraval	20°54′	70°22′	17	13th October, 1941	0530	1730	2330	
Visakhapatnam	17°43′	83°14′	10	24th September, 1928	0530	1730	2330	

*Radio wind ascents.

†Naval Meteorological Office.

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 km. above mean sea level

June 1957

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	5·5	5.1	147	30	4·7	3·5	155	30	5·0	4·3	148	28	5·8	4·5	220	30	9·2	6·6	226	30	8·2	6·0	203
0·15 a. g. .	26	13·4	12·9	155	28	10·0	8·4	174	28	12·6	11·4	170	28	12·5	10·6	228	30	12·1	9·4	230	30	13·8	10·3	220
0·3 a.m.s.l. .	26	15·8	15·4	186	28	12·2	10·6	178	28	14·4	13·2	182	28	13·7	11·7	234	30	12·6	9·8	226	30	15·5	11·9	222
0·6 ,, .	26	16·6	15·6	194	27	14·0	12·8	190	26	15·6	13·9	191	28	15·5	13·9	250	30	13·4	10·2	230	29	17·5	15·7	214
0·9 ,, .	26	15·3	14.2	202	27	14·1	13·0	176	24	13·5	11·5	202	26	16·5	15·3	254	30	12·8	9·8	236	27	17·4	15·3	248
1·5 ,, .	24	12·2	9·8	223	25	11·6	9·4	215	24	10·4	7·7	213	24	14·5	9·4	241	28	12·6	9·2	253	27	12·1	8·9	259
2·1 ,, .	21	11·8	8·4	246	21	8·8	7·1	245	20	8·8	5·7	237	20	15·0	3·9	217	28	14·1	7·8	251	25	11·2	4·1	284
3·0 ,, .	19	12·1	8·5	268	16	9·0	7·0	270	14	9·1	6·3	253	17	14·6	2·1	197	26	13·5	3·1	293	19	13·7	2·8	090
3·6 ,, .	11	10·7	7·1	252	13	9·0	6·8	283	5	6·4	3·6	300	17	15·4	1·8	156	25	13·2	1·7	312	9	16·2	8·9	083
4·5 ,, .	8	6·7	5·6	253	9	8·7	6·1	266	1	5·0	5·0	290	12	12·4	3·1	041	23	14·1	3·3	306	2	22·5	17·8	122
5·4 ,, .	6	7·3	5·3	263	7	9·7	9·0	248					10	12·1	7·8	357	21	14·4	4·9	315	1	9·0	9·0	070
6·0 ,, .	6	8·1	6·4	238	5	10·2	9·8	232					9	10·0	5·8	350	20	16·5	10·3	315				
7·2 ,, .	1	8·0	8·0	255	3	18·7	18·5	247					6	13·2	7·8	330	17	17·4	13·4	333				
9·0 ,, .	1	13.0	13·0	270	3	27·7	27·3	249					3	7·3	5·5	003	14	14·1	7·7	345				

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3·3	0·3	004	30	6·3	2·3	315	30	3·5	0·5	120	30	4·7	3·2	114	30	5·4	0·8	318	30	3·5	0·7	289
0·15 a. g. .	30	12·9	1·2	139	30	10·2	2·1	323	30	12·1	1·6	200	30	13·2	6·0	128	30	11·4	1·0	311	30	12·3	2·6	309
0·3 a.m.s.l. .	30	13·3	2·6	158	30	10·3	2·2	330	30	12·4	1·3	202	30	6·9	4·0	118	30	7·1	1·1	288	30	5·6	0·7	258
0·6 ,, .	30	14·3	2·8	240	30	10·4	3·7	324	30	12·2	1·6	212	30	13·4	6·8	118	30	11·8	2·6	307	30	11·1	4·4	305
0·9 ,, .	30	13·0	6 6	270	30	10·7	4·6	310	30	10·3	2·3	263	30	10·4	2·9	128	30	11·5	3·4	316	30	10·1	6·3	318
1·5 ,, .	29	10·3	6·7	277	29	9·9	6·6	291	28	10·5	5·3	267	30	8·1	4·2	311	30	11·6	7·4	308	30	9·9	8·0	318
2·1 ,, .	27	10·3	7·8	292	28	12·3	9·6	296	27	11·2	7·6	275	30	9·4	6·8	298	28	14·6	11·9	303	30	11·4	9·6	314
3·0 ,, .	23	14·6	12·0	300	24	15·7	13·2	298	20	11·9	10·7	294	29	11·6	9·3	308	26	17·1	14·8	305	30	13·2	11·2	314
3·6 ,, .	14	16 6	18·8	315	20	16.7	14·9	300	6	9·5	7·8	292	24	13·8	10·7	319	21	17·4	16·6	308	16	15·2	13·8	319
4·5 ,, .	10	12·9	10 2	290	14	17·3	14·7	294					20	16·5	13·1	323	19	18·2	16·9	310	9	17·3	16·8	320
5·4 ,, .	5	7·6	5·4	272	10	20·2	18·7	284					18	19·7	15·0	329	16	20·1	19·2	312	2	16·0	16·0	303
6·0 ,, .	3	7·3	5·4	271	8	21·8	20·0	283					13	17·5	15·0	313	14	21·0	19·8	309	2	17·0	17·0	304
7·2 ,, .	1	6·0	6·0	210	6	23·3	19·8	283					9	24·3	23·4	236	9	25·7	25·0	304				
9.0 ,, .					2	15·0	13·3	289					4	42·5	39·3	291	2	35·1	35·1	287				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

June 1957

Station	ANANTAPUR												ASANSOL											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	6·0	5·6	255	30	11·3	10·0	265	30	12·0	10·8	262	30	3·1	1·8	162	30	5·0	3·2	114	30	3·9	2·7	158
0·15 a. g.	29	13·0	12·7	252	29	19·1	17·7	257	28	20·0	20·2	250	28	8·0	4·6	168	29	10·7	5·2	125	30	11·6	7·4	180
0·3 a.m.s.l.													28	8·3	5·1	178	29	10·9	5·6	128	30	12·0	8·0	181
0·6 ,,	29	14·4	14·1	255	29	19·5	17·2	256	28	21·9	21·4	252	28	11·5	7·5	222	28	10·9	4·3	140	30	15·2	11·1	192
0·9 ,,	29	18·8	18·0	265	29	16·2	15·5	262	28	23·7	23·6	256	25	12·2	7·3	231	28	11·2	2·6	155	30	15·0	10·8	202
1·5 ,,	29	21·5	19·5	273	29	17·0	16·4	265	27	20·8	20·0	260	23	9·5	5·5	270	28	10·5	3·0	255	30	12·7	6·0	227
2·1 ,,	28	15·9	13·7	278	28	16·6	14·2	267	26	16·9	15·0	270	22	10·6	7·8	301	24	10·8	6·1	282	25	10·6	6·9	279
3·0 ,,	26	13·2	6·8	358	21	14·5	7·7	289	24	12·9	7·5	284	18	12·6	10·6	305	14	19·9	18·3	299	11	11·7	8·4	276
3·6 ,,	22	10·3	6·4	265	15	13·1	6·7	262	18	10·4	2·3	338	12	11·7	10·1	298	10	18·7	17·4	299	2	10·0	8·7	281
4·5 ,,	16	9·2	6·2	250	9	13·6	4·0	295	12	12·0	5·3	255	6	12·0	8·5	296	5	27·4	25·1	307				
5·4 ,,	15	8·7	5·9	258	7	9·9	3·1	310	6	6·3	3·6	007	4	11·0	3·6	231								
6·0 ,,	13	8·8	4·2	265	4	13·3	2·7	353	5	6·6	1·8	091	2	8·5	7·3	248								
7·2 ,,	10	10·2	4·8	255	4	14·5	7·4	275	2	10·5	9·7	096												
9·0 ,,	4	12·3	5·9	075	1	5·0	5·0	300																

Station	BAGHDOGRA												BAIRAGARH											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3·0	2·2	060	30	4·1	2·8	091	30	4·6	4·1	049	30	8·0	6·1	271	30	8·8	5·8	254	30	8·0	5·9	256
0·15 a. g.	22	8·8	7·9	064	30	7·0	4·4	100	24	10·1	9·9	068	28	17·3	14·0	273	29	13·0	8·9	267	29	17·3	10·7	273
0·3 a.m.s.l.	22	8·5	7·8	069	30	7·0	4·1	100	24	10·1	9·2	070												
0·6 ,,	22	8·3	7·6	085	30	7·1	4·5	109	23	9·0	8·2	084	29	15·7	12·4	271	29	13·0	8·5	265	29	16·2	9·7	266
0·9 ,,	20	7·7	5·3	096	29	6·5	3·5	120	22	8·3	6·5	092	28	21·0	18·1	287	29	12·5	9·1	267	29	18·0	11·6	278
1·5 ,,	18	7·9	0·3	111	27	7·8	1·7	225	17	9·9	2·7	105	25	14·8	12·3	298	28	10·7	9·3	273	29	13·9	8·9	287
2·1 ,,	16	11·3	6·2	273	24	11·1	4·3	270	15	10·4	5·1	275	25	10·7	5·5	302	28	11·8	9·2	280	28	11·7	6·6	297
3·0 ,,	13	17·1	13·8	289	21	14·3	9·1	275	8	9·4	3·7	250	24	11·3	1·7	229	26	12·5	7·4	249	22	10·0	3·4	315
3·6 ,,	10	12·7	9·4	290	17	13·6	11·1	278	4	3·0	1·9	270	19	12·3	3·6	260	24	11·7	5·5	293	3	13·3	12·2	063
4·5 ,,	9	10·5	8·7	267	17	14·1	11·0	279	4	3·0	2·7	242	17	12·4	5·6	287	21	13·3	7·6	307				
5·4 ,,	8	13·7	12·6	268	10	13·6	12·6	273	3	5·3	5·3	295	13	12·1	8·3	294	18	13·9	9·8	295				
6·0 ,,	8	12·6	11·4	267	7	16·0	15·4	264	2	6·5	5·5	270	12	14·9	11·1	285	13	17·9	14·4	292				
7·2 ,,	5	18·6	15·6	237	4	16·7	16·5	285	1	7·0	7·0	335	8	16·4	15·7	268	9	20·9	17·8	273				
9·0 ,,	3	24·3	13·3	255	2	21·5	21·3	280					6	15·8	15·4	274	4	18·5	17·9	293				

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TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

June 1957

Station	BAMRAULI												BANGALORE							
Time in I.S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3·9	0·9	287	30	5·8	2·5	293	30	7·4	4·4	330	30	3·1	0·9	147	30	9·9	9·4	247	30	10·6	9·7	252
0·15 a.g. .	30	6·9	1·6	270	30	9·1	4·3	280	27	8·2	4·9	327	30	6·6	2·0	205	23	16·2	15·7	250	27	17·5	17·0	248
0·3 a.m.s.l. .	30	7·8	2·3	274	30	8·9	4·4	288	27	8·6	5·3	323	30	13·3	1·8	230								
0·6 ,, .	30	10·7	4·0	264	30	8·6	4·9	282	27	9·7	6·2	316	30	14·5	3.1	268								
0·9 ,, .	30	11·4	6·3	272	30	9·5	6·7	284	27	10·7	6·7	310	30	14·1	4·1	266								
1·5 ,, .	30	11·3	8·8	275	30	10·6	8·5	283	27	10·6	6·9	304	30	11·9	7·0	268	12	24·7	22·5	266	27	20·7	20·1	257
2·1 ,, .	30	12·1	10·3	278	26	12·2	10·4	294	27	10·5	8·1	294	24	9·4	7·1	260	9	20·2	17·2	270	21	18·3	17·5	272
3·0 ,,	30	13·3	10·8	289	25	15·8	11·9	297	26	13.8	11·7	283	13	13·5	11·3	268	6	10·2	4·0	279	13	14·5	11·2	275
3·6 ,, .	28	13·5	11·9	278	24	15·4	12·5	291	24	15·5	13·8	278	4	10·0	9·6	299	4	9·7	7·1	259	6	8·7	7·0	297
4·5 ,, .	28	14·5	12·6	296	20	16·4	13·3	277	24	17·1	15·1	274	1	6·0	6·0	280	2	5·5	2·5	216	2	11·5	5·9	338
5·4 ,, .	26	13·9	12·2	282	17	18·5	16·0	273	23	18·3	15·5	276					2	8·5	7·5	243	1	16·0	16·0	280
6·0 ,, .	26	14·0	12·1	276	15	20·5	18·5	260	22	19·9	16·8	275					2	8·0	7·7	242	1	21·0	21·0	280
7·2 ,, .	24	16·8	14·4	265	14	24·1	21·5	266	19	22·5	19·9	261					1	3·0	3·0	045				
9·0 ,, .	23	20·1	17·8	266	7	24·0	20·5	259	16	19·6	16·6	270												

Station	BANGALORE				BAREILLY								BEGUMPET											
Time in I.S.T.	2330				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	11·3	9·8	246	30	5·0	2·2	077	30	4·4	1·6	292	30	6·6	6·0	265	30	7·3	5·2	263	30	10·1	8·6	256
0·15 a.g. .	30	17·4	17·1	246	30	11·0	3·4	073	30	9·4	4·3	283	29	15·8	14·9	265	30	11·9	8·6	258	26	17·0	14·9	257
0·3 a.m.s.l. .					30	12·9	3·6	066	30	8·9	4·2	286												
0·6 ,, .					30	14·2	1·8	217	30	9·9	4·9	293	29	11·1	10·5	265	30	10·7	7·4	259	26	11·9	10·4	255
0·9 ,, .					30	12·2	3·0	263	30	8·9	5·2	299	29	22·4	21·0	282	30	12·1	9·7	266	26	20·6	18·3	256
1·5 ,, .	27	27·7	26·9	257	30	10·5	6·0	272	30	10·6	9·2	302	27	22·8	21·3	288	30	13·5	11·1	280	26	18·4	16·1	268
2·1 ,, .	24	21·3	18·7	275	30	12·0	9·0	273	29	12·7	11·2	298	25	16·5	14·8	300	30	14·5	11·5	286	24	14·1	11·4	287
3·0 ,, .	20	15·1	10·3	268	28	15·4	12·9	305	28	16·4	15·1	305	25	14·0	8·9	315	25	14·5	11·0	303				
3·6 ,, .	14	11·8	7·2	257	21	14·7	12·8	307	27	16·5	14·7	302	22	11·7	4·9	323	21	13·2	9·5	312	20	13·2	7·8	326
4·5 ,,	8	9·6	5·2	260	14	16·1	13·8	303	23	19·7	22·1	295	18	8·3	2·1	026	15	9·3	6·6	327	6	14·5	11·5	325
5·4 ,, .	2	11·0	6·5	359	11	16·2	14·1	298	19	22·0	19·8	292	11	6·8	2·5	020	9	9·9	7·1	018	1	6·0	6·0	100
6·0 ,, .	1	11·0	11·0	290	8	15·9	13·3	297	17	23·4	20·6	287	7	6·3	1·8	350	6	6·2	4·8	015				
7·2 ,, .					4	16·7	16·1	279	11	25·0	22·2	265	4	7·0	6·5	352	2	9·5	4·9	024				
9·0 ,, .					1	17·0	17·0	280	6	39·2	36·2	266	1	3·0	3·0	130	1	5·0	5·0	335				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

June 1957

Station	BHAGALPUR								BHUBANESHWAR												BHUJ			
Time in I.S.T.	0530				1730				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4·6	3·8	102	30	4·3	2·7	080	30	4·4	3·3	221	30	10·1	7·3	186	30	7·7	5·5	199	30	6·8	6·3	231
0·15 a.g.	29	11·6	8·5	120	29	8·7	5·0	075	28	10·6	7·5	226	28	14·4	10·5	187	28	14·8	10·6	206	30	15·7	14·9	238
0·3 a.m.s.l.	29	12·2	9·0	140	29	9·4	5·4	077	28	13·1	10·4	232	28	15·2	10·5	190	28	16·4	12·2	211	30	16·5	15·7	240
0·6 ,,	26	11·4	9·2	176	29	9·1	4·4	079	28	13·9	9·3	238	28	13·6	9·0	197	27	17·5	13·3	218	30	21·2	20·4	245
0·9 ,,	25	10·7	8·7	199	28	8·4	1·3	078	26	13·8	9·5	250	27	11·4	4·8	225	27	17·4	12·4	223	30	18·7	17·3	247
1·5 ,,	25	9·0	4·6	255	28	9·3	4·9	276	24	12·4	2.7	299	26	11·3	4·3	292	21	13·0	7·1	235	29	17·7	10·9	249
2·1 ,,	24	11·7	8·4	284	28	13·1	10·6	284	22	12·0	6·1	297	22	12·7	6·6	309	16	12·9	4·9	275	23	16·3	24·2	269
3·0 ,,	21	17·0	16·1	293	25	16·9	15·3	283	19	12·4	5·6	332	15	15·7	9·5	316	10	9·4	2·9	218	21	16·2	3·8	357
3·6 ,,	20	21·1	19·3	299	21	18·2	17·5	285	11	8·8	3·6	333	13	15·5	10·0	318	2	7·0	1·8	274	12	14·7	6·8	051
4·5 ,,	11	15·6	14·3	275	18	17·7	17·0	287	9	8·6	3·5	295	5	13·4	11·6	310	1	8·0	8·0	310	6	14·2	12·5	020
5·4 ,,	5	12·2	11·2	265	17	19·6	19·2	288	5	13·8	4·0	316	3	19·3	19·3	320					5	10·6	3·3	071
6·0 ,,	5	13·6	11·4	262	16	18·6	17·7	284	1	18·0	18·0	290	2	17·5	17·1	327					4	13·2	2·8	190
7·2 ,,	2	13·0	11·0	292	13	20·0	18·7	273	1	10·0	10·0	215	2	11·0	6·3	008					3	9·7	3·5	022
9·0 ,,					4	16·3	15·3	269	1	11·0	11·0	195	2	7·5	1·7	101					3	12·3	3·5	348

Station.	BHUJ								BIKANER												CHIKALTHANA			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	8·8	8·2	227	30	9·1	8·0	228	30	5·8	5·0	223	30	5.3	2·3	226	30	5·9	4·1	190	30	10·3	9·4	269
0·15 a.g.	30	15·2	13·9	236	30	17·1	16·0	236	30	21·6	17·6	226	30	10·6	4·3	245	30	18·7	13·0	202	30	17·1	15·1	276
0·3 a.m.s.l.	30	15·5	14·1	238	30	18·0	16·8	237	30	14·8	11·9	220	30	9·2	4·0	240	30	15·0	11·5	195				
0·6 ,,	30	17·4	15·4	245	30	20·1	18·1	242	30	21·7	21·7	249	30	10·8	4·9	259	30	18·3	12·4	211				
0·9 ,,	30	16·2	13·9	250	30	16·1	13·5	245	27	19·1	20·7	244	30	10·2	4·6	260	29	15·1	9·5	232	29	21·2	18·9	287
1·5 ,,	30	12·3	7·4	288	29	12·9	5·2	261	25	16·2	13·1	253	29	9.5	6.7	267	29	10·2	6·3	280	27	18·3	14·8	301
2·1 ,,	29	13.3	5·9	317	29	11·6	2·3	302	24	11·4	6·6	256	27	10·5	6·9	287	28	11·2	7·9	307	24	12·0	7·9	270
3·0 ,,	29	16·2	5·9	339	27	13·3	3·0	029	13	10·2	6·4	323	24	13·2	9·4	293	25	12·4	9·6	316	19	8·8	6·4	243
3·6 ,,	28	18·0	6·7	349	21	13·5	6·2	021	9	13·6	8·2	334	21	12·3	9·6	295	20	12·5	10.8	323	5	10·4	5·0	209
4·5 ,,	26	16·7	6·4	356	14	11·9	4·3	018	2	16·0	13·9	070	19	13·3	11·2	299	9	12·7	11·0	322	3	11·3	1·0	216
5·4 ,,	24	16·4	7·2	342	8	10·1	1·5	304	1	16·0	16·0	050	17	18·6	17·0	299					3	8·3	1·8	354
6·0 ,,	20	18·8	11·8	346	7	9·9	1·7	007	1	2·0	2·0	010	15	18·7	16·6	293					3	7·3	4·5	325
7·2 ,,	17	21·7	15·8	338	3	12·0	11·1	053	1	15·0	15·0	300	14	24·4	18·5	290								
9·0 ,,	9	19·1	12·0	309	1	17·0	17·0	055					3	32·0	25·6	274								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

June 1957

Station	CHIKALTHANA								COCHIN												DARJEELING			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	10·8	7·4	273	30	12·6	11·7	271	30	3·8	0·8	024	30	5·4	3·6	268	30	3·5	0·7	187	30	0·1	0·1	270
0·15 a. g. .	30	13·3	9·6	278	29	19·6	18·5	275	10	6·8	2·9	176	10	7·6	6·7	257	7	6·1	1·4	232	11	3·0	0·5	052
0·3 a. m. s. l. .									10	7·4	5·1	230	10	9·9	8·7	253	7	7·3	4·1	251				
0·6 ,, .									10	11·8	10·5	257	10	13·4	12·3	266	7	13·3	11·8	264				
0·9 ,, .	30	12·7	9·4	278	29	20·9	19·5	283	10	14·2	13·1	260	10	16·1	15·0	273	7	16.7	15·4	267				
1·5 ,, .	30	13·5	10·4	283	29	20·8	18·0	290	10	18·0	17·5	267	9	16·7	15·5	274	6	19·0	17·8	282				
2·1 ,, .	27	13·9	11·2	279	26	14·2	10·0	290	9	18·1	17·8	270	7	14·1	12·3	272	4	19·5	15·9	299				
3·0 ,, .	14	10·1	7·9	291	20	8·2	0·2	139	8	18·3	17·3	266	7	15·1	12·7	267	1	10·0	10·0	245	10	6·7	5·5	283
3·6 ,, .	11	10·8	4·9	287	4	9·3	4·3	083	3	14·7	11·5	253	3	13·0	12·6	314					10	11.4	9.4	282
4·5 ,, .	6	11.0	3.1	245					2	18·0	17·3	225	1	32·0	32·0	290					7	9·5	6·6	277
5·4 ,, .	4	14·5	9·9	286					1	15·0	15·0	255									6	14·5	14·1	254
6·0 ,, .	4	18·3	14·1	287					1	14·0	14·0	230									4	15·5	14·6	256
7·2 ,, .																					3	16·0	15·0	241
9·0 ,, .																					2	29·5	28·4	242

Station	DARJEELING				DUM DUM																GADAG			
Time in I. S. T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	0·9	0·5	225	30	4·3	3·5	183	30	5·7	4·0	190	30	6·9	5·0	178	30	4·4	3·7	170	30	9·5	8·6	242
0·15 a. g. .	7	10·9	2·1	036	30	11·1	9·0	195	30	8·9	6·9	194	30	13·0	9·6	180	30	14.8	12·5	184	29	18·8	18·4	252
0·3 a. m. s. l. .					30	12·3	10·4	207	30	9·5	6·7	201	30	13·6	10·5	188	30	17·2	14·8	189				
0·6 ,, .					30	12·7	9·7	225	30	10·8	7·4	208	30	14·3	10·2	195	30	18·7	16·3	197				
0·9 ,, .					30	12·6	10·2	215	28	9·3	6·4	205	30	14·2	9·9	203	30	18·2	15·1	208	29	20·4	19·1	259
1·5 ,, .					30	10·2	6·4	245	26	8·7	5·3	235	30	11·0	5·0	241	28	13·1	9·9	220	17	20·9	18·9	271
2·1 ,, .					30	11·0	7·3	273	23	9·1	5·7	287	30	10·4	5·3	278	24	10·2	5.8	239	15	12·2	8·2	265
3·0 ,, .	7	7·4	2·8	233	30	9·8	6·6	291	20	12·1	9·4	294	30	13·2	10·2	306	17	9·3	3·7	276	11	11·2	1·5	113
3·6 ,, .	6	7·5	1·8	252					19	14·3	11·7	290					1	8·0	8·0	215	6	10·0	8·7	072
4·5 ,, .	3	12·3	11·3	270	30	12·9	8·3	284	11	17·0	15·9	292	30	14·4	11·2	296					3	7.3	4·4	065
5·4 ,, .					28	12.3	9.7	267	10	16·1	14·9	280	30	12·2	9·8	289					1	5·0	5·0	125
6·0 ,, .					27	12·1	8·8	266	9	16·6	14·5	282	27	15.1	12·4	274					1	2·0	2·0	135
7·2 ,, .					27	12·9	7·4	266	4	17·8	17·7	259	27	15·8	13·0	259								
9·0 ,, .					26	13·3	8·1	242	1	11·0	11·0	235	25	14·0	9·7	261								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

June 1957

Station	GADAG								GANNAVARAM								GAUHATI			
Time in I. S. T.	1730				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	11·2	9·8	244	30	11·2	10·3	235	30	5·8	4·7	275	30	8·2	5·7	260	30	6·9	4·9	251	29	2·0	1·2	039
0·15 a. g. .	30	20·7	19·3	245	29	22·2	21·3	241	28	11·9	10·1	275	29	10·3	7·4	260	27	14·2	11·8	231	29	5·7	2·5	046
0·3 a. m. s. l. .									28	15·9	14·7	274	29	10·3	8·1	267	27	16·4	14·5	233	29	5·4	2·3	043
0·6 ,, .									28	21·4	21·2	278	29	11·6	10·2	274	27	17·4	15·9	243	29	6·1	0·5	010
0·9 ,, .	30	20·0	19·0	248	29	24·7	23·4	246	28	22·2	20·8	281	29	12·2	10·7	278	27	16·3	15·1	254	29	7·1	2·0	238
1·5 ,, .	26	20·1	18·3	253	24	20·4	18·7	256	28	17·5	15·7	288	28	14·8	12·2	292	27	13·7	11·2	275	28	12·3	8·0	243
2·1 ,, .	19	15·6	12·1	270	22	12·7	8·7	261	27	12·4	9·7	299	28	15·9	12·9	302	24	12·7	8·6	303	28	14·0	10·6	249
3·0 ,, .	11	11·3	6·3	311	18	11·5	1·8	083	24	13·3	6·0	346	25	13·8	10·2	316	20	11·5	7·1	334	27	15·7	11·4	260
3·6 ,, .	8	10·6	1·8	359	15	11·5	3·3	068	19	15·2	6·1	015	20	10·6	6·1	345	10	8·7	4·3	0 2	27	15·2	12·5	263
4·5 ,, .	4	8·7	1·9	114	6	5·8	0·9	160	13	10·0	2·6	345	18	11·0	6·0	317	2	5·5	2·9	292	27	15·5	13·0	258
5·4 ,, .	3	3·3	0·8	050	4	6·0	3·9	094	8	7·9	3·1	286	17	9·7	7·0	288					26	15·2	12·7	250
6·0 ,, .	2	4·5	1·7	360	3	8·7	6·8	095	6	6·8	1·2	349	13	9·9	4·2	265					26	15·1	12·6	245
7·2 ,, .	1	10·0	10·0	085									3	8·0	5·3	358					23	17.1	14·7	245
9·0 ,, .	1	16·0	16·0	070									1	10·0	10·0	025					20	18·8	17·8	244

Station	GAUHATI									GAYA										
Time in I. S. T.	1130				1730*				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3·8	1·8	347	30	1·6	0·7	049	30	2·9	0·4	012	30	2·6	1·7	163	30	6·9	2·5	345	30	2·6	1·6	144
0·15 a. g. .	25	7·0	2·9	030	28	4·8	1·4	044	28	6·7	2·2	050	29	10·1	5·1	181	30	12·6	4·6	325	30	11·9	5·1	144
0·3 a. m. s. l. .	25	7·5	1·8	024	28	4·5	1·0	071	28	6·9	2·8	035	29	10·4	4·8	183	30	13·1	4·5	326	30	11·6	4·9	148
0·6 ,, .	25	6·7	1·5	074	28	5·9	1·4	297	26	5·7	2·0	027	29	11·3	6·0	233	30	12·8	4·9	325	30	12.5	5·0	176
0·9 ,, .	22	7·5	2·3	186	28	8·4	5·0	249	26	6·5	2·3	216	29	10·9	7·4	260	28	10·9	5·7	312	30	12·4	3·7	190
1·5 ,, .	20	11·3	6·6	232	28	12·4	10·2	244	22	12·0	9·5	240	29	11·5	8·9	280	27	12·6	7·6	312	30	11·3	4·2	277
2·1 ,, .	18	13·4	8·4	237	28	14·6	11·6	246	18	13·0	11·2	248	28	13·2	9·8	294	27	13·3	10·1	302	28	12·7	8·3	288
3·0 ,, .	12	12·3	8·7	234	28	15·9	12·2	255	12	11·2	9·0	239	22	15·8	12·1	262	22	14·6	12·8	289	13	13·2	11·8	313
3·6 ,, .	7	13·0	11·1	244	28	15·4	11·9	255	6	11·8	9·9	243	17	15·6	13·8	286	15	19·5	17·8	288	2	13·0	10·1	285
4·5 ,, .	3	10·3	9·5	287	28	13·6	10·5	253	1	23·0	23·0	225	8	15·9	14·6	281	9	22·4	20·6	281				
5·4 ,, .	3	13·7	13·1	284	27	15·2	12·7	250					3	14·3	22·7	280	4	27·8	26·0	288				
6·0 ,, .	1	5·0	5·0	250	26	15·7	13·0	246					2	10·5	10·2	308	1	8·0	8·0	250				
7·2 ,, .	1	12·0	12·0	280	25	19·2	16·7	253					1	12·0	12·0	345								
9·0 ,, .					18	17·0	13·6	251																

Table IV—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9·0 Km. above mean sea level

June 1957

Station	GOPALPUR												GORAKHPUR								GWALIOR			
Time in I.S.T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4·6	2·5	219	30	10·7	8 3	188	30	7·4	6 2	212	30	2·9	2·4	060	30	3·3	1·0	326	30	4·6	3·7	254
0·15 a.g.	27	10·1	8·1	207	29	18·2	14·4	196	30	14·8	11.5	218	30	10·6	7·8	073	30	9·3	3·7	350	30	12·4	8·4	260
0·3 a.m.s.l.	26	10·9	8·7	231	29	17·3	11·6	198	30	13·5	10·4	227	30	11·9	8 8	087	30	10·0	4·2	346	30	10·2	6·8	253
0·6 ,,	26	11·9	11·9	216	29	12·5	6·6	207	30	11·9	8·3	231	30	11·4	5·8	121	30	11·5	4·1	352	30	14·8	10·6	277
0·9 ,,	26	12·4	8·4	260	29	10·4	3 9	243	29	10·4	6·5	241	30	10·0	2·7	153	30	11·8	6·4	3 6	29	14·2	9·8	279
1·5 ,,	26	12·7	8·1	288	28	12·9	8·1	306	29	9 8	4.8	285	30	11·3	6·4	297	29	12·7	9 3	293	29	13·0	9·7	291
2·1 ,,	21	11·7	7·4	3 9	28	13·1	7 6	322	26	11·4	4·9	301	28	13·6	11·9	288	29	15·5	13·3	282	27	12·0	9·5	307
3·0 ,,	19	12·4	6·0	317	25	14·0	6 3	322	20	9·7	3·4	3 5	21	14·2	13·1	294	27	18·0	17·0	289	21	12·0	8·0	322
3·6 ,,	18	11·8	4·9	332	22	14·9	4·1	311	7	7·1	1.8	35	17	14·1	13·1	295	26	18·3	16·6	285	18	12·7	8.4	331
4·5 ,,	14	11·6	6·8	344	20	15·2	3·3	326	4	6·3	5·3	057	11	13·3	12·2	292	23	20·0	18·3	285	14	15·4	11·5	325
5·4 ,,	12	10·3	5·3	039	17	14·5	4·3	306	1	7·0	7·0	335	6	13·8	11·7	273	18	18·3	16·7	285	9	15·0	13·0	317
6·0 ,,	8	6·1	1·7	007	16	14·3	5·3	307					5	12·2	8·3	252	16	22·4	20·0	280	8	17·0	15·5	311
7·2 ,,	5	8·6	6·1	177	10	11·7	2·5	311					4	19·5	18·9	254	11	22·3	18·8	260	7	19·4	17·1	285
9·0 ,,	3	12·3	11·7	114	4	11·7	9·5	353					4	20·7	20·5	264	5	16·2	15·8	270	4	21·0	20·1	283

Station	GWALIOR								IMPHAL												JABALPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	6·0	3·7	326	30	4·0	1·5	249	30	1·1	0·3	240	30	5·2	4·0	237	30	2·4	1·2	241	30	3·4	2·5	245
0·15 a.g.	30	10·5	5·7	327	30	13·4	3·1	282	29	2·9	0·9	211	29	9 2	7·9	240	27	5·1	3·6	249	30	12·0	9·0	249
0 3 a.m.s.l.	30	9·2	4·8	323	30	10·4	2·5	275																
0·6 ,,	30	12·2	7·5	318	30	14·5	4·1	298													30	12·7	9.9	257
0 9 ,,	30	11·7	7·6	316	30	11·7	4·3	301	29	2·8	1·0	211	29	8·8	7·3	240	27	4·7	2·7	248	30	14·9	11.3	274
1·5 ,,	30	11·7	8 2	307	30	10·7	6 6	302	28	7·9	5·8	257	29	8·7	6·5	250	27	8·2	6·9	250	28	14·9	10·5	285
2·1 ,,	29	12·7	9·4	295	28	11·7	7·2	293	23	12·3	9·7	265	27	10·0	7·9	258	25	11·5	9·8	251	28	10·9	7·1	295
3 0 ,,	25	14·5	10·8	300	23	13·4	8·1	305	15	12·5	11·3	269	23	12·8	11·4	271	15	16·1	14·0	264	27	11.5	4·0	311
3·6 ,,	23	17·7	13·3	301	13	10 2	6·3	344	14	15·0	13·6	274	16	12·8	11·7	277	8	12·1	9·5	249	26	12·0	5·1	305
4·5 ,,	18	19·4	16·0	296	4	12·0	11·0	330	8	10·1	8·8	239	6	12·7	11·3	280	2	18·0	15·9	230	21	14·8	7·5	299
5·4 ,,	13	26·5	23·2	300	2	9·0	6·7	313	3	13·7	12·9	243	1	10·0	10·0	265					15	13·9	9·3	272
6·0 ,,	11	30·6	27·1	303	1	9·0	9·0	259	1	19·0	19·0	230									10	14·8	10·4	274
7·2 ,,	7	28.4	24·9	281																	5	17·4	13·5	268
9·0 ,,	3	18·7	15·4	297																	1	27·0	27·0	275

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

June 1957

Station	JABALPUR								JAGDALPUR												JAIPUR			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5·6	2·9	296	30	3·5	1·6	225	30	3·4	2·5	238	30	3·4	1·8	241	30	3·3	1·7	212	30	3·7	1·7	295
0·15 a. g.	29	12·8	4·6	305	29	10·8	5·1	239	27	11·7	9·3	237	24	10·1	5 9	223	28	11·1	7·8	208	29	13·4	8·8	245
0·3 a. m. s. l.																								
0·6 ,,	29	12·7	4·8	303	29	11·1	5·0	245	27	6·6	5·1	236	24	7·4	4·5	217	29	8·7	5·1	204	29	15·1	10·9	248
0·9 ,,	29	12·5	7·1	299	29	12·6	4·7	255	27	15·7	13·5	251	24	10·7	7·0	244	28	12·3	9·7	222	29	18 9	15·1	263
1·5 ,,	29	13·0	10·6	298	29	12·8	6·1	290	23	14·4	12·8	271	22	11·5	10·5	275	28	12·7	10.3	256	28	17·0	14·1	273
2·1 ,,	29	13·1	10·7	299	26	11·4	5·1	298	20	10·7	8·1	287	19	12·9	8·8	295	22	10·5	5·3	293	25	12·6	8·2	292
3·0 ,,	24	14·8	10·3	304	20	12·5	7·2	302	15	10·8	6·7	353	14	13.2	9·7	299	15	11·7	6·4	316	15	9 0	8·6	349
3·5 ,,	20	15·4	10·3	309	6	15·1	5·7	290	7	13·0	9·6	355	9	15·0	10·8	312	5	11·4	0·8	105	13	13·2	10·3	357
4·5 ,,	16	16·1	12·3	300	1	7·0	7·0	310	5	7·2	1·6	26	5	14·8	13 8	335	1	12·0	12·0	045	9	16·8	12·9	014
5·4 ,,	9	17·8	12·9	313					1	5·0	5·0	185	2	13·0	13·0	304					7	11·3	8·4	325
6·0 ,,	7	23.0	15.6	297					1	3·0	3·0	165	2	14·0	14·0	297					3	14·7	14·1	297
7·2 ,,	4	30.5	28.5	301									1	17·0	17·0	330					1	13·0	13·0	324
9·0 ,,	1	25.0	25.0	265																	1	14.0	14·0	275

Station	JAIPUR				JAMSHEDPUR								JHARSUGUDA											
Time in I. S. T.	1730				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5·1	3·1	289	30	3·2	0·9	227	30	7·0	1·2	125	30	4·0	2·7	183	30	5·1	1·2	283	30	5 9	4·2	181
0·15 a. g.	28	12·3	5·5	273	28	7·1	3·9	227	27	13·6	3·4	105	28	10·0	7·1	194	28	9·1	2·6	279	28	12·5	8·5	189
0·3 a. m. s. l.					28	7·2	4·5	226	27	13·6	2·7	122	28	8·1	5·9	192	28	8·4	2·2	274	28	11·0	7·5	182
0·6 ,,	28	10·6	5·8	277	28	11·1	9·3	245	27	11 8	1·9	177	28	12·0	8·0	237	28	10·9	5·3	291	28	14·7	9·6	205
0·9 ,,	28	10·7	3·1	311	28	13·3	10·9	256	27	11·3	2·4	228	27	15·0	10·4	250	28	11·0	5·8	275	28	13·4	8·4	221
1·5 ,,	26	11.0	3·5	292	28	12·0	8·1	272	27	10·6	4·3	250	25	13·4	10·8	279	28	11·2	6·9	283	26	12·6	7·6	257
2·1 ,,	24	11·8	7·9	282	28	9·3	6·9	307	27	11·2	6·5	304	23	12·7	10·6	297	26	12·2	7·2	289	21	10·3	6·5	310
3·0 ,,	20	15·2	6·9	312	26	9 6	6·7	299	24	13·3	10·7	307	21	14·7	12 6	315	21	11·9	9·0	297	16	11 6	8·1	322
3·6 ,,	17	16 5	10·8	308	22	10·3	6·6	300	22	14·2	11·4	307	14	13·3	10·3	329	16	11·5	8·9	307	3	10·0	3·0	149
4·5 ,,	14	16 6	12 6	310	14	9·8	5·6	274	11	16·1	13·9	292	6	11·2	6·2	018	9	12·9	9·3	299				
5·4 ,,	10	21·8	21·0	306	9	9·2	6·6	257	2	16·5	16·5	276	4	8·3	5·8	007	6	15·3	13·8	296				
6·0 ,,	6	23·0	20·4	283	7	12.3	9.4	265					1	13·0	13·0	355	4	19·0	17·0	291				
7·2 ,,	4	20·1	19·3	294	2	15.5	9·8	308					1	12·0	12·0	245	1	7·0	7·0	200				
9·0 ,,	1	41·0	41·0	295									1	2·0	2.0	115	1	9.0	9.0	190				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level.

June 1957

Station	JODHPUR												MADRAS							
Time in I.S.T.	0530*				1130				1730*				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	7·6	5·9	227	30	9·5	8·8	240	28	9·1	4·0	220	30	6·9	5·5	232	30	7·6	6·4	257	30	9·7	9·1	264
0·15 a. g. .	29	10·8	9·3	232	30	14·5	13·4	237	28	10·2	5·8	232	29	19·3	16·4	220	30	12·0	10·5	263	30	14·0	13·3	271
0·3 a. m. s. l. .	29	10·1	8·6	230	30	12·1	11·6	239	28	9·9	5·2	232	29	15·3	12·6	218	30	15·6	13·9	268	30	14·5	13·7	268
0·6 ,, .	29	11·2	12·9	231	30	14·4	12·7	241	28	11·4	7·3	236	29	22·2	19·8	232	30	20·7	18·9	270	30	14·1	13·1	271
0·9 ,, .	29	28·0	17·2	233	30	14·6	12·8	241	28	11·9	7·8	244	29	22·7	10·5	226	30	23·7	21·9	272	30	14·1	12·2	272
1·5 ,, .	28	16·7	13·9	239	28	13·0	9·7	239	28	12·1	9·0	244	20	15·1	8·3	246	30	19·3	17·7	278	29	15·1	13·0	280
2·1 ,, .	29	13·3	7·4	249	27	10·4	3·8	255	28	11·0	7·6	252	13	9·6	4·2	294	30	15·0	12·9	278	28	14·6	12·5	274
3·0 ,, .	29	11·8	4·8	336	26	12·0	1·0	322	28	10·5	4·4	280	8	9·1	3·8	074	30	15·0	10·8	277	23	11·9	8·7	271
3·6 ,, .	29	12·5	7·1	333	24	11·8	1·8	353	28	10·7	4·8	281	3	10·7	4·4	096	30	14·6	10·7	272	21	14·1	9·3	273
4·5 ,, .	29	13·8	7·8	334	22	12·0	3·2	020	28	12·1	6·1	280	2	9·5	9·3	030	30	13·9	10·2	267	20	13·3	9·5	276
5·4 ,, .	28	13·7	9·7	311	21	14·8	5·2	297	28	15·5	11·0	073					28	12·6	9·7	257	17	13·8	11·8	262
6·0 ,, .	28	14·6	10·9	303	21	17·4	7·3	305	28	17·5	12·8	295					27	11·9	6·4	244	15	13·7	11·9	260
7·2 ,, .	27	20·6	17·2	290	15	25·5	20·4	281	25	23·8	18·0	293					25	12·2	3·1	217	10	11·7	7·1	273
9·0 ,, .	24	24·0	21·2	290	12	31·8	25·8	250	21	24·1	21·3	287					18	17·3	8·6	093	9	11·4	2·3	089

Station	MADRAS								MANGALORE												MINICOY			
Time in I.S.T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	7·6	3·8	223	30	6·0	5·5	217	30	7·5	2·0	162	30	7·4	4·8	227	30	6·3	3·0	165	30	10·3	9·7	263
0·15 a. g. .	30	8·6	5·0	231	30	14·1	12·3	221	24	11·2	5·3	190	25	11·0	8·5	230	26	9·3	5·8	211	27	19·4	18·3	262
0·3 a. m. s. l. .	30	9·2	6·4	238	30	16·1	14·7	231	24	11·7	7·4	222	25	11·4	9·3	235	26	10·5	8·1	227	27	20·6	19·6	261
0·6 ,, .	30	10·8	8·8	230	30	17·4	16·4	241	23	13·3	10·4	243	22	14·3	12·0	245	25	13·2	11·1	244	27	23·8	22·8	263
0·9 ,, .	30	12·4	10·9	260	30	17·8	16·9	251	23	14·9	12·4	253	22	17·0	14·7	255	25	15·2	13·0	255	27	26·7	25·8	269
1·5 ,, .	30	14·3	13·1	266	30	16·8	16·0	263	19	17·1	15·4	268	16	16·4	13·4	262	24	17·0	15·0	257	27	26·6	25·9	274
2·1 ,, .	30	15·8	14·1	270	30	14·5	12·5	269	15	15·3	12·7	275	14	13·4	10·0	274	16	14·2	11·6	265	25	23·8	23·3	278
3·0 ,, .	30	16·0	12·9	272	27	12·3	9·7	284	8	9·3	3·7	268	9	13·2	7·7	268	10	11·5	4·5	274	21	19·9	20·0	268
3·6 ,, .	30	14·5	11·8	275	16	12·4	8·1	297	6	7·0	1·0	333	7	9·0	2·3	205	5	10·6	3·0	315	18	17·5	15·5	265
4·5 ,, .	29	14·0	10·7	276	2	14·5	5·1	020	4	5·7	4·8	257	2	6·5	6·5	048	4	11·0	6·6	055	13	11·2	13·5	262
5·4 ,, .	26	12·9	10·3	277	1	12·0	12·0	040	1	5·0	5·0	280	2	6·0	5·4	008	2	13·0	12·1	028	9	15·2	11·5	263
6·0 ,, .	24	12·3	9·8	274	1	9·0	9·0	055					2	5·0	4·9	056					5	8·8	5·4	285
7·2 ,, .	22	13·3	8·3	272	1	4·0	4·0	055													3	15·3	5·6	107
9·0 ,, .	18	14·3	3·7	126																	2	35·5	35·5	095

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

June 1957

Station	MINICOY								MOHANBARI												MUSSOORIE			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	11·6	11·1	263	30	11·0	10·6	262	30	2·0	1·5	055	30	2·4	1·1	038	30	1·6	0·7	047	30	4·0	2·5	358
0·15 a. g. .	27	19·7	19·0	260	28	19·1	18·6	259	24	9·0	7·8	062	30	6·6	2·7	085	26	9·1	5·4	042	29	14·0	7·8	354
0·3 a. m. s. l. .	27	20·2	19·4	260	28	20·2	19·6	260	24	9·4	7·9	063	30	6·8	3·4	085	26	9·1	5·0	038				
0·6 ,, .	27	23·4	22·8	267	28	24·3	23·4	263	22	8·7	6·7	074	30	6·0	2·3	108	26	8·6	4·1	070				
0·9 ,, .	27	25·9	25·1	273	27	27·2	26·5	271	22	7·9	4·3	086	30	5·4	2·2	180	25	7·6	3·1	1 3				
1·5 ,, .	27	27·3	26·4	274	26	27·2	2·62	275	18	9·8	3·0	201	27	8·8	6·4	220	24	9·0	5·7	206				
2·1 ,, .	26	25·9	24·9	274	24	24·3	23·4	274	14	9·6	2·9	217	23	10·8	8·8	240	20	10·0	8·9	217	29	10·7	4·8	004
3·0	23	22.9	21.9	267	21	20·1	19·0	272	12	9·5	4·3	225	20	10·7	7·8	210	13	11·8	9·3	213	29	11·0	9·3	300
3·6 ,, .	18	21·3	19.9	267	16	16.6	15·4	267	7	8·3	1·6	114	18	9·7	6·8	213	1	15·0	15·0	225	28	13·6	9·1	300
4·5 ,, .	13	18·1	16·9	268	12	15·1	13·9	263	3	6·0	3·1	232	11	11·4	11·0	237	1	17·0	17.0	225	25	18·2	14·0	308
5·4 ,, .	10	20·4	16·2	263	6	13·2	9·5	266	1	5·0	5·0	220	7	15·6	15·3	236					20	14·4	10·9	289
6·0 ,, .	7	9·9	5·7	230	4	12·5	12·1	286	1	10·0	10·0	245	6	14·2	13·0	241					17	14·1	11·9	286
7·2 ,, .	3	11·3	7·9	127									3	13·7	12·9	261					9	26·4	21·9	285
9·0 ,, .	2	33·5	33·5	087									1	28·0	28·0	255					2	34·0	34·0	272

Station	MUSSOORIE				NAGPUR												NANPARA			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	4·3	1·6	304	30	6·2	4·7	270	30	6·0	5·1	299	29	8·2	4·6	307	30	5·7	2·3	267	30	3·6	2·9	100
0·15 a. g. .	27	12·5	7·0	352	30	9·0	6·8	278	30	9·3	7·3	295	29	8·6	4·9	305	29	11·6	6·9	238	29	14·1	11·3	118
0·3 a. m. s. l. .																					29	14·6	10·4	117
0·6 ,, .					30	11·1	8·8	283	30	9·4	6·9	298	29	9·4	5·7	297	29	12·6	7·0	255	29	14·7	10·6	126
0·9 ,, .					30	15·0	12·5	292	30	9·5	7·0	301	29	10.5	7·7	286	29	12·5	7·9	274	29	11·7	6·3	140
1·5 ,, .					30	12·9	10·0	299	30	10·1	6·8	303	29	10·9	8·6	287	29	12·0	8·4	285	29	9·8	4·0	264
2·1 ,, .	27	6·6	2·6	290	30	11·3	7·1	296	25	9·5	4·8	321	29	12·2	9·1	293	27	11·7	7·9	295	24	11·3	8·2	283
3·0 ,, .	26	9·7	7·8	291	30	10·8	2·9	325	22	10·0	4·5	318	29	12.6	8·9	292	21	9·9	5·1	311	17	14·8	13.0	281
3·6 ,, .	25	12·5	10·2	304	29	11·0	2·3	309	21	10·8	3·2	300	27	12·5	8·8	286	8	9·9	2·8	266	12	14·5	12·0	297
4·5 ,, .	20	13·5	10·7	315	29	11·8	3·6	316	19	11·3	4·3	341	27	12·5	8·8	272	4	8·7	5·1	040	8	15·0	12·2	295
5·4 ,, .	18	15·3	11·5	296	26	14·2	5·2	292	14	13·4	4·8	347	25	13·4	9·0	282					5	19·2	17·7	311
6·0 ,, .	15	16·5	13·7	291	26	14·5	5·1	286	14	15·5	3·6	326	24	13·5	8·8	285					2	18.5	18·3	297
7·2 ,, .	12	21·3	18·4	285	24	13·0	4·3	286	14	13·4	4·7	340	22	15·7	9·9	288								
9·0 ,, .	8	37·1	36·0	277	19	13·5	3·7	245	8	11·1	4·9	302	19	13·8	11·3	267								

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TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

JUNE 1957

Station	NANPARA				NEW DELHI												POONA			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	2·8	2·4	320	30	5·6	3·0	256	30	8·5	5·3	276	29	7·1	2·9	304	30	5·3	3.7	222	30	3·5	3·4	263
0·15 a. g. .	30	7·7	4·1	314	30	15·0	9·0	266	30	10·7	6·4	278	27	12·6	5·1	320	30	13·7	6·3	237	29	11·0	10·6	261
0·3 a. m. s. l. .	30	7·9	4·4	307	30	13·2	8·0	261	30	10·7	5·7	278	28	12·5	5·0	331	30	11.0	6·1	227				
0·6 ,, .	30	9·2	4·8	300	30	15·0	8·9	268	30	11·2	6·6	283	27	12·5	5·1	314	30	13·6	5·5	263	29	6·3	6·0	262
0·9 ,, .	30	9·5	5·8	295	30	14·4	10·3	256	30	11·4	8·1	290	27	11·1	6·9	307	30	12·2	5·5	287	29	13.9	13·4	267
1·5 ,, .	30	10·8	8·8	294	30	11·2	8·2	300	30	10·0	8·3	297	27	11·3	8·7	303	30	9·8	6·6	306	26	18·3	16·8	271
2·1 ,, .	30	13·6	11·6	295	30	10·9	8·6	305	30	10·8	9·2	298	26	13·0	11·0	302	30	11·0	9·5	309	23	10·1	5·8	279
3·0 ,, .	29	16·6	15·6	297	30	13·9	10·3	310	30	13·9	11·8	302	24	13·8	12·2	307	28	15·4	13·7	320	20	8·8	2·8	185
3·6 ,, .	27	18·2	9·7	316	29	15·7	13·0	318	29	16·1	13·5	303	22	15·2	13·5	312	19	16·6	13·4	321	19	9·1	4·2	170
4·5 ,, .	23	17·6	15·9	292	28	15.8	12.7	319	29	17·0	13·3	308	22	20.0	16.4	304	11	14·3	11·8	315	15	8·7	1·0	188
5·4 ,, .	21	20·3	18·0	288	28	16.3	12.7	308	28	16·7	13·4	295	22	20.2	17.9	295	4	15·7	12·9	265	11	8·7	2·3	281
6·0 ,, .	17	19·1	16·7	275	28	17.5	14.4	294	26	18·8	16·8	295	20	20.9	18.2	288	1	15·0	15·0	260	10	10·1	2·5	270
7·2 ,, .	9	22·6	20·9	273	28	23·6	20·2	278	25	24·8	22·6	276	20	22.5	19.3	282					7	8.0	4.7	084
9·0 ,, .	3	36·0	35·7	254	27	31·8	28·3	277	22	31·8	30·3	285	20	28.9	26.5	286					5	10.4	8.8	100

Station	POONA								PORT BLAIR											
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	7·4	7·0	266	30	4·9	4·7	267	30	9·4	9·0	229	30	11·6	11·3	229	30	12·0	11·5	232	30	7·0	6·7	228
0·15 a. g. .	30	15·1	14·4	269	29	13·0	12·7	260	28	18·3	17·6	230	28	17.3	16·7	233	27	17·7	17·3	236	28	15·8	15·3	228
0·3 a. m. s. l. .									28	19·6	18·8	232	28	18·6	18·0	233	27	19·5	19·1	237	28	17·3	16·5	231
0·6 ,, .	30	10·2	9·6	268	29	7·5	7·4	261	28	23·2	22·4	236	28	23·4	22·9	236	27	23·6	23·0	239	27	22·4	21·3	235
0·9 ,, .	30	15·6	15·3	268	29	15·0	14·4	261	25	23·8	23·1	241	24	25·8	25·2	238	27	25·1	24·4	243	24	21·6	21·0	239
1·5 ,, .	28	17·6	16·4	264	26	16·5	15·1	269	24	21·1	20·2	246	15	23·3	19·7	245	21	20·2	19·0	249	18	18·8	17·8	244
2·1 ,, .	23	9·6	6·7	273	26	11·0	7·2	265	23	17·0	16·0	252	8	18·9	18·4	254	20	16·7	15·6	251	12	12·3	10·8	246
3·0 ,, .	20	8·7	1·7	241	23	9·4	2·7	167	20	17·0	14·1	248	7	16·4	14·5	250	16	13·2	11·5	252	7	7·1	6·4	271
3·6 ,, .	18	8·3	0·9	250	21	8·4	3·3	173	16	17·9	14·2	250	5	14·6	12·4	268	16	13·6	10·8	247	3	13·3	12·2	236
4·5 ,, .	17	8·6	1·7	257	5	7·8	1·5	088	16	19·4	14·9	251	3	16·0	9·0	278	15	15·3	10·8	250				
5·4 ,, .	14	9.9	3.0	338					12	13·4	8·3	247	2	5·5	5·2	334	13	14·7	9·8	237				
6·0 ,, .	13	9.7	4.0	330					11	13·8	8·8	211	2	2·0	1·5	024	12	13·2	8·7	217				
7·2 ,, .	9	8.6	5.4	011					8	14·4	6·4	177	2	8·5	8·3	061	10	16·4	3·0	157				
9·0 ,, .	5	8.2	5.0	298					8	19·9	14·7	091					7	20·4	12·5	071				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

June 1957

Station	RAIPUR												SANTA CRUZ											
Time in I.S.T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5·1	3·6	216	30	6·4	2·6	290	30	6·3	4·0	196	30	6·3	5·0	250	30	8·9	7·2	250	30	11·7	10·3	257
0·15 a. g.	30	16·1	12·5	233	30	12·1	5·5	277	29	13·2	8·3	201	24	12·1	9·4	250	29	12·0	9·7	247	21	16·0	14·3	261
0·3 a. m.s.l.													24	13·0	10·3	250	29	11·0	8·9	248	24	15·6	13·5	255
0·6 ,,	30	19·7	15·0	247	30	13·0	5·3	282	29	13·5	9·0	211	24	13·5	11·8	250	29	11·2	9·1	249	24	15·6	13·8	250
0·9 ,,	29	18·7	13·9	253	30	12·9	6·2	284	29	12·4	8·6	225	24	14·5	12·0	252	25	10·2	8·9	254	24	16·2	14·5	250
1·5 ,,	27	13·2	10·0	275	29	13·0	8·4	277	29	12·7	7·3	258	23	15·9	12·3	245	14	6·3	4·5	262	24	15·5	13·3	240
2·1 ,,	25	13·6	9·0	293	27	13·6	9·0	283	26	13·6	6·7	283	23	14·3	10·3	250	11	6·1	1·4	007	23	13·1	9·3	245
3·0 ,,	23	14·8	8·1	316	25	13·2	7·3	303	20	11·1	7·0	320	23	14·4	6·4	260	8	11·4	3·7	319	22	16·9	8·2	248
3·6 ,,	21	13·2	6·8	317	21	12·6	6·7	300	11	11·7	3·5	324	23	13·9	5·5	261	8	11·4	2·1	258	20	16·9	6·1	250
4·5 ,,	12	7·7	1·3	003	13	9·1	1·7	287	2	12·0	10·7	070	22	14·1	6·0	261	6	8·8	6·3	345	19	15·8	4·6	246
5·4 ,,	6	8·3	1·9	199	8	10·9	6·5	260					21	16·1	8·2	270	6	9·7	7·2	350	19	15·8	5·2	258
6·0 ,,	3	11·7	6·1	207	7	12·4	9·7	247					20	17·0	7·3	275	6	13·8	11·3	010	18	15·5	4·3	265
7·2 ,,	2	10·0	9·5	268	2	11·0	9·9	188					18	14·4	5·6	303	6	16·2	12·8	359	17	14·4	2·4	022
9·0 ,,	1	15.0	15·0	290									14	12·7	1·0	279	5	9·0	4·4	328	13	14·5	4·5	065

Station	SANTA CRUZ				TEZPUR												TIRUCHIRAPALLI							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	6·6	5·6	240	30	1·6	0·6	097	30	1·0	0·2	092	30	1·4	1·2	070	30	11·8	11·7	270	30	17·8	16·3	268
0·15 a. g.	28	11·1	10·3	238	27	7·7	2·8*	118	30	7·0	1·6	129	28	7·6	3;7	086	30	18·5	18·1	267	29	19·8	18·4	267
0·3 a. m.s.l.	28	11·3	10·6	240	27	8·3	2·9	114	30	7.3	1·5	129	28	7·4	3·0	104	30	21·0	20·6	266	29	20·0	18·7	269
0·6 ,,	28	11·9	11·3	242	24	8·1	2·2	190	30	7·6	2·9	208	28	7·1	2·3	170	30	26·9	25·9	273	29	20·5	19·6	270
0·9 ,,	23	10·4	9·7	248	21	8·6	2·5	208	30	9·2	5·7	233	26	7·7	5·0	218	30	27·0	25·7	266	29	21·0	20·5	270
1·5 ,,	16	10·6	9·5	245	15	10·5	4·6	234	28	13·1	10·4	238	22	10·6	9·6	239	30	23·2	22·1	261	28	20·4	19·9	266
2.1 ,,	15	9·4	5·1	247	11	11·8	5·7	260	25	14·6	12·4	240	16	13·6	11·2	234	30	22·9	21·5	264	27	20·7	19·5	266
3·0 ,,	10	9·5	4·3	257	9	15·3	12·2	260	16	13·7	9·4	233	6	13·2	9·0	258	28	19·0	17·7	277	22	19·6	18·5	270
3·6 ,,	4	10·5	2·5	139	6	13·5	9·0	250	11	10·6	6·6	227	4	9·0	5·2	230	24	14·0	12·1	281	22	17·1	15·4	277
4·5 ,,	3	10·0	4·3	230	3	6·7	4·8	138	8	11·7	8·0	240	1	9·0	9·0	135	17	11·3	10·0	276	16	15·5	14·4	272
5·4 ,,	1	10·0	10·0	205	1	21·0	21·0	250	7	17·1	15·2	252					13	8·6	6·2	272	11	15·3	14·5	270
6·0 ,,					1	29·0	29·0	025	5	18·6	16·6	250					13	8·8	6·1	276	8	13·3	11·9	286
7·2 ,,					1	31·0	31·0	230	3	22·7	21·1	265					10	9·8	0·5	349	7	11.1	4·9	283
9·0 ,,									1	53·0	53·0	250					6	13·3	11·1	095	4	10·0	0·9	200

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

June 1957

Station	TIRUCHIRAPALLI				TRIVANDRUM												UDAIPUR			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	15·3	15·1	270	30	5·9	4·2	341	30	7·7	6·8	305	30	7·8	6·9	291	30	4·7	2·8	323	30	2·0	1·9	233
0·15 a.g. .	28	19·6	19 3	271	23	9·1	8·3	325	24	12·6	11·5	293	26	11·1	10·1	286	26	12·2	9·4	305	30	7·6	7·0	240
0·3 a.m.s.l. .	28	20·6	20·3	270	23	11.6	10·7	311	24	14·1	13·0	291	26	12·8	11·8	285	26	14·5	11·8	298				
0·6 ,, .	28	26·9	26·6	270	23	16·9	16·2	295	21	19·3	18·3	288	26	17·8	16·7	284	25	19·2	17·6	298				
0·9 ,, .	28	27.1	26·7	268	23	20·6	20·0	288	21	23·2	21·9	286	25	20·6	19·4	284	21	23·5	22·2	286	29	10·1	9·0	249
1·5 ,, .	28	21·5	20·9	267	22	23·2	22·7	285	7	24·3	23·5	282	23	22·7	21·2	286	18	25·2	24·1	290	26	13·0	9·6	259
2·1 ,, .	28	21·0	19·6	265	19	23·9	23·4	283	3	26·3	25·1	279	21	23·7	22·6	288	12	24·6	24·3	289	26	10·0	1·7	280
3·0 ,, .	25	20·4	18·4	270	17	21·6	21·0	280	2	20·0	19·7	259	19	22·2	21·5	280	1	24·0	24·0	295	24	12·5	2·7	047
3.6 ,, .	15	19·2	14·6	274	17	18·6	17·6	273	1	2·0	2·0	255	16	19·3	18·5	279					14	13·3	6·5	067
4·5 ,, .	10	15·8	14·1	262	15	13·9	12·2	269	1	7·0	7·0	240	15	15·5	14·2	271					5	10.0	6·2	326
5·4 ,, .	2	16·5	15·3	244	15	10·7	5·3	278					14	10·5	7·5	255					1	7·0	7·0	220
6·0 ,, .	2	13·5	8·8	235	13	9·7	4·3	279					13	8·5	4·0	253					1	10·0	10·0	200
7·2 ,, .					13	10·1	3·2	067					13	8·5	3·4	092					1	4·0	4·0	020
9·0 ,, .					9	15·6	12·3	073					9	16·4	12·3	066					1	4·0	4·0	080

Station	UDAIPUR								VENGURLA												VERAVAL			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	4·2	3·5	247	30	3·1	2·5	212	30	2·9	1·7	228	30	6·0	5.0	221	30	3·4	1·3	197	30	11·8	9·8	254
0·15 a.g. .	30	9·4	6·5	264	29	9·7	7,1	250	25	9·2	3·1	241	28	12·9	11·1	231	28	9·2	5·5	231	29	13·4	11·0	249
0·3 a. m. s. l. .									25	10·4	5·9	252	28	13·7	11·8	242	28	10·8	8·3	237	29	14·2	11·4	253
0·6 ,, .									23	13·6	9·6	263	25	17·2	14·3	247	28	13·8	11·2	245	27	14·1	11·5	253
0·9 ,, .	30	9·7	7·2	263	29	10·4	7·1	261	19	13·2	10·5	273	20	15·4	12·8	264	20	15·3	12·7	264	23	13·6	11·1	255
1·5 ,, .	29	11·0	7·0	263	29	12·9	9·2	260	17	14·2	12·4	272	15	10·4	9·0	277	15	14·5	12·2	268	16	11·8	9·0	240
2·1 ,, .	28	9·9	4 6	272	29	12·3	5·1	277	11	8·5	6·0	280	13	7·4	5·2	274	8	10·3	7·7	276	7	12·6	7·8	250
3.0 ,, .	27	10·3	2·9	220	25	11·5	4·1	041	8	7·8	2·7	101	10	9·5	3·2	288	3	10·3	7·0	273	3	10·0	2·6	258
3·6 ,, .	25	12·0	2·8	338	17	10·7	4·7	093	5	7·8	4·0	111	8	7·8	2·6	211								
4·5 ,, .	22	12·0	3·1	342	10	10 6	3·3	185	3	4·7	2·8	181	6	8·8	0·6	273								
5·4 ,, .	20	14·1	7·1	304	2	17·5	18·0	207					1	7·0	7·0	050								
6·0 ,, .	19	17·5	11·2	302	2	16·5	15·1	244						BREAK										
7·2 ,, .	17	20·2	15·2	308	2	10·0	8·6	305					1	8·0	8.0	030								
9·0 ,, .	12	16·3	12·8	305	2	8·0	8·0	352																

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds upto 9.0 Km. above mean sea level

June 1957

Station	VERAVAL								VISAKHAPATNAM								
Time in I.S.T.	1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	20	12·2	11·6	261	30	12·3	11·1	255	30	3·4	2·7	234	31	10·2	8·2	225	30	5·7	4·4	215
0·15 a. g. .	20	13·8	13·3	251	30	13·0	11·5	251	28	8·6	7·8	242	30	9·7	8·7	220	30	8·8	7·1	227
0·3 a. m. s. l. .	20	14·8	14·5	254	30	13·5	12·1	252	28	10·9	10·1	249	30	10·8	9·5	227	30	10·4	8·4	233
0·6 ,, .	20	14·9	14·7	256	30	14·7	13·4	251	28	13·3	12·6	261	30	10·9	8·6	241	30	11·7	9·1	246
0·9 ,, .	14	13·7	12·7	258	25	15·0	13·9	255	28	13·5	12·7	268	29	10·7	8·5	261	30	11·6	9·0	257
1·5 ,, .	10	12·3	10·8	266	18	11·1	7·6	251	26	12·7	10·4	278	29	12·4	8·8	289	28	12·5	8·4	283
2·1 ,, .	7	9·7	7·0	290	11	10·5	1·8	291	25	11·7	7·5	302	27	15·4	11·7	296	28	10·5	6·3	310
3·0 ,, .	5	11·4	8·8	332	7	11·3	3·8	005	15	12·6	7·2	351	21	15·8	9·4	326	25	13·6	8·6	310
3·6 ,, .	5	10·8	8·3	319	2	10·0	10·0	347	6	9·7	4·8	271	14	14.3	9·1	330	15	12·3	7·4	350
4·5 ,, .	5	13·8	3·6	300					1	32·0	32·0	245	10	14·1	9·6	308	6	6·7	4·9	044
5·4 ,, .	4	11·7	5·7	300									5	9·6	6·9	282	1	9·0	9·0	175
6·0 ,, .	4	13·5	8·1	281									1	12·0	12·0	270				
7·2 ,, .	2	14·5	12·1	024																
9·0 ,, .	1	10·0	10·0	060																

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds above 9·0 Km. above mean sea level

June 1957

AGARTALA

0530 hrs.

Ht in Km.	n	V	v	D
10·5	1	19·0	19·0	275

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	27·0	27·0	235

AHMEDABAD

0530 hrs.

Ht in Km.	n	V	v	D
10·5	1	12·0	12·0	070
12·0	1	8·0	8·0	065
14.1	1	11·0	11·0	080

1730 hrs.

Ht in Km.	n	V	v	D
10·5	10	14·1	7·7	329
12·0	8	11·8	0·1	168
14·1	5	16·6	13·7	079
16·2	3	30·7	3·8	127
18·0	1	43·0	43·0	100

AMBALA

0530 hrs.

Ht in Km.	n	V	v	D
10·5	4	49·5	47·0	288
12·0	4	52·3	51·2	286
14·1	4	52·0	47·7	269
16·2	3	45·7	43·7	274
18·0	3	31·7	29·0	285
21·0	3	30·3	29·5	283

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	60·0	60·0	320
12·0	1	59·0	59·0	320
14·1	1	54·0	54·0	295

ANANTAPUR

0530 hrs.

Ht in Km.	n	V	v	D
10·5	2	16·5	15·5	066
12·0	1	27·0	27·0	095

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	16·0	16·0	075
12·0	1	24·0	24·0	080
14·1	1	20·0	20·0	035
16·2	1	35·0	35·0	070

BAGHDOGRA

0530 hrs.

Ht in Km.	n	V	v	D
10·5	2	23·0	22·5	258
12·0	2	23·0	22·0	263
14·1	1	8·0	8·0	290

1730 hrs.

Ht in Km.	n	V	v	D
10·5	2	34·0	33·4	256
12·0	2	38·0	38·0	249
14·1	1	13·0	13·0	280
16.2	1	8·0	8·0	120
18·0	1	23·0	23·0	115

BAIRAGARH

0530 hrs.

Ht in Km.	n	V	v	D
10·5	3	9·3	8·8	290
12·0	2	7·0	6·0	227
14·1	1	13·0	13·0	095

1730 hrs.

Ht in Km.	n	V	v	D
10·5	3	19·3	18·5	287

BAMRAULI

0530* hrs.

Ht in Km.	n	V	v	D
10·5	21	19·7	18·0	264
12·0	17	21·0	19·2	259
14·1	10	12·7	10·7	267
16·2	3	11·3	2·9	056

1130 hrs.

Ht in Km.	n	V	v	D
10·5	5	22·4	19·6	268
12·0	4	16·0	14·5	282
14·1	3	11·3	4·8	076
16·2	3	15·0	12·2	078

1730 hrs.*

Ht in Km.	n	V	v	D
10·5	11	16·1	13·9	278
12·0	7	12·6	9·6	242
14·1	3	9·3	7·0	154
16·2	1	10·0	10·0	300

BAREILLY

1730 hrs.

Ht in Km.	n	V	v	D
10·5	2	39.5	31·3	279
12·0	1	41·0	41·0	310

BEGUMPET

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	6·0	6·0	320
12·0	1	7·0	7·0	050

BHAGALPUR

1730 hrs.

Ht in Km.	n	V	v	D
10·5	2	29·5	29·5	268
12·0	1	17·0	17·0	265
14·1	1	10·0	10·0	250
16·2	1	10·0	10·0	080
18·0	1	24·0	24·0	115

BHUBANESHWAR

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	14·0	14·0	100

BHUJ

0530 hrs.

Ht in Km.	n	V	v	D
10·5	1	4·0	4·0	270
12·0	1	4·0	4·0	180
14·1	1	10·0	10·0	270

1730 hrs.

Ht in Km.	n	V	v	D
10·5	7	12·0	8·3	292
12·0	5	11·0	6·7	265
14·1	4	12·7	4·0	219
16·2	1	26·0	26·0	085

BIKANER

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	35·0	35·0	225

DUM DUM

0530 hrs.*

Ht in Km.	n	V	v	D
10·5	22	14·6	9·5	241
12·0	18	16·5	8·8	223
14·1	10	14·4	5·5	068

DUMDUM

1730* hrs.

Ht in Km.	n	V	v	D
10·5	22	16·6	11·1	256
12·0	18	16·1	8·0	224
14·1	8	17·6	3·8	190
16·2	3	15·7	14·0	070
18·0	2	24·0	24·0	045

GANNAVARAM

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	9·0	9·0	015

GAUHATI

0530* hrs.

Ht in Km.	n	V	v	D
10·5	18	17·7	15·4	235
12·0	15	18·2	16·5	244
14·1	3	36·6	32·1	272
16·2	2	34·5	18·5	263
18·0	2	39·0	21·7	232

1730* hrs.

Ht in Km.	n	V	v	D
10·5	12	18·6	15·8	258
12·0	9	18·4	13·2	247
14·1	1	32·0	32·0	280

GOPALPUR

0530 hrs.

Ht in Km.	n	V	v	D
10·5	1	13·0	13·0	210
12·0	1	12·0	12·0	210
14·1	1	19·0	19.0	120

1730 hrs.

Ht in Km.	n	V	v	D
10·5	2	9·5	9·5	339
12·0	1	13.0	13·0	090
14·1	1	31·0	31·0	105
16·2	1	27 0	27·0	115
18·0	1	25.0	25·0	105

GORAKHPUR

0530 hrs.

Ht in Km.	n	V	v	D
10.5	3	20·0	20·0	266
12·0	1	16·0	16·0	260

GORAKHPUR

1730 hrs.

Ht in Km.	n	V	v	D
10·5	3	10·0	9·7	240
12·0	3	8.0	6·7	255
14·1	3	6·7	5.3	260
16·2	2	8.0	5·5	155
18·0	1	23·0	23·0	180

GWALIOR

0530 hrs.

Ht in Km.	n	V	v	D
10·5	4	23·5	20·5	275
12·0	4	26·5	24·0	269
14·1	1	21·0	21·0	270

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	11·0	11·0	295
12·0	1	19·0	19·0	310

JABALPUR

0530 hrs.

Ht in Km.	n	V	v	D
10·5	1	15·0	15·0	260

JHARSUGUDA

0530 hrs.

Ht in Km.	n	V	v	D
10·5	1	2·0	2·0	200
12·0	1	11·0	11·0	100
14·1	1	24·0	24·0	115

1730 hrs.

Ht in Km.	n	V	v	D
10·5	1	7.0	7·0	190
12·0	1	4·0	4·0	090

JODHPUR

0530* hrs.

Ht in Km.	n	V	v	D
10·5	20	19·1	15·8	282
12·0	16	18·0	15·3	266
14·1	8	20·1	17·9	260

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds above 9.0 km. above mean sea level

June 1957

Ht. in Km.	n	V	v	D
		JODHPUR		
		1130 hrs.		
10·5	5	20·6	18·3	267
12·0	5	23·2	16·5	270
14·1	1	12·0	12·0	270
		1730 hrs.*		
10.5	18	22·2	18·2	277
12·0	14	21·1	15·7	272
14·1	6	12·8	4·0	297
		MADRAS		
		0530 hrs.*		
10·5	11	25·7	23·3	082
12·0	7	32·1	30·8	085
14·1	7	49·0	47·0	089
16·2	4	73·0	71·4	093
		1130 hrs.		
10·5	8	16·5	12·0	080
12·0	6	24·3	21·0	090
14·1	4	36·0	36·0	098
16·2	2	48·0	46·7	114
18·0	1	59·0	59·0	095
21·0	1	43·0	43·0	100
		1730 hrs. *		
10·5	16	21·1	16·7	083
12·0	10	29·1	27·0	079
14·1	4	55·0	53·4	092
16·2	1	67·0	67·0	080
		MINICOY		
		0530 hrs.		
10·5	12	47·5	47.3	086
		1730 hrs.		
10·5	1	48·0	48·0	075

Ht. in Km.	n	V	v	D
		MUSSOORIE		
		1730 hrs.		
10·5	1	41·0	41·0	265
		NAGPUR		
		0530 hrs.*		
10·5	17	13·6	4·8	213
12·0	12	14·0	4·8	223
14·1	7	16·3	4·5	090
16·2	1	22·0	22·0	120
18·0	1	27·0	27·0	095
		1130 hrs.		
10·5	5	13·6	7·2	294
12·0	4	12·0	0·9	290
14·1	3	8·0	3·3	206
16·2	2	28·5	28·5	088
18·0	2	23·5	23·5	080
		1730 hrs.*		
10·5	14	13·1	3·6	100
12·0	12	15·9	6·9	093
14.1	9	20·1	18·8	090
16·2	2	37·5	37·0	104
18.0	2	37·0	35·7	099
		NEW DE I		
		0530 hrs *		
10·5	24	34·3	31·0	275
12·0	24	34·6	32·4	270
14·1	22	28·1	26·9	270
16·2	16	14·2	10·3	256
18·0	4	22·2	10·5	326
21·0	2	17·0	7·2	155
		1130 hrs.		
10·5	16	35·2	33·1	276
12·0	13	38·8	35·7	276
14·1	10	38·2	35·5	269
16·2	5	26·4	21·5	295
18·0	5	15·4	4·5	337
21·0	1	31·0	31·0	235

Ht. in Km.	n	V	v	D
		NEW DELHI		
		1730 hrs.*		
10·5	20	32·1	30·2	278
12·0	18	31·7	29·4	280
14·1	17	25·1	21·9	268
16·2	10	19·4	15·3	261
18·0	5	13·4	7·9	110
21·0	1	25·0	25·0	290
		POONA		
		0530 hrs.		
10·5	3	13·0	12·5	115
12·0	2	17·5	17·0	120
14·1	1	37·0	37·0	095
		1730 hrs.		
10·5	5	7·0	1·0	105
12·0	3	5·7	1·7	187
14·1	2	15·5	15·5	095
		PORT BLAIR		
		0530 hrs.*		
10·5	8	30·9	27·7	086
12·0	6	34·7	32·0	070
14·1	6	43·8	36·0	063
16·2	1	26·0	26·0	290
18·0	1	32·0	32·0	030
		1730 hrs.*		
10·5	6	24·8	20·0	079
12·0	3	30·0	27·9	079
14·1	3	33·3	28·6	061
16·2	1	28·0	28·0	110
18.0	1	33·0	33·0	100
21·0	1	56·0	56·0	080
		SANTA CRUZ		
		0530 hrs.*		
10·5	12	14·6	2·4	122
12·0	17	19·0	11·1	084
14·1	5	31·8	25·4	281
		1130 hrs.		
10·5	1	7·0	7·0	345

Ht. in Km.	n	V	v	D
		SANTA CRUZ		
		1730 hrs.*		
10·5	10	15·7	10·6	090
12·0	9	17·8	14·9	093
14·1	2	39·0	38·1	084
16·2	1	46·0	46·0	090
		TIRUCHIRAPALLI		
		0530 hrs.		
10·5	3	29·3	23·9	075
12·0	1	36·0	36·0	090
		1730 hrs.		
10·5	1	23·0	23·0	080
12·0	1	52·0	52·0	095
		TRIVANDRUM		
		0530 hrs.*		
10·5	5	22·4	21·2	089
12·0	1	36·0	36·0	090
		1730 hrs. *		
10·5	8	26·5	21·5	089
12·0	8	36·4	36·1	087
14·1	5	57·6	56·9	091
16·2	3	48·3	48·0	085
18·0	1	64·0	64·0	100
21·0	1	46·0	46·0	100
		UDAIPUR		
		0530 hrs.		
10·5	1	6·0	6·0	075
12·0	1	7·0	7·0	160
14·1	1	15·0	15·0	080
		1730 hrs.		
10·5	3	10·3	9·7	250
12·0	1	10·0	10·0	280
		2330 hrs.		
10·5	1	18·0	18·0	335

Ht. in Km.

RADIOSONDE DATA

June 1957

During the month, observations of upper air temperature, pressure and humidity were made at 12 stations in India as given in the list below. For a detailed description of the instruments used a reference may be made to the I.M.D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

Serial No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad	Clock type	1st October, 1944	00 and 12	
2	Bombay	Clock type	7th September, 1954	00 and 12	
3	Calcutta	Clock type	13th December, 1946	00 and 12	Fan type used from 13th December, 1946 to 30th November, 1947.
4	Gauhati	Clock type	22nd July, 1955	00 and 12	
5	Jodhpur	Clock type	17th April, 1946	00 and 12	
6	Madras	Fan type	29th June, 1946	00 and 12	
7	Nagpur	Fan type	1st October, 1946	00 and 12	
8	New Delhi	Clock type	3rd December, 1943	00 and 12	
9	Port Blair	Fan type	4th December, 1949	00 and 12	
10	Trivandrum	Fan type	1st July, 1947	00 and 12	
11	Veraval	Fan type	3rd October, 1944	00 and 12	
12	Visakhapatnam	Fan type	8th December, 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

June 1957

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (987 mb.)						BOMBAY (1002 mb.)						CALCUTTA (999 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew point			Mean	Mxa.	Min.	Dew point
Surface	30	98	302·9	308	299	293·4	30	13	301·9	303	300	297·4	30	6	300·8	304	298	299·6
1000	30	—20	..	..	..	..	30	31	..	..	..	..	30	—1	..	..	..	..
900	29	923	301·1	305	298	284·9	30	963	296·0	299	293	291·6	30	928	296·2	301	291	292·6
850	29	1426	297·7	302	292	282·6	29	1460	293·2	295	290	287·8	30	1425	294·2	301	288	285·9
800	29	1953	293·1	297	285	280·6	29	1983	291·0	295	287	283·2	30	1950	291·5	297	285	285·7
700	29	3086	284·4	288	280	273·1	29	3119	285·6	289	282	273·7	30	3082	284·6	290	279	279·3
600	28	4349	274·8	279	270	264·8	28	4397	277·7	282	268	264·9	30	4356	276·4	288	272	269·2
500	26	5799	267·3	273	260	..	27	5867	271·1	275	265	..	28	5805	268·6	275	261	..
400	26	7522	258·8	265	249	..	22	7669	262·3	265	257	..	27	7540	260·6	267	251	..
300	24	9657	246·4	253	237	..	15	9763	248·3	255	240	..	24	9688	247·4	255	239	..
250	24	10950	237·1	245	226	..	12	11083	241·4	248	233	..	21	10938	238·3	246	227	..
200	21	12467	227·2	237	212	..	8	12617	231·4	240	224	..	16	12463	226·2	235	213	..
175	18	13344	220·6	232	205	..	5	13492	224·8	230	217	..	13	13326	219·8	231	204	..
150	9	14276	211·6	221	196	..							9	14310	213·9	225	199	..
125																		
100																		
80																		

	GAUHATI (996 mb.)						JODHPUR (975 mb.)						MADRAS (1002 mb.)					
Surface	30	49	299·0	301	297	298·8	29	218	302·7	307	298	294·0	30	15	301·7	303	300	295·9
1000	28	18	..	..	..	..	29	—8	..	..	..	..	29	32	..	..	..	..
900	28	912	294·8	297	291	293·3	29	930	299·3	303	295	289·7	29	964	297·1	301	294	290·5
850	28	1436	292·4	295	286	291·1	29	1432	297·5	301	293	284·7	29	1463	294·2	298	291	288·1
800	28	1957	289·8	293	283	287·8	29	1962	295·3	300	291	281·1	29	1986	291·1	295	288	285·6
700	28	3084	283·6	289	272	280·7	29	3106	287·1	293	282	274·1	29	3117	283·6	288	278	279·8
600	28	4354	277·1	282	271	273.5	29	4381	276·1	283	270	263·7	29	4386	27 ·1	280	272	272·8
500	27	5820	269·7	276	261	269.0	29	5835	267·5	273	260	..	28	5811	267·8	272	265	..
400	24	7571	262·4	269	251	..	28	564	260·1	271	249	..	25	7562	257·5	261	249	..
300	21	9732	250·2	258	235	..	24	9694	246·0	259	234	..	15	9684	245·2	250	239	..
250	19	11050	241·4	249	224	..	23	10995	236·7	251	227	..	10	10970	235·0	242	229	..
200	18	12583	230·7	243	214	..	21	12516	225·1	239	205	..	6	12463	224·3	233	220	..
175	9	13479	227·3	237	214	..	18	13364	218·2	230	205	..	6	13326	218·0	227	213	..
150	8	14500	220·4	229	207	..	13	14328	213·0	223	206	..	6	14305	213·1	222	208	..
125	5	15562	212·4	225	203	..	9	15451	207·4	212	199	..	5	15432	206·2	219	200	..
100																		
80																		

RADIOSONDE DATA

Table VI—Mean Dynamic Height, Temperature and Dew Point at Standard Pressure Surfaces

(A) From Ascents at 00 Hours G. M. T.

June 1957

Standard Pressure Surface mbs.	NAGPUR Surf. Pr. (966 mb.)						NEW DELHI (975 mb.)						PORT BLAIR (998 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew point
Surface	27	311	301·5	306	297	292·5	30	210	300·7	305	295	292·7	13	79	299·1	300	296	297·7
1000	27	3	..	..	..	..	29	−17	..	..	..	..	13	62	..	..	..	..
900	27	937	299·3	303	291	288·2	29	920	301·3	306	296	287·3	13	988	294·8	297	293	293·2
850	27	1439	296·8	301	291	285·4	29	1425	298·7	303	292	284·8	13	1483	292·2	295	290	289·9
800	27	1966	293·3	297	289	283·6	29	1955	295·2	303	288	282·7	13	2003	289·3	292	285	286·7
700	27	3102	285·3	289	283	277·3	29	3096	286·1	290	280	275·9	12	3134	284·3	286	281	281·1
600	27	4375	276·7	286	272	268·3	29	4368	276·3	280	271	264·9	11	4406	278·0	281	275	274·0
500	26	5835	268·7	274	265	..	29	5820	267·7	271	262	..	11	5871	269·6	273	266	..
400	24	7565	259·4	265	256	..	29	7515	260·2	266	250	..	10	7607	260·0	265	257	..
300	19	9699	245·7	254	239	..	26	9701	249·3	259	240	..	10	9756	246·6	253	241	..
250	16	10999	236·2	247	229	..	26	11010	240·6	249	232	..	8	11014	236·7	247	229	..
200	15	12475	224·0	238	215	..	25	12518	230·4	239	222	..	7	12578	226·6	236	219	..
175	10	13320	215·4	219	209	..	25	13133	224·8	232	215	..	6	13417	220·0	229	213	..
150	9	14270	209·2	221	201	..	21	14146	218·6	225	208	..	6	14403	212·8	222	204	..
125							18	15623	213·9	222	205	..						
100							10	17023	211·0	216	204	..						
80							5	18365	210·4	215	202	..						

	TRIVANDRUM (1001 mb.)						VERAVAL (1001 mb.)						VISAKHAPATNAM (995 mb.)					
Surface	25	64	298·5	301	297	296·8	23	8	302·1	303	299	298·5	27	48	302·1	304	300	297·6
1000	25	71	..	..	..	..	23	20	..	..	..	..	27	5	..	..	..	..
900	25	991	293·1	296	290	289·6	23	947	295·4	299	292	290·9	27	943	299·1	306	293	291·3
850	25	1482	290·5	294	288	286·0	23	1445	294·3	299	290	280·3	27	1444	296·0	302	289	288·6
800	25	1999	283·1	291	285	282·8	22	1975	292·2	297	288	280·6	27	1970	293·0	299	285	286.1
700	25	3120	282·2	285	278	275·1	21	3102	285·1	289	283	273·0	27	3104	284·9	289	279	279·2
600	23	4381	275·2	279	271	266·1	21	4380	276·9	281	273	269·1	27	4375	276·2	282	273	272·6
500	20	5835	267·7	271	261	..	18	5843	268·7	274	265	..	26	5832	268·4	272	263	..
400	18	7554	257·6	261	253	..	18	7571	258·6	265	251	..	26	7559	259·0	264	254	..
300	15	9674	244·4	252	239	..	15	9703	245·8	250	240	..	23	9693	246·2	252	242	..
250	7	10921	234·2	237	228	..	13	10999	235·8	241	229	..	19	10999	236·5	244	232	..
200							11	12523	226·3	233	218	..	14	12523	225·6	234	221	..
175							8	13391	220·0	227	209	..	12	13407	220·3	229	214	..
150							8	14368	213·2	223	200	..	10	14377	214·5	223	206	..
125							6	15563	207·0	216	200	..	5	15452	206·0	211	201	..
100																		
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

June 1957

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (984 mb.)						BOMBAY (1001 mb.)						CALCUTTA (997 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	30	98	312·3	318	301	292·0	30	13	304·0	306	299	297·8	30	6	304·7	311	297	298·8
1000	30	−16	..	..	..	..	30	24	..	..	..	..	30	−20	..	..	..	..
900	26	912	304·8	311	297	286·7	30	959	296·6	300	293	290·6	30	919	298·8	305	292	293·3
850	26	1421	300·0	308	293	284·2	30	1456	294·3	297	290	286·2	30	1420	295·8	302	287	289·7
800	26	1952	294·7	301	289	281·8	30	1981	291·9	296	288	281·4	30	1946	293·1	299	284	286·7
700	26	3092	285·3	290	280	274·8	28	3118	286·3	290	282	274·3	30	3085	285·9	294	277	279·5
600	24	4359	276·3	283	271	266·1	26	4397	278·3	284	274	262·3	28	4361	277·5	284	270	272·1
500	23	5818	268·8	274	261	..	26	5872	272·1	277	267	255·7	27	5831	269·9	276	263	..
400	21	7547	260·3	268	250	..	20	7633	263·9	271	260	..	26	7570	261·0	267	251	..
300	17	9684	246·4	256	240	..	15	9816	251·7	261	247	..	23	9711	247·5	257	234	..
250	14	10953	237·1	248	228	..	11	11116	242·4	248	238	..	19	11007	239·5	248	223	..
200	11	12448	224·9	235	216	..	8	12672	232·6	239	228	..	14	12497	225·8	238	212	..
175	10	13322	218·6	231	207	..							8	13337	218·5	233	204	..
150	8	14347	213·6	225	202	..							7	14446	212·4	229	197	..
125	5	15509	207·8	213	199	..							5	15432	205·6	223	190	..
100																		
80																		

Standard Pressure Surface mbs.	GAUHATI (993 mb.)						JODHPUR (972 mb.)						MADRAS (1000 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	30	49	302·4	305	299	301·7	25	218	311·3	315	305	291·8	30	15	305·4	307	303	296·8
1000	29	−12	..	..	..	..	25	−10	..	..	..	..	30	19	..	..	..	..
900	29	921	297·1	303	293	295.6	25	918	303·5	307	299	288·8	30	958	298·6	302	294	291·4
850	29	1419	294·2	299	289	292·3	25	1426	298·9	303	295	286·4	30	1459	294·7	299	289	289·7
800	29	1946	291·2	296	285	289·1	25	1960	294·4	299	291	283·2	30	1982	290·5	294	286	286·4
700	29	3074	284·6	290	277	281·6	25	3094	285·2	291	281	273·1	30	3111	283·4	287	279	280·0
600	28	4346	277·5	283	264	273·8	25	4368	275·4	281	268	263·4	29	4378	276·1	280	269	274·1
500	28	5809	269·1	276	250	267·8	25	5814	267·7	277	260	..	26	5840	268·6	273	265	..
400	26	7539	259·8	269	235	..	25	7540	260·0	270	250	..	23	7567	258·9	266	254	..
300	19	9712	246·7	257	238	..	24	9671	246·3	259	238	..	19	9701	245·7	257	239	..
250	13	10998	237·3	247	227	..	23	10957	236·8	248	226	..	14	11013	238·1	248	231	..
200	13	12511	227·2	241	213	..	21	12467	225·5	242	212	..	8	12501	226·1	237	216	..
175	5	13420	222·8	228	217	..	19	13371	220·8	240	205	..						
150							15	14307	213·0	222	197	..						
125							9	15362	206·1	219	193	..						
100																		
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

June 1957

Standard Pressure Surface mbs.	NAGPUR Surf. Pr. (963 mb.)						NEW DELHI (973 mb.)						PORT BLAIR (997 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	28	311	308·4	314	301	292·1	30	210	309·5	315	300	291·6	11	79	300·1	301	297	297·6
1000	28	−29	..	..	..	..	27	−41	..	..	..	..	11	54	..	..	..	..
900	28	924	304·5	310	297	288·6	27	915	305·1	309	297	285·7	11	982	294·4	295	291	292·5
850	28	1438	299·9	306	294	286·0	27	1425	300·6	305	293	283·1	11	1476	291·5	293	288	289·6
800	28	1970	295·1	304	291	284·1	27	1957	295·3	299	289	281·5	11	1994	288·8	291	287	286·3
700	27	3111	285·7	289	281	277·7	27	3099	286·1	290	282	275·9	11	3119	283·6	287	282	279·5
600	26	4387	277·5	281	273	273·3	27	4374	276·5	281	272	265·9	11	4389	277·1	280	274	272·3
500	25	5851	269·8	276	267	..	25	5827	268·4	274	263	..	10	5848	268·3	272	265	..
400	23	7591	261·5	266	258	..	24	7557	260·8	267	255	..	10	7574	258·8	264	256	..
300	19	9741	248·0	259	243	..	24	9706	249·1	255	244	..	8	9703	246·9	254	242	..
250	16	11048	240·5	253	232	..	22	11003	240·6	246	237	..	6	11007	238·3	245	230	..
200	14	12577	229·5	237	225	..	21	12545	229·8	237	219	..						
175	13	13458	223·2	234	217	..	21	13438	223·3	234	208	..						
150	13	14460	215·6	229	208	..	21	14431	218·7	230	206	..						
125	8	15589	207·5	215	201	..	13	15570	213·3	223	201	..						
100	5	17005	204·2	208	196	..	9	16924	208·3	221	200	..						
80							7	18393	212·1	220	205	..						

	TRIVANDRUM (1000 mb.)						VERAVAL (1000 mb.)						VISAKHAPATNAM (994 mb.)					
Surface	27	64	300·5	303	299	297·6	21	8	304·0	305	302	299·9	30	48	304·0	307	301	298·6
1000	27	67	..	..	..	..	21	9	..	..	..	..	29	−8	..	..	..	..
900	27	992	293·9	296	291	291·1	21	944	297·0	300	294	289·4	29	929	299·7	306	295	291·5
850	27	1486	291·2	293	289	288·3	21	1443	295·0	299	290	284·2	29	1432	297·1	302	291	288·9
800	27	2004	288·8	291	287	285·3	20	1967	292·5	295	289	279·5	29	1959	293·3	297	289	286·2
700	26	3128	283·1	287	279	276·6	18	3102	286·2	291	284	274·3	29	3098	285·9	290	283	279·4
600	26	4397	276·4	281	269	267·3	18	4384	278·9	284	275	270·2	27	4374	277·4	284	273	272·5
500	24	5856	269·0	273	264	..	15	5858	270·2	274	264	..	25	5836	269·7	274	265	..
400	23	7586	258·6	263	254	..	13	7593	260·3	264	255	..	22	7563	259·7	266	254	..
300	14	9705	244·3	251	237	..	11	9735	246·5	250	244	..	19	9685	245·9	251	239	..
250	11	10982	234·6	243	227	..	10	11028	238·7	245	236	..	15	10989	237·1	243	231	..
200	10	12495	223·6	235	217	..	9	12544	224·9	228	218	..	13	12507	225·8	235	219	..
175	8	13307	218·3	229	209	..	9	13136	220·0	226	215	..	10	13363	219·9	228	213	..
150	7	14362	212·6	225	200	..	8	14414	211·5	220	200	..	8	14347	213·3	225	205	..
125	6	15428	207·7	217	201	..												
100																		
80																		

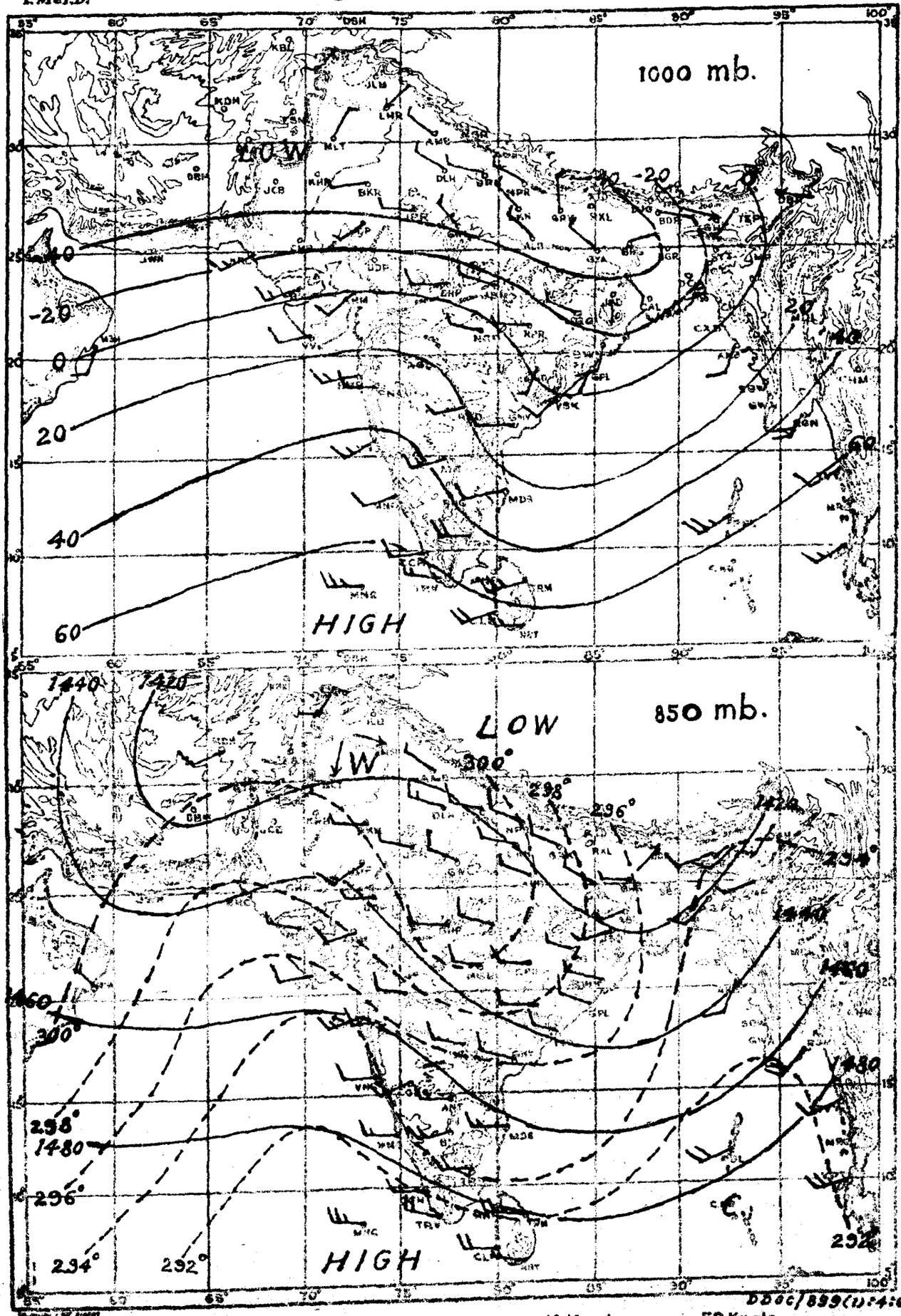
NOTE —Number of observations refer to those of dynamic height.
Means are not worked out for temperature and dew point for the 1000 mb. surface for dew point for standard pressure surfaces with temperature less than 273°A.
Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—S4—334 D.D.G. Obs. P./62—19-6-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JUNE 1957

I. Met.D. Plate I



RESULTANT WIND —— 5 Knots, ——— 10 Knots, ———— 50 Knots.

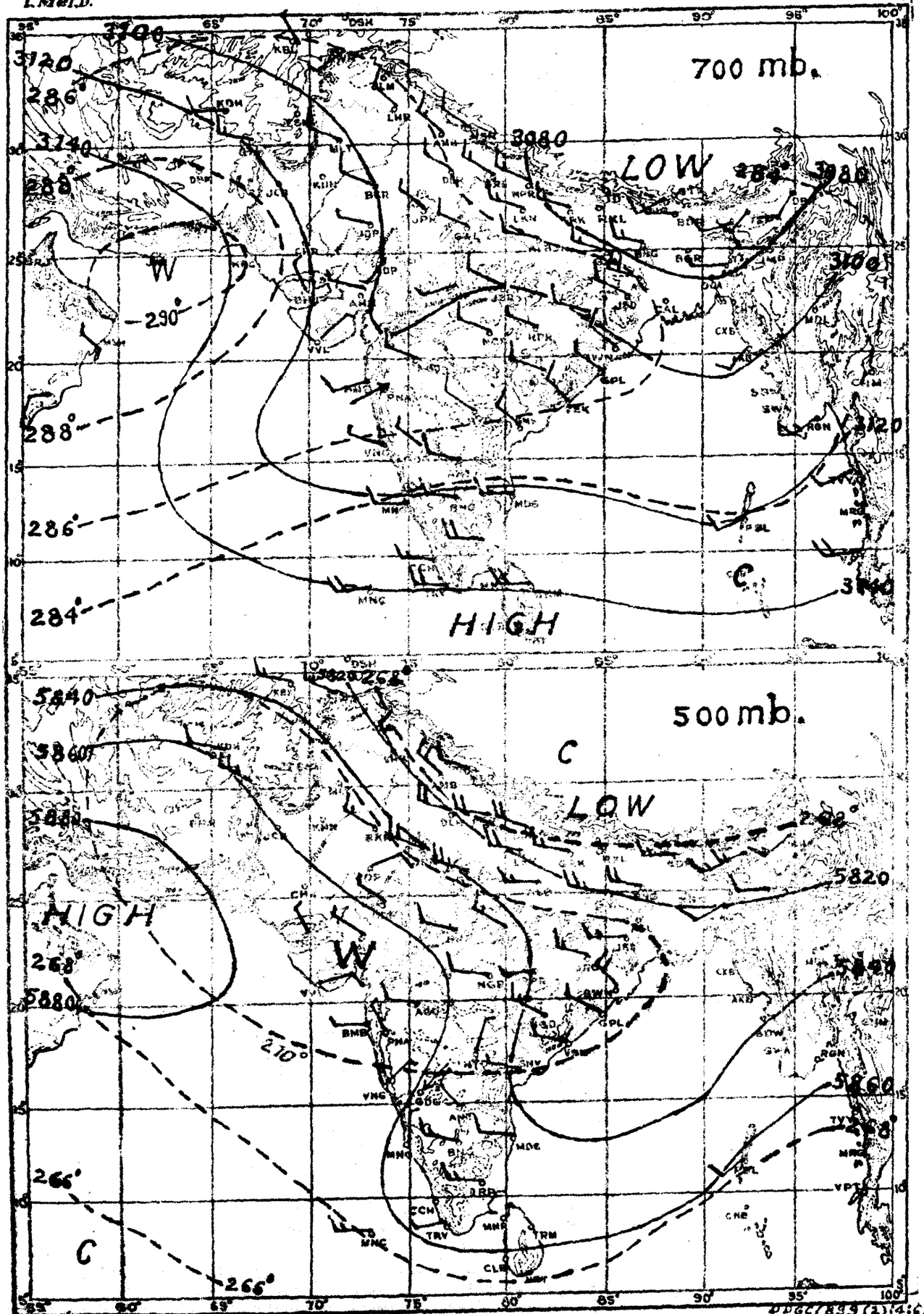
- - - - - - - - Isotherms in degrees absolute. ———— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JUNE 1957

I. Met. D.

Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

- - - - - - Isotherms in degrees absolute. ———— Contours in geopotential metres.

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WEATHER BUREAU

INDIA WEATHER REVIEW, 1957

Monthly Weather Report

July

SURPLUS
DUPLICATE

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Chief features:

(1) Extension of the monsoon into northwest India during the first half of the month, about 2 weeks later than the normal date, and

(2) Moderate but sustained activity of the monsoon which resulted in well distributed rainfall over the country.

In association with the movement of an easterly wave across upper Burma, a low pressure area formed over East Pakistan and adjoining West Bengal on the 1st. Moving slowly westwards, it became well marked on the 3rd when it was over Gangetic West Bengal and Chota Nagpur. Continuing to move further westwards and weakening into a diffuse low pressure area, it lay over northeast Madhya Pradesh on the 5th and merged into the seasonal trough on the next day. Under its influence, the Bay branch of the monsoon was active in most parts of northeast India and in east Madhya Pradesh between the 3rd and 5th. Jamshedpur recorded 18 cms. of rain on the 3rd and Gondia 14 cms. on the 5th.

An upper level trough which developed over the Gulf of Cambay and the neighbourhood on the 4th persisted there till the 10th. Under its influence the Arabian Sea branch of the monsoon strengthened along the west coast on the 5th and became strong in the Konkan and Maharashtra on the 6th and 7th. Ratnagiri recorded 22 cms. and Bombay 16 cms. on the 6th.

In association with the movement of a westerly wave which moved across Jammu and Kashmir, the monsoon advanced as a feeble current into Uttar Pradesh, the Punjab(I) and Himachal Padesh on the 9th and into Jammu and Kashmir and northeast and west Rajasthan on the 11th. An easterly wave which moved across the Arakan coast and the north Bay was responsible for the strengthening of the Bay branch of the monsoon in northeast India and in Madhya Pradesh between the 12th and 14th. The Arabian Sea branch also strengthened in the Konkan, Gujarat and Saurashtra and Kutch during the period 13th to 15th, causing widespread and locally heavy to very heavy rains over these areas. Dahanu recorded 22 cms. on the 14th and 20 cms. on the next day. Bombay (Santacruz) recorded 16 cms. on the 14th and Bhavnagar 20 cms. on the 15th. The heavy rains are reported to have caused dislocation of railway, road and telegraphic communications in some parts of Saurashtra.

A low pressure area appeared over the north Bay on the 18th and moved into Gangetic West Bengal and neighbourhood on the 19th. Moving slowly in a westnorthwesterly direction, it lay over southeast Rajasthan and the adjoining parts of Uttar Pradesh and Madhya Pradesh on the 22nd. Thereafter, it moved northwards across northeast Rajasthan and the Punjab(I) and filled up over the Punjab hills by the 25th.

In association with the formation and movement of the low pressure area, the monsoon became active over the region extending from Gangetic West Bengal to southwest Uttar Pradesh during the period 18th to 22nd. Widespread and locally heavy rain also occurred in east Rajasthan and adjoining Madhya Pradesh on the 22nd and 23rd and in the Punjab(I) and Himachal Pradesh between the 23rd and 26th. Guna recorded 20 cms. and Kotah 19 cms. on the 22nd and Dalhousie 23 cms. on the 25th. There was a spell of fairly widespread rain in Uttar Pradesh also between the 19th and 24th. Although the monsoon was generally weak over the country during the last week of the month, well distributed light to moderate rainfall occurred in many parts of the country.

The total rainfall during the month was in large excess in Jammu and Kashmir, in moderate excess in east Rajasthan, Saurashtra and Kutch, the Konkan and the Madras State and in slight excess in the Punjab (I), Rayalaseema and Kerala. It was in slight defect in west Madhya Pradesh, Gujarat and Maharashtra, in moderate defect in Orissa and Vidarbha and in large defect in west Rajasthan. Over the rest of the country, it was normal.

Both mean maximum and mean minimum temperatures were normal over the country except in Sub-Himalayan West Bengal where the mean maximum temperature alone was below normal.

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Mean relative humidity was in excess in Maharashtra and south Mysore State, in defect in Jammu and Kashmir and normal elsewhere.

Mean cloud amount was in excess in Sub-Himalayan West Bengal, east Uttar Pradesh and the Madras State, in defect in Jammu and Kashmir and normal elsewhere over the country.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs.IST of the date noted in the succeeding column ; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs.IST of the date given in the succeeding column.

Poona 5,
The 14th November 1958.

S. S. LAL,
for *Director General of Observatories.*

Errata to M.W.R. for July 1957 (Asadha 10 - Sravana 9, 1879 Saka).

Page No.	Station	Hour	Column	For	Read
Table I Sub-division					
323	27. Mysore (North)		8	-1.1	+1.1
Table II					
324	Sibsagar		7	+0;3	+0.2
324	Golaghat		9	26	..
324	Gauhati		12	219.4	+219.4
324	Gauhati		19	+0.1	0
324	Barrackpore		22	9	0
324	Foot Note		-	Data not reliabl	* Data not reliable
326	Orai		10	117.0	217.0
326	Jodhpur		21	Blank	0
327	Mandla		10	26.9	206.9
327	Ambikapur		13	05.7	105.7
327	Jagdalpur (P.B.O.)		20	6	26
327	Mandvi		8	32.3	23.3
328	Ahmednagar		7	40.3	+0.3
329	Hanamkonda		11	67.3	67.6
329	Hanamkonda		12	+164.6	-164.6
330	Nainital		18,19	8.,5	8.5, ..
Table III					
334	Bagdogra	2330	6	Blank	..
337	Varanasi (Banaras) (Babatpur Aerodrome)	1130	4	995.5	999.5
338	Roorkee	0830	8	2 .9	25.9
338	Mainpuri	0830	2	083	0830
339	Karnal	0830	1	arnal	Karnal
341	Nowgong	1730	3	Blank	,,
344	Aurangabad	1730	7	27.5	27.6
346	Kakinada	1730	22	Blank	0
347	Bidar	0830	21	Blank	0
347	Gulbarga	1730	8	22.	22.9
348	Belgaum (Sambre Aerodrome)	1130	10	20.4	24.4
348	Bangalore (Central Observatory)	0230	23	Blank	0
349	Trivandrum (Aerodrome) Hill Stations excluding Kashmir.	Trivandram (Aerodrome) Hill Stations excluding Kashmir.		---	Trivandrum (Aerodrome Hill Stations excluding Kashmir.
350	Foot note		-	(R) Register not received	(R) Register not received
350	Foot note			+ Data not available	+ Data not available.
351	Wallungchung Gola	0830	2	(*) 0830	(R) 0830
351	Wallungchung Gola	1730	2	(*) 1730	(R) 1730
351	Chainpur	1730	2	1730	* 1730
351	Tista Catchment		1	Tista Catchment*	Tista Catchment

P.T.O.

Page No.	Station	Time in I.S.T.	Ht. in Km.	Existing entry under n	V	v	D	Correct entry under n	V	v	D
358	Cochin	1730	4.5				289				290
361	Jabalpur	2330	0.6	0				30			
	"	2330	0.9	0				30			
	"	2330	1.5	6				26			
	"	2330	2.1	1				21			
	"	2330	3.0	5				15			
361	Jagdalpur	under	Time in I.S.T.			1370				1730	
361	Jagdalpur	0530	0.6	2				22			
	"	0530	0.9	8				18			
	"	0530	1.5	1				11			
361	Jagdalpur	1730	0.6	0				20			
	"	1730	0.9	0				20			
	"	1730	1.5	5				15			
362	Column 1	under	Ht. in Km.	First digit of all Hts. dropped out				Standard Hts. as given on other pages to be taken.			
362	Mangalore	0530	1.5	21.				21.6			
	"	0530	6.0	9.				9.0			
364	Poona	1730	0.9				26				260
	"	1730	1.5				26				263
	"	1730	2.1				26				268
369	Udaipur	1730	10.5	45.4				15.4			
	"	1730	14.1	35.5				35.3			
368	Bikaner	1730	An asterisk mark * appearing against 1730 hrs.					Asterisk mark * be deleted.			

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity %		Cloud	
					0830 hrs. I.S.T.	1730 hrs. I.S.T.	0830 hrs. I.S.T.	1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura).	426·1	106	32·0	25·5	85	79	7·0	5·8
	+25·6		+0·3	+0·4	0		+0·5	
2. West Bengal .	412·3	101	31·3	26·0	86	82	6·3	5·9
	+3·1		−0·6	+0·1	+3		−0·1	
3. Orissa . .	205·1	61	31·1	25·9	84	80	6·7	6·6
	−128·5		−0·1	+0·2	+2		+0·7	
4. Bihar . .	322·5	99	31·7	25·5	86	80	6·6	6·5
	−2·6		0	+0·1	+4		+0·3	
5. Uttar Pradesh .	331·0	106	34·0	26·3	81	70	5·9	6·0
	+18·2		+0·5	+0·1	+2		+0·4	
6. Punjab (I) (Including Himachal Pradesh & Delhi)*	198·5	112	36·6	27·1	71	56	4·9	5·1
	+21·7		+0·3	0	+1		+0·7	
		214	26·3	13·5	66	53	2·7	4·2
7. Jammu and Kashmir.	139·7		+0·1	−0·9	−11		−0·9	
	+74·5							
Sub-Division								
1. Bay Islands .	391·1	100	29·3	24·2	85	87	6·8	7·0
	−0·8		+0·5	+·03	+1		+0·2	
2. Assam (Including Manipur & Tripura).	426·1	106	32·0	25·5	85	79	7·0	5·8
	+25·6		+0·3	+0·4	0		+0·5	
3. Sub-Himalayan West Bengal	588·9	93	30·3	25·6	89	80	7·0	5·9
	−43·3		−1·4	−0·1	+4		+1·5	
4. Gangetic West Bengal.	346·1	106	31·6	26·1	85	83	6·1	5·9
	+20·5		−0·3	+0·1	+2		−0·5	
5. Orissa . .	205·1	61	31·1	25·9	84	80	6·7	6·6
	−128·5		−0·1	+0·2	+2		+0·7	
6. Chota Nagpur .	341·2	98	30·8	24·3	85	81	6·9	6·9
	−6·5		+0·2	0	+2		0	
7. Bihar . .	314·2	100	32·2	26·2	86	80	6·5	6·1
	−0·8		−0·2	+0·1	+5		+0·4	
8. Uttar Pradesh (East).	330·0	103	33·9	26·6	82	73	7·0	6·3
	+9·9		+0·5	+0·3	+2		+1·4	
9. Uttar Pradesh (West).	331·8	108	34·0	26·0	80	68	5·0	5·7
	+24·4		+0·4	+0·1	+2		−0·3	
10. Punjab (India) (Including Delhi.)	198·5	112	36·6	27·1	71	56	4·9	5·1
	+21·7		+0·3	0	+1		+0·7	
11. Himachal Pradesh.	518·9	..	33·5	22·9	81	61	5·4	5·3
	..		..	..	..		..	
12. Jammu and Kashmir.	139·7	214	26·3	13·5	66	53	2·7	4·2
	+74·5		+0·1	−0·9	−11		−0·9	
13. Rajasthan (West)	35·2	45	38·3	27·8	68	41	3·7	3·5
	−43·4		+0·9	+0·5	0		−0·3	
14. Rajasthan (East).	290·6	128	33·1	25·4	76	60	5·5	5·7
	+64·4		−0·2	0	+1		+0·1	
15. Madhya Pradesh (West)	306·1	87	31·3	23·9	84	70	6·9	6·9
	−45·5		+0·5	0	+1		+0·6	
Division—*Contd.*								
8. Rajasthan . .	162·9	107	35·4	26·5	72	52	4·7	4·7
	+10·5		+0·3	+0·2	+1		−0·1	
	342·0	91	30·6	23·8	85	74	6·9	7·0
9. Madhya Pradesh	−32·1		+0·2	+0·1	+2		+0·5	
	413·1	106	30·6	24·4	86	74	6·7	6·7
10. Bombay . .	+24·8		−0·1	+0·1	+4		+0·1	
	142·6	101	32·4	25·1	77	65	6·7	6·8
11. Andhra Pradesh	+1·1		−0·5	+0·1	+3		+0·5	
	71·5	128	33·7	25·3	70	60	6·1	6·7
12. Madras . .	+15·7		−0·7	+0·2	+2		+1·2	
	365·8	100	27·6	21·2	88	75	7·0	7·1
13. Mysore . .	−0·1		−0·6	+0·2	+5		+0·6	
	609·2	113	28·4	23·8	90	84	7·2	7·1
14. Kerala . .	+71·2		−0·1	+0·4	+1		+0·3	
Mean of India .	297·2	100	31·9	24·8	82	70	6·3	6·3
(Excluding Jammu and Kashmir and Himachal Pradesh).	−1·1	..	0	+0·1	+3		+0·4	
Sub-Division—*Contd.*								
16. Madhya Pradesh (East).	393·2	97	29·5	23·7	87	79	7·0	7·3
	−12·9		−0·2	+0·2	+4		+0·4	
17. Gujarat . .	279·3	86	31·9	25·3	89	73	7·2	6·2
	−43·9		+0·1	+0·2	+4		+0·3	
18. Saurashtra and Kutch	259·1	128	32·0	25·8	85	75	5·9	5·9
	+57·2		−0·5	−0·1	+4		−0·3	
19. Konkan . .	911·9	129	29·3	25·0	89	85	7·0	7·1
	+204·8		−0·1	0	+4		−0·2	
20. Maharashtra .	277·1	85	29·9	22·2	84	68	6·7	6·9
	−47·6		+0·2	+0·2	+6		+0·2	
21. Vidarbha . .	210·7	66	31·0	24·0	82	70	7·3	7·6
	−107·5		−0·3	+0·1	+2		+1·0	
22. Coastal Andhra Pradesh.	127·4	99	33·1	26·3	77	67	6·6	7·0
	−1·5		−0·4	+0·3	+1		+0·3	
23. Telangana .	208·3	97	30·5	23·2	81	67	7·1	6·9
	−5·8		−0·4	0	+4		+1·1	
24. Rayalaseema .	107·1	114	33·3	24·2	74	55	6·7	6·3
	+13·0		−0·9	−0·5	+5		+0·5	
25. Madras . .	71·5	128	33·7	25·3	70	60	6·1	6·7
	+15·7		−0·7	+0·2	+2		+1·2	
26. Coastal Mysore .	986·5	96	28·1	23·6	91	87	7·4	7·6
	−41·1		−0·5	+0·1	+1		+0·4	
27. Mysore (North) .	225·1	108	28·4	21·3	86	73	7·1	7·2
	+16·0		−0·5	+0·2	+5		−1·1	
28. Mysore (South) .	219·6	101	26·4	20·3	89	74	6·7	6·7
	+1·7		−0·9	−0·3	+7		−0·1	
29. Kerala (Including Laccadives).	609·2	113	28·4	23·8	90	84	7·2	7·1
	+71·2		−0·1	+0·4	+1		+0·3	

NOTE :—The entries in the second line for each division and sub-division indicate departures from normal.
*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	28·4	..	30·4	11	24·8	..	22·7	3	88·0	246·2	..	66·5	15	12	..	19·2	14·3	..	14	0	0	3	0	0	0	0	0	0
Long Island	30·6	..	32·6	23	24·4	..	22·4	12	99·4	252·1	..	39·4	12	14	..	5·7	3·4	..	21	0	0	2	0	0	0	0	0	0
Port Blair	29·3	+0·5	31·1	23	24·2	+0·3	21·8	12	158·4	391·1	−0·8	75·1	28	18	−2·5	19·1	15·0	−10·6	27	0	0	6	1	0	0	0	0	0
Car Nicobar	30·4	..	31·7	11	24·8	..	21·2	26	223·9	280·0	..	103·4	26	12	..	8·0	5·2	..	16	0	0	1	0	0	0	0	0	0
Nancowry	29·6	..	30·9	8	25·0	..	22·1	29	105·3	282·3	..	35·0	12	17	..	12·1	10·5	..	23	0	0	4	0	0	0	0	0	0
Kondul	29·7	..	33·1	9	25·2	..	21·9	30	178·7	377·6	..	86·9	22	16	..	8·3	7·5	..	17	0	0	2	0	0	0	0	0	0
Assam (Including Manipur, Tripura)																												
Pasighat	29·6	..	35·2	4	23·8	..	22·2	31	465·2	773·9	..	196·6	10	26	..	4·4 (e)	3·7 (d)	..	26	0	0	0	0	0	0	0	0	0
Digboi	31·3	..	35·8	4	24·5	..	22·8	29	91·8	480·3	..	52·6	23	22	..	5·9	4·3	..	26	0	0	0	0	0	0	0	0	0
Dibrugarh	30·9	+0·2	36·1	3,4	24·5	+0·4	22·8	28,31	76·8	472·0	−64·5	87·6	7	24	+2·7	3·5	2·8	+1·2	26	0	0	4	0	0	0	0	0	0
Dibrugarh(Mohanbari Aerodrome)	31·0	..	36·1	3	24·0	..	21·5	22	162·1	411·5	..	53·8	13	21	..	7·2	7·0	..	27	0	0	17	0	0	0	0	0	0
North Lakhimpur	30·6	..	35·6	4	24·6	..	22·8	6	136·6	724·7	..	100·2	9	25	..	.. (a)	.. (a)	..	29	0	0	8	0	0	0	0	0	0
Sibsagar	32·2	+0·4	36·2	4	25·6	+0·3	24·1	31	53·9	553·0	+96·1	97·0	18	21	+1·3	5·7	5·9	+2·4	27	0	0	11	0	0	0	0	0	0
Jorhat	32·9	..	35·1	4	25·1	..	23·9	21,26	38·3	448·2	..	78·5	5	21	..	..	..	..	25	0	0	20	0	0	0	0	0	0
Golaghat	33·0	..	35·6	2,4	..	..	..	26	95·9	358·8	..	81·3	21	20	..	..	..	..	22	0	0	0	0	0	0	0	0	0
Gohpur (R)																												
Tezpur	32·4	+0·5	35·3	4	26·0	+0·7	22·3	27	56·7	317·2	−30·5	71·6	8	13	−3·9	.. (k)	.. (l)	..	21	0	2	9	0	0	0	0	0	0
Tezpur (P.B.O.)	32·2	..	36·3	5	25·6	..	23·0	30	65·1	372·6	..	86·1	8	15	..	3·8	2·1	..	22	0	0	14	0	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	53·0	161·9	..	40·4	11	10	..	9·7	6·0	..	17	0	0	4	0	0	0	0	0	0
Chaparmukh (R)																												
Tangla	32·7	..	35·4	3	25·7	..	23·8	27	45·0	267·1	..	55·9	10	11	..	9·2 (a)	6·5 (a)	..	14	0	0	1	0	0	0	0	0	0
Gauhati	32·3	+0·2	34·4	4	26·4	+0·7	24·6	13	137·4	531·3	219·4	122·2	8	11	−4·3	4·4	2·3	+0·1	14	0	0	0	0	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	31·9	..	34·1	4	26·0	..	24·1	13	72·5	531·7	..	88·9	9	13	..	7·5	5·3	..	21	0	0	19	0	0	0	0	0	0
Rangiya*																												
Goalpara	32·3	..	35·3	15	25·7	..	22·3	11	163·8	314·9	..	60·7	17	18	..	..	..	..	23	0	0	0	0	0	0	0	0	0
Dhubri	30·4	+0·4	33·4	14	26·3	+0·6	25·0	10	126·0	346·9	−89·7	66·3	28	18	+1·9	8·3	7·1	+1·1	19	0	0	3	0	0	0	0	0	0
Dhubri(Rupsi Aerodrome)	31·4	..	33·8	15	25·6	..	23·5	17	164·7	570·2	..	160·0	28	14	..	7·2	5·1	..	14	0	0	3	0	0	0	0	0	0
Tura (R)																												
Agartala	31·1	..	33·0	14	25·1	..	24·1	23	122·3	264·9	..	63·5	11	11	..	12·7	10·8	..	19	0	4	3	0	0	0	0	0	0
Silchar	31·7	−0·6	34·1	13	24·8	−0·3	23·7	5	157·3	674·0	+152·8	144·3	4	28	+5·3	3·2	1·9	−0·8	28	0	2	8	0	0	0	0	0	0
Silchar (Kumbhigram Aerodrome)	32·2	..	35·3	4	24·3	..	23·5	31	84·6	563·3	..	59·9	12	23	..	5·8	5·3	..	30	0	0	17	0	0	0	0	0	0
Imphal	28·8	..	31·3	15	22·2	..	20·9	28	89·7	269·8	..	42·9	22	19	..	10·1	6·5	..	22	0	0	6	0	0	0	0	0	0
Haflong	27·6	..	31·1	3	21·1	..	19·8	22	34·8	190.6	..	31·7	14	17	..	..	..	..	25	0	0	2	0	0	0	0	0	0
Lumding	34·2	+1·3	36·3	12	25·2	+0·5	23·3	26	2·1	88·3	−104·5	47·0	19	7	−4·5	2·9	1·1	..	11	0	0	1	0	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar(C.W.O.)	31·8	..	34·3	15	25·4	..	23·8	28	224·9	642·4	−144·2	179·0	31	17	−3·5	7·4	5·0	..	23	0	0	11	0	0	0	0	0	0
Jalpaiguri	29·4	−2·0	32·2	21	24·9	−0·3	22·5	31	233·3	759·3	−59·1	193·5	28	24	+1·7	9·3	7·3	+4·1	28	0	0	13	0	0	0	0	0	0
Bagdogra	31·0	..	32·8	6	24·6	..	21·8	7	158·5	1151·4	..	187·5	28	26	..	5·2	3·4	..	27	0	0	10	0	0	0	0	0	0
Malda	31·3	−0·8	33·4	16	26·3	+0·2	24·1	2	44·7	364·9	+73·3	90·2	23	11	−3·8	11·0	9·1	+0·6	18	0	0	9	0	0	0	0	0	0
Gangetic West Bengal.																												
Dum Dum	31·8	..	34·5	31	25·8	..	22·5	1	192·7	387·4	..	102·8	19	18	..	10·7	8·3	..	23	0	0	7	0	0	0	0	0	0
Calcutta	32·0	+0·1	36·4	15	26·2	+0·3	24·3	24	179·1	389·6	+64·2	88·9	24	16	−1·5	7·7	6·6	+0·6	25	0	0	8	0	0	0	0	1	0
Barrackpore	31·2	..	33·8	31	26·1	..	24·8	3,22	124·4	238·0	..	48·0	24	17	..	..	..	..	24	0	9	9	0	0	0	0	0	0
Saugor Island	30·1	−0·7	31·3	1	26·8	+0·1	24·2	24	251·6	474·1	+81·9	217·4	19	15	−1·5	..	..	..	20	0	0	3	0	0	0	0	1	0
Sandheads	..	..	..	..	..	..	..	..	70·4	292·5	+14·4	67·6	18	15	+2·3	..	..	..	18	0	0	3	0	0	0	0	0	0
Contai	30·6	..	32·5	18	26·4	..	24·6	3	207·3	482·3	..	128·5	24	14	..	15·1	12·7	..	17	0	0	2	0	0	0	0	0	0
Midnapore	31·8	−0·3	33·4	30	25·9	−0·2	23·9	24	142·7	248·6	−75·0	68·5	24	12	−4·3	6·9	6·2	+2·2	14	0	0	0	0	0	0	0	0	0
Purulia	31·5	..	35·0	29	25·4	..	22·2	5,21	89·4	282·2	..	55·4	3	17	..	7·3	5·6	..	19	0	0	1	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	480·1	+150·4	86·9	19	16	+0·3	..	..	..	20	..	..	..	..	..	..	..	..	..
Burdwan	31·1	−1·2	34·4	17	25·9	−0·2	22·0	14	195·3	328·6	+3·5	76·7	10	15	−1·0	5·7	3·8	−0·4	15	0	0	0	0	0	0	0	0	0
Krishnagar	32·3	+0·1	34·8	17	26·2	+0·3	24·4	24	100·4	230·4	−55·3	84·6	21	12	−4·3	7·9	5·8	0	19	0	0	6	0	0	0	0	0	0
Asansol	31·5	−0·6	34·4	11	25·8	+0·4	23·6	22	144·2	325·0	−22·7	50·1	29	21	+3·3	9·0	7·3	−0·6	26	0	0	11	0	0	0	0	0	0
Suri	31·8	..	34·4	18	25·6	..	23·3	22	71·8	379·2	..	107·4	12	18	..	10·4	9·2	..	23	0	0	0	0	0	0	0	0	0
Berhampore	32·5	+0·4	35·1	13	26·2	+0·1	24·6	2	121·9	292·7	+16·6	63·5	21	16	−0·1	6·2	4·6	−0·9	19	0	0	2	0	0	0	0	0	0
Orissa																												
Baripada	32·0	..	34·5	29,31	..	..	..	..	278·8	445·3	..	66·3	17	19	..	3·7	2·6	..	20	0	0	6	0	0	0	0	0	0
Balasore	31·1	−0·6	33·4	9,10	26·0	+0·2	23·9	25	76·9	210·3	−89·4	33·0	2,20	11	−3·1	16·1	9·5	+2·6	16	0	0	5	0	0	0	0	0	0

Data not reliabl . (e) Mean of 26 days. (d) Mean of 27 days. (R) Register not received. (k) Mean of 20 days. (l) Mean of 19 days (a) Mean of 30 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orissa—(*Contd.*)																												
Chandbali	30·1	—1·1	34·4	10	25·8	+0·2	23·3	1,24	88·6	189·0	—236·2	68·6	24	9	—7·8	13·2	10·7	—0·7	12	0	0	3	0	0	0	0	0	0
Cuttack	32·3	+0·4	36·2	2,31	25·5	—0·2	22·2	24	143·7	245·6	—81·8	106·7	24	19	+3·1	..	..	..	19	0	0	4	0	0	0	0	0	0
Bhubaneswar	31·5	..	35·7	2	25·8	..	22·7	3	163·6	202·8	..	41·9	24	16	..	17·1	14·8	..	19	0	0	7	0	0	0	0	0	0
Puri	30·9	+0·2	32·9	31	27·2	+0·6	23·9	3	34·6	64·6	—197·5	25·4	18	5	—7·0	24·5	22·7	+4·5	10	0	0	0	0	0	0	0	0	0
Gopalpur	31·2	+0·3	38·3	12	26·3	+0·1	24·0	4	24·5	88·4	—93·5	38·5	13	6	—3·7	..	..	..	12	0	0	3	0	0	0	0	0	0
Koraput	24·8	..	28·9	31	19·5	..	16·1	7	155·8	427·6	..	95·3	18	20	..	..	..	..	24	0	0	0	0	0	0	0	0	0
Titilagarh	28·9	..	33·4	28	24·2	..	22·3	4,5	150·5	530·3	..	89·6	18	17	..	6·1	4·6	..	21	0	0	5	0	0	0	0	0	0
Bolangir	..	..	..	..	..	..	..	..	..	383·8	..	139·2	13	13	..	10·5	10·0	..	15	0	0	0	0	0	0	0	0	0
Angul	31·5	+0·3	34·4	2	25·3	+0·2	22·3	3	87·0	231·9	—84·8	62·0	24	14	—1·2	11·2	8·3	+0·3	15	0	0	7	1	0	0	0	0	0
Keonjhar	30·1	..	33·0	30	22·7	..	20·6	26	78·9	210·6	..	43·4	3	18	..	10·7	9·1	..	21	0	0	0	0	0	0	0	0	0
Sambalpur	30·6	—0·1	33·9	28,30	25·1	0	23·2	3	125·2	405·9	—116·3	78·3	3	16	—3·6	8·3	7·8	+1·5	18	0	0	2	0	0	0	0	0	0
Jharsuguda	30·6	..	34·8	30	24·7	..	22·7	3	145·6	436·4	..	101·9	17	18	..	8·7	7·5	..	20	0	0	9	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	32·1	+0·3	35·6	30	26·2	+0·3	24·0	24	177·7	396·3	+62·0	175·8	3	14	—3·4	9·9	7·4	+0·6	20	0	0	8	0	0	0	0	0	0
Jamshedpur (P.B.O.)	32·1	..	35·6	30	25·7	..	23·4	22	199·7	403·0	..	142·7	3	12	..	8·5	6·2	..	21	0	0	14	0	0	0	0	0	0
Chaibasa	31·7	—0·2	35·6	30	25·4	+0·1	22·7	3	100·6	249·4	—83·6	64·3	3	17	+0·8	4·4	3·3	—0·7	21	0	0	2	0	0	0	0	0	0
Ranchi	29·9	+0·8	32·6	1	22·3	—0·6	20·4	9	245·4	426·5	+34·1	67·3	24	19	+0·5	3·0	2·5	—5·5	20	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	28·9	..	32·1	29	23·1	..	21·3	22,24	(i) 150·7	304·6	..	45·8	24	20	..	(j) 17·0	11·5	..	25	0	0	6	0	0	0	0	0	0
Daltonganj	32·3	—0·5	35·6	28	25·8	+0·2	22·9	24	262·1	491·5	+151·1	145·8	3	16	+0·4	7·8	5·2	—0·6	19	0	0	10	0	0	0	0	0	0
Hazaribagh	29·4	—0·2	32·9	28	23·4	+0·1	22·1	3,22	171·6	292·6	—38·4	64·5	22	20	+2·2	10·3	8·3	—1·5	23	0	0	10	0	0	0	0	0	0
Dhanbad	31·0	..	34·2	30	25·0	..	21·6	25	129·4	254·3	..	36·8	17	18	..	9·2	7·8	..	21	0	0	8	0	0	0	0	0	0
Bihar																												
Purnea	31·8	—0·2	33·7	7	26·1	+0·2	22·5	2	78·5	353·3	—10·4	96·5	2	16	—0·6	8·7	6·5	+2·3	20	0	0	5	0	0	0	0	0	0
Forbesganj	32·9	..	35·7	8,18	24·6	..	23·3	4 days	72·5	516·7	..	91·9	21	19	..	10·0	7·6	..	26	0	0	17	0	0	0	0	0	0
Darbhanga	32·9	+0·8	36·1	8	26·6	+0·3	23·9	29	182·0	363·2	+55·3	69·1	23	14	+0·1	6·9	3·3	—2·3	16	0	0	0	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	762·3	+437·7	129·5	25	15	+1·0	..	..	..	15	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	231·7	—74·9	42·7	23	13	—0·8	..	..	..	17	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	246·5	—84·2	55·9	22	13	—1·5	..	..	..	15	..	..	..	..	..	..	..	..	..
Patna	32·8	+0·2	36·4	1	26·9	+0·3	24·9	23	75·7	302·8	+8·7	42·4	24	15	+1·3	9·3	7·8	+0·9	23	0	0	8	0	0	0	0	0	0
Patna(Aerodrome)	32·4	..	35·6	8	26·6	..	24·3	24	90·3	442·3	..	130·6	11	13	..	8·5	6·0	..	18	0	0	9	0	0	0	0	0	0
Dehri	32·8	..	37·5	1	26·4	..	23·6	24	56·4	453·0	+160·4	73·1	22	15	+0·8	6·5	5·6	..	16	0	0	3	0	0	0	0	0	0
Gaya	32·3	—1·1	35·4	28	26·2	+0·3	24·1	24	154·9	417·1	+81·6	104·7	3	16	+0·2	9·1	7·5	—1·7	20	0	0	16	0	0	0	0	0	0
Jamui	32·6	..	35·5	29	26·5	..	24·3	23	136·1	271·0	..	47·2	2	12	..	7·2	5·4	..	20	0	0	7	0	0	0	0	0	0
Dumka	31·3	—0·6	33·9	29,30	25·2	—0·4	22·7	22,25	64·5	249·9	—101·1	38·2	22	21	+3·0	..	..	..	22	0	0	9	0	0	0	0	0	0
Bhagalpur	32·4	..	35·6	28	26·5	..	24·4	2,23	131·4	195·7	..	29·4	22	15	..	8·9	7·0	..	19	0	0	11	0	0	0	0	0	0
Sabour	32·3	—0·1	35·8	18	26·4	+0·1	24·2	2	143·2	210·1	—42·9	35·4	18	13	—2·1	10·2	7·2	—2·5	19	0	0	12	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	33·2	+0·3	41·7	10	25·7	—0·6	23·3	24, 29	150·9	414·1	+41·5	54·6	22	16	+2·0	3·8	3·1	—2·9	17	0	0	0	0	0	0	0	0	0
Nautanwa	33·1	..	42·1	21	25·9	..	22·2	29	169·6	831·6	..	121·2	11	21	..	8·8	7·2	..	22	0	0	0	0	0	0	0	0	0
Gorakhpur	..	..	..	..	26·6	+0·4	23·9	29	135·1	475·6	+129·4	97·5	18	17	+2·7	2·3	3·5	—0·2	20	0	0	0	0	0	0	0	0	0
Azamgarh(R)																												
Ballia	33·2	..	36·4	2,7,8	23·8	..	20·7	24	109·7	321·4	..	49·5	11	12	..	7·4	5·5	..	19	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (R)																												
Varanasi (Banaras) (Babatpur Aerodrome)	33·2	..	37·2	9	26·6	..	22·1	24	104·0	503·7	..	127·3	20	12	..	(a) 11·5	10·2	..	16	0	0	16	0	0	0	0	0	0
Allahabad (Bamrauli)	34·3	+0·9	38·9	9	26·8	+0·2	23·8	24	111·6	258·1	—60·9	38·6	25	16	+0·8	8·9	6·3	—1·4	18	0	0	14	0	0	0	0	1	0
Banda	35·7	..	42·8	16	27·0	..	22·2	26	151·2	397·0	..	93·0	17	13	..	2·5	1·6	..	14	0	0	0	0	0	0	0	0	0
Fatehpur(R)																												
Kanpur	34·1	+0·5	39·7	7	27·3	+0·7	23·6	26	222·8	365·2	+92·1	78·7	19	16	+3·5	12·5	9·9	—1·8	17	0	0	3	0	0	0	0	0	0
Lucknow	34·2	+0·6	40·3	2	26·3	—0·1	22·9	26	75·8	262·2	—42·6	69·3	29	15	+1·6	..	..	..	17	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	33·8	+0·2	39·4	3	26·9	+1·0	23·7	25	127·4	204·6	—100·2	41·7	12	14	+0·6	13·1	9·9	..	15	0	0	9	0	0	0	0	0	0
Hardoi	33·3	..	37·8	7	26·8	..	24·4	24	187·3	286·1	..	46·2	13	16	..	9·2	6·4	..	20	0	0	1	0	0	0	0	0	0
Lakhimpur Kheri	32·7	..	36·4	2,4,7	25·9	..	23·6	30	165·7	700·5	..	139·7	30	20	..	5·5	4·2	..	20	0	0	12	0	0	0	0	0	0
Bahraich(R)																												

(R) Register not received. (i) Total for 22 days. (j)— Mean of 21 days. (a) Mean of 30 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West)																												
Orai	34·6	..	40·6	4,7	24·8	..	20·7	26	117·0	328·6	..	67·3	26	14	..	11·9	9·2	..	15	0	0	0	0	0	0	0	0	0
Jhansi	33·9	+0·2	40·6	7	26·9	+1·0	23·3	25	186·9	304·1	+4·1	115·4	19	12	—1·8	7·0	5·7	—1·1	16	0	0	1	0	0	0	0	0	0
Agra	34·2	—0·1	42·7	5	27·0	+0·1	24·4	10	171·8	377·4	+160·2	54·6	20	16	+5·0	5·9	5·8	—1·3	16	0	0	0	0	0	0	0	0	0
Agra (Aerodrome) (R)																												
Mainpuri	35·6	+0·5	43·9	9	27·1	+0·3	21·5	19	68·5	121·4	—70·1	34·6	19	5	—5·4	6·6	5·2	+1·7	10	0	0	2	0	0	0	0	0	0
Aligarh	34·8	+0·2	42·4	5	24·1	—2·6	20·6	24	108·3	296·8	+74·0	68·6	20	12	+1·7	11·4	8·6	+1·2	14	0	0	1	0	0	0	0	0	0
Bareilly	33·7	+0·3	40·6	3	26·2	+0·1	22·8	8	86·5	265·1	—64·1	57·9	9	15	+2·2	7·5	5·8	+2·3	19	0	0	5	0	0	0	0	0	0
Meerut	34·8	+0·7	42·2	4,8	26·9	+0·5	24·4	24	..	314·6	+96·4	62·2	24	11	+0·7	..	7·9	..	12	0	0	0	0	0	0	0	0	0
Najibabad	33·9	..	41·6	3	25·6	..	21·7	8	111·0	339·3	..	52·8	24	13	..	4·7	3·7	..	17	0	0	0	0	0	0	0	0	0
Roorkee	34·5	+1·1	44·2	6,7	26·0	+0·4	23·8	20	102·7	386·7	+74·3	88·9	31	14	+2·1	8·1	7·0	+3·0	15	0	0	10	0	0	0	0	0	0
Dehra Dun	30·8	+0·5	36·4	5	23·8	+0·6	21·0	31	229·6	588·2	—79·8	75·7	19	19	—1·3	4·4	2·8	+0·2	25	0	0	10	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
New Delhi	35·4	+0·3	42·2	5,7	27·2	+0·3	24·2	24	124·0	258·8	+80·2	51·8	22	13	+4·0	11·8	10·0	—0·3	15	0	0	8	0	0	0	0	0	0
Hissar	37·8	+0·2	45·8	7,8	27·0	—0·3	23·3	13	39·9	197·8	+89·1	47·0	24	10	+4·0	10·0	10·8	+1·9	11	0	0	4	0	0	0	0	0	0
Karnal	35·2	..	42·9	3	25·4	..	23·2	25	67·2	123·6	..	36·8	23	9	..	0	0	..	9	0	0	2	0	0	0	0	0	0
Patiala	35·9	..	44·3	3	26·6	..	23·1	10	77·1	139·0	—104·3	30·0	24	10	+2·3	10·2	11·1	..	10	0	0	5	0	0	0	0	0	0
Ambala(R)																												
Ambala (Aerodrome)(R)																												
Chandigarh (R)																												
Ludhiana(R)																												
Ferozepur	37·7	..	45·1	8	26·8	..	21·4	23	109·3	234·9	..	99·6	15	6	..	4·0	3·0	..	6	0	0	0	0	2	0	0	0	0
Amritsar	37·7	..	44·6	7	25·9	..	22·1	24	39·9	73·7	..	39·4	25	5	..	13·7	11·3	..	7	0	0	8	0	4	0	0	0	0
Pathankot	36·2	..	43·4	5	25·2	..	21·6	31	114·5	363·2	..	79·2	25	15	..	4·5	3·2	..	15	0	0	0	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur	34·7	..	41·8	3	24·2	..	21·3	9	142·6	426·5	..	85·3	27	19	..	6·4	5·0	..	21	0	0	6	0	0	0	0	0	0
Mandi	32·3	..	38·3	5	21·6 (a)	..	..	..	178·7	611·2	..	81·8	9	16	..	2·8	2·4	..	20	0	0	4	0	0	0	0	0	0
Jammu and Kashmir																												
Srinagar	31·1	+0·1	35·7	19	17·8	—0·1	14·2	1	4·1	20·8	—38·4	8·3	10	3	—1·9	5·2	4·5	+0·5	7	0	0	5	0	0	0	0	0	0
Gulmarg	21·5	0	25·8	9	9·2	—1·7	5·2	1	48·6	67·2	—35·9	32.0	27	5	—3·9	8·2	5·1	0	12	0	0	10	0	0	0	0	0	0
Sonamarg*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dras	..	..	..	..	..	..	..	..	..	88·9	+72·9	55·9	24	3	+1·4	..	..	..	3	..	..	..	..	..	..	..	..	..
Kargil(R)																												
Leh(R)																												
Skardu(R)																												
Gurez	..	..	..	..	..	..	..	..	..	38·1	—18·8	12·7	7, 22, 23	3	—2·9	..	..	..	3	..	..	..	..	..	..	..	..	..
Gilgit(R)																												
Misgar(R)																												
Jammu(R)																												
Gund	..	..	..	..	..	..	..	..	..	18·4	..	4·1	22	4	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	23·4	..	12·9	25	3	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	27·4	..	5·1	29	4	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Khangral	..	..	..	..	..	..	..	..	..	42·8	..	22·9	23	4	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	17·8	..	10·2	24	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Khalatse(R)																												
Mulbik	..	..	..	..	..	..	..	..	..	51·1	..	30·5	25	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	39·7	+0·8	45·9	7	28·7	+0·6	24·8	24	15·5	20·1	—35·8	6·6	11	3	—1·3	7·5	7·2	—4·7	6	0	0	1	0	1	0	0	0	0
Churu (R)																												
Bikaner	38·6	+0·1	43·8	7	28·0	0	24·2	23	31·0	56·7	—28·1	26·2	23	7	+2·1	13·3	13·0	+1·7	7	0	0	8	0	0	0	0	0	0
Jaisalmer	39·1	..	44·1	7	26·8	..	24·9	31	64·5	64·5	..	40·1	27	3	..	23·6	25·0	..	3	0	0	0	0	0	0	0	0	0
Phalodi	37·7	..	43·3	6	27·4	..	24·6	28	11·4	19·6	—49·2	19·6	23	1	—2·8	24·9	23·5	..	1	0	0	0	0	0	0	0	0	0
Jodhpur	37·2	+1·1	42·4	7	27·4	+0·6	24·6	27	20·8	39·3	—61·5	20·8	27	4	—1·5	18·0	18·0	—1·5	4		0	5	0	1	0	0	3	0
Barmer	37·5	+1·7	42·6	7	27·0	+0·9	24·0	23	0	40·1	—42·4	26·7	23	3	—1·0	15·9	15·1	+3·5	3	0	0	2	0	0	0	0	0	0

(R) Register not received. (a) Mean of 30 days. *Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (East)																												
Alwar (R)																												
Sikar (R)																												
Jaipur	34·0	—0·6	43·5	7	25·7	0	22·8	11	152·7	352·9	+156·3	105·9	23	15	+4·7	11·7	8·5	+0·5	17	0	0	11	0	1	0	0	0	0
Jaipur (Sanganer) Aerodrome)	33·6	..	43·1	7	25·6	..	22·2	28	214·2	387·4	..	96·8	23	15	..	..	..	..	18	0	0	7	0	1	0	0	0	0
Dholpur (R)																												
Ajmer	33·2	0	40·3	7	25·1	—0·7	21·7	11	75·3	176·8	+14·0	52·1	23	10	—1·1	16·0	14·5	+4·8	11	0	0	5	0	0	0	0	0	0
Kotah	34·3	—0·1	41·9	7	26·6	0	23·3	1	136·9	352·1	+94·5	188·7	22	10	—1·1	12·1	10·7	+4·3	14	0	0	5	0	0	0	0	0	0
Chambal	33·3	..	41·7	7	23·2	..	21·2	9days	157·8	373·3	..	150·1	..	10	..	11·6	8·1	..	16	0	0	14	0	0	0	0	0	0
Jhalawar	32·9	+0·7	41·7	8	25·5	+0·7	23·3	26	204·3	372·3	+75·6	134·6	22	12	—1·5	13·3	12·1	+4·2	16	0	0	4	0	0	0	0	0	0
Udaipur	30·9	—0·9	36·8	7	24·2	—0·1	21·4	23	95·8	198·9	—18·3	43·4	11	8	—2·4	6·6	5·7	..	12	0	0	10	0	0	0	0	0	0
Erinpura (Jawai Dam).	33·8	..	38·1	7	26·2	..	23·3	10	50·0	54·1	..	22·6	27	3	..	11·7	12·5	..	5	0	0	0	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	34·6	+0·7	40·4	7	27·4	+0·8	24·0	19	169·5	378·5	+80·0	113·5	26	8	—6·8	12·3	9·4	..	15	0	0	6	0	0	0	0	0	0
Sheopur Kalan	33·8	..	42·1	7	26·5	..	24·1	19,23	205·2	526·7	..	187·2	22	12	..	12·8	10·0	..	14	0	0	4	0	0	0	0	0	0
Guna	32·1	+1·0	40·2	6	24·2	+0·2	22·3	24	259·3	608·1	+243·6	195·6	22	14	—1·5	16·1	12·6	+1·5	18	0	0	6	0	0	0	0	0	0
Rajgarh	32·7	..	41·2	6	24·9	..	22·3	1	54·1	199·6	..	36·3	22	14	..	17·1	15·0	..	17	0	0	3	0	0	0	0	0	0
Neemuch	32·1	+1·0	40·3	7	23·9	+0·2	21·7	1	77·0	155·7	—84·8	51·4	14	9	—1·6	16·4	15·5	+1·3	13	0	0	2	0	0	0	0	0	0
Ratlam	30·5	..	36·7	7	23·6	..	22·1	8	6·4	94·3	..	28·7	8	10	..	15·7	13·5	..	20	0	0	0	0	0	0	0	0	0
Alirajpur	30·8	..	34·7	5	24·3	..	22·6	25	54·3	294·9	..	120·9	13	11	..	16·7	15·0	..	24	0	0	0	0	0	0	0	0	0
Indore	29·9	0	35·3	7	22·8	+0·3	21·4	24	73·7	192·2	—90·3	46·7	9	13	—0·3	29·4	26·2	..	19	0	0	4	0	0	0	0	0	0
Bhopal (Bairagarh)	30·2	+0·4	36·4	7	23·1	—0·3	21·7	10	114·4	287·9	—213·2	88·1	10	16	—0·4	21·0	18·1	+2·0	21	0	0	8	0	0	0	0	1	0
Khandwa	31·3	+0·2	34·3	4	24·1	0	21·7	1	103·0	213·7	—31·7	46·5	27	13	+0·9	16·4	15·2	+3·3	23	0	0	1	0	0	0	0	0	0
Hoshangabad	31·3	+1·2	35·9	3	24·2	+0·3	22·8	10	39·8	147·2	—277·2	57·7	13	12	—3·7	6·9	5·2	—0·6	22	0	0	1	0	0	0	0	0	0
Betul	27·9	..	31·8	3	22·4	..	21·2	21	25·2	146·8	..	34·0	12	14	..	11·9	9·6	..	23	0	0	2	0	0	0	0	0	0
Chhindwara	29·3	..	32·2	1	22·1	..	20·5	26	125·3	281·9	..	76·2	6	12	..	11·7	9·6	..	12	0	0	2	0	0	0	0	0	0
Seoni	29·0	+0·1	33·2	3	22·6	+0·2	21·7	21,22	197·1	434·7	+22·7	76·7	31	22	+3·7	10·2	7·6	+0·4	29	0	0	12	0	0	0	0	0	0
Sagar	29·7	—0·2	34·6	7	23·1	+0·3	21·6	24	80·3	267·5	—128·0	57·4	10	14	—2·5	10·7	8·7	..	18	0	0	10	0	0	0	0	0	0
Nowgong	33·3	—0·5	38·8	7	23·7	—2·2	21·2	22	100·2	165·1	+14·3	61·2	26	16	+1·9	9·4	7·1	+2·1	17	0	0	3	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	31·9	+0·3	37·8	3	25·5	+0·3	23·6	25	274·0	331·0	—30·9	88·4	10	15	—0·4	10·6	7·7	—0·5	20	0	0	11	0	0	0	0	0	0
Umaria	30·2	0·1	34·7	3	24·0	0	21·8	25	154·1	341·6	—109·3	47·7	17	20	—0·1	7·7	6·3	+0·2	26	0	0	3	0	0	0	0	0	0
Jabalpur	30·5	+0·3	35·0	3	24·1	+0·4	22·2	23	87·2	183·7	—108·6	86·6	9	17	—1·1	9·4	7·3	+1·8	23	0	0	7	0	0	0	0	0	0
Mandla	29·7	..	32·8	2,3	23·2	..	21·6	3,4	26·9	122·3	..	69·9	13	21	..	7·4	4·7	..	27	0	0	12	0	0	0	0	0	0
Pendra	28·3	0·3	31·2	28	22·8	+0·4	20·6	25	237·0	388·8	+15·2	57·1	25	23	+4·1	10·6	8·5	..	27	0	0	16	0	0	0	0	0	0
Ambikapur	28·8	..	32·3	28,29	23·2	..	21·2	3,25	167·7	368·6	..	05·7	20	20	..	10·5	9·0	..	27	0	0	12	0	0	0	0	0	0
Champa	30·6	..	33·9	30	24·7	..	22·2	3	101·5	475·8	..	115·6	17	19	..	7·0	6·0	..	21	0	0	7	0	0	0	0	0	0
Raigarh	30·7	..	34·6	30	25·0	..	23·2	2,3	136·0	110·3	..	63·7	3	21	..	6·4	4·7	..	25	0	0	0	0	0	0	0	0	0
Raipur	29·7	—0·7	33·8	30	24·0	+0·1	22·0	5	144·7	380·1	—0·6	57·7	19	16	0	12·2	11·4	—2·6	25	0	0	9	0	0	0	0	0	0
Kanker	28·7	—0·2	32·8	30	23·6	+0·3	21·7	5	151·1	432·5	+33·2	70·6	18	17	—0·9	9·8	8·0	—1·7	19	0	0	5	0	0	0	0	0	0
Jagdalpur (P.B.O.)	27·5	—0·8	31·6	12	22·1	—0·1	20·1	5	157·2	497·5	+113.2	73·7	18	23	+3·6	9·3	7·2	..	6	0	0	4	1	0	0	0	0	0
Gujarat																												
Deesa	33·8	..	38·6	7	26·0	..	23·6	14	71·6	90·5	..	38·9	14	4	..	13·2	11·9	..	6	0	0	4	0	0	0	0	0	0
Idar	31·9	..	37·0	7	24·5	..	22·4	27	86·2	187·1	..	51·6	15	10	..	11·7	9·1	..	17	0	0	3	6	0	0	0	0	0
Ahmedabad	34·4	+0·5	37·7	7	26·4	+0·7	23·5	9	59·8	189·9	—120·5	38·9	12	12	—0·6	11·2	9·6	—1·7	18	0	0	5	0	0	0	0	1	0
Dohad	30·3	—0.4	35·0	8	23·9	—0·2	22·2	25,30	51·4	130·5	—98·6	34·5	12	10	-3·0	23·6	25·8	+11·3	18	0	0	3	0	0	0	0	0	0
Baroda	32·2	+0·1	36·0	4	25·4	+0·1	23·3	27	122·4	452·3	+141·7	90·2	26	17	+4·3	8·0	6·6	—2·4	21	0	0	3	0	0	0	0	0	0
Baroda (Aerodrome)	32·2	..	35·9	4	25·6	..	23·4	26	100·9	379·2	..	92·7	14	16	..	13·4	12·8	..	21	0	0	5	0	0	0	0	0	0
Broach	31·7	..	35·6	5	25·7	..	24·2	14	134·6	280·9	..	96·0	13	12	..	13·3	11·7	..	18	0	0	0	0	0	0	0	0	0
Surat	30·7	0	33·8	5	25·7	+0·3	24·3	10	128·8	344·4	—98·1	93·5	9	16	—0·3	14·1	12·6	+0·9	22	0	0	0	0	0	0	0	0	0
Saurashtra and Kutch																												
Bhuj	33·4	+0·7	37·8	6	26·0	+0·4	23·3	15	56·9	143·7	—17·1	68·1	15	6	0	18·3	16·1	—2·7	9	0	0	5	0	0	0	0	0	0
Bhuj (P.B.O.)*																												
Bhuj (Aerodrome)	33·5	..	37·6	6	26·2	..	22·3	27	38·8	140·9	..	85·9	15	5	..	(e) 24·0	20·2	..	8	0	0	2	0	0	0	0	1	0
Kandla	32·4	..	35·3	6	26·8	..	22·4	11	40·3	194·1	..	67·8	11	6	..	33·0	29·1	..	8	0	0	6	0	0	0	3	0	0
Mandvi	31·3	..	33·3	5	27·2	..	32.3	26	74·0	260·3	..	124·5	12	10	..	35·2	35·7	..	12	0	0	2	0	0	0	4	0	0

(R) Register not received. *Observations not recorded. (e) Mean of 26 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squa
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	9
Saurashtra and Kutch—*(Contd.)*																												
Dwarka	30·6	+0·2	32·8	7	27·0	—0·1	24·7	15	59·0	119·4	—57·1	42·4	10	6	0	25·4	26·1	+2·1	9	0	0	0	0	0	0	0	0	0
Porbander	30·4	..	32·8	5	26·9	..	24·9	16	29·8	158·5	..	63·5	15	9	..	18·7	18·8	..	16	0	0	0	0	0	0	0	0	0
Porbander (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	0	0
Jamnagar	..	..	..	..	25·8	—0·6	23·9	16,27	122·0	296·1	+69·3	158·0	15	7	—0·9	..	..	..	12	0	0	8	0	0	0	6	0	0
Rajkot (Aerodrome)	30·9	—2·0	37·2	6	24·4	—0·3	22·1	28	184·6	334·6	+63·3	90·4	26	12	+1·5	33·4	27·4	+8·1	16	0	0	4	0	0	0	0	0	0
Surendranagar	34·2	..	38·3	6	26·1	..	23·8	14	34·5	99·0	..	25·7	14	9	..	19·8	18·1	..	11	0	0	3	0	0	0	0	0	0
Bhavnagar	33·0	—0·8	38·1	5	25·8	0	23·9	27	209·3	423·3	+245·2	195·6	15	9	—0·3	17·0	14·5	+2·6	9	0	0	1	0	0	0	0	0	0
Bhavnagar (Aerodrome)	33·3	..	37·4	5	26·0	..	24·3	27	..	387·6	..	195·5	15	10	..	..	23·8	..	13	0	0	3	0	0	0	0	0	0
Mahuva	31·0	..	34·9	1	25·1	..	23·2	27	242·5	363·7	..	167·9	15	12	..	28·2	21·8	..	19	0	0	0	0	0	0	0	0	0
Keshod	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	33·1	25·4	..	..	0	0	0	0	0	0	1	0	0
Veraval	29·7	..	32·3	6	26·5	..	24·3	15	67·5	237·3	+39·7	101·9	15	14	+4·8	31·7	32·1	..	21	0	0	0	0	0	0	3	0	0
Konkan																												
Dahanu	29·8	—0·2	32·8	3	24·9	—0·8	22·3	31	398·2	966·4	+267·1	218·9	14	27	+5·0	29·5	26·0	—0·6	29	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	29·7	0	32·4	4	25·2	+0·4	22·6	27	382·2	777·2	+160·7	158 2	6	23	+0·9	17·6	17·0	—1·7	28	0	0	1	0	0	0	0	4	0
Bombay (Santacruz Aerodrome)	29·9	+0·2	32·6	4	25·0	+0·2	21·8	10	486·0	994·1	+377·6	161·6	14	26	+3·9	19·7	16·6	..	31	0	0	1	0	0	0	0	0	0
Alibag	29·1	0	31·2	4,5	25·2	—0·1	21·8	15	..	747·5	+152·1	79·5	6	25	+1·7	..	29·6	+1·1	29	0	0	0	0	0	0	0	0	0
Harnai	28·4	—0·6	29·9	2,4	24·5	+0·4	22·6	27	446·0	1117·1	+261·6	143·5	6	27	+0·6	22·4	23·3	+3·3	30	0	0	0	0	0	0	2	0	0
Ratnagiri	28·6	..	31·0	2	24·4	..	22·9	5,27	399·5	1047·0	+187·2	220·7	6	28	+2	..	..	..	31	0	0	0	0	0	0	2	0	0
Devgad	28·8	—0·1	31·7	4,5	25·1	—0·3	22·8	27	250·2	734·2	+27·3	114·1	27	28	+3·6	30·6	30·7	+1·2	30	0	0	1	0	0	0	0	0	0
Vengurla	29·0	..	31·2	3,4	24·1	..	22·8	6	342·3	969·4	..	108·7	6	31	..	..	..	..	31	0	0	1	0	0	0	0	0	0
Maharashtra																												
Nandurbar*	30·0	..	34·6	5	..	..	..	.	99·7	232·4	..	89·9	1	13	..	(k) 12·7	(l) 11·1	..	25	0	0	0	0	0	0	0	0	0
Jalgaon	32·8	..	37·1	4	24·0	..	22·6	1	66·3	208·5	—33·0	90·9	1	10	—4·3	25·5	18·2	..	20	0	0	0	0	0	0	0	0	0
Malegaon	32·3	+1·1	35·1	5	23·8	+0·7	22·0	8	19·3	31·0	—81·3	7·9	8	5	—2·4	19·7	16·4	+1·0	10	0	0	0	0	0	0	0	0	0
Deolali	26·9	..	31·0	5	21·9	..	20·7	7,27	19·7	82·5	..	20·6	6	10	..	26·2	21·2	..	19	0	0	0	0	0	0	0	0	0
Aurangabad	29·9	—0·1	33·3	5	21·7	+0·1	20·1	7	88·2	184·9	+13·7	54·6	7	13	+1·7	24·0	20·5	+2·8	19	0	0	5	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	30·9	..	34·3	5	21·7	..	20·2	7	144·8	211·6	..	50·8	31	10	..	25·0	20·0	..	16	0	0	3	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	1482·7	—255·2	218·4	14	29	—1·0	..	..	..	31	..	..	..	..	..	..	..	..	..
Ahmednagar	29·7	+0·1	32·5	5	21·7	40·3	20·5	7	49·8	77·7	—18·3	47·0	7	3	—3·8	15·7	11·1	—4·5	7	0	0	0	0	0	0	0	0	0
Parbhani	32·1	..	36·7	2,3	22·8	..	20·4	26	107·0	229·7	+43·8	60·5	6	9	—2·1	19·7	16·2	..	17	0	0	2	0	0	0	0	0	0
Poona	28·2	+0·1	30·7	4	22·0	—0·1	20·8	26	35·1	77·5	—89·1	14·2	7,14	10	—2 7	9·3	6·5	—9·9	24	0	0	0	0	0	0	1	0	0
Poona (Lohagaon Aerodrome)	27·9	..	30·7	2	21·4	..	20·3	27	37·0	63·9	..	23·1	7	6	..	..	..	..	18	0	0	0	0	0	0	0	0	0
Baramati	29·8	..	31·7	5,30	22·1	..	20·7	7	18·5	27·9	..	8·6	7	4	..	23·2	18·1	..	5	0	0	0	0	0	0	0	0	0
Jeur	31·1	..	33·9	1,5	20·8	..	19·8	27	27·6	68·9	..	14·5	30	10	..	23·6	16·7	..	12	0	0	2	0	0	0	0	0	0
Sholapur	31·5	—0·3	35·1	5	22·3	0	20·7	27	54·9	133·1	+26·9	38·3	30	8	+0·3	16·9	13·5	—2 8	18	0	0	3	0	0	0	0	0	0
Miraj	27·9	+0·2	31·8	4	21·7	+0·1	20·9	7	40·8	68·8	—36·1	13·5	14	9	—0·1	24·8	17·2	+0·3	21	0	0	0	0	0	0	0	0	0
Kolhapur	26·3	..	29·2	4	21·3	..	19·8	6	101·2	285·5	..	61·0	14	20	..	23·7	19·0	..	29	0	0	0	0	0	0	0	0	0
Vidarbha																												
Buldhana	28·5	..	31·4	4	21·8	..	20·4	5	69·6	160·3	..	36·6	7	13	..	16·0	15·4	..	15	0	0	0	0	0	0	0	0	0
Akola	31·8	+0·1	35·1	3	24·2	+0·4	23·0	5	62·8	138·3	—110·4	42·7	13	9	—3·4	16·5	13·0	+1·9	16	0	0	3	0	0	0	0	0	0
Amravati	31·0	+0·2	34·4	3	23·7	+0·4	21·6	5	23·0	105·6	—133·4	17·3	29	11	—1·8	19·8	16·6	+4·4	17	0	0	4	0	0	0	0	0	0
Yeotmal	30·1	..	35·1	4	22·9	..	20·7	5	62·0	131·6	..	25·4	10	14	..	(a) 23·1	(b) 19·0	..	23	0	0	2	0	0	0	0	0	0
Nagpur	30·8	—0·5	35·0	3	24·2	+0·1	22·3	5	123·1	282·7	—88·1	62·2	6	19	+2·5	17·5	13·0	..	29	0	0	8	0	0	0	0	0	0
Gondia	29·9	..	33·9	1	24·2	..	22·2	2	272·3	539.4	..	141·8	5	17	..	7·3	6·1	..	23	0	0	10	0	0	0	0	0	0
Brahmapuri	29·7	..	33·2	29	21·6	..	18·7	5	141·8	412·2	..	80·8	5	15	..	11·2	9·0	..	21	0	0	2	0	0	0	0	0	0
Chanda	30·4	—0·9	34·6	1	24·0	—0·3	21·9	6	79·3	316·1	—98·2	42·4	16	17	+0·1	13·3	8·9	+0·5	24	0	0	6	0	0	0	0	0	0
Sironcha	30·4	..	35·1	1	24·3	..	21·1	5	158·2	552·7	..	77·7	5	21	..	2·9	4·1	..	27	0	0	6	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	35·0	—1·1	38·1	11	27·2	+0·6	22·7	27	5·3	127·3	+57·4	38·3	27	6	+0·5	13·7	10·0	+0·7	10	0	0	0	0	0	0	0	0	0
Ongole	34·1	..	37·2	2	26·7	..	21·2	25	0·5	190·9	..	50·0	24	9	..	17·8	12·2	..	10	0	0	3	0	0	0	0	0	0
Rentachintala	34·3	+0·4	37·8	2, 12	26·3	+0·4	22·0	25	17·3	93·9	—28·0	27·4	26	7	—2·0	17·0	12·9	—2·2	10	0	0	1	0	0	0	0	0	0
Gannavaram	33·0	..	35·4	2	25·4	..	21·5	25	6·1	105·6	..	21·1	25	15	..	22·2	16·0	..	18	0	0	2	0	0	0	0	0	0

(k) Mean of 20 days. (l) Mean of 19 days. (b) Mean of 29 days. (a) Mean of 30 days. *Previously Hydrometeorological observatory.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed km per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm.or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Coastal Andhra Pradesh—*(contd.)*																												
Masulipatam	33·1	—0·5	36·3	2	26·0	+0·4	22·8	25	41·7	141·8	—20·5	44·0	27	11	+0·3	17·0	12·8	+2·2	12	0	0	1	0	0	0	0	0	0
Nidadavolu	31·9	..	34·3	2, 4	25·1	..	22·1	24	16·7	146·3	..	33·3	25	11	..	19·2	12·4	..	19	0	0	2	0	0	0	0	0	0
Kakinada	32·7	+0·3	36·8	30	25·8	0	22·1	13	72·0	201·3	+34·9	45·7	31	11	—0·1	15·3	13·0	+3·7	16	0	0	1	0	0	0	0	0	0
Visakhapatnam	32·6	—0·5	36·4	2	26·3	+0·4	24·3	25	57·9	85·1	—27·2	19·1	14	9	+0·5	20·5	15·9	+0·6	16	0	0	5	0	0	0	0	0	0
Calingapatam	31·2	—0·9	36·3	12	26·1	0	23·9	4	68·6	115·2	—25·5	30·5	14	10	+1·4	17·1	12·6	+0·5	10	0	0	1	0	0	0	0	0	0
Telangana																												
Ramagundam	31·1	..	35·5	2	24·8	..	22·0	6	114·6	279·3	..	27·9	31	17	..	8·9	7·2	..	22	0	0	0	0	0	0	0	0	0
Nizamabad	30·3	—0·9	33·6	3	23·1	—0·2	20·1	25	81·1	459·8	+202·0	118·4	6	19	+4·0	10·8	9·2	+0·3	25	0	0	0	0	0	0	0	0	0
Mahbubnagar	30·6	..	36·8	3	22·7	..	21·0	25, 26	39·1	217·8	..	36·9	26	17	..	18·0	16·0	..	20	0	0	3	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	29·8	—0·6	33·8	2	22·1	—0·1	20·1	26	69·4	97·4	—54·7	32·0	25	13	+1·9	28·5	24·6	+4·2	18	0	0	0	0	0	0	2	0	0
Hakimpet	29·3	..	33·2	2	21·4	..	19·9	26	69·4	141·0	..	84·3	25	9	..	..	..	..	12	0	0	0	0	0	0	0	0	0
Hanamkonda	31·4	+0·2	34·8	2	24·5	+0·2	21·9	25	15·3	67·3	+164·6	16·5	14	10	—3·4	18·2	13·2	+2·4	16	0	0	1	0	0	0	0	0	0
Bhadrachallam	32·0	..	35·5	12	24·7	..	22·1	24	38·1	166·3	..	39·1	14	12	..	11·3	8·1	..	20	0	0	0	0	0	0	0	0	0
Khammameth	31·9	..	35·1	1,2	24·2	..	21·9	25	6·6	169·1	..	39·1	8	15	..	13·6	9·0	..	15	0	0	0	0	0	0	0	0	0
Rayalaseema																												
Arogyavaram	30·5	..	32·6	2	21·9	..	20·6	10	4·3	65·9	..	27·9	31	4	..	17·9	14·2	..	11	0	0	1	0	0	0	0	0	0
Cuddapah	33·8	—1·5	36·9	24	25·3	—0·3	21·9	26	5·1	137·9	+34·5	48·8	30	9	+2·3	13·5	8·5	—3·4	10	0	0	0	0	0	0	0	0	0
Anantapur	32·8	..	35·6	2	23·7	..	22·3	14	18·0	39·2	—27·6	9·9	6	5	+1·1	21·1	18·0	..	7	0	0	2	0	0	0	0	0	0
Kurnool	32·7	—0·4	35·7	2	23·1	—0·8	21·2	26	36·0	144·3	+32·0	39·1	26	10	+0·7	29·3	19·0	+2·3	12	0	0	0	0	0	0	0	0	0
Madras																												
Palayamcottai	35·0	..	37·3	23	26·8	..	25·9	7,26,27	0	0	—8·4	0	..	0	-0·6	23·0	18·2	..	0	0	0	0	0	0	0	0	0	0
Tuticorin	35·1	..	37·2	4 days	26·9	..	25·4	7	0	0	..	0	..	0	..	25·2	20·4	..	0	0	0	0	0	0	0	0	0	0
Pamban	30·1	—1·7	31·7	15	26·7	+0·4	21·7	26	0	12·2	+0·5	10·9	26	1	+0·2	12·4	12·9	—2·4	3	0	0	0	0	0	0	0	0	0
Mathurai	36·4	+0·9	38·8	21	25·4	+0·2	21·1	27	7·4	94·0	+44·5	76·2	27	3	+0·3	10·3	8·1	+0·2	7	0	0	0	0	0	0	0	0	0
Nagapattinam	35·0	—0·6	37·7	11	25·9	—0·2	22·3	24	2·0	83·8	+40·6	28·2	24	4	+1·1	14·7	11·9	+2·2	9	0	0	7	0	0	0	0	0	0
Tiruchirapalli	35·5	—1·0	37·5	21	26·1	+0·4	23·2	27	0	28·4	—5·9	27·9	27	1	—1·1	35·5	31·0	+0·9	2	0	0	4	0	0	0	0	0	0
Coimbatore	27·9	—2·5	29·7	24, 31	22·1	+0·4	21·1	10	14·4	26·4	—15·5	5·3	8, 25	6	+1·3	20·5	16·7	+6·1	10	0	0	0	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome).	30·3	..	32·4	3	21·9	..	21·0	20	9·1	13·2	..	4·3	13	2	..	36·1	29·8	..	6	0	0	3	0	0	0	0	0	0
Salem	33·6	—0·3	36·3	29	23·4	+0·1	21·9	30, 31	20·7	68·4	—27·9	16·3	2	5	—2·1	10·3	9·1	+2·3	11	0	0	4	0	0	0	0	0	0
Kallakurichi	35·6	..	37·9	29	25·4	..	23·0	11	11·6	50·0	..	16·8	11	4	..	..	..	..	7	0	0	5	0	0	0	0	0	0
Cuddalore	35·7	+0·1	38·2	4	26·2	+0·3	21·9	24	19·7	186·2	+120·2	99·1	24	7	+1·7	9·8	9·0	+1·6	8	0	0	4	0	0	0	0	0	0
Vellore	34·6	+0·1	37·6	12	26·0	+0·9	23·4	24	9·0	56·5	—59·1	27·9	24	4	—2·3	12·7	8·6	+0·6	7	0	0	6	0	0	0	0	0	0
Madras	34·4	—1·3	37·2	4	25·5	—0·8	22·9	29	16·4	159·2	+67·8	31·7	1	10	+3·2	18·0	13·4	—2·4	18	0	0	9	0	0	0	5	0	0
Madras (Nungambakkam).	34·4	..	37·7	4	25·8	..	23·1	29	..	141·9	..	26·9	29	9	..	..	7·3	..	16	0	0	7	0	0	0	0	0	0
Coastal Mysore																												
Karwar	28·5	..	30·0	4	24·6	..	21·9	28	276·5	798·8	—167·9	83·0	28	29	+2·0	21·8	21·0	..	30	0	0	0	0	0	0	0	0	0
Honavar	27·3	—1·0	30·3	3, 4	23·6	0	21·5	28	394·2	982·5	—145·5	145·5	9	30	+0·4	12·4	11·5	+5·2	30	0	0	0	0	0	0	0	0	0
Mangalore	28·8	+0·1	30·9	20	23·6	+0·1	22·3	17	168·8	1178·2	+190·1	135·5	11	29	+1·5	11·7	10·3	+1·3	31	0	0	6	0	0	0	1	11	0
Mangalore (Bajpe Aerodrome).	27·5	..	30·0	7	22·7	..	21·9	31	441·0	1409·3	..	207·8	11	29	..	..	..	..	30	0	0	0	1	0	0	0	0	0
Mysore (North)																												
Bidar	28·9	—0·4	31·7	2, 4	21·1	0	19·9	6	49·4	182·2	—23·3	43·7	25	11	—0·6	25·2	22·6	+0·4	20	0	0	0	0	0	0	0	0	0
Gulbarga	31·6	—0·3	35·7	5	22·3	+0·1	21·1	27	36·4	145·4	+1·6	52·1	30	12	+2·9	25·5	21·1	+4·0	13	0	0	1	0	0	0	0	0	0
Bijapur	30·1	—0·2	33·4	4	21·5	—0·1	20·3	27	38·9	72·1	+11·9	18·3	30	7	+2·7	19·0	15·1	0	14	0	0	1	0	0	0	0	0	0
Belgaum	24·4	—0·2	27·8	2	20·3	+0·6	19·1	29	175·7	712·5	+278·2	97·3	15	28	+5·9	14·5	9·2	—0·8	30	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	..	..	..	..	20·1	+0·8	19·3	31	139·4	332·4	—94·1	70·6	15	21	—1·1	15·7	12·3	—2·0	31	0	0	0	0	0	0	0	0	0
Belgaum (Sambre Aerodrome).	25·5	..	28·3	2	19·8	..	19·2	29,31	90·5	187·7	..	54·7	15	17	..	36·3	29·1	..	19	0	0	0	0	0	0	0	0	0
Gadag	29·0	+0·6	31·5	2,3	21·3	+0·2	20·6	14, 31	21·4	42·0	—31·4	9·9	15	5	—1·9	22·1	18·2	—1·6	15	0	0	0	0	0	0	0	0	0
Raichur	32·3	—0·1	35·7	2	22·8	—0·1	21·6	31	28·4	89·2	—30·2	17·0	26	9	+0·6	22·6	20·3	+4·9	13	0	0	0	0	0	0	0	0	0
Mysore (South)																												
Bellary	31·3	—1·3	33·8	4	23·9	0	21·1	27	13·7	88·9	+48·0	29·2	31	5	+1·6	17·2	14·1	+0·4	7	0	0	0	0	0	0	0	0	0
Chitaldrug	26·9	—1·2	30·2	3	21·0	+0·5	19·9	31	61·4	79·4	+6·5	25·7	9	9	+0·8	15·2	13·9	+0·7	19	0	0	0	0	0	0	0	0	0
Shimoga	26·8	..	29·4	2,4	21·4	..	20·1	27	131·5	229·4	..	33·5	9	18	..	8·3	4·7	..	25	0	0	0	0	0	0	0	0	0
Balehonnur	22·5	—0·3	26·1	20	18·6	0	16·9	10	..	946·2	+67·6	109·7	8	28	—0·3	..	..	..	30	0	0	0	0	0	0	0	0	0
Hassan	24·0	—1·3	26·7	4	19·0	+0·3	17·7	26	57·1	125·5	—21·8	21·8	15	14	+0·8	16·8	13·0	+1·7	24	0	0	0	0	0	0	0	0	0
Mysore	26·8	—1·1	28·9	3,29	19·8	+0·2	18·3	26,27	35·4	49·9	—18·2	14·2	25	7	—0·3	19·6	14·1	—0·2	15	0	0	0	0	0	0	0	0	0
Bangalore(Central Observatory).	27·1	—0·3	29·4	4	19·3	+0·6	18·0	27	19·2	27·8	—72·0	8·9	14	4	—4·0	20·3	16·5	+3·0	12	0	0	0	0	0	0	0	0	0
Bangalore(Aerodrome).	27·9	..	29·9	4	19·0	..	17·8	27	16·8	18·1	..	8·6	14	1	..	..	..	..	11	0	0	0	0	0	0	2	0	0

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or or more)		Wind speed km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm.) or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Kerala (Including Laccadives)																												
Kozhikode	27·6	−0·4	30·3	27	23·6	+0·2	22·1	17	280·9	984·5	+160·0	121·9	10	28	+1·5	10·9	9·4	+1·7	29	0	0	3	0	0	0	0	0	0
Palghat	27·8	..	29·8	24,28	22·8	..	21·6	10	220·7	524·3	..	96·5	8	24	..	16·1	13·1	..	27	0	0	3	0	0	0	0	0	0
Fort Cochin	28·0	−0·1	29·9	15	24·5	+0·8	23·2	10	226·5	654·8	+62·7	112·0	11	24	−0·2	11·5	9·4	+1·4	27	0	0	4	0	0	0	0	0	0
Cochin (Naval Air Station)	28·9	..	30·5	24	23·7	..	22·1	10	236·9	633·8	..	110·7	11	25	..	8·5	5·7	..	28	0	0	6	0	0	0	0	10	0
Alleppey	28·7	..	29·7	26	23·4	..	22·2	5	163·0	737·0	..	33·8	10	26	..	14·8	12·4	..	29	0	0	4	0	0	0	0	0	0
Punalur	29·6	..	32·1	28	22·3	..	21·0	11	255·1	592·5	..	38·6	5	23	..	8·5	4·5	..	23	0	0	0	0	0	0	0	0	0
Trivandrum	29·5	+0·3	31·6	26	23·4	+0·2	21·8	10	57·5	188·4	−9·0	45·7	10	14	−0·3	16·0	11·3	+1·0	22	0	0	1	0	0	0	0	0	0
Trivandrum (Aerodrome)	29·4	..	30·5	24	23·9	..	22·1	10	..	195·9	..	52·3	10	14	..	..	9·2	..	20	0	0	0	0	0	0	0	0	0
Hill Stations excluding Kashmir																												
Walong (R)																												
Kohima Aijal*	24·1	..	27·8	4	19·1	..	17·8	23,26	122·0	328·1	..	38·1	19	24	..	..	(a) ..	(a) ..	28	0	0	0	0	0	0	1	0	0
Shillong	24·3	+0·2	26·1	3,20	13·4	+0·3	16·3	14	46·9	124·8	−221·9	26·4	10	12	−6·2	4·5	3·1	−0·4	18	0	0	0	0	0	0	1	0	0
Cherrapunji	22·0	−0·4	25·8	15	13·4	−0·1	17·4	5 days	146·1	1834·7	−562·3	202·2	9	31	−3·5	15·0	12·6	+4·1	31	0	0	0	30	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	4916·2	..	464·8	9	31	..	..	..	..	31	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan)	19·2	−0·4	20·6	5,20	13·6	+0·1	14·9	14,22	232·4	694·4	−141·8	80·6	22	27	+1·4	0·2	0·1	−0·2	30	0	0	31	0	0	0	0	0	0
Kalimpong	24·4	+0·3	25·8	7,12	16·5	−3·1	15·2	26	154·9	673·2	+95·1	66·0	10	24	+2·1	7·0	5·0	−3·7	24	0	0	0	0	0	0	0	0	0
Katmandu	28·5	−0·2	31·7	4	20·4	0	19·2	1	78·5	280·0	−93·1	39·1	7	21	−1·7	2·9	1·6	+0·2	30	0	0	3	0	0	0	4	0	0
Mukteswar (Kumaon)	20·9	+0·1	26·4	6	15·1	+0·7	15·4	31	146·3	258·1	−56·1	33·3	23	19	+1·2	12·8	14·6	+6·2	22	0	0	10	27	0	0	0	0	0
Nainital	21·7	..	24·5	2,3	17·1	..	15·0	27	397·0	1020·7	..	223·5	30	25	..	10·4	8·5	..	26	0	0	0	0	0	0	0	0	0
Tapoban	25·2	..	31·7	1	15·2	..	7·2	3	..	264·4	..	48·3	14	18	..	..	..	..	24	0	0	0	0	0	0	0	0	0
Badrinath (R)																												
Lokpal (R)																												
Jamuna Chetty (R)																												
Mussoorie	21·1	+0·7	25·2	3	16·4	+0·5	15·0	13	297·5	807·4	+109·9	137·2	7	22	−1·2	6·2	5·9	−0·9	21	0	0	5	17	0	0	0	0	0
Kharsali (R)																												
Rana (R)																												
Simla	21·3	+0·2	27·3	3,4	16·3	+1·2	13·3	31	253·2	566·8	+152·8	87·6	9	19	−0·7	3·8	3·6	−0·4	22	0	0	7	0	0	0	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	466·1	+62·5	56·6	23	16	−1·7	..	..	..	18	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	28·1	−4·9	8·9	31	4	+0·2	..	..	..	7	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	69·1	..	15·7	22	8	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	291·1	..	42·7	27	20	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Koksar	..	..	..	..	..	..	..	..	..	174·2	..	48·8	23	8	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Dalhousie	25·0	..	31·2	5,6,8	17·5	..	13·9	25	162·0	795·3	+238·5	232·6	25	17	−3·0	2·4	3·0	..	19	0	0	0	0	0	0	0	0	0
Dharamshala	29·1	..	35·3	4,5	21·8	..	19·2	31	154·7	801·4	..	135·9	29	19	..	6·5	5·0	..	20	0	0	19	0	0	0	0	0	0
Abu (R)																												
Pachmarhi	25·0	+0·3	33·7	3	20·4	+0·5	18·9	26	113·9	450·5	−215·7	61·7	12	19	−3·0	12·7	13·3	+1·7	28	0	0	7	6	0	0	0	0	0
Mahabaleshwar	21·9	+3·3	22·7	7	16·1	−0·7	13·8	6	873·6	2159·4	−516·0	312·9	14	31	+0·9	22·8	23·2	+2·6	31	0	0	0	31	0	0	0	0	0
Nandi Hills	22·4	..	23·9	5	15·4	..	14·5	13,31	..	69·1	..	22·9	14	7	..	..	..	..	7	0	0	0	0	0	0	0	0	0
Mercara	20·2	−0·2	22·1	28	17·2	+0·5	16·2	28	453·6	1146·9	+51·9	111·0	15	29	+0·5	17·1	16·3	+4·7	30	0	0	0	0	0	0	0	0	0
Kodaikanal	17·4	+0·6	19·9	17	11·6	+0·4	10·0	14	109·6	135·2	+17·1	33·3	23	11	+0·8	15·7	16·0	−0·9	20	0	0	3	10	0	0	0	0	0
Ootacamund	16·8	+0·2	19·4	23,24, 28	10·0	−1·2	8·9	5 days	80·4	140·7	−71·6	27·7	5	13	−2·8	6·3	4·4	−5·3	21	0	0	0	0	0	0	0	0	0
Coonoor	21·6	0	24·0	5	15·1	0	11·7	28	..	53·9	−12·4	19·8	5	6	−1·0	..	6·6	−1·3	17	0	0	0	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	48·8	..	5·1	4 days	10	..	..	..	..	21	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	587·1	..	74·2	30	26	..	..	..	..	29	..	..	..	..	..	..	..	..	..
Lachen	18·2	..	19·4	4 days	7·4	..	6·1	13	..	207·8	..	19·1	10	26	..	..	..	..	28	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung (Chumbi)	20·2	+1·6	21·4	6	10·0	−0·7	7·9	3	..	147·1	−15·7	22·9	22	20	+2·3	..	..	..	20	0	0	0	0	0	0	0	0	0
Lhasa (R)																												

(R) Register not received. *Temporarily closed. (a) Mean of 30 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Ceylon																												
Colombo	29·0	−0·7	30·0	1,14	24·7	−0·3	22·0	10	63·4	154·7	+28·0	25·1	2	13	+4·6	..	..	..	17	0	0	0	0	0	0	0	0	0
Trincomalee	34·4	+1·0	36·0	7 days	26·0	+0·7	23·0	26	44·4	53·1	+ 7·6	30·5	25	3	+0·7	..	..	..	5	0	0	4	0	0	0	0	0	0
Batticoloa	32·9	..	36·0	14	25·2	..	24·0	5 days	19·3	37·8	..	18·0	25	4	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Hambantota	31·6	+0·7	35·0	16,17	25·2	+0·6	24·0	5,5,27	12·7	15·0	−39·1	9·9	5	1	−3·2	..	..	..	5	0	0	0	0	0	0	0	0	0
Mannar	31·1	..	33·0	19	26·5	..	23·0	26	0	11·2	..	10·9	26	1	..	..	..	..	2	0	0	0	0	0	0	0	0	0
Hydrometeorological Observatories.																												
Damodar Catchment.																												
Bokaro	31·7	..	35·0	30	25·2	..	23·3	22	126·6	256·7	..	41·7	18	17	..	9·9	7·5	..	23	0	0	17	0	0	0	0	0	0
Hazaribagh	31·7	..	34·8	17	22·0	..	21·0	20	155·5	275·6	..	43·1	22	17	..	10·0	6·0	..	23	0	0	0	0	0	0	0	0	0
Tilaiya	30·8	..	33·9	28	25·4	..	23·4	3	184·6	348·1	..	87·4	3	12	..	11·5	5·8	..	18	0	0	14	0	0	0	0	0	0
Ramgarh	31·5	..	35·1	17,30	25·0	..	23·3	3,22	163·4	329·9	..	88·1	18	21	..	5·3	3·6	..	26	0	0	15	0	0	0	0	0	0
Panchet Hills	32·1	..	35·8	30	26·0	..	21·7	24	102·8	220·2	..	45·2	19	14	..	11·3	10·1	..	22	0	0	16	0	0	0	0	0	0
Durgapur	33·1	..	35·6	12	26·3	..	23·5	3	..	285·7	..	53·9	24	14	..	..	..	..	21	0	0	6	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	324·6	..	50·0	29	21	..	..	..	..	26	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	241·8	..	57·1	21	15	..	..	..	..	17	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	447·9	..	95·5	21	14	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	328·2	..	98·0	20	18	..	..	..	..	21	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	521·2	..	85·1	23	16	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	369·7	..	91·9	18	18	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	235·1	..	49·3	13	17	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Mahanadi Catchment.																												
Baramul	32·0	..	40·0	30	24·1	..	22·4	25	166·0	369·5	..	74·2	17	18	..	3.2	2·7	..	18	0	0	7	0	0	0	0	0	0
Hirakud	30·7	..	34·4	29,30	25·3	..	23·4	3	140·8	312·4	..	70·6	3	17	..	7·9 (c)	6·5 (c)	..	23	0	0	5	0	0	0	0	0	0
Khijrawan	29·2	..	44·9	1	..	..	..	..	114·4	127·8	.	58·7	2	17	..	14·0	9·8	..	23	0	0	3	0	0	0	0	0	0
Sonepur	30·9	..	34·4	9,28, 29	21·3	..	16·1	19,20, 22	..	266·6	..	36·3	19	15	..	..	9·7	..	21	0	0	0	0	0	0	0	0	0
Ginabahar	30·2	..	33·9	29	23·5	..	21·7	25	..	503·5	..	73·7	8	23	..	..	..	..	24	..	..	..	..	..	..	..	..	..
Narbada Catchment.																												
Punasa	31·8	..	35·8	7	24·3	..	21·2	1	52·2	174·7	..	62·0	8	9	..	8·3	7·3	..	18	0	0	5	0	0	0	0	0	0
Bagra Tawa (R)																												
Thikri	32·1	..	35·9	7	24·7	..	22·4	31	..	148·4	..	39·1	8	12	..	..	7·4	..	19	0	0	0	0	0	0	0	0	0
Tapti Catchment.																												
Nandurbar*																												
Sabarmati Catchment.																												
Jhadol (R)																												
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	0·8	..	0·8	8	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	118·6	..	38·1	17	11	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	133·5	..	81·3	10	5	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Kotra Cantonment.	..	..	..	..	..	..	..	..	..	177·9	..	31·0	14	7	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Dharoi	32·5	..	37.5	7	26.4	..	23·8	14	40·1	94·0	..	31·7	15	7	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Ganga Catchment.																												
Mukhim	24·3	..	28·1	6,7	17·5	..	16·2	1	83·5	510·5	..	105·2	19	16	..	..	..	..	19	0	0	3	19	0	0	0	0	0
Tehri	..	..	..	..	21·8 (e)	..	13·2	13	..	258·4	..	69·6	25	11	..	..	..	..	16	0	0	0	0	0	0	0	0	0
Gandak Catchment.																												
Gorkha	27·5	..	30·7	5	21·4	..	19·8	31	123·6	465·3	..	95·5	11	18	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Pokhara	29·0	..	31·2	5	21·8	..	20·6	1,7	175·4	691·8	..	123·4	29	27	..	..	..	..	30	..	..	..	..	..	..	..	..	..
Nawakot	(e) 30·0	..	32·3	4	21·9	..	20·6	15	56·2	462·2	..	64·5	11	25	..	..	..	..	28	..	..	..	..	..	..	..	..	..

*Converted to Class II Surface Observatory from 12th July, 1957.

(R)—Register not received. (c) Mean of 28 days. (e) Mean of 26 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with *									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hydrometeorological Observatories.—(contd.)																												
Gandak Catchment (contd.)																												
Jomosom . .	(a) 23·9	..	26·1	5,6	14·1	..	12·2	3	2·3	32·0	..	6·3	21	5	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Timure . .	25·2	..	27·8	5	17·7	..	15·6	26	13·0	296·3	..	53·6	23	22	..	..	..	..	28	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh . .	(e) 25·9	..	28·5	7	..	..	..	..	135·8	363·1	..	41·5	19	19	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Gogra Catchment.																												
Dandeldhura .	(a) 22·9	..	26·1	3	17·7	..	16·1	8	153·0	414·1	..	65·5	31	19	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Munsivari . .	..	..	..	..	..	..	..	..	160·4	737·4	..	106·7	29	26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sallyana . .	..	..	..	..	..	..	..	..	74·1	294·3	..	61·0	19	13	..	..	..	..	17	..	..	..	..	..	..	..	..	..
Butwal . .	(e) 31·6	..	34·5	4	(c) 25·0	..	21·7	18	581·9	1225·3	..	139·7	17	22	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Bagmati Catchment.																												
Katmandu . .	27·8	..	30·1	4	20·2	..	18·8	1	86·4	275·3	..	37·1	7	21	..	3·0	1·6	..	27	0	0	10	0	0	0	0	0	0
Kosi Catchment.																												
Chautara . .	(i) 26·2	..	28·6	1	(g) 20·6	..	16·0	10	97·1	482·4	..	68·3	10	25	..	..	..	..	29	..	..	..	..	..	..	..	..	..
Okhaldunga .	23·7	..	27·2	21	17·5	..	16·3	26	114·7	312·3	..	62·7	10	18	..	1·4	1·1	..	23	0	0	2	10	0	0	0	0	0
Barahkshetra .	31·4	..	33·6	22	24·8	..	23·8	23,31	253·4	676·9	..	179·8	30	23	..	7·0	3·9	..	28	0	0	2	0	0	0	0	0	0
Angbung . .	28·3	..	31·1	7	21·3	..	19·6	17	..	338·0	..	82·5	29	14	..	..	..	..	21	..	..	..	..	..	..	..	..	..
Taplejung . .	24·1	..	26·0	5,21	18·2	..	16·3	12	106·0	379·2	..	55·8	27	17	..	..	..	..	28	0	0	0	15	0	0	0	0	0
Taplethok .	28·0	..	30·1	17,21	18·1	..	16·7	18	..	603·0	..	44·2	10	27	..	..	..	..	27	..	..	..	..	..	..	..	..	..
Wallungchung Gola*																												
Bhojpur . .	(a) 23·6	..	25·4	21	18.4	..	17·5	31	63·6	194·3	..	28·5	17	17	..	..	..	..	20	..	..	..	..	..	..	..	..	..
Chainpur . .	27·2	..	30·2	7	20·1	..	19·1	17	..	279·8	..	45·7	20	20	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Tista Catchment.																												
Gangtok . .	21·3	..	23·3	12	16·6	..	15·8	11	215·0	645·3	..	81·8	22	31	..	4·3	3·6	..	31	0	0	1	31	0	0	0	0	0
Geyzing . .	25·9	..	28·8	26	19·2	..	17·9	22	165·6	531·5	..	72·6	22	27	..	..	..	..	27	..	..	..	..	..	..	..	..	..

(a)—Mean of 30 days. (c) Mean of 28 days. (e) Mean of 26 days. (g) Mean 24 days. (i) Mean of 22 days. *Data not available.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1007·2	1004·6	..	27·9	25·8	25·1	30·9	84	..	5·2	..	8·3	0	2	23	0	0	0	0	0	25	0	0	6	0
	1730	"	1005·3	1002·7	..	27·7	25·7	25·0	31·7	85	..	5·5	..	8·0	0	3	23	0	0	0	0	0	26	0	0	5	0
Long Island	0830	33	1008·8	1005·1	..	28·0	25·9	25·1	31·3	85	..	6·2	..	2·0	0	0	15	0	0	0	0	1	11	3	0	16	0
	1730	"	1006·8	1003·2	..	27·9	25·6	24·7	31·1	83	..	6·2	..	2·7	0	0	21	1	0	0	1	1	13	5	0	10	0
Port Blair	0530	79	1007·0	998·0	..	25·0	24·2	23·8	29·5	94	..	6·7	..	12·1	0	5	22	0	0	0	0	0	20	5	2	4	0
	0830	"	1008·1	999·3	+0·8	27·5	25·5	24·7	31·1	85	+1	6·8	+0·2	15·6	0	9	21	0	0	0	0	0	20	9	1	1	0
	1130	"	1007·3	998·5	..	28·0	25·5	24·4	30·6	81	..	7·2	..	18·6	0	10	20	1	0	0	0	1	18	10	0	1	0
	1730	"	1006·3	997·3	..	26·6	25·0	24·3	31·2	87	..	7·0	..	12·8	0	4	24	0	0	0	0	1	19	7	1	3	0
	2330	"	1007·6	998·6	..	25·4	24·4	24·0	29·4	92	..	5·2	..	12·2	0	4	25	0	0	0	1	0	22	6	0	2	0
Car Nicobar	0830	10	1008·6	1007·4	..	28·1	25·7	24·6	31·3	81	..	5·6	..	5·2	0	0	24	0	0	0	0	0	16	6	1	7	1
	1730	"	1006·8	1005·6	..	27·4	25·2	24·3	29·9	84	..	5·4	..	2·3	0	0	17	0	0	0	0	0	13	4	0	14	0
Nancowry	0830	26	1009·4	1006·5	..	27·5	25·3	24·4	29·9	83	..	5·9	..	4·8	0	0	29	0	0	0	0	0	20	8	1	2	0
	1730	"	1007·7	1004·8	..	27·1	25·1	24·2	30·6	85	..	5·9	..	5·1	0	0	27	0	0	0	0	0	20	7	0	4	0
Kondul	0830	8	1009·4	1008·5	..	28·0	26·4	25·8	32·5	88	..	5·5	..	5·5	0	0	24	0	1	11	12	0	0	0	0	7	0
	1730	"	1007·4	1006·5	..	27·4	26·2	25·8	32·9	91	..	5·2	..	5·9	0	0	21	0	1	10	9	0	0	0	0	10	1
Assam (Including Manipur, Tripura)																											
Pasighat	0830	..	..	..	..	25·5	24·6	24·0	30·2	91	..	7·6	..	3·6	0	0	22	3	2	8	1	2	0	4	2	9	0
	1730	..	..	..	..	27·7	25·6	24·7	31·0	85	..	5·5	..	1·9	0	0	14	2	0	5	0	0	0	0	7	17	0
Digboi	0830	..	..	..	..	26·6	25·3	24·6	31·1	88	..	7·5	..	3·0	0	0	31	2	10	4	1	1	6	3	4	0	0
	1730	..	..	..	..	29·0	26·1	24·8	31·5	76	..	6·6	..	3·2	0	0	31	4	15	5	1	0	4	0	2	0	0
Dibrugarh	0830	106	1002·4	990·5	—0.1	26·9	25·7	25·1	31·8	90	+3	7·8	+1·2	2·0	0	0	21	7	1	3	1	6	1	0	2	10	0
	1730	"	999·5	987·7	..	28·3	26·0	25·0	31·9	83	..	5·7	..	2·1	0	0	18	3	7	4	1	1	2	0	0	13	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1000·5	988·3	..	25·4	24·9	24·6	31·1	95	..	7·5	..	3·0	0	0	13	0	8	0	1	1	2	1	0	18	0
	0530	"	1001·5	988·9	..	25·3	24·8	24·5	30·7	96	..	7·6	..	2·6	0	0	17	2	6	5	2	0	2	0	0	14	0
	0830	"	1002·6	990·2	..	27·1	25·5	24·8	31·4	88	..	7·6	..	2·8	0	0	22	0	9	7	2	3	0	1	0	9	0
	1130	"	1001·7	989·3	..	28·8	26·2	25·2	32·0	82	..	7·3	..	4·9	0	0	27	3	8	2	5	2	4	2	1	4	0
	1730	"	999·5	986·8	..	28·8	26·3	25·1	32·4	81	..	5·9	..	4·5	0	0	26	4	16	4	0	0	1	0	1	5	0
	2330	"	1001·4	988·8	..	26·0	25·1	24·8	31·3	93	..	7·0	..	2·3	0	0	11	3	4	2	0	1	0	0	1	20	0
North Lakhimpur	0830	102	1002·1	990·6	..	26·3	25·4	25·0	31·5	93	..	7·7	..	..	0	0	20	8	5	1	0	3	2	0	1	11	0
	1130	"	1001·4	990·3	..	28·5	26·3	25·3	32·8	84	..	7·3	..	..	0	0	25	5	6	4	3	6	1	0	0	6	0
	1730	"	998·8	987·5	..	28·9	26·6	25·6	33·1	83	..	6·4	..	..	0	1	27	7	6	3	1	7	1	1	2	3	0
Sibsagar	0830	97	1002.8	992·0	+0·6	27·8	26·1	25·3	32·5	87	0	(a) 7·5	+0·3	(a) 3·9	0	0	30	2	8	2	4	8	2	1	3	0	0
	1730	"	999·3	988·6	..	30·0	27·0	25·8	33·3	79	..	6·5	..	4·0	0	0	26	11	6	2	0	3	2	1	1	5	0
Jorhat	0530	90	1000·9	990·8	..	25·6	25·4	25·3	32·7	98	..	7·5	..	5·3	0	0	19	2	2	2	4	6	3	0	0	12	0
	0830	"	1002·0	992·0	..	28·0	26·4	25·7	33·2	88	..	7·1	..	7·6	0	0	20	1	4	1	2	7	3	0	2	11	0
	1130	"	1001·0	991·1	..	30·7	27·3	25·9	33·7	77	..	6·5	..	8·3	0	0	27	6	1	0	1	9	4	1	5	4	0
	1730	"	998·3	988·3	..	30·2	27·4	26·3	33·9	80	..	5·6	..	8·0	0	1	25	9	4	2	1	2	1	4	3	5	0
Golaghat	0830	..	..	..	..	27·9	26·1	25·4	32·4	86	..	7·4	..	..	0	0	1	0	0	0	1	0	0	0	0	30	0
	1730	..	..	..	..	30·8	27·7	26·5	34·5	78	..	7·0	..	..	0	0	3	0	0	0	2	0	0	0	1	28	0
Gohpur (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tezpur	0830	79	1002·7	993·9	+0·2	27·4	26·3	25·7	33·0	90	+4	6·9	+0·3	..	0	0	18	0	2	9	2	2	1	1	1	13	0
	1730	"	998·7	990·3	..	30·1	27·1	26·0	33·4	79	..	5·6	..	..	0	0	15	1	1	5	2	1	3	2	0	16	0
Tezpur (P.B.O.)	0230	78	1000·6	991·8	..	26·5	25·7	25·3	32·2	94	..	7·2	..	0·7	0	0	5	0	0	2	0	1	2	0	0	26	0
	0530	"	1001·3	992·4	..	26·4	25·7	25·4	32·6	94	..	7·3	..	1·4	0	0	8	1	0	3	0	3	1	0	0	23	0
	0830	"	1002·5	993·7	..	27·9	26·1	25·3	32·5	86	..	7·1	..	2·5	0	0	20	0	2	7	1	5	5	0	0	11	0
	1130	"	1002·0	993·3	..	30·1	26·7	25·2	32·3	76	..	6·4	..	4·1	0	0	25	0	3	7	1	5	6	2	0	6	1
	1730	"	999·9	990·3	..	30·1	27·1	25·9	33·3	79	..	6·0	..	2·0	0	0	12	2	1	3	1	2	1	2	0	19	0
	2330	"	1001·6	992·8	..	27·0	26·1	25·7	33·1	92	..	6·8	..	1·0	0	0	6	0	1	2	0	1	0	2	0	25	0
Majbat	0830	..	..	..	..	..	..	..	..	..	..	7·8	..	9·8	0	0	28	0	3	8	1	1	10	5	0	3	0
	1730	..	..	..	..	..	..	..	..	..	..	7·3	..	5·2	0	0	24	0	2	2	1	4	9	2	4	7	0
Chaparmukh (R)	0830	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tangla	0830	78	1001·6	992·9	..	28·4	26·2	25·3	32·1	84	..	5·6	..	6·9	0	0	30	1	0	4	4	3	9	9	0	1	0
	1730	"	997·9	989·3	..	30·3	26·9	25·5	32·8	76	..	4·5	..	7·3	0	1	29	1	3	3	2	1	9	9	2	1	0

(R) Register not received. (a) Mean of 30 days.

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity%		Colud amount (Oktas).		Mean wind speed. km. per hour	Wind speed (Km.p.h.)			No. of observations									
			At mean sea leve or height in g.p. m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal		6 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur, Tripura) —*Contd.*																											
Gauhati	0830	55	1002·1	995·9	+0·5	28·1	26·3	25·5	32·9	85	+2	6·7	+0·3	(a) 2·2	0	0	22	1	8	3	3	1	4	1	1	8	0
	1730	"	998·6	992·3	..	30·5	27·3	25·9	33·8	77	..	5·7	..	(a) 2·5	0	0	24	0	3	3	3	4	9	1	1	6	0
Gauhati (Kaikuchi Aerodrome)	0230	49	1000·2	994·6	..	26·8	25·9	25·5	32·8	92	..	6·6	..	3·0	0	0	18	1	4	1	0	4	7	0	1	13	0
	0530	"	1000·8	995·1	..	26·5	25·7	25·4	32·2	94	..	7·4	..	2·6	0	0	20	2	5	2	3	5	2	1	0	11	0
	0830	"	1001·9	996·3	..	28·4	26·3	25·3	32·4	84	..	7·3	..	5·1	0	0	26	4	10	3	0	2	0	3	4	5	0
	1130	"	1001·1	995·6	..	30·1	26·8	25·4	32·5	76	..	7·0	..	7·3	0	0	30	10	12	1	0	2	0	3	2	1	0
	1730	"	998·8	993·3	..	30·0	26·9	25·8	33·1	78	..	7·0	..	5·0	0	0	27	2	1	1	3	4	8	5	3	4	0
	2330	"	1001·4	995·8	..	27·6	26·3	25·8	33·3	90	..	6·8	..	3·1	0	0	18	0	1	2	1	6	6	2	0	13	0
Rangiya *	0830																										
*	1730																										
Goalpara	0830	38	1001·7	997·5	..	28·3	26·3	25·3	32·5	84	..	7·6	..	2·2	0	0	21	0	3	2	5	1	4	2	4	10	0
	1730	"	998·6	994·5	..	29·8	27·1	26·0	33·5	81	..	7·3	..	2·2	0	0	21	1	3	1	2	0	6	5	3	10	0
Dhubri	0830	35	1002·2	998·4	+0·8	28·2	26·7	26·1	33·8	88	+3	6·6	+0·6	7·5	0	0	30	2	18	3	2	1	4	0	0	1	0
	1730	"	999·2	995·4	..	28·6	27·0	26·4	34·4	88	..	5·6	..	5·7	0	0	27	0	11	1	1	5	9	0	0	4	0
Dhubri (Rupsi Aerodrome)	0830	..	..	..	..	28·5	26·3	25·4	32·8	84	..	7·4	..	4·0	0	0	23	1	4	6	6	2	4	0	0	8	0
	1130	..	..	..	..	29·8	26·8	25·7	32·6	79	..	7·0	..	5·4	0	0	26	0	5	2	9	2	7	1	0	5	0
	1730	..	..	..	..	28·9	26·7	25·7	33·1	83	..	5·5	..	2·2	0	0	13	0	0	3	3	5	2	0	0	18	0
Tura (R)	0830	370																									
(R)	1730	"																									
Agartala	0230	16	1000·4	998·6	..	25·7	25·1	24·9	31·5	95	..	6·2	..	10·1	0	2	28	0	0	2	15	10	3	0	0	1	0
	0530	"	1000·8	999·0	..	25·4	24·9	24·6	31·1	95	..	7·1	..	9·1	0	0	31	0	0	0	22	8	1	0	0	0	0
	0830	"	1001·9	1000·1	..	28·3	26·2	25·2	32·5	83	..	6·9	..	12·7	0	4	27	0	0	1	18	10	2	0	0	0	0
	1130	"	1001·5	999·7	..	30·0	27·1	25·8	33·6	79	..	7·3	..	12·1	0	5	26	0	0	2	14	8	6	1	0	0	0
	1730	"	999·1	997·3	..	28·7	26·4	25·3	32·5	82	..	6·5	..	11·0	0	1	30	1	0	0	9	15	4	2	0	0	0
	2330	"	1001·7	999·9	..	26·3	25·4	23·8	31·8	93	..	5·5	..	12·0	0	3	26	0	0	0	15	9	4	1	0	2	0
Silchar	0830	29	1003·5	1000·2	+0·6	28·4	26·0	25·0	31·8	82	—3	6·5	+0.3	1·4	0	0	14	4	2	2	1	1	3	0	1	17	0
	1730	"	1000·0	996·7	..	29·6	26·6	25·3	32·3	79	..	5·8	..	1·7	0	0	17	3	0	0	0	0	3	6	5	14	0
Silchar (Kumbhigram Aerodrome)	0530	97	1001·1	990·2	..	24·7	24·5	24·4	30·0	99	.	7·3	..	4·2	0	0	25	1	4	16	2	0	0	1	1	6	0
	0830	"	1002·1	991·2	..	27·4	25·8	25·1	31·8	88	..	6·6	..	4·2	0	0	24	2	3	9	2	1	1	3	3	7	0
	1130	"	1001·0	990·3	..	30·3	26·5	24·9	31·5	73	..	6·2	..	5·2	0	0	29	0	3	3	3	1	4	9	6	2	0
	1730	"	998·8	988·0	..	28·6	26·4	25·3	32.2	83	..	5·9	..	4·8	0	1	24	0	1	4	3	4	3	8	2	6	0
Imphal	0530	801	1003·3	916·2	..	22·8	21·8	21·4	25·3	92	..	7·1	..	3·1	0	0	20	1	1	3	5	5	2	1	2	11	0
	0830	"	1003·5	917·1	..	25·5	22·7	21·4	25·6	78	..	6·5	..	4·1	0	0	19	0	1	2	5	6	4	0	1	12	0
	1130	"	1002·0	916·0	..	27·3	23·2	21·3	25·2	70	..	6·2	..	9·5	0	4	23	1	2	1	3	6	10	4	0	4	0
	1730	"	1000·0	914.2	..	26·3	22·9	21·3	25·6	75	..	6·1	..	6·5	0	1	25	0	0	2	3	4	12	3	2	5	0
	2330	"	1003·3	916·4	..	23·5	22·1	21·5	25·5	89	..	6·3	..	4·3	0	1	18	0	1	3	3	4	3	2	3	12	0
Haflong	0830	682	1003·0	928·2	..	23·5	22·1	21·5	25·6	88	..	6·7	..	..	0	0	31	0	1	0	0	14	16	0	0	0	0
	1730	"	999·2	925·5	..	26·0	23·1	21·7	26·1	78	..	5·1	..	..	0	0	31	0	0	0	0	10	21	0	0	0	0
Lumding	0830	149	1002·2	985·7	..	29·3	25·9	24·5	30·0	75	—7	7·2	..	0·6	0	0	3	0	0	1	0	1	1	0	0	28	0
	1730	"	999·0	982·5	..	31·4	26·7	24·8	30·5	68	..	5·9	..	1·4	0	0	10	0	1	1	1	3	2	1	1	21	0
Sub-Himalayan West Bengal.																											
Cooch Behar (C.W.O.)	0830	43	1002·1	997·2	..	28·3	26·3	25·5	32·7	85	..	7·2	..	8·5	0	0	30	0	6	13	5	1	3	1	0	1	1
	1130	"	1001·3	996·5	..	30·1	27·1	25·9	33·2	79	..	6·9	..	10·7	0	1	29	0	1	15	3	3	2	2	0	1	4
	1730	"	999·0	994·2	..	29·4	26·9	25·9	33·4	81	..	6·3	..	5·9	0	0	20	0	2	9	4	2	3	0	0	11	0
Jalpaiguri	0830	83	1002·0	992·7	+0·6	26·4	25·3	24·7	32·8	91	+3	6·9	+1·6	7·7	0	0	29	4	10	10	1	1	1	1	1	2	0
	1730	"	999·0	989·7	..	28·9	26·2	24·9	31·6	80	..	5·2	..	6·0	0	1	27	3	10	4	7	2	1	1	0	3	0
Bagdogra	0230	131	999·5	984·8	..	26·1	25·3	25·0	31·5	95	..	7·3	..	4·4	0	0	18	0	9	6	2	0	0	0	1	13	0
	0530	"	1000·0	985·3	..	25·4	24·8	24·5	31·0	95	..	7·5	..	5·0	0	0	22	2	9	7	0	0	1	0	3	9	0
	0830	"	1001·3	986.6	..	27·1	25·7	25·1	31·9	89	..	7·8	..	7·3	0	0	26	1	10	9	3	0	1	0	2	5	0
	1130	"	1000·7	986·1	..	28·8	26·4	25·3	32·2	82	..	7·4	..	8·9	0	0	30	1	9	13	4	0	1	2	0	1	0
.. .. ..	1730	"	998·1	983·6	..	28·9	26·2	25·2	31·6	81	..	6·8	..	5·4	0	0	22	1	5	6	5	3	0	1	1	9	0
.. .. ..	2330	"	1000·8	986·2		26·7	25·9	25·5	32·6	94	..	7·5	..	7·3	0	0	26	0	16	7	1	0	1	0	1	5	0
Malda	0830	31	1000·6	997·1	+0·4	28·3	26·6	26·0	33·5	87	+5	7·1	+1·3	10·8	0	0	30	0	2	10	8	6	3	0	1	1	0
	1730	"	997·9	994·4	..	29·8	27·1	26·0	33·4	80	..	6·7	..	9·3	0	0	31	1	3	10	8	6	2	0	1	0	0

*Data not reliable.

(a) Mean of 30 days.

(R) Register not received

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal																											
Dum Dum	0230	6	998·9	998·2	..	26·7	25·9	25·6	32·6	94	..	5·3	..	6·5	0	0	26	0	0	3	6	7	9	1	0	5	0
	0530	"	999·2	998·5	..	26·5	25·9	25·6	33·1	95	..	6·3	..	6·3	0	1	26	0	0	5	6	6	9	1	0	4	0
	0830	"	1000·5	999·8	..	28·6	26·6	25·7	33·5	84	..	6·7	..	10·7	0	2	29	0	2	2	8	9	9	1	0	0	0
	1130	"	1000·0	999·3	..	30·3	27·1	25·7	32·8	77	..	6·8	..	9·9	0	1	30	0	1	3	6	12	7	2	0	0	0
	1730	"	997·8	997·1	..	29·0	26·5	25·4	32·6	82	..	6·7	..	8·4	0	1	26	0	1	1	7	9	8	1	0	4	0
	2330	"	1000·3	999·6	..	27·1	26·2	25·7	33·5	92	..	5·2	..	7·7	0	0	31	0	1	3	10	9	7	1	0	0	0
Calcutta	0830	6	1000·7	1000·0	+0·7	28·8	26·5	25·6	32·7	83	0	6·8	−0·2	8·6	0	0	31	0	0	4	7	8	9	3	0	0	0
	1130	"	1000·1	999·4	..	30·7	27·0	25·4	32·8	75	..	6·8	..	9·3	0	0	30	0	1	5	6	3	13	1	1	1	0
	1730	"	997·9	997·2	..	29·3	26·7	25·5	33·2	80	..	6·8	..	7·6	0	0	29	0	0	4	8	6	10	1	0	2	0
Barrackpore	0530	7	999·3	998·5	..	26·4	26·1	25·9	33·1	98	..	6·3	..	3·1	0	0	20	0	0	7	2	6	5	0	0	11	0
	0830	"	1000·6	999·9	..	28·9	27·0	26·3	34·0	86	..	6·7	..	9·5	0	2	26	0	1	4	6	5	10	1	1	3	0
	1130	"	1000·1	999·3	..	30·7	27·8	26·8	35·1	81	..	6·5	..	10·9	0	0	29	0	0	3	10	5	8	2	1	2	0
	1730	"	997·9	997·1	..	29·1	27·1	26·2	34·3	86	..	6·5	..	8·0	0	0	25	0	0	2	7	8	6	0	2	6	0
	2330	"	1000·5	999·7	..	26·8	26·2	25·9	33·4	95	..	4·8	..	4·5	0	0	21	0	0	2	5	5	9	0	0	10	0
Saugor Island	0830	3	1000·1	999·8	+0·3	28·6	26·8	26·1	34·1	86	+4	6·1	−0·9	26·6	0	22	9	0	0	0	4	8	16	3	0	0	0
	1730	"	998·1	997·8	..	29·1	26·8	25·9	33·5	83	..	5·9	..	29·8	0	25	6	0	0	0	6	12	11	1	1	0	0
Sandheads	0530	10	999·1	998·0	..	28·3	26·6	25·9	33·6	87	..	6·5	..	..	0	14	17	0	2	1	0	4	18	6	0	0	0
	0830	"	1000·2	999·1	+0·3	28·5	26·6	25·8	32·8	85	+3	6·5	+0·3	..	0	13	17	0	0	1	2	3	19	5	0	1	0
	1130	"	999·9	998·8	..	29·0	26·8	25·8	33·2	82	..	6·7	..	..	0	12	18	0	0	1	1	7	15	6	0	1	0
	1730	"	998·0	996·9	..	29·0	26·8	25·8	33·2	83	..	5·9	..	..	0	19	11	0	0	0	1	9	16	4	0	1	0
	2330	"	1000·3	999·2	..	28·6	26·8	26·0	33·6	86	..	5·3	..	..	0	11	20	0	0	0	1	10	19	1	0	0	0
Contai	0830	11	1000·4	999·2	..	28·8	26·6	25·7	33·2	84	..	6·2	..	7·4	0	0	29	1	0	1	3	7	16	1	0	2	0
	1730	"	998·0	996·8	..	28·9	27·0	26·0	34·0	85	..	5·6	..	8·3	0	1	29	0	0	0	8	11	9	2	0	1	0
Midnapore	0830	45	1000·1	999·0	+0·2	28·8	26·3	25·2	32·4	82	0	5·4	−0·4	3·4	0	0	26	0	1	1	5	9	9	0	1	5	0
	1730	"	997·4	992·4	..	29·4	26·7	25·6	32·7	80	..	5·0	..	4·2	0	0	29	0	1	1	6	7	14	0	0	2	0
Purulia	0830	255	999·7	972·0	..	27·4	25·3	24·6	30·2	85	..	7·1	..	3·3	0	0	29	3	2	1	11	2	4	2	4	2	0
	1730	"	996·6	969·0	..	29·1	26·0	24·3	31·1	77	..	6·8	..	3·3	0	0	28	1	2	0	10	8	2	0	5	3	0
Burdwan	0830	32	1000·3	996·7	+0·4	28·2	26·5	25·9	33·3	85	+1	6·2	−0·4	0·8	0	0	8	0	0	0	0	4	3	1	0	23	0
	1730	"	997·4	993·7	..	29·5	28·1	27·6	36·9	89	..	6·3	..	1·6	0	0	13	0	0	0	6	7	0	0	0	18	0
Krishnagar	0830	15	1000·7	999·1	+0·5	28·8	26·9	26·4	34·0	86	+3	4·8	−1·8	3·1	0	0	29	0	0	6	6	14	3	0	0	2	0
	1730	"	998·1	996·5	..	29·7	27·4	26·7	34·3	83	..	4·0	..	2·9	0	0	30	0	0	6	12	12	0	0	0	1	0
Asansol	0230	126	998·2	984·2	..	26·4	25·9	25·7	33·3	96	..	5·6	..	6·4	0	0	24	0	0	4	8	8	2	1	1	7	0
	0530	"	998·6	984·5	..	26·1	25·8	25·6	34·1	97	..	6·7	..	5·1	0	0	23	0	1	5	7	7	2	0	1	8	0
	0830	"	999·8	985·8	+0·9	27·3	26·5	26·0	33·8	89	+4	6·7	−0·1	7·7	0	0	25	0	0	7	8	7	3	0	0	6	0
	1130	"	999·4	985·5	..	29·8	27·2	26·2	34·2	81	..	6·9	..	7·2	0	0	26	1	4	6	6	5	3	0	1	5	0
	1730	"	997·0	983·0	..	29·1	27·1	26·4	34·3	86	..	6·8	..	7·5	0	0	27	0	2	6	12	5	2	0	0	4	0
	2330	"	999·6	985·5	..	26·9	26·3	26·1	33·8	95	..	5·8	..	6·5	0	0	23	0	1	3	10	8	1	0	0	8	0
Suri	0830	77	1000·4	991·8	..	28·2	26·3	25·6	32·8	85	..	6·6	..	9·6	0	1	29	1	2	7	9	8	3	0	0	1	0
	1730	"	997·8	989·2	..	29·7	26·9	25·7	32·7	81	..	6·7	..	8·5	0	0	30	1	3	11	10	3	1	1	0	1	0
Berhampore	0830	19	1000·0	997·9	−0·1	28·4	26·8	26·1	33·6	87	+3	6·9	+0·2	4·5	0	0	27	0	0	11	3	12	1	0	0	4	0
	1730	"	997·3	995·2	..	29·8	27·2	26·3	34·7	81	..	6·2	..	3·9	0	0	22	0	0	10	6	6	0	0	0	9	0
Orissa																											
Baripada	0830	54	1000·5	994·4	..	28·1	26·1	25·3	32·2	85	..	6·5	..	1·8	0	0	17	0	4	0	1	3	7	0	1	14	1
	1730	"	997·8	991·8	..	29·0	26·6	25·0	32·6	82	..	6·5	..	5·4	0	0	25	0	1	1	10	4	5	1	0	6	3
Balasore	0830	20	1000·1	997·9	−0·2	28·6	26·5	25·7	32·8	84	+2	7·7	+1·8	13·3	0	7	22	0	0	1	5	4	18	0	1	2	0
	1730	"	997·9	995·7	..	29·1	26·7	25·6	32·4	82	..	7·3	..	12·9	0	9	20	0	0	0	9	12	8	0	0	2	0
Chandbali	0830	6	1000·5	999·8	+0·6	28·6	26·7	25·9	33·3	85	+1	6·2	−0·2	5·4	0	0	31	0	0	0	7	6	10	3	5	0	0
	1730	"	998·3	997·6	..	28·8	26·5	25·7	33·0	83	..	5·8	..	6·6	0	0	31	0	0	0	14	6	10	1	0	0	0
Cuttack	0830	27	1000·6	997·6	−0·1	28·1	26·1	25·1	32·2	84	+4	6·2	0	..	..	..	..	1	0	0	0	0	1	1	1	27	0
	1730	"	998·0	995·0	..	29·8	26·5	24·9	31·8	76	..	6·3	..	..	..	..	..	0	0	0	0	0	4	0	1	26	0
Bhubaneswar	0230	46	999·3	994·1	..	26·4	25·6	25·4	32·0	94	..	6·1	..	8·7	0	2	24	1	0	0	0	9	10	3	3	5	0
	0530	"	999·6	994·3	..	26·1	25·4	25·1	32·2	94	..	6·3	..	6·9	0	1	22	0	0	0	0	7	10	4	2	8	0
	0830	"	1000·8	995·6	..	28·3	26·2	25·3	31·9	84	..	6·8	..	11·7	0	4	25	1	0	0	1	4	15	5	3	2	0
	1130	"	1000·4	995·2	..	30·3	26·2	24·4	30·4	72	..	6·9	..	12·4	0	2	29	1	0	0	0	6	12	8	4	0	0
	1730	"	998·4	993·2	..	28·3	26·0	25·4	31·9	83	..	7·1	..	15·7	0	9	22	1	1	0	2	12	11	3	1	0	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS.—JULY, 1957. (ASADHA 10—SRAVANA 9, 1879 SAKA)

Division and Station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa (*Contd.*)																											
Bhubaneswar (*Contd.*)	2330	46	1000·7	995·5	..	26·7	25·8	25·5	32·6	92	..	5·8	..	6·5	0	1	24	0	0	0	0	11	9	3	2	6	0
Puri . . .	0830	6	1001·2	1000·5	+0·7	29·0	27·1	26·2	34·2	85	+3	6·4	+0·6	21·7	0	16	15	1	0	0	1	3	16	10	0	0	0
	1730	"	998·9	998·2	..	29·3	27·4	26·6	34·8	86	..	6·3	..	24·6	0	20	11	0	0	0	2	7	15	6	1	0	0
Gopalpur . .	0530	17	1000·2	998·3	..	26·8	25·6	25·1	32·1	90	..	6·1	..	6·8	0	3	15	0	0	0	0	8	10	0	0	13	0
	0830	"	1001·4	999·5	+0·7	28·6	26·2	25·1	31·7	82	+1	6·2	+1·2	10·1	0	7	20	0	0	2	0	9	15	1	0	4	0
	1130	"	1001·2	999·3	..	30·1	26·8	25·3	32·4	76	..	6·2	..	14·2	0	5	26	2	0	0	5	11	10	2	1	0	0
	1730	"	999·0	997·1	..	28·8	26·6	25·8	33·0	83	..	6·4	..	17·6	0	9	22	0	0	0	2	13	15	0	1	0	0
	2330	"	1001·3	999·4	..	27·5	26·1	25·4	32·7	88	..	5·6	..	9·7	0	3	23	0	0	0	0	7	18	0	1	5	0
Koraput . . .	0830	913	1448·1	904·3	..	21·4	20·0	19·6	22·8	88	..	7·2	..	..	0	0	31	3	0	0	0	3	14	7	4	0	0
	1730	"	1435·2	902·7	..	23·0	21·0	20·0	23·2	84	..	7·5	..	..	0	0	31	1	1	0	0	0	10	9	10	0	0
Titilagarh . .	0830	211	1001·2	977·7	..	26·0	24·1	23·2	28·6	84	..	5·9	..	3·4	0	0	28	1	0	0	3	12	11	1	0	3	0
	1730	"	998·3	975·0	..	28·8	25·1	23·5	29·3	75	..	5·6	..	2·9	0	0	29	1	0	3	2	10	10	3	0	2	0
Bolangir(R) . .	0830	..																									
(R) . .	1730	..																									
Angul . . .	0830	139	1000·9	985·5	+0·5	27·2	24·8	23·7	29·1	81	+1	7·4	+1·1	4·8	0	0	22	2	1	3	1	0	2	8	5	9	0
	1730	"	998·1	982·7	..	29·1	25·6	24·1	29·3	75	..	7·6	..	5·9	0	0	28	1	1	1	4	4	6	8	3	3	0
Keonjhar . .	0830	463	996·9	946·5	..	26·3	23·9	22·6	27·6	80	..	6·9	..	9·8	0	3	28	1	3	3	2	5	10	5	2	0	0
	1730	"	994·6	944·2	..	27·2	24·2	22·9	27·8	79	..	7·0	..	9·7	0	0	30	0	0	0	4	7	11	7	1	1	0
Sambalpur . .	0830	148	1001·0	981·4	+0·6	26·7	24·9	24·0	30·3	86	+2	6·3	+0·2	5·3	0	0	30	0	0	0	1	8	15	6	0	1	0
	1730	"	997·9	981·5	..	29·1	25·9	24·5	30·8	73	..	6·5	..	3·0	0	0	22	1	0	0	1	3	12	3	2	9	0
Jharsuguda . .	0230	230	998·8	973·2	..	25·6	24·9	24·5	31·3	94	..	6·7	..	6·2	0	1	21	0	1	0	6	5	4	6	0	9	0
	0530	"	999·2	973·3	..	25·1	24·5	24·3	30·3	95	..	7·2	..	5·4	0	0	26	0	0	1	6	6	5	8	0	5	0
	0830	"	1000·4	974·8	..	26·6	25·1	24·3	30·9	83	..	7·2	..	6·3	0	0	28	0	0	1	3	6	9	8	1	3	0
	1130	"	1000·0	974·6	..	28·4	25·8	24·7	31·7	81	..	7·1	..	7·1	0	0	29	0	0	0	2	6	13	8	0	2	0
	1730	"	997·4	972·0	..	28·4	25·5	24·3	30·6	80	..	7·2	..	7·2	0	1	28	1	0	3	2	5	10	8	0	2	0
	2330	"	1000·1	974·5	..	26·2	25·2	24·7	30·9	93	..	6·5	..	7·2	0	0	27	0	0	2	4	4	13	4	0	4	0
Chota Nagpur																											
Jamshedpur . .	0830	129	1000·0	985·1	+0·2	28·2	26·0	25·0	32·8	83	+2	6·3	−0·3	7·3	0	0	29	0	0	4	2	1	10	11	1	2	0
	1730	"	997·0	982·1	..	29·9	26·4	24·9	32·4	76	..	7·1	..	8·8	0	0	28	1	0	8	7	4	4	4	0	3	0
Jamshedpur (P.B.O.)	0530	145	998·7	982·5	..	26·2	25·4	25·0	31·6	94	..	7·1	..	2·8	0	0	18	0	3	1	3	2	5	1	3	13	0
	0830	"	999·9	983·7	..	28·1	25·9	25·0	31·4	84	..	7·0	..	5·3	0	0	27	0	0	3	3	1	11	8	1	4	0
	1130	"	999·3	983·3	..	30·2	26·5	25·0	31·8	75	..	6·8	..	6·2	0	0	30	1	2	5	4	2	11	2	3	1	0
	1730	"	997·0	980·9	..	29·9	26·3	24·8	31·4	75	..	7·1	..	5·8	0	0	26	1	0	7	10	2	5	1	0	5	0
	2330	"	999·8	983·6	..	27·1	25·7	25·1	31·9	88	..	6·2	..	3·3	0	0	18	1	6	4	1	1	3	0	2	13	0
Chaibasa . .	0830	226	999·6	974·6	+0·4	28·1	25·6	24·7	30·3	81	0	6·7	+0·2	1·8	0	0	16	0	2	0	4	0	9	1	0	15	0
	1730	"	996·7	971·8	..	29·7	26·2	25·5	31·2	78	..	6·7	..	1·7	0	0	12	0	2	0	0	0	9	1	0	19	0
Ranchi . . .	0830	655	998·2	927·0	−0·8	24·6	23·3	22·7	27·4	90	+5	6·9	+0·3	1·3	0	0	14	3	0	5	1	3	0	0	2	17	0
	1730	"	997·4	926·5	..	25·9	24·0	22·7	28·3	86	..	6·7	..	0·3	0	0	3	0	0	1	0	0	0	2	0	28	0
Ranchi (C.W.O.) .	0530	652	998·5	927·3	..	23·5	22·8	22·6	26·7	94	..	6·8	..	6·9	0	0	25	0	2	5	1	10	5	1	1	6	0
	0830	"	999·2	928·5	..	25·4	23·7	22·7	28·4	85	..	6·8	..	9·1	0	1	30	3	0	5	4	5	5	7	2	0	0
	1130	"	998·8	928·4	..	27·2	24·2	22·9	27·9	78	..	6·9	..	11·4	0	2	29	3	1	6	2	5	6	5	3	0	0
	1730	"	996·2	925·9	..	26·6	24·3	23·3	29·0	83	..	(j) 6·6	..	(j) 9·7	0	1	19	0	1	4	3	2	5	4	1	1	0
Daltonganj(R) .	0830	221																									
(R) .	1730	"																									
Hazaribagh . .	0830	611	999·6	933·1	+0·5	25·6	24·0	23·0	28·4	87	+2	7·0	−0·1	9·0	0	0	29	1	2	5	2	3	8	4	4	2	0
	1730	"	996·7	930·6	..	27·0	24·7	23·8	29·7	83	..	7·2	..	8·0	0	1	20	1	2	4	5	3	2	2	2	10	0
Dhanbad. . .	0830	257	999·5	971·0	..	27·5	25·7	24·9	30·6	86	..	7·0	..	8·9	0	1	29	1	2	4	4	9	4	4	2	1	0
	1730	"	996·7	968·4	..	28·6	26·0	24·9	31·3	81	..	7·0	..	7·4	0	0	26	3	3	6	6	2	5	1	0	5	0
Bihar																											
Purnea . . .	0830	38	1000·8	996·6	+0·5	28·3	26·7	26·1	33·5	88	+3	7·1	+1·2	4·3	0	0	28	3	3	16	4	1	1	0	0	3	0
	1730	"	997·6	993·4	..	29·7	27·3	26·3	34·0	82	..	6·1	..	3·9	0	0	30	1	0	17	5	2	3	2	0	1	0
Forbesganj . .	0830	61	1000·9	994·0	..	27·8	26·3	25·7	33·3	89	..	7·4	..	7·1	0	0	26	0	0	24	0	0	0	2	0	5	0
	1730	"	997·5	990·8	..	30·4	27·4	26·1	34·2	78	..	6·3	..	7·2	0	0	31	1	1	23	1	1	0	3	1	0	0
Darbhanga . .	0830	49	1000·4	994·9	+0·6	29·0	27·1	26·4	34·0	86	+3	6·9	+0·8	3·4	0	0	28	0	14	9	5	0	0	0	0	3	0
	1730	"	997·3	991·8	..	31·0	27·6	26·3	34·4	76	..	5·6	..	3·2	0	0	26	0	12	3	9	0	1	0	1	5	0
Motihari (R) . .	0830	66																									
(R) .	1730	"																									

(R) Register not received. (j) Mean of 21 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS.—JULY, 1957. (ASADHA 10—SRAVANA 9, 1879 SAKA)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas)		Mean wind speed Km. per hour.	Wind speed (Km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar (*Contd.*)																											
Patna . . .	0830	53	999·7	993·8	+0·3	29·2	26·9	25·9	34·3	83	+2	6·8	+0·2	10·2	0	6	23	0	1	19	2	1	3	2	1	2	0
	1730	"	997·0	991·1	..	30·5	27·0	25·6	32·6	76	..	6·5	..	9·2	0	3	24	0	5	15	4	1	0	2	0	4	0
Patna (Aerodrome) .	0530	60	998·0	991·3	..	27·2	26·4	26·1	33·6	94	..	6·7	..	9·2	0	1	25	2	0	16	3	2	1	1	1	5	0
	0830	"	999·1	992·4	..	29·1	27·0	26·3	34·3	85	..	6·6	..	11·5	0	2	26	1	1	13	2	7	1	1	2	3	0
	1130	"	998·7	992·1	..	30·8	27·5	26·2	33·9	75	..	7·1	..	12·1	0	3	26	3	2	14	1	3	1	4	1	2	0
	1730	"	996·0	989·4	..	30·9	27·2	25·7	33·3	75	..	6·4	..	10·7	0	1	28	2	3	14	4	1	2	3	0	2	0
	2330	52	999·2	993·3	..	28·9	27·3	26·6	34·8	88	..	5·7	..	6·0	0	1	16	0	0	8	5	3	0	1	0	14	0
Dehri . . .	0830	107	999·2	987·3	..	28·8	26·8	26·1	34·0	87	..	6·5	..	2·9	0	0	28	0	2	2	10	1	7	4	2	3	0
	1730	"	995·6	983·8	..	30·1	27·2	26·0	33·9	80	..	6·7	2·5	2·5	0	0	25	2	2	3	8	1	2	4	3	6	0
Gaya . . .	0230	116	998·1	985·1	..	27·2	26·3	26·1	33·6	94	..	5·2	..	3·8	0	0	18	1	0	3	4	1	5	4	0	13	0
	0530	"	998·5	985·4	..	26·7	26·1	25·9	33·4	95	..	6·2	..	3·5	0	0	14	0	1	3	3	0	4	2	1	17	0
	0830	"	999·7	986·7	+0·7	28·6	26·8	26·0	34·1	86	+11	6·4	+1·2	7·6	0	1	21	0	1	7	2	2	3	5	2	9	0
	1130	"	999·4	986·5	..	30·7	27·4	25·9	33·6	77	..	6·5	..	8·7	0	2	22	0	3	5	3	2	2	4	5	7	0
	1730	"	996·8	983·9	..	30·0	27·1	25·9	33·1	79	..	6·5	..	7·7	0	0	23	1	1	6	4	1	4	2	4	8	0
	2330	"	999·5	986·4	..	27·8	26·8	26·4	34·1	93	..	5·5	..	3·1	0	0	17	0	0	6	4	2	2	0	3	14	0
Jamui . . .	0830	82	999·7	990·4	..	29·2	27·2	26·4	34·7	85	..	7·3	..	4·0	0	0	24	0	1	10	7	1	0	0	5	7	0
	1730	"	996·9	987·7	..	29·8	27·5	26·5	35·0	84	..	7·2	..	4·1	0	0	28	0	1	16	5	0	0	1	5	3	0
Dumka . .	0830	149	999·9	983·3	+0·1	28·0	26·3	25·6	32·9	86	+4	4·7	-1·1	..	0	0	28	1	1	11	7	1	6	1	0	3	0
	1730	"	997·2	980·8	..	29·0	26·9	26·0	33·4	84	..	5·3	..	..	0	0	28	1	1	15	9	0	2	0	0	3	0
Bhagalpur . .	0530	49	999·1	993·6	..	26·9	26·1	25·9	33·8	95	..	6·7	..	6·7	0	0	27	0	0	14	6	3	2	1	1	4	0
	0830	"	1000·2	994·7	..	29·2	27·0	26·1	33·7	84	..	6·6	..	8·1	0	0	28	0	3	12	8	2	3	0	0	3	0
	1130	"	1000·0	994·7	..	30·8	27·6	26·3	33·9	78	..	6·6	..	7·5	0	0	29	0	0	17	6	3	0	3	0	2	0
	1730	"	997·4	992·0	..	29·7	27·1	26·1	34·0	81	..	6·5	..	6·9	0	0	27	0	1	13	8	1	2	2	0	4	0
	2330	"	1000·2	994·7	..	27·8	26·6	26·1	34·1	91	..	5·3	..	6·7	0	0	27	0	1	16	6	3	0	1	0	4	0
Sabour . . .	0830	37	999·7	995·5	+0·1	28·9	27·1	26·3	34·0	87	+4	6·9	+0·2	8·5	0	0	31	1	2	6	12	1	7	2	0	0	0
	1730	"	997·1	993·0	..	29·8	27·4	26·3	34·2	83	..	6·8	..	6·3	0	0	25	0	2	11	8	1	2	1	0	6	0
Uttar Pradesh (East)																											
Gonda . . .	0830	110	999·1	986·9	..	29·0	26·5	25·0	32·4	84	+2	6·4	+0·3	2·9	0	1	14	0	0	15	0	0	0	0	0	16	0
	1730	"	996·0	983·7	..	31·3	27·2	25·6	32·9	73	..	5·0	..	1·4	0	0	7	0	0	6	0	0	0	1	0	24	0
Nautanwa . .	0830	..	..	.	..	28·3	26·4	25·0	32·8	84	..	5·9	..	5·9	0	0	27	0	8	8	10	0	0	0	1	4	0
	1730	..	..	..	..	30·1	27·1	25·6	32·9	77	..	4·9	..	5·2	0	0	30	3	0	12	13	0	0	0	2	1	0
Gorakhpur . .	0830	77	999·3	990·8	+0·1	29·2	27·1	26·3	34·2	86	+3	7·3	+2·5	2·7	0	0	21	1	10	5	2	0	1	1	1	10	0
	1730	"	996·7	988·3	..	31·7	28·4	27·6	36·2	79	..	5·8	..	2·1	0	0	20	0	5	8	0	2	2	2	1	11	0
Gorakhpur (P.B.O.)	0230	78	997·9	989·1	..	27·6	26·5	26·1	34·1	92	..	5·8	..	4·7	0	1	22	1	4	10	3	2	2	0	1	8	0
	0530	"	998·3	989·5	..	27·1	26·2	25·9	33·2	93	..	7·0	..	3·8	0	1	20	1	8	5	3	3	0	1	0	10	0
	1130	"	993·3	990·7	..	31·1	27·0	25·9	32·8	75	..	7·0	..	6·5	0	0	30	2	5	8	9	2	3	1	0	1	0
	2330	"	999·1	990·4	..	28·2	26·7	26·2	34·4	89	..	5·3	..	4·3	0	0	25	1	10	4	6	1	3	0	0	6	0
Azamgarh (R) .	0830	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ballia . . .	0830	64	998·2	991·4	..	28·7	26·5	25·6	33·2	83	..	6·6	..	2·6	0	0	24	0	6	10	4	0	2	2	0	7	0
	1730	"	995·8	988·8	..	31·1	27·2	25·4	32·9	75	..	5·9	..	2·4	0	0	22	0	7	5	6	1	1	1	1	9	0
Varanasi (Banaras). (R)	0830	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Varanasi (Banaras) (Babatpur Aerodrome).	0530	85	998·6	989·0	..	27·0	26·5	25·8	34·1	96	..	6·3	..	5·7	0	0	26	0	2	8	4	4	4	2	2	5	0
	0830	"	999·8	990·3	..	29·4	27·0	25·9	33·4	83	..	6·3	..	10·5	0	0	31	0	1	8	2	3	8	5	4	0	0
	1130	"	995·5	990·1	..	31·5	27·4	25·8	32·3	73	..	6·5	..	11·5	0	2	29	2	2	7	1	4	5	5	5	0	0
	1730	"	997·0	987·6	..	30·4	27·4	25·9	34·2	77	..	6·4	..	10·2	0	3	25	1	0	6	5	2	4	4	6	3	0
	2330	"	999·4	989·8	..	28·3	26·8	26·2	31·2	85	..	5·6	..	8·1	0	0	27	1	2	11	2	2	5	4	0	4	0
Allahabad (Bamrauli)	0230	98	997·5	986·5	..	27·8	26·3	25·7	32·5	88	..	5·8	..	4·2	0	0	21	0	3	4	1	7	3	3	0	10	0
	0530	"	997·6	986·6	..	27·4	26·1	25·5	31·1	90	..	6·7	..	4·7	0	0	23	0	2	6	3	2	4	5	1	8	0
	0830	"	999·0	988·1	+0·2	29·1	26·7	25·7	23·2	82	+3	6·9	+0·4	8·4	0	0	29	0	1	8	2	6	4	7	1	2	0
	1130	"	998·8	988·0	..	31·7	27·9	25·9	34·1	73	..	7·0	..	8·9	0	0	29	0	4	5	2	2	3	10	3	2	0
	1730	"	996·1	985·3	..	31·8	27·2	25·3	32·5	71	..	7·3	..	8·5	0	1	27	3	3	6	4	1	4	7	0	3	0
	2330	"	998·4	987·4	..	28·3	26·4	25·6	32·8	86	..	6·5	..	4·1	0	0	20	0	1	5	0	8	3	2	1	11	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity%		Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km. p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (East) *(Contd.)*																											
Banda	0830	121	998·5	985·4	..	29·9	..	..	..	..	..	5·3	..	1·1	0	0	8	0	1	0	1	0	5	0	1	23	0
	1730	"	995·3	982·2	..	30·9	..	..	..	..	..	5·5	..	1·7	0	0	15	0	2	0	3	0	8	0	2	16	0
Fatehpur (R)	0830	114	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kanpur	0830	126	999·0	985·1	+0·5	29·7	26·7	25·5	32·4	79	−4	7·2	+2·7	8·5	0	1	29	0	1	7	6	4	5	5	2	1	0
	1730	"	996·0	982·2	..	31·6	27·2	25·4	32·5	72	..	7·0	..	7·6	0	0	28	2	2	9	5	4	2	4	2	3	0
Lucknow	0830	113	999·2	986·6	+0·5	29·5	26·8	25·6	32·7	81	+2	6·8	+1·0	..	0	0	31	0	2	24	1	0	0	3	1	0	0
	1730	"	996·2	983·8	..	32·1	26·9	24·7	31·2	68	..	5·9	..	..	0	0	31	0	1	21	1	0	2	4	2	0	0
Lucknow (Amausi Aerodrome)	0230	128	997·1	983·0	..	27·5	25·5	24·6	31·0	86	.	6·1	..	6·6	0	0	22	0	1	8	6	3	3	1	0	9	0
	0530	"	997·5	983·3	..	27·3	26·1	25·1	32·9	88	..	6·8	..	6·7	0	0	26	1	0	7	10	2	3	2	1	5	0
	0830	"	998·7	984·6	+0·4	29·1	26·3	25·1	31·9	79	+5	7·2	+1·4	11·2	0	0	22	0	0	9	8	5	2	2	3	0	0
	1130	"	998·5	984·5	..	31·1	26·9	25·0	32·9	71	..	7·0	..	13·5	0	3	26	0	1	8	7	3	3	6	1	2	0
	1730	"	996·1	982·1	..	31·2	26·7	24·7	29·9	72	..	6·5	..	10·5	0	2	26	1	0	9	3	3	3	6	3	3	0
	2330	"	998·4	984·2	..	28·5	26·1	25·5	31·6	83	..	6·1	..	7·7	0	2	27	1	1	6	5	6	3	1	2	6	0
Hardoi	0830	142	998·5	982·6	..	28·8	27·3	26·8	35·7	89	..	6·0	..	4·6	0	0	23	0	0	9	9	2	1	2	0	8	0
	1730	"	995·5	980·0	..	31·1	28·3	27·0	36·3	81	..	5·0	..	5·0	0	1	23	2	3	4	7	2	2	3	0	6	0
Lakhimpur Kheri	0830	147	999·4	983·6	..	28·1	26·8	26·3	34·4	90	..	6·8	..	3·1	0	0	12	0	1	4	8	0	0	1	0	17	0
	1730	"	996·2	980·1	..	30·5	27·9	26·9	35·9	82	..	5·9	..	1·6	0	0	13	1	3	4	1	0	0	4	0	18	0
Bahraich (R)	0830	129	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uttar Pradesh (West).																											
Orai	0830	141	1000·3	984·4	..	29·6	27·0	25·9	33·5	81	..	4·7	..	4·9	0	0	39	0	2	0	6	1	4	4	15	1	0
	1730	"	996·2	980·6	..	31·5	27·6	26·0	34·1	74	..	4·2	..	3·7	0	0	31	1	8	2	2	7	6	2	3	0	0
Jhansi	0830	251	998·8	971·3	−0·1	28·7	25·9	25·1	31·3	81	+5	5·3	−0·6	2·5	0	0	19	1	0	0	2	0	6	8	2	12	0
	1730	"	996·1	968·5	..	31·2	26·9	24·9	32·1	72	..	5·7	..	2·7	0	0	20	2	1	2	2	1	2	4	6	11	0
Agra	0830	169	998·5	979·6	+0·1	29·9	26·5	25·1	32·3	78	+4	5·2	−0·1	4·1	0	0	19	0	0	1	3	4	6	5	0	12	0
	1730	"	995·6	977·2	..	32·4	27·1	24·7	34·9	68	..	6·3	..	2·6	0	0	16	0	1	6	1	1	2	2	3	15	0
Agra (Aerodrome) (R)	0530	168																									
(R)	0830	"																									
(R)	1130	"																									
(R)	1730	"																									
(R)	2330	"																									
Mainpuri	083	157	998·7	981·3	+0·2	30·4	26·5	25·9	31·8	75	−1	3·9	−1·4	2·6	0	0	26	0	1	7	4	3	3	7	1	5	0
	173	"	995·5	978·3	..	31·8	26·6	24·8	30·1	69	..	5·1	..	2·8	0	0	28	0	0	10	4	5	2	6	1	3	0
Aligarh	0830	187	998·1	977·3	..	29·6	26·2	24·7	31·1	77	−1	5·2	+0·4	6·3	0	0	28	3	0	12	0	2	2	7	2	3	0
	173	"	995·1	974·4	..	33·0	27·4	25·7	31·6	64	..	6·2	..	6·0	0	0	26	3	1	11	0	1	0	9	1	5	0
Bareilly	0830	173	998·7	979·5	−0·1	28·7	26·2	25·2	32·0	82	0	6·2	+0·4	6·5	0	3	20	1	2	10	6	1	1	1	1	8	0
	1730	"	995·4	976·5	..	32·1	27·1	24·7	31·6	68	..	6·1	..	3·6	0	1	22	3	0	17	2	0	0	0	1	8	0
Bareilly (P.B.O.)	0230	172	997·0	977·9	..	28·2	26·0	25·2	31·3	84	..	4·4	..	7·6	0	1	25	0	1	20	4	0	0	1	0	5	0
	0520	"	997·4	978·3	..	27·6	25·9	25·3	31·9	88	..	6·2	..	6·2	0	0	28	0	3	21	2	0	0	2	0	3	0
	113	"	998·7	979·7	..	30·8	26·9	25·0	32·3	74	..	6·4	..	9·1	0	2	27	2	5	11	5	1	1	4	0	2	0
	233	"	998·0	978·9	..	29·0	26·5	25·5	32·6	83	..	4·2	..	6·8	0	1	24	0	2	14	7	2	0	0	0	6	0
Meerut	0830	222	998·1	973·9	−0·1	29·2	26·2	24·9	31·0	80	+5	2·7	−2·4	4·1	0	0	18	0	2	11	2	0	0	2	1	13	0
Najibabad	0830	270	998·9	969·3	..	28·5	25·7	24·5	30·8	81	..	4·8	..	4·7	0	0	21	2	3	1	9	6	0	0	0	10	0
	1730	"	996·4	967·1	..	31·8	26·5	24·1	30·1	67	..	4·1	..	4·0	0	0	17	1	2	0	7	5	0	0	2	14	0
Roorkee	0830	274	998·8	968·6	+0·1	28·5	2 ·9	24·9	31·3	82	+4	5·7	+0·6	1·7	0	0	18	0	1	0	16	0	0	0	1	13	0
	1730	"	996·0	966·3	..	32·9	26·7	23·6	30·0	63	..	4·7	..	1·7	0	0	18	0	0	0	14	0	0	0	4	13	0
Dehra Dun	0530	682	998·1	923·9	..	24·4	23·3	22·7	27·8	91	..	6·6	..	1·5	0	0	15	5	3	0	2	3	2	0	0	16	0
	0830	"	998·9	925·0	0	25·8	23·9	23·0	28·1	86	+2	6·0	−0·2	1·5	0	0	16	2	2	0	1	4	3	1	3	15	0
	1130	"	998·5	925·1	..	28·0	24·6	23·1	29·1	76	..	6·4	..	2·3	0	0	26	2	0	0	4	10	7	1	2	5	0
	1730	"	994·9	922·0	..	29·2	24·9	22·2	28·0	72	..	5·8	..	2·0	0	0	20	3	2	0	4	5	5	0	1	11	0
	2330	"	998·2	924·4	..	25·8	24·0	23·3	28·6	86	..	5·5	..	0·8	0	0	8	2	2	0	1	2	1	0	0	23	0
Punjab (India) (Including Delhi)																											
New Delhi	0230	216	996·5	972·5	..	28·7	25·4	23·9	30·0	77	..	4·5	..	10·8	0	1	28	0	1	10	4	4	5	4	1	2	0
	0530	"	996·7	972·4	..	28·0	25·1	23·8	28·8	80	..	5·0	..	9·9	0	1	25	0	1	10	4	2	3	5	1	5	0
	0830	"	998·1	974·2	−0·4	29·5	25·5	24·1	29·6	71	−3	5·2	−0·3	14·1	0	8	22	0	3	9	7	1	2	7	1	1	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas)		Wind speed (Km. p.h.)			No. of observations.									
			At mean sea level or height in c.p.m. of nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.	Mean wind speed, Km. per hour.	62 or more.	20 to 61.	1 to 19.	Wind direction.									
																	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) (Including Delhi)—(*Con'd.*)																											
New Delhi—*Contd.*	1130	216	997·8	974·2	..	32·4	26·7	24·1	29·6	65	..	5·2	..	14·5	0	7	21	0	2	8	5	1	1	5	6	3	0
	1730	"	994·7	971·2	..	33·6	26·3	22·7	28·3	57	..	5·3	..	12·6	0	4	24	1	3	9	2	0	3	6	4	3	0
	2330	"	997·2	973·3	..	29·2	25·7	23·7	29·8	73	..	4·5	..	10·9	0	0	27	0	2	10	3	6	3	3	0	4	0
Hissar . . .	0530	221	996·5	972·0	..	27·8	24·8	23·3	28·7	79	..	4·2	..	6·8	0	0	26	1	1	2	5	7	9	1	0	5	0
	0830	"	997·8	973·5	0	30·1	25·7	23·7	29·1	71	+0·4	1·5	+1·7	10·0	0	6	21	2	0	5	4	1	8	7	0	4	0
	1130	"	997·6	973·6	..	34·5	27·1	24·5	29·4	58	..	4·0	..	9·1	0	2	26	1	1	2	8	1	5	7	3	3	0
	1730	"	994·2	970·3	..	35·1	26·7	22·5	28·1	55	..	5·0	..	7·9	0	1	26	5	3	5	3	3	3	3	2	4	0
	2330	"	996·8	972·5	..	29·9	25·5	23·3	29·1	71	..	3·8	..	5·8	0	0	24	1	0	2	6	6	3	4	2	7	0
Karnal . . .	0830	249	997·4	970·6	..	28·8	25·4	23·5	30·0	71	..	5·4	..	0·2	0	0	2	0	1	0	1	0	0	0	0	29	0
	1730	"	994·0	967·9	..	34·3	26·5	22·7	29·6	57	..	5·5	..	6·1	0	0	1	0	0	0	1	0	0	0	0	30	0
Patiala . . .	0830	251	997·9	970·4	..	29·3	25·6	23·9	30·3	75	..	4·6	..	7·2	0	0	26	0	0	4	18	0	1	0	3	5	0
	1730	"	994·4	967·4	..	33·5	26·4	22·5	27·9	57	..	3·9	..	7·0	0	0	26	1	1	1	13	0	0	1	9	5	0
Ambala (R) .	0830	272	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R) .	1730	"	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ambala (P.B.O.) .	0230	276	996·1	965·5	..	28·5	25·0	23·4	28·2	77	..	4·0	..	9·0	9	1	25	1	0	9	12	1	0	0	2	5	0
	0530	"	996·5	965·8	..	27·6	24·6	23·4	28·4	80	..	4·8	..	8·1	0	0	26	2	1	7	13	0	0	2	1	5	0
	1130	"	997·6	967·3	..	32·0	26·2	23·8	29·6	65	..	4·8	..	10·3	0	1	30	2	2	5	14	1	1	2	4	0	0
	2330	"	996·5	966·0	..	29·8	25·2	23·1	27·8	72	..	3·3	..	8·7	0	1	29	0	2	2	19	0	2	4	1	1	0
Ambala (Aerodrome) (R) .	0530	273																									
(R) .	0830	"																									
(R) .	1130	"																									
(R) .	1730	"																									
(R) .	2330	"																									
Chandigarh (R) .	0830	347																									
(R) .	1730	"																									
Ludhiana (R) .	0830	247																									
(R) .	1730	"																									
Ferozepur . .	0830	200	997·1	974·9	..	30·5	26·2	24·2	30·2	71	..	2·2	..	2·0	0	0	19	0	6	2	5	2	3	0	1	12	0
	1730	"	995·6	972·0	..	36·8	27·8	23·4	30·0	53	..	2·4	..	1·5	0	0	15	0	3	0	3	0	2	0	7	16	0
Amritsar . . .	0530	234	996·3	970·4	.	26·7	24·1	22·7	28·2	80	..	4·0	..	8·7	0	3	21	3	5	12	2	1	0	1	0	7	0
	0830	"	997·3	971·6	..	30·2	25·0	22·9	27·4	67	..	3·1	..	11·7	0	0	28	2	4	8	6	4	1	2	1	3	0
	1130	"	997·1	971·7	..	34·4	26·3	22·4	27·8	54	..	2·4	..	12·8	0	6	23	1	1	5	9	4	4	1	4	2	0
	1530	"	993·6	968·5	..	36·4	26·1	20·8	25·4	46	..	2·9	..	13·6	0	0	30	2	1	5	5	2	5	6	4	1	0
Pathankot . .	0830	344	998·1	960·4	..	29·0	24·7	22·3	27·5	71	..	4·7	..	1·1	0	0	10	9	1	4	3	1	0	0	1	21	0
	1730	"	995·5	958·6	..	34·3	26·1	22·2	27·2	56	..	3·8	..	3·5	0	0	21	1	3	4	0	2	2	8	1	10	0
Himachal Pradesh																											
Bilaspur . . .	0830	493	999·1	945·2	..	26·8	23·5	21·8	26·3	78	..	5·3	..	3·1	0	0	25	7	5	2	1	4	2	1	2	6	1
	1730	"	994·2	941·6	..	32·7	25·2	21·4	26·0	57	..	5·6	..	4·9	0	0	30	4	1	3	0	7	6	1	6	1	2
Mandi . . .	0830	761	998·3	916·1	..	24·8	22·5	21·3	25·2	83	..	5·5	..	0·6	0	0	6	1	0	0	1	1	1	1	1	25	0
	1730	"	993·6	912·9	..	30·0	24·2	21·5	25·9	65	..	5·0	..	1·6	0	0	15	0	1	3	1	2	0	3	5	16	0
Jammu and Kashmir																											
Srinagar . . .	0830	1587	1427·9	834·8	+0·9	22·2	18·1	15·9	18·0	68	−1·1	2·5	−0·9	2·2	0	0	14	2	0	2	5	3	0	1	1	17	0
	1130	"	1421·9	834·4	..	27·4	19·5	15·7	17·9	51	..	2·5	..	3·8	0	0	25	1	2	0	6	4	1	7	4	6	0
	1730	"	1395·3	832·1	..	28·6	19·7	15·1	17·2	45	..	4·2	..	5·0	0	1	22	5	1	1	4	3	0	6	3	8	0
Gulmarg . .	0830	2655	3085·2	736·5	+0·4	17·2	12·9	9·9	11·9	64	−1·0	3·0	−0·8	3·5	0	0	17	6	8	1	0	0	0	1	1	14	0
	1730	"	3076·2	735·4	..	19·3	14·2	10·7	12·8	60	..	4·2	..	7·3	0	0	27	1	6	0	7	1	7	3	2	4	0
Leh (R) .	0530	3514																									
(R) .	0830	"																									
(R) .	1730	"																									
Skardu (R) .	0830	2288																									
(R) .	1730	"																									
Gilgit (R) .	0830	1491																									
(R) .	1730	"																									
Misgar (R) .	0830	3106																									
(R) .	1730	"																									
Jammu (R) .	0830																										

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal		62 or more.	20 to 61.	1 to 19.	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (West)																											
Sri Ganganagar .	0530	177	995·5	976·6	..	29·2	24·3	21·5	26·1	66	..	2·0	..	6·9	0	0	28	1	0	3	5	1	14	2	2	3	0
	0830	,,	996·7	977·3	..	31·3	25·5	22·5	27·4	61	+1	2·4	+0·3	7·6	0	0	29	1	1	1	7	1	15	2	1	2	0
	1130	,,	996·5	977·3	..	35·5	26·7	22·6	27·7	51	..	2·3	..	10·3	0	0	30	0	2	1	8	1	10	6	2	1	0
	1730	,,	992·9	973·8	..	37·7	26·1	19·8	24·3	41	..	2·3	..	5·5	0	0	30	0	4	4	2	2	6	10	2	1	0
	2330	,,	995·5	976·1	..	31·2	25·0	21·4	26·7	60	..	1·5	..	5·2	0	0	22	1	0	6	5	4	5	1	0	9	0
Churu (R) .	0830	291																									
(R) .	1730	,,																									
Bikaner . . .	0830	224	998·2	973·5	+0·4	30·0	25·4	23·3	29·1	68	+2	2·0	—0·9	12·4	0	4	27	0	0	0	2	0	25	3	1	0	0
	1730	,,	994·3	970·3	..	37·5	25·7	20·1	23·2	40	..	2·9	..	11·8	0	3	28	2	1	1	0	0	21	2	4	0	0
Bikaner (P.B.O.) .	0530	224	996·7	972·6	..	29·1	25·9	24·5	30·8	78	..	3·9	..	10·6	0	1	29	0	1	1	1	1	22	4	0	1	0
	1130	,,	997·4	973·1	..	34·3	27·3	23·7	31·0	57	..	3·6	..	12·0	0	2	27	0	0	1	1	2	18	7	0	2	0
	2330	,,	996·4	971·8	..	31·8	26·1	23·6	28·5	65	..	3·8	..	13·0	0	3	28	0	0	1	5	8	17	0	0	0	0
Jaisalmer . .	0830	242	997·6	971·4	..	29·1	24·9	23·3	27·8	70	..	2·5	..	23·2	0	18	13	0	1	0	2	0	28	0	0	0	0
	1730	,,	993·8	968·1	..	38·2	26·0	20·2	24·4	3(	..	2·8	..	22·2	0	15	16	0	1	0	2	0	27	0	1	0	0
Phalodi . . .	0830	234	998·6	973·0	..	28·8	25·1	23·9	28·5	75	..	5·3	..	25·7	0	20	11	0	1	0	1	1	26	2	0	0	0
	1730	,,	995·3	969·9	..	37·5	26·1	20·3	24·7	39	..	2·3	..	23·0	0	18	13	0	1	1	0	5	19	3	1	0	1
Jodhpur . . .	0230	224	997·9	973·1	..	29·2	24·9	22·9	28·8	70	..	3·3	..	16·3	0	7	21	0	1	0	0	1	19	6	1	3	0
	0530	,,	998·3	973·3	..	27·6	24·5	23·0	28·7	74	..	4·3	..	16·4	0	7	22	0	1	0	0	1	18	0	9	2	0
	0830	,,	999·7	974·9	+2·1	28·9	25·1	22·5	28·5	71	+1	5·0	0·7	18·3	0	12	19	0	1	1	0	1	18	10	0	0	0
	1130	,,	999·4	974·9	..	32·8	25·5	22·3	26·8	55	..	4·7	..	19·2	0	14	17	0	1	1	1	1	19	6	2	0	0
	1730	,,	995·6	971·4	..	36·1	25·7	20·4	24·9	42	..	4·4	..	15·0	0	10	21	0	0	3	2	1	18	6	1	0	0
	2330	,,	998·6	973·9	..	31·0	25·1	22·3	27·4	63	..	3·0	..	19·0	0	20	11	0	2	1	0	4	21	3	0	0	0
Barmer . . .	0530	194	998·2	976·6	..	27·6	24·9	23·8	29·4	80	..	4·7	..	13·6	0	3	26	0	0	0	0	9	16	4	0	2	0
	0830	,,	999·4	977·9	+1·0	29·0	25·1	23·4	28·6	72	—4	5·4	0	14·2	0	4	26	0	0	0	0	11	15	3	1	1	0
	1130	,,	999·1	977·9	..	33·1	25·8	22·4	27·9	54	..	5·0	..	16·8	0	7	24	0	0	0	1	11	15	2	2	0	0
	1730	,,	995·3	974·4	..	36·6	26·1	21·1	25·7	42	..	4·3	..	15·7	0	9	21	0	1	2	2	12	12	1	0	1	0
	2330	,,	998·6	977·2	..	30·6	25·7	23·5	28·7	66	..	3·0	..	15·9	0	6	25	0	1	1	1	11	14	3	0	0	0
Rajasthan (East)																											
Alwar (R) .	0830	271																									
(R) .	1730	,,																									
Sikar (R) .	0810	433																									
(R) .	1730	,,																									
Jaipur . . .	0830	436	999·1	951·4	—0·2	27·9	24·5	22·9	27·9	75	+2	5·1	—0·1	11·3	0	4	25	2	1	1	1	1	1	12	10	2	0
	1130	,,	998·7	951·4	..	31·0	25·3	22·6	28·2	65	..	5·0	..	11·3	0	1	28	3	1	2	0	0	2	13	8	2	0
	1730	,,	995·4	948·5	..	31·8	25·2	21·8	26·2	59	..	6·2	..	7·7	0	0	28	1	3	2	1	0	10	6	5	3	0
Jaipur (Sanganer Aerodrome).	0230	390	997·1	954·4	..	27·2	24·5	23·3	28·4	82	..	4·2	..	..	0	2	21	0	0	1	0	1	7	7	7	8	0
	0530	,,	997·3	954·6	..	26·1	24·4	23·0	29·3	83	..	5·0	..	..	0	1	24	1	2	0	0	0	3	10	9	6	0
	0830	,,	998·5	955·7	..	28·0	25·2	23·9	29·4	79	..	5·3	..	..	0	5	22	2	1	3	0	0	2	9	10	4	0
	1130	,,	998·4	955·9	..	30·5	25·7	23·8	29·4	70	..	5·5	..	..	0	5	24	1	1	2	0	0	2	13	10	2	0
	1730	,,	995·2	952·9	..	31·4	25·7	22·8	28·4	66	..	6·4	..	..	0	2	23	2	2	2	0	1	9	4	5	6	0
	2330	,,	997·9	955·0	..	27·8	24·9	23·4	29·4	75	..	4·5	..	..	0	1	25	2	0	4	0	3	6	10	1	5	0
Dholpur (R) .	0830	176																									
(R) .	1730	,,																									
Ajmer . . .	0830	486	999·3	946·1	—0·2	26·9	23·5	22·1	27·2	75	+1	5·6	+0·8	15·0	0	3	28	0	0	1	1	0	15	13	1	0	0
	1730	,,	996·3	943·7	..	32·0	24·4	20·9	24·6	56	..	5·5	..	9·7	0	0	31	1	4	3	0	0	10	11	2	0	0
Kotah . . .	0530	257	997·8	969·3	..	27·5	24·8	23·5	28·4	80	..	5·4	..	9·0	0	4	23	0	0	0	0	0	6	19	2	4	0
	0830	,,	998·9	970·9	+0·1	28·8	25·0	23·2	28·5	74	+4	5·6	+0·3	7·9	0	0	26	0	0	0	0	0	5	20	1	5	0
	1130	,,	999·3	971·2	..	31·4	25·9	23·4	28·7	65	..	5·4	..	12·0	0	1	30	0	0	1	0	0	3	19	8	0	0
	1730	,,	996·1	968·2	..	32·7	25·8	22·5	27·6	59	..	6·2	..	6·5	0	0	28	1	1	0	0	0	6	9	11	3	0
	2330	,,	998·6	970·3	..	29·1	25·1	23·2	28·5	73	..	5·2	..	10·8	0	1	29	0	0	0	1	0	13	13	3	1	0
Chambal . .	0830	351	999·3	960·6	..	27·5	25·4	23·8	30·6	82	..	5·3	..	5·4	0	0	26	0	0	0	0	1	8	14	3	5	0
	1730	,,	996·1	958·3	..	31·4	25·8	23·1	29·3	67	..	5·7	..	5·5	0	0	28	2	2	0	0	0	7	11	6	3	0
Jhalawar . .	0830	321	999·6	964·5	+0·2	27·0	24·3	23·0	27·9	79	—2	4·6	—1·7	8·4	0	0	30	0	0	1	0	0	7	20	2	1	0
	1730	,,	996·7	961·7	..	31·4	25·0	21·7	26·5	60	..	4·5	..	8·1	0	0	31	3	2	0	1	1	3	16	5	0	0
Udaipur . . .	0230	582	999·4	935.7	..	25·3	23·1	22·0	27·1	83	..	5·8	..	5·2	0	0	21	0	0	1	0	3	6	10	1	10	0
	0530	,,	999·3	935·5	..	24·7	22·7	21·7	26·3	84	..	6·3	..	5·3	0	0	19	0	0	0	0	3	8	8	0	12	0
	0830	,,	1000·3	936·9	+0·2	26·4	23·3	21·6	26·4	76	0	6·4	+1·0	4·4	0	0	21	0	0	0	0	2	9	9	1	10	0

(R) Register not received

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, Km. per hour.	Wind speed (Km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East)—(*Contd.*)																											
Udaipur—*Contd.*	1130	582	1000·4	937·4	..	28·4	24·0	22·1	26·4	70	..	6·7	..	5·9	0	0	29	0	1	1	0	3	12	9	3	2	0
	1730	"	997·9	934·9	..	29·0	24·3	22·1	26·7	68	..	6·3	..	5·2	0	0	28	1	0	1	2	0	10	12	2	3	0
	2330	"	1000·5	936·9	..	25·9	23·4	22·3	27·3	82	..	5·5	..	5·2	0	0	24	1	0	0	2	3	7	11	0	7	0
Erinpura (Jawai Dam)	0830	295	1000·5	967·8	..	27·7	24·6	23·3	29·4	77	..	5·9	..	11·8	0	2	28	0	0	0	1	10	9	10	0	1	0
	1730	"	996·8	964·7	..	32·3	25·7	22·6	27·3	59	..	5·4	..	12·0	0	3	26	2	0	0	0	10	10	6	1	2	0
Madhya Pradesh (West)																											
Gwalior (P.B.O.)	0230	210	996·7	973·5	..	28·5	25·3	23·8	29·6	78	..	5·2	..	5·2	0	1	17	0	2	0	2	1	11	1	1	13	0
	0530	"	996·9	973·8	..	28·0	25·2	23·9	29·8	80	..	6·1	..	5·3	0	1	19	0	1	1	1	1	9	4	3	11	0
	0830	"	998·3	975·2	+0·2	29·8	25·8	24·0	30·1	72	—5	6·0	+0·2	8·4	0	3	21	1	2	0	4	0	4	9	4	7	0
	1130	"	998·1	975·2	..	32·2	26·5	23·9	29·9	64	..	5·8	..	9·4	0	2	27	1	3	2	4	1	2	7	9	2	0
	1730	"	995·4	972·4	..	31·6	26·1	23·7	29·2	66	..	7·0	..	8·0	0	1	27	0	3	2	2	3	4	8	6	3	0
	2330	"	997·9	974·8	..	29·2	25·6	23·7	29·8	75	..	5·2	..	5·1	0	0	20	1	0	2	4	2	6	5	0	11	0
Sheopur Kalan	0830	235	998·8	973·6	..	28·4	25·3	23·5	29·7	77	..	7·6	..	11·5	0	1	29	0	1	1	2	8	7	4	6	1	1
	1730	"	995·3	969·3	..	32·1	25·8	22·6	28·4	62	..	6·5	..	14·5	0	6	24	3	4	2	1	0	6	6	7	1	1
Guna	0530	479	998·8	946·1	..	25·1	23·5	22·9	27·8	88	..	6·3	..	8·3	0	1	24	0	0	0	0	1	12	12	0	6	0
	0830	"	999·9	947·4	+0·2	26·5	24·2	23·3	28·4	83	0	6·5	+0·7	6·9	0	0	29	0	0	1	0	2	2	24	0	2	0
	1130	"	999·8	947·7	..	29·0	24·8	23·2	28·2	72	..	6·4	..	11·0	0	2	28	2	2	0	0	0	6	16	4	1	0
	1730	"	996·7	944·9	..	29·5	24·7	22·5	27·7	69	..	6·7	..	8·2	0	0	30	2	3	0	1	0	7	11	6	1	0
	2330	"	999·6	947·1	..	26·4	24·1	23·1	28·2	83	..	5·5	..	5·8	0	0	20	0	0	0	0	3	9	8	0	11	0
Rajgarh	0830	382	1000·5	958·4	..	26·5	23·9	22·7	27·7	80	..	6·7	..	12·0	0	2	28	0	0	0	1	0	2	27	0	1	0
	1730	"	997·1	955·5	..	30·6	24·5	21·5	25·8	62	..	6·7	..	12·6	0	3	27	0	0	1	2	1	1	21	4	1	0
Neemuch	0830	496	1001·0	946·6	+0·6	25·8	23·4	22·4	26·8	82	+2	6·7	+0·9	16·0	0	5	25	0	2	0	0	0	6	22	0	1	0
	1730	"	997·5	943·9	..	30·4	24·3	21·5	25·5	61	..	6·0	..	16·7	0	6	24	0	6	0	0	1	2	21	0	1	0
Ratlam	0830	486	1001·6	947·7	..	24·4	23·2	22·7	27·6	90	..	7·4	..	14·3	0	4	27	0	0	0	1	0	14	15	1	0	0
	1730	"	998·1	945·4	..	29·2	24·3	21·9	26·9	67	..	7·1	..	14·9	0	4	27	1	0	0	0	2	10	14	4	0	0
Alirajpur	0830	293	1002·4	969·8	..	25·4	24·0	23·4	28·7	89	..	7·7	..	14·6	0	5	25	0	0	0	0	0	11	19	0	1	0
	1730	"	999·4	967·3	..	29·2	25·0	23·2	28·3	71	..	7·0	..	14·9	0	5	26	0	0	0	0	1	11	19	0	0	0
Indore	0530	567	1000·3	937·8	..	23·3	22·3	21·9	26·3	92	..	7·3	..	25·7	0	19	12	0	0	0	0	2	13	15	1	0	0
	0830	"	1001·6	939·2	+0·1	24·1	22·8	22·2	26·8	89	+2	7·3	+0·1	26·9	0	21	9	0	0	0	0	1	10	18	1	1	0
	1130	"	1001·2	939·4	..	27·0	23·4	21·9	26·1	74	..	6·7	..	28·4	0	24	7	0	0	0	0	1	9	18	3	0	0
	1730	"	998·2	936·7	..	28·1	23·7	21·7	26·0	70	..	6·7	..	26·2	0	21	10	0	0	0	0	2	10	17	2	0	0
	2330	"	1001·4	939·0	..	23·5	22·8	22·4	27·2	89	..	6·1	..	23·5	0	18	13	1	0	0	1	2	15	12	0	0	0
Bhopal (Bairagarh)	0230	523	999·4	941·8	..	24·1	22·8	22·2	27·0	90	..	6·4	..	14·3	0	6	24	0	0	0	0	2	10	18	0	1	0
	0530	"	999·7	942·1	..	23·6	22·5	22·0	26·5	91	..	6·7	..	15·8	0	7	24	0	0	0	0	1	10	19	1	0	0
	0830	"	1001·1	943·6	+0·3	24·8	23·0	22·3	26·8	86	0	7·3	+0·7	18·8	0	12	18	0	0	0	0	0	7	21	2	1	0
	1130	"	1000·7	943·7	..	27·5	24·0	22·3	27·3	75	..	7·2	..	17·6	0	11	20	1	0	0	1	0	5	19	5	0	0
	1730	"	997·3	940·8	..	28·5	23·9	21·8	26·3	69	..	6·7	..	16·5	0	4	26	3	0	1	0	1	5	14	6	1	0
	2330	"	1000·6	943·1	..	24·8	23·1	21·6	27·1	87	..	6·0	..	12·0	0	5	24	0	1	0	0	5	9	13	1	2	0
Khandwa	0830	318	1002·3	966·9	+0·4	25·9	23·8	22·7	27·8	82	+2	7·6	+1·5	12·4	0	1	29	0	0	0	0	3	15	10	2	1	0
	1730	"	999·0	964·1	..	29·6	24·9	22·7	27·6	67	..	7·4	..	14·8	0	7	23	1	0	0	1	2	13	11	2	1	0
Hoshangabad	0830	302	1001·6	967·9	+0·2	25·8	24·1	23·3	28·7	87	+1	7·2	+0·3	3·9	0	0	23	0	0	0	0	1	9	13	0	8	0
	1730	"	998·0	964·9	..	29·7	25·3	23·2	28·6	70	..	6·7	..	4·9	0	0	24	0	0	0	1	2	10	11	0	7	0
Betul	0830	653	1002·5	930·8	..	23·4	22·1	21·5	25·5	89	..	8·0	..	9·3	0	0	31	0	0	0	0	0	5	20	6	0	0
	1730	"	998·7	928·0	..	26·6	23·3	21·8	25·3	76	..	7·8	..	9·8	0	0	29	1	0	0	0	2	6	16	4	2	0
Chhindwara	0830	685	999·8	925·1	..	24·3	22·5	21·9	25·9	86	..	6·5	..	3·0	0	0	31	0	7	8	0	0	0	8	8	0	0
	1730	"	998·1	924·2	..	26·5	23·1	21·1	25·8	74	..	6·5	..	3·2	0	0	28	2	3	0	0	0	2	7	14	3	0
Seoni	0830	618	999·0	931·6	—1·4	24·7	23·2	23·3	27·4	88	+5	7·5	+1·2	4·5	0	0	31	1	0	0	1	3	11	8	7	0	0
	1730	"	997·5	930·5	..	26·3	23·8	22·8	27·7	82	..	7·7	..	4·8	0	0	30	0	0	0	2	6	11	9	2	1	0
Sagar	0830	551	1000·0	939·5	+0·2	24·7	23·4	22·7	27·8	89	—1	6·7	+0·5	9·7	0	2	27	0	0	0	0	0	4	18	7	2	0
	1730	"	996·7	936·9	..	27·7	24·3	22·8	28·0	75	..	6·8	..	7·9	0	1	25	0	0	1	1	0	3	13	8	5	0
Nowgong	0830	229	999·3	973·9	0	28·2	25·7	24·5	31·3	82	+3	6·1	—0·1	5·8	0	0	30	1	0	1	0	6	16	6	0	1	0
	1730		996·3	971·2	..	29·9	26·2	24·5	31·0	75	..	6·8	..	6·5	0	0	28	2	5	1	0	5	14	0	1	3	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas),		Mean wind speed, Km. per hour.	Wind speed (Km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	29 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (East)																											
Sutna	0530	317	998·0	962·8	..	25·8	24·7	24·2	30·3	91	..	6·4	..	4·1	0	0	16	0	0	1	0	3	7	7	0	13	0
	0830	"	999·1	964·1	+0·3	27·7	25·5	24·4	31·0	83	+4	6·5	+0·3	3·7	0	0	23	0	1	0	3	1	13	10	0	3	0
	1130	"	998·8	964·0	..	29·6	26·2	24·7	31·2	76	..	6·9	..	8·5	0	0	26	1	0	2	1	5	6	9	2	5	0
	1730	"	996·2	961·6	..	30·0	26·1	24·3	31·0	74	..	7·0	..	4·2	0	0	27	0	1	5	1	0	11	6	5	4	0
	2330	"	999·0	963·9	..	27·0	25·3	24·6	29·5	87	..	6·5	..	3·7	0	0	16	1	0	2	3	3	7	0	0	15	0
Umaria	0830	459	999·7	949·3	..	26·2	24·4	23·9	29·4	86	+3	6·5	−0·5	6·5	0	0	24	0	1	0	1	0	4	15	3	7	0
	1730	"	997·1	947·1	..	27·9	25·3	24·2	30·3	81	..	7·5	..	4·7	0	0	18	0	3	0	0	1	2	7	5	13	0
Jabalpur	0530	393	999·0	955·5	..	24·6	23·7	23·2	28·7	92	..	6·8	..	4·1	0	0	22	0	0	0	1	2	11	6	2	9	0
	0830	"	1000·3	956·9	+0·4	26·0	24·4	23·6	29·1	87	+4	6·8	+0·1	7·0	0	0	29	0	1	0	0	2	12	14	0	2	0
	1130	"	1000·0	956·9	..	28·3	25·3	24·0	29·7	78	..	6·9	..	7·3	0	0	29	0	1	0	1	1	14	12	0	2	0
	1730	"	996·9	954·1	..	29·3	25·5	23·8	29·4	75	..	7·3	..	4·8	0	0	23	0	1	0	0	1	10	9	2	8	0
	2330	"	996·6	953·3	..	26·0	24·4	23·7	29·4	88	..	7·0	..	3·3	0	0	19	0	0	0	2	4	9	4	0	12	0
Mandla	0830	443	1000·5	951·7	..	25·5	24·1	23·4	29·2	89	..	7·0	..	4·3	0	0	26	1	1	0	2	3	4	4	3	5	5
	1730	"	997·3	949·0	..	27·6	24·9	23·5	29·3	79	..	7·1	..	5·0	0	0	27	1	1	2	5	5	0	1	5	4	4
Pendra	0530	625	999·1	956·7	..	23·3	22·6	22·2	27·3	94	..	7·2	..	7·1	0	1	26	2	1	1	0	9	8	3	3	4	0
	0830	"	1000·3	962·1	+0·3	24·4	23·2	22·7	27·6	91	+7	7·6	+1·8	8·8	0	0	29	0	0	0	1	3	7	3	4	2	0
	1130	"	999·7	961·9	..	26·3	24·2	23·4	28·7	85	..	7·5	..	8·0	0	0	31	3	2	0	2	6	7	6	5	0	0
	1730	"	997·5	959·8	..	26·2	24·1	23·3	28·5	84	..	7·3	..	8·5	3	1	28	3	0	1	1	7	8	4	3	2	0
	2330	"	1000·2	961·8	..	24·0	23·2	22·9	27·9	94	..	6·6	..	5·1	0	0	23	2	1	0	1	7	9	2	1	8	0
Ambikapur	0830	611	1000·0	953·3	..	25·2	23·7	23·1	28·1	89	..	6·7	..	6·9	0	0	26	2	1	1	3	3	8	4	4	5	0
	1730	"	997·2	951·1	..	26·5	24·3	23·4	28·7	84	..	6·2	..	9·8	0	1	30	6	1	0	1	5	10	5	3	0	0
Champa	0830	245	1000·8	973·4	..	26·0	24·7	24·3	30·1	90	..	7·5	..	4·3	0	0	20	0	0	0	1	0	8	11	0	11	0
	1730	"	997·9	970·9	..	28·6	25·6	24·5	30·6	78	..	7·4	..	5·2	0	1	14	6	0	0	1	0	8	5	1	16	0
Raigarh	0830	220	1000·6	976·0	..	26·7	25·1	24·4	30·3	87	..	7·7	..	4·2	0	0	23	0	0	0	3	0	12	4	4	8	0
	1730	"	997·8	973·2	..	29·1	25·9	24·5	30·8	77	..	7·1	..	2·6	0	0	16	0	0	0	2	0	8	2	4	15	0
Raipur	0530	298	999·7	966·5	..	24·4	23·5	23·0	28·2	93	..	7·2	..	8·3	0	0	29	0	0	0	0	4	18	7	0	2	0
	0830	"	1001·2	967·9	+0·3	25·7	24·0	23·3	28·5	87	+3	7·5	+1·1	8·2	0	0	28	0	0	0	0	5	8	14	1	3	0
	1130	"	1000·7	967·7	..	27·8	24·8	23·4	28·8	78	..	7·3	..	5·0	0	1	28	0	0	0	0	2	13	10	4	2	0
	1730	"	998·0	965·2	..	28·2	24·9	23·5	28·8	77	..	7·5	..	7·5	0	0	26	0	0	1	0	2	8	15	0	5	0
	2330	"	1000·2	967·5	..	25·4	24·2	23·5	29·2	90	..	7·1	..	8·3	0	1	26	0	0	1	0	1	15	6	1	4	0
Kanker	0830	402	1001·9	957·4	+0·5	25·5	23·4	22·5	27·2	84	+2	6·5	−0·9	1·5	0	0	11	0	0	0	0	0	9	1	1	20	0
	1730	"	999·1	954·0	..	26·5	24·1	22·8	27·9	80	..	6·8	..	1·7	0	0	13	0	0	0	0	0	10	0	3	18	0
Jagdalpur (P.B.O.)	0530	553	1001·6	940·5	..	22·4	21·4	21·4	24·7	94	..	7·5	..	3·4	0	1	15	0	0	0	1	3	8	4	0	15	0
	0830	"	1002·7	941·0	+0·6	23·9	22·5	21·9	26·3	89	+5	7·4	+1·2	4·6	0	0	26	0	0	0	0	2	15	8	1	5	0
	1130	"	1002·0	941·6	..	26·2	23·3	22·1	26·3	79	..	7·5	..	8·1	0	0	28	0	0	0	0	0	13	13	2	3	0
	1730	"	999·9	939·5	..	25·2	23·1	22·1	26·6	84	..	7·7	..	6·3	0	0	25	0	0	0	1	5	14	8	0	3	0
	2330	"	1002·5	941·5	..	25·2	22·4	22·0	26·6	93	..	6·9	..	3·1	0	0	17	0	0	0	1	3	9	3	1	14	0
Gujarat																											
Deesa	0830	136	1001·6	985·7	+0·5	27·5	25·0	25·0	31·8	87	..	6·5	..	10·8	0	0	31	0	0	0	1	3	8	8	3	0	0
	1730	"	997·8	982·8	..	32·3	26·9	24·6	31·0	66	..	5·8	..	10·8	0	1	29	9	0	0	2	7	13	6	2	1	0
Idar	0830	219	1001·8	977·4	..	26·0	25·0	24·4	30·9	93	..	7·3	..	8·6	0	0	31	2	0	1	1	0	16	9	2	0	0
	1730	"	998·4	974·3	..	30·4	26·1	24·0	30·4	71	..	6·6	..	7·2	0	0	31	1	1	1	2	4	12	9	1	0	0
Ahmedabad	0230	55	1000·6	994·4	..	26·8	25·2	24·4	30·6	88	..	5·0	..	12·1	0	1	30	0	0	0	1	7	17	5	1	0	0
	0530	"	1000·4	994·2	..	26·1	24·9	24·3	30·6	91	..	5·6	..	11·2	0	0	31	0	0	0	3	4	17	6	1	0	0
	0830	"	1001·6	995·4	+0·1	27·1	25·5	24·8	31·4	87	−4	6·9	+0·5	13·6	0	2	28	3	2	0	1	2	17	8	0	1	0
	1130	"	1001·8	995·6	..	29·7	26·3	24·8	31·6	75	..	7·2	..	15·6	0	7	23	1	0	1	0	3	16	8	1	1	0
	1730	"	998·5	992·3	..	31·6	26·5	24·0	30·5	67	..	6·1	..	15·9	0	5	26	0	0	3	0	9	7	8	4	0	0
	2330	"	1001·4	995·2	..	27·6	25·6	24·6	31·3	85	..	5·7	..	13·6	0	5	26	0	0	0	1	11	13	6	0	0	0
Dohad	0830	333	1001·9	964·9	..	25·5	24·0	23·2	28·6	88	0	7·4	+0·1	23·2	0	19	12	0	0	0	0	0	17	14	0	0	0
	1730	"	999·6	963·1	..	29·2	25·0	23·1	28·3	71	..	5·5	..	18·9	0	10	20	0	0	0	0	0	25	5	0	1	0
Baroda	0530	35	1001·1	997·1	..	25·9	25·2	24·9	31·7	94	..	6·2	..	3·6	0	0	22	0	0	0	0	1	19	2	0	9	0
	0830	"	1002·3	998·3	..	26·9	25·7	25·2	32·1	91	+6	7·3	+0·3	4·7	0	0	27	1	0	0	0	0	20	6	0	4	0
	1130	"	1002·4	998·4	..	29·5	26·3	24·9	31·8	77	..	6·9	..	7·2	0	0	28	0	0	0	0	0	19	8	1	3	0
	1730	"	999·5	995·6	..	30·4	26·6	25·0	31·6	75	..	6·1	..	7·9	0	0	30	0	1	0	0	2	21	5	1	1	0
	2330	"	1002·2	998·2	..	26·9	25·7	25·3	32·2	91	..	6·1	..	6·8	0	0	29	0	0	0	0	0	29	0	0	2	0
Baroda (Aerodrome)	0830	38	1002·4	998·1	..	27·4	25·6	24·9	31·2	87	..	7·1	..	11·1	0	2	29	0	0	0	0	1	27	3	0	0	0
	1130	"	1002·4	998·2	..	29·6	25·9	24·3	30·5	74	..	6·9	..	12·9	0	4	27	0	0	0	0	4	15	12	0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas)		Wind speed (Km.p.h.)			No. of observations										
			At mean sea level or height in m.p.m. of nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed, Kms. per hour.	62 or more.	20 to 61.	1 to 19.	Wind direction										
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat—*(Contd.)*																											
Baroda (Aerodrome)—*Contd.*	1730	38	999·5	995·3	..	30·2	26·3	24·6	31·0	73	..	6·6	..	13·9	0	6	24	0	0	0	0	4	24	2	0	1	0
Broach	0830	17	1002·1	1000·1	..	27·0	25·5	24·8	31·5	88	.	6·5	..	6·8	0	0	31	1	0	0	0	3	27	0	0	0	0
	1730	"	999·0	997·9	..	29·7	25·8	24·1	30·1	72	..	6·9	..	11·6	0	1	30	0	0	0	0	1	29	1	0	0	0
Surat	0530	13	1001·7	1000·4	..	26·3	25·3	24·9	31·4	92	..	6·9	..	6·7	0	2	21	1	0	0	2	1	13	6	3	8	0
	0830	"	1002·9	1001·6	+0·5	27·5	25·9	25·3	32·1	88	+5	7·1	+0·2	7·4	0	1	29	0	0	1	3	4	18	4	0	1	0
	1430	"	1003·2	1001·9	..	29·1	26·4	25·3	32·4	81	..	7·3	..	11·3	0	2	28	0	0	0	0	2	21	5	2	1	0
	1730	"	1000·8	999·6	..	29·3	26·3	25·1	31·7	77	..	7·1	..	15·3	0	4	25	0	0	0	0	7	16	6	0	2	0
	2330	"	1003·1	1001·8	..	27·3	25·7	25·1	31·6	89	..	5·8	..	11·2	0	5	26	0	0	0	1	4	21	5	0	0	0
Saurashtra & Kutch																											
Bhuj	0330	105	1000·5	998·9	+0·5	28·1	25·4	24·3	30·2	77	+2	5·8	—0·2	9·7	0	2	26	0	0	0	0	0	13	15	0	3	0
	1730	"	998·7	997·5	..	31·2	25·5	22·8	29·0	63	.	5·2	..	20·7	0	16	15	0	0	0	0	1	17	11	2	0	0
Bhuj (P.B.O.)	0230	106	999·6	998·4	..	27·0	25·0	24·0	30·2	83	.	5·8	..	(a) 13·2	0	2	28	0	0	0	0	1	23	5	1	0	0
	0530	"	999·1	997·9	..	27·0	24·9	24·0	29·8	83	..	5·9	..	12·5	0	5	22	0	0	0	0	0	19	8	0	4	0
	1130	"	1000·3	998·6	..	31·2	25·4	22·7	27·7	62	..	6·1	..	15·5	0	12	17	0	0	0	0	1	15	12	1	2	0
	2330	"	1000·5	998·9	.	27·7	25·1	23·9	29·7	80	..	4·4	..	15·3	0	5	26	0	0	0	0	0	26	5	0	0	0
Bhuj (Aerodrome)	0330	20	999·9	998·7	.	29·6	26·8	26·5	33·9	86	.	6·6	..	14·5	0	6	22	0	0	0	0	1	14	12	1	3	0
	1130	"	1000·0	998·8	..	31·4	27·8	26·4	34·4	75	..	6·2	..	19·3	0	15	13	0	0	0	0	0	17	8	3	3	0
	1730	"	999·7	998·5	..	31·9	28·4	26·9	36·6	76	..	(e) 6·6	..	(e) 22·8	0	17	9	0	0	0	0	2	15	7	2	0	0
Kandla	0330	5	1001·2	1000·7	..	28·3	26·3	25·4	32·6	84	..	5·8	..	21·3	0	12	19	0	0	0	0	1	21	9	0	0	0
	1730	"	999·0	998·5	.	30·9	26·8	25·6	31·8	72	..	5·6	..	38·5	0	25	6	0	0	0	0	1	21	9	0	0	0
Mandvi	0830	9	1000·7	999·7	..	28·7	27·1	26·4	34·4	88	..	5·6	..	34·3	0	26	4	0	0	0	0	1	11	15	1	1	2
	1730	"	999·1	998·1	..	29·5	27·5	26·7	35·1	85	..	5·3	..	39·1	0	29	2	0	0	0	0	0	12	18	0	0	1
Dwarka	0830	11	1001·4	1000·1	+0·4	28·4	26·4	25·6	32·9	85	+2	6·6	0	25·8	0	22	9	0	0	0	0	0	12	18	1	0	0
	1730	"	999·7	998·4	..	29·4	26·9	25·9	33·5	82	..	6·4	..	26·0	0	21	10	0	0	0	0	0	15	15	1	0	0
Porbander	0830	7	1001·8	1001·6	..	28·0	26·1	25·3	32·1	85	..	6·5	..	17·9	0	11	19	0	0	0	0	0	15	14	1	1	0
	1730	"	1000·3	999·5	..	29·4	26·4	25·1	31·9	77	..	7·4	..	20·4	0	13	18	0	0	0	0	0	14	16	1	0	0
Porbander (Aerodrome)	0830	7	1001·8	1001·0	..	28·8	26·1	25·0	31·5	91	..	6·6	..	20·6	0	17	14	0	0	0	0	0	17	13	1	0	0
	1130	"	1002·2	1001·4	..	30·3	26·7	25·4	32·0	76	..	6·6	..	23·8	0	24	7	0	0	0	0	0	27	3	1	0	0
Jamnagar	0530	23	1000·0	997·4	..	26·3	25·3	24·8	31·4	92	..	5·3	..	17·5	0	14	17	0	0	0	0	2	26	3	0	0	0
	0830	"	1001·2	998·7	+0·5	28·3	26·0	25·0	31·7	83	+1	5·5	+0·6	21·6	0	14	17	0	0	0	0	0	25	7	0	0	0
	1130	"	1001·4	999·5	..	30·8	26·4	24·5	30·7	70	..	6·4	..	29·1	0	25	6	0	0	0	0	0	6	25	0	0	0
	1730	"	999·1	996·5	..	30·2	26·3	24·5	31·0	73	..	6·0	..	32·5	0	25	6	0	0	0	0	0	6	23	2	0	0
Rajkot (Aerodrome)	0330	134	1001·5	999·6	+0·5	26·9	25·5	25·1	31·5	88	+8	5·2	—1·4	23·1	0	14	17	0	0	0	1	4	23	3	0	0	0
	1130	"	1001·5	999·7	..	29·9	26·1	24·5	30·6	73	..	5·8	..	29·5	0	23	8	0	0	0	0	2	22	7	0	0	0
	1730	"	999·9	998·5	..	28·9	25·8	24·1	29·8	73	..	6·2	..	36·1	0	25	6	0	0	0	1	1	19	9	1	0	0
Surendranagar	0830	74	1001·5	999·1	..	27·4	26·0	25·4	32·5	88	..	6·3	..	20·0	0	13	18	0	0	0	1	3	16	7	4	0	0
	1730	"	998·5	996·1	..	32·1	27·3	25·4	32·5	76	..	6·4	..	20·4	0	14	17	0	2	0	0	2	16	5	6	0	0
Bhavnagar	0530	17	1002·6	1000·7	+0·9	27·3	25·4	24·6	30·8	86	+10	5·3	—1·6	9·2	0	0	31	0	0	0	0	5	13	11	2	0	0
	1730	"	999·6	998·0	..	31·1	26·2	23·8	29·9	69	..	5·3	..	6·3	0	0	30	0	0	0	0	1	24	1	4	1	0
Bhavnagar (Aerodrome)	0830	11	1002·0	1000·8	..	28·1	25·3	24·0	29·9	79	..	5·3	..	19·2	0	10	21	0	0	0	0	1	14	16	0	0	0
	1130	"	1002·2	1001·0	..	30·0	25·6	23·3	28·7	66	..	6·0	..	21·6	0	13	17	0	0	0	0	0	13	17	0	1	0
Mahuva	0830	16	1002·5	1000·7	..	27·1	26·5	26·2	34·2	95	..	6·1	..	16·7	0	11	19	0	0	0	0	1	16	12	1	1	0
	1730	"	1000·5	998·8	..	28·8	27·5	26·9	35·7	90	..	6·2	..	31·5	0	26	5	0	0	0	0	6	17	8	0	0	0
Keshod	0830	54	1002·5	996·7	..	27·7	25·7	25·0	31·5	85	..	6·9	..	22·2	0	15	16	0	0	0	0	2	16	13	0	0	0
	1130	"	1002·9	997·1	..	29·6	26·2	24·9	31·3	77	..	7·4	..	35·2	0	29	2	0	0	0	0	1	15	15	0	0	0
	1730	"	1000·8	995·5	..	29·6	26·0	24·5	30·7	75	..	7·2	..	38·4	0	31	0	0	0	0	0	0	15	16	0	0	0
Veraval	0230	8	1001·7	1000·8	..	27·4	26·4	25·9	33·6	92	..	6·6	..	30·3	0	26	5	0	0	0	0	0	12	17	2	0	0
	0530	"	1001·2	1000·3	..	27·3	26·3	25·8	33·3	92	..	6·4	..	30·3	0	28	3	0	0	0	0	0	7	22	2	0	0
	0830	"	1002·6	1001·7	+0·2	27·6	26·6	26·2	33·9	91	+6	6·8	+0·2	27·1	0	24	7	0	0	0	0	0	7	24	0	0	0
	1130	"	1003·2	1002·3	..	28·6	26·9	26·3	34·2	87	..	7·0	..	27·4	0	23	8	0	0	0	0	0	9	20	2	0	0
	1730	"	1000·9	1000·0	..	28·6	27·1	26·5	34·5	88	..	6·5	..	30·2	0	29	2	0	0	0	0	0	11	20	0	0	0
	2330	"	1002·7	1001·9	..	27·5	26·5	26·2	33·8	92	..	5·9	..	26·9	0	21	10	0	0	0	0	1	10	18	2	0	0
Konkan																											
Dahanu	0830	5	1003·4	1003·0	+0·8	26·7	25·1	24·5	30·5	87	—1	6·1	—1·5	21·3	0	22	9	0	0	2	3	0	4	22	0	0	0
	1730	"	1002·0	1001·5	..	28·1	25·9	24·9	31·6	84	..	6·4	..	24·1	0	15	16	0	0	0	1	0	3	27	0	0	0
Bombay (Colaba)	0830	11	1004·8	1003·6	+0·4	27·2	25·7	25·1	31·9	86	+5	6·7	—0·3	14·9	0	4	26	0	1	0	0	1	5	22	1	1	0
	1130	"	1005·2	1004·0	..	28·1	26·2	25·4	32·4	86	..	7·2	..	15·9	0	5	26	0	0	0	1	1	8	20	1	0	0
	1730	"	1003·4	1002·2	..	27·4	25·8	25·1	31·8	87	..	7·1	..	16·4	0	6	24	0	0	2	0	0	6	20	2	1	0

(a) Mean of 30 days. (e) Mean of 26 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas)		Mean wind speed, km. per hour.	Wind speed (Km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Konkan—*(Contd.)*																											
Bombay (Santacruz Aerodrome).	0230	8	1003·6	1002·7	..	26·6	25·0	24·1	30·4	87	..	6·9	..	13·6	0	5	23	0	0	1	1	1	16	7	2	3	0
	0530	,,	1003·2	1002·3	..	26·6	24·9	24·1	30·2	87	..	7·1	..	12·3	0	3	24	0	0	0	0	2	15	9	1	4	0
	0830	,,	1004·7	1003·8	+0·3	27·2	25·3	24·2	30·6	85	+4	7·3	+0·3	15·2	0	5	25	0	0	0	0	2	15	12	1	1	0
	1130	,,	1005·3	1004·4	..	27·9	25·4	24·1	30·4	81	..	7·3	..	19·7	0	14	17	0	0	0	0	2	16	12	1	0	0
	1730	,,	1003·2	1002·3	..	27·7	25·2	23·9	30·1	81	..	7·4	..	17·3	0	11	17	0	0	0	1	1	11	14	1	3	0
	2330	,,	1005·2	1004·3	..	27·0	25·2	24·1	30·5	85	..	7·0	..	12·7	0	3	25	0	0	0	1	3	18	6	0	3	0
Alibag	0830	7	1004·9	1004·1	+0·2	27·3	26·6	26·3	34·1	94	+10	7·3	-0·3	27·1	0	24	7	0	0	0	1	1	19	7	3	0	0
Harnai	0830	20	1005·4	1003·1	+1·0	26·5	25·3	24·7	31·4	90	+5	7·6	..	23·2	0	16	15	1	1	0	2	2	11	13	1	0	0
	1730	,,	1004·0	1001·7	..	27·1	25·5	24·8	31·4	87	..	7·4	..	25·4	0	21	10	0	0	2	0	1	10	17	1	0	0
Ratnagiri	0830	35	1006·5	1002·5	+0·6	26·5	25·0	24·4	30·5	89	..	7·1	..	..	2	16	13	0	0	0	0	0	17	14	0	0	0
	1730	,,	1005·1	1001·1	..	27·0	25·3	24·4	31·0	86	..	7·2	..	..	0	17	14	0	0	0	0	0	26	5	0	0	0
Devgad	0830	36	1006·5	1002·5	+1·2	26·9	25·7	25·0	32·0	90	+3	7·4	+0·6	27·5	0	22	9	0	0	1	1	0	3	18	8	0	0
	1730	,,	1005·1	1001·1	..	27·4	25·8	25·1	31·8	88	..	7·6	..	27·1	0	23	7	0	1	0	0	0	1	20	8	1	0
Vengurla	0230	9	1006·0	1005·0	..	25·5	24·5	24·0	29·9	92	..	7·3	..	..	0	5	11	0	0	0	0	0	2	13	1	15	0
	0530	,,	1005·7	1004·7	..	26·0	24·6	23·9	29·8	89	..	7·3	..	..	0	6	16	0	0	0	0	0	5	17	0	9	0
	0830	,,	1007·2	1006·2	..	26·5	25·0	24·4	30·4	89	..	7·6	..	..	0	3	15	0	1	0	0	0	3	14	0	13	0
	1130	,,	1007·5	1006·5	..	27·5	25·5	24·7	31·0	85	..	7·4	..	..	0	2	22	0	0	0	0	0	4	20	0	7	0
	1730	,,	1005·8	1004·8	..	26·8	25·0	24·3	30·2	86	..	7·7	..	..	0	3	13	0	0	0	0	0	2	13	1	15	0
	2330	,,	1007·5	1006·5	..	25·7	24·5	23·9	29·7	90	..	7·3	..	..	0	5	13	1	0	0	0	0	3	14	0	13	0
Maharashtra																											
Nandurbar*	0830	206	(k) 1003·0	(k) 979·9	..	26·2	24·4	23·6	29·1	86	..	(k) 8·0	..	(k) 11·1	0	0	20	0	0	0	0	0	4	16	0	0	0
	1730	,,	(k) 1000·7	(k) 977·7	..	(k) 27·8	(k) 25·0	(k) 23·6	(k) 29·4	(k) 79	..	(k) 8·0	..	(k) 15·2	0	2	18	0	0	0	0	0	4	16	0	0	0
Jalgaon	0830	201	1003·1	980·5	..	26·1	24·1	23·0	28·3	84	..	6·3	..	12·7	0	3	27	0	0	0	0	1	4	20	5	1	0
	1730	,,	999·6	977·4	..	30·4	25·0	22·4	27·3	64	..	6·9	..	21·9	0	19	12	2	0	0	0	1	0	17	11	0	0
Malegaon	0830	437	1002·7	954·6	+0·2	26·3	23·7	22·0	27·1	77	+3	6·8	+0·8	11·0	0	0	31	1	0	0	0	0	3	25	2	0	0
	1730	,,	1000·1	952·4	..	28·7	23·7	21·4	25·2	65	..	6·6	..	17·8	0	8	22	1	0	0	1	0	0	24	4	1	0
Deolali	0830	571	1004·3	941·2	..	23·6	22·6	21·7	26·7	89	..	7·5	..	19·8	0	12	19	0	0	0	0	0	16	15	0	0	0
	1730	,,	1002·6	939·8	..	24·7	22·5	21·7	25·7	83	..	7·4	..	27·7	0	27	4	0	0	0	0	0	19	12	0	0	0
Aurangabad	0830	581	1004·3	940·1	+0·2	23·3	22·0	21·4	25·4	89	+8	6·9	-0·1	17·1	0	8	22	0	0	0	0	1	8	21	0	1	0
	1730	,,	1000·5	937·4	..	27·5	22·9	20·7	24·4	69	..	7·7	..	28·4	0	21	10	0	1	0	0	0	3	23	4	0	0
Aurangabad (Chikalthana Aerodrome).	0230	579	1002·6	938·6	..	22·4	20·8	20·0	23·3	87	..	6·6	..	16·6	0	7	24	1	0	0	0	0	2	24	4	0	0
	0530	,,	1002·5	938·4	..	22·1	20·9	20·2	24·0	89	..	7·4	..	15·0	0	7	22	0	0	0	0	0	1	23	5	2	0
	0830	,,	1003·6	939·8	..	23·9	21·7	20·7	24·4	82	..	6·8	..	15·4	0	7	24	1	0	0	0	0	2	21	7	0	0
	1130	,,	1002·8	939·7	..	27·3	22·7	20·5	24·3	67	..	7·0	..	20·0	0	12	19	0	0	0	0	0	2	19	10	0	0
	1730	,,	999·9	937·1	..	27·4	22·5	20·1	23·7	67	..	7·5	..	21·3	0	14	15	1	0	0	0	0	4	19	5	2	0
	2330	,,	1003·8	939·9	..	23·3	21·3	20·4	24·0	84	..	6·7	..	16·8	0	12	19	0	0	0	0	0	5	21	5	0	0
Ahmednagar	0830	657	1003·9	931·6	-0·3	23·8	21·5	20·3	24·0	81	+4	5·9	+0·1	6·6	0	0	31	0	0	0	0	0	19	0	12	0	0
	1730	,,	1001·3	930·2	..	27·2	22·0	19·3	22·6	62	..	5·5	..	7·9	0	0	31	0	0	0	0	0	18	0	13	0	0
Parbhani	0830	423	1003·9	956·9	..	25·1	22·5	21·5	25·2	80	..	6·6	..	14·1	0	3	28	0	0	0	0	0	4	24	3	0	0
	1730	,,	999·8	953·7	..	29·4	23·6	20·5	24·4	60	..	7·1	..	17·8	0	7	24	2	1	0	0	0	3	20	5	0	0
Poona	0530	559	1003·4	941·4	..	22·5	21·2	20·6	24·1	89	..	6·8	..	4·1	0	0	20	0	0	0	0	0	4	16	0	11	0
	0830	,,	1004·6	942·9	+0·3	23·9	22·1	21·3	25·1	86	+7	6·8	+0·2	4·0	0	0	22	0	0	0	0	2	7	12	1	9	0
	1130	,,	1004·4	943·2	..	26·2	22·9	21·4	25·5	75	..	6·9	..	7·7	0	0	27	0	0	0	0	0	8	17	2	4	0
	1730	,,	1002·5	941·2	..	25·6	22·3	20·7	24·5	74	..	7·1	..	8·7	0	0	30	0	0	0	0	0	7	23	0	1	0
	2330	,,	1005·2	943·2	..	22·9	21·4	20·8	24·3	87	..	6·4	..	4·7	0	0	20	0	0	0	0	0	4	16	0	11	0
Poona	0230	593	1003·8	938·1	..	22·0	21·1	20·6	24·4	92	..	6·5	..	17·2	0	9	20	0	0	0	0	0	0	26	3	2	0
(Lohagaon Aerodrome)	0530	,,	1003·5	937·8	..	21·9	21·1	20·6	24·5	92	..	6·9	..	15·3	0	6	23	0	0	0	0	0	0	24	5	2	0
	0830	,,	1004·6	939·1	..	23·5	21·7	20·9	24·7	86	..	7·0	..	18·1	0	13	17	0	0	0	0	0	0	28	2	1	0
	1130	,,	1004·2	939·3	..	25·6	22·4	20·8	24·8	74	..	7·0	..	31·8	0	26	5	0	0	0	0	0	0	28	3	0	0
	1730	,,	1002·5	937·4	..	24·9	21·7	20·3	23·5	76	..	6·8	..	33·2	0	29	2	0	0	0	0	0	1	26	4	0	0
	2330	,,	1005·3	939·5	..	22·3	21·2	20·5	24·4	90	..	6·5	..	19·3	0	11	19	1	0	0	0	0	1	25	3	1	0
Baramati	0830	551	1004·7	943·5	..	24·5	22·1	20·9	24·7	81	..	6·9	..	15·2	0	5	26	0	0	0	0	1	12	18	0	0	0
	1730	,,	1001·7	941·7	..	27·2	22·3	19·9	23·2	65	..	6·5	..	28·8	0	22	9	0	0	0	0	0	4	24	3	0	0
Jeur	0830	521	1004·2	946·7	..	24·4	22·2	20·4	25·2	81	..	5·1	..	7·1	0	0	25	0	0	0	0	0	1	18	6	6	0
	1730	,,	1000·9	944·3	..	28·2	22·9	19·4	24·0	63	..	5·5	..	10·2	0	0	31	0	0	0	0	0	1	17	13	0	0
Sholapur	0530	479	1004·1	950·7	..	22·7	21·2	20·4	23·9	87	..	6·4	..	7·5	0	0	31	0	0	0	0	0	23	7	1	0	0
	0830	,,	1005·0	952·0	+0·4	24·4	22·1	21·5	24·9	81	+8	6·5	+0·5	9·0	0	0	31	0	0	0	0	0	23	8	0	0	0
	1130	,,	1004·1	951·8	..	28·6	23·1	20·6	24·1	63	..	6·8	..	16·3	0	6	25	0	0	0	0	0	12	16	3	0	0

*Previously Hydrometeorological Observatory.

(k) Mean of 20 days.

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars. At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars. At station level	Mean pressure in millibars. Departure from normal	Mean temperature in °C. Dry bulb	Mean temperature in °C. Wet bulb	Mean temperature in °C. Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas). Mean amount	Cloud amount (Oktas). Departure from normal	Mean wind speed, km. per hour	Wind speed (Km.p.h.). 62 or more	Wind speed (Km.p.h.). 20 to 61	Wind speed (Km.p.h.). 1 to 19	No. of observations. Wind direction. N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra (*Contd*).																											
Sholapur—(*Contd*).	1730	479	1001·0	948·9	..	28·8	23·0	20·3	23·8	61	..	7·0	..	13·6	0	5	25	1	1	0	0	0	22	5	1	1	0
	2330	"	1005·2	952·1	..	24·4	21·7	20·4	23·9	79	..	5·2	..	11·2	0	0	31	0	0	0	0	0	20	11	0	0	0
Miraj . . .	0830	554	1006·0	944·8	+0·3	23·4	21·9	21·4	25·2	88	+5	7·3	—0·1	14·0	0	4	27	0	0	0	0	0	12	16	3	0	0
	1730	"	1003·8	943·1	..	25·6	22·2	20·6	24·4	75	..	7·2	..	23·5	0	21	10	0	0	0	0	0	9	15	7	0	0
Kolhapur . .	0530	570	1004·6	941·5	..	22·1	21·3	20·9	24·7	93	..	6·7	..	15·4	0	8	22	0	0	0	0	0	1	27	2	1	0
	0830	"	1005·9	942·8	..	23·0	21·9	21·4	25·5	90	..	7·5	..	18·9	0	15	16	0	0	0	0	0	7	22	2	0	0
	1130	"	1005·8	943·1	..	24·8	22·6	21·7	25·7	83	..	7·3	..	24·3	0	26	5	0	0	0	0	0	5	22	4	0	0
	1730	"	1003·9	941·2	..	24·1	22·2	21·2	25·3	84	..	7·2	..	23·1	0	23	8	0	0	0	0	0	4	24	3	0	0
Vidarbha																											
Buldhana . .	0830	650	1002·7	931·4	..	23·4	21·6	20·7	24·4	85	..	6·8	..	5·1	0	0	31	0	0	0	0	0	8	0	23	0	0
	1730	"	999·3	929·1	..	27·2	22·7	20·4	24·4	68	..	7·4	..	4·6	0	0	29	0	0	0	0	0	2	0	27	2	0
Akola . . .	0830	282	1002·4	971·0	+0·2	26·3	23·4	21·6	26·6	77	—1	7·3	+1·0	12·8	0	5	26	0	0	0	0	2	8	18	3	0	0
	1130	"	1001·9	970·7	..	29·0	24·1	22·0	25·9	65	..	7·5	..	12·0	0	4	26	0	0	0	0	2	7	16	5	1	0
	1730	"	998·4	967·5	..	29·8	24·2	21·5	25·7	63	..	7·4	..	8·2	0	3	27	1	1	0	0	0	2	16	10	1	0
Akola (Aerodrome)	0530	309	1001·6	967·0	..	24·1	22·6	21·9	26·3	88	..	6·6	..	12·2	0	4	26	0	0	0	0	0	7	19	4	1	0
	2330	"	1002·3	967·8	..	25·9	23·4	22·1	26·9	81	..	6·2	..	13·5	0	7	23	0	0	0	0	1	7	13	9	1	0
Amravati . .	0830	370	1002·4	961·4	+0·4	25·2	23·1	22·2	26·5	84	+3	7·2	+1·0	15·3	0	3	28	1	0	0	0	0	9	21	0	0	0
	1730	"	998·7	958·3	..	28·7	24·0	21·5	26·0	67	..	7·6	..	12·2	0	1	30	2	1	0	0	0	11	9	8	0	0
Yeotmal . . .	0830	451	1002·5	952·5	..	24·5	22·8	22·0	26·5	86	..	(a) 6·6	..	(a) 19·2	0	13	17	0	0	0	0	0	10	16	4	0	0
	1730	"	998·8	949·6	..	28·1	24·1	22·2	26·9	72	..	(a) 7·0	..	(a) 15·5	0	10	16	1	0	0	0	1	8	12	4	4	0
Nagpur . . .	0230	310	1000·1	965·5	..	24·9	23·5	22·9	27·9	89	..	7·0	..	9·3	0	1	25	0	0	1	0	2	9	11	3	5	0
	0530	"	1003·3	965·7	..	24·5	23·4	22·8	27·1	91	..	7·2	..	8·4	0	2	23	0	0	0	0	1	9	13	2	6	0
	0830	"	1001·6	967·1	+0·1	26·1	24·0	23·0	28·2	84	+2	7·5	+1·0	13·3	0	4	27	0	0	0	0	1	9	13	8	0	0
	1130	"	1001·2	967·0	..	28·7	24·7	23·0	27·5	72	..	7·7	..	18·2	0	10	21	1	0	0	0	1	7	14	8	0	0
	1730	"	998·5	964·3	..	28·2	24·5	23·2	27·7	76	..	7·9	..	13·5	0	7	22	1	0	1	0	3	6	11	7	2	0
	2330	"	1001·2	966·6	..	25·2	23·8	23·0	27·6	89	..	7·7	..	9·7	0	3	23	1	1	0	0	2	9	8	5	5	0
Gondia . . .	0830	313	1001·6	966·8	..	25·7	24·1	23·5	28·8	88	..	7·3	..	4·5	0	0	27	2	0	0	1	3	14	4	3	4	0
	1730	"	998·6	964·1	..	27·6	25·0	23·8	29·1	81	..	7·3	..	5·8	0	0	29	2	0	0	0	2	18	2	5	2	0
Brahmapuri . .	0830	229	1002·0	976·5	..	25·8	24·1	23·3	28·7	87	..	7·4	..	11·3	0	1	30	0	0	0	0	2	12	14	3	0	0
	1730	"	998·9	973·9	..	27·7	25·1	24·0	30·9	81	..	7·4	..	10·9	0	2	27	1	0	0	1	5	11	9	2	2	0
Chanda . . .	0830	193	1002·7	981·0	+0·3	26·0	23·9	23·0	28·7	83	+5	7·3	+1·1	9·7	0	1	30	1	0	0	0	1	12	13	4	0	0
	1730	"	999·4	978·0	..	28·8	25·1	23·5	28·8	74	..	7·5	..	7·5	0	0	30	2	1	1	1	3	9	12	1	1	0
Sironcha . .	0830	123	1003·5	989·5	..	25·7	24·2	23·5	29·1	89	..	7·6	..	4·8	0	0	22	0	1	1	2	3	6	7	2	9	0
	1730	"	1000·3	986.7	..	28·5	25·3	23·9	29·8	77	..	7·4	..	4·9	0	1	23	3	1	0	3	3	1	8	5	7	0
Coastal Andhra Pradesh																											
Nellore . . .	0530	20	1004·0	1001·8	..	27·6	23·7	21·7	26·3	71	..	6·9	..	5·4	0	0	29	0	0	0	0	2	8	17	2	2	0
	0830	"	1005·7	1003·5	+0·7	29·0	24·2	21·9	25·9	67	+4	7·3	+1·0	8·0	0	0	31	0	0	0	0	2	10	16	3	0	0
	1130	"	1004·8	1002·6	..	32·1	24·8	21·3	25·4	54	..	7·2	..	13·8	0	6	25	0	0	0	1	1	7	19	3	0	0
	1730	"	1001·8	999·6	..	33·2	25·5	21·9	26·4	53	..	7·5	..	7·2	0	0	31	0	0	0	1	3	19	6	2	0	0
	2330	"	1004·7	1002·5	..	29·1	24·8	22·7	27·4	69	..	5·5	..	7·7	0	0	26	0	0	0	0	3	3	11	9	0	5	0
Ongole . . .	0830	12	1004·9	1003·6	..	29·5	27·6	27·0	35·1	87	..	6·6	..	14·4	0	4	26	0	0	0	0	1	1	11	2	15	1	0
	1730	"	1001·3	1000·0	..	36·5	29·4	27·8	37·4	73	..	6·6	..	10·8	0	2	28	0	0	0	0	3	0	6	12	9	1	0
Rentachintala .	0830	106	1004·6	993·0	..	28·2	24·0	22·3	26·7	69	—1	6·2	—0·8	7·9	0	0	29	0	0	0	0	0	1	3	25	0	2	0
	1730	"	1001·0	989·0	..	33·0	24·6	20·5	23·9	50	..	7·1	..	6·3	0	0	29	2	0	0	0	0	4	22	1	2	0
Gannavaram . .	0230	23	1002·1	999·5	..	26·6	24·7	23·9	29·5	85	..	6·5	..	10·4	0	4	23	0	0	0	1	0	3	21	2	4	0
	0530	"	1002·4	999·8	..	26·3	24·1	23·0	28·1	83	..	7·0	..	14·2	0	4	26	0	0	0	0	0	4	19	7	1	0
	0830	"	1003·9	1001·3	..	27·7	24·5	23·1	28·2	76	..	7·0	..	20·0	0	13	17	0	0	0	0	0	4	19	7	1	0
	1130	"	1003·4	1000·9	..	30·3	25·5	23·2	28·7	66	..	6·7	..	26·9	0	24	7	0	0	0	0	0	3	18	10	0	0
	1730	"	1005·5	997·9	..	31·1	25·6	23·1	28·2	63	..	6·9	..	16·5	0	8	22	1	0	1	1	0	3	10	14	1	0
	2330	"	1003·2	1000·6	..	27·2	25·2	24·2	30·2	83	..	6·5	..	11·5	0	3	23	0	0	0	0	1	6	14	5	5	0
Masulipatam . .	0530	3	1002·7	1002·4	..	26·5	25·1	24·6	30·8	90	..	7·7	..	12·9	0	2	29	1	0	0	1	0	9	17	3	0	0
	0830	"	1004·3	1003·9	+0·1	27·9	25·5	24·3	30·6	82	+4	7·2	+1·0	12·1	0	1	30	0	0	0	0	3	5	16	7	0	0
	1130	"	1003·9	1003·6	..	30·4	26·3	24·8	31·0	73	..	7·5	..	16·3	0	3	28	0	0	0	0	0	3	16	12	0	0
	1730	"	1001·2	1000·9	..	31·4	27·0	25·2	32·2	71	..	7·5	..	12·9	0	0	30	1	0	0	2	6	4	4	13	1	0
	2330	"	1003·2	1002·9	..	27·6	26·1	25·5	32·5	88	..	4·5	..	12·0	0	0	30	1	0	0	2	10	9	7	1	1	0

(a) Mean of 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, Km. per hour	Wind speed (Km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest isobaric level.	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh—*(Contd.)*																											
Nidadavolu	0830	12	1003·9	1002·5	..	27·1	25·3	24·5	30·8	86	..	7·0	..	12·3	0	3	27	0	0	0	0	0	11	19	0	1	0
	1730	,,	1000·8	999·4	..	30·0	26·5	25·1	31·9	75	..	7·1	..	11·6	0	1	29	0	0	0	0	0	4	25	1	1	0
Kakinada	0830	8	1003·5	1002·7	+0·4	28·9	26·0	24·6	31·2	78	0	5·9	—0·3	10·2	0	0	31	0	0	0	0	0	30	0	1	0	0
	1730	,,	1000·7	999·5	..	30·6	26·4	24·5	31·0	71	..	6·5	..	10·4	0	0	31	0	0	0		0	26	0	5	0	0
Visakhapatnam	0230	3	1001·0	1000·6	..	27·3	25·7	25·1	31·6	88	..	5·9	..	8·3	0	2	20	0	0	0	0	0	18	4	0	9	0
	0530	,,	1001·2	1000·8	..	26·7	25·5	25·0	31·7	90	..	6·6	..	9·0	0	3	20	0	0	0	0	1	14	6	2	8	0
	0830	,,	1002·3	1001·9	+0·2	28·7	26·0	24·8	31·5	80	—5	6·5	—0·3	13·6	0	5	24	0	0	0	1	0	19	6	3	2	0
	1130	,,	1001·8	1001·4	..	30·9	27·2	25·7	33·0	74	..	6·4	..	16·3	0	8	22	0	0	2	1	1	21	2	3	1	0
	1730	,,	999·6	999·2	..	30·1	26·7	25·2	32·4	76	..	6·7	..	17·1	0	8	23	0	0	1	1	2	18	6	3	0	0
	2330	,,	1002·1	1001·7	..	27·8	26·0	25·3	32·2	87	..	5·5	..	8·7	0	2	20	0	0	0	0	0	12	6	4	9	0
Calingapatam	0830	6	1001·8	1001·1	+0·3	27·9	25·6	24·9	30·5	84	+4	6·3	+0·9	6·8	0	0	31	0	0	0	0	0	15	15	1	0	0
	1730	,,	999·6	998·9	..	29·0	26·3	25·1	31·9	80	..	6·7	..	8·4	0	0	31	0	0	1	2	10	13	4	1	0	0
Telangana																											
Ramagundam	0830	156	1003·1	985·6	..	26·3	23·9	23·2	27·6	80	..	7·5	..	7·0	0	1	29	0	0	0	0	0	6	16	8	1	0
	1730	,,	1000·1	928·8	..	29·7	25·2	23·2	28·5	68	..	6·7	..	4·5	0	0	28	4	1	0	0	1	6	13	3	3	0
Nizamabad	0830	381	1004·3	961·9	+0·8	24·9	22·7	21·7	25·7	82	+5	6·7	+1·4	9·2	0	0	30	0	0	0	0	0	25	4	1	1	0
	1730	,,	1000·0	959·3	..	29·0	24·7	22·5	27·5	70	..	6·8	..	5·3	0	0	26	0	1	0	1	1	13	7	3	5	0
Mahbubnagar	0830	505	1005·4	949·4	..	24·1	22·1	21·2	24·7	85	..	7·1	..	14·2	0	3	28	1	0	0	0	0	13	7	10	0	0
	1730	,,	1001·2	946·3	..	28·1	23·0	20·9	24·1	67	..	7·4	..	10·4	0	0	31	1	0	0	0	0	10	13	7	0	0
Hyderabad (Begumpet Aerodrome).	0230	545	1003·1	943·0	..	23·4	21·6	20·8	24·4	84	..	6·9	..	21·1	0	14	16	0	0	0	0	0	1	25	4	1	0
	0530	,,	1003·4	943·2	..	22·7	21·3	20·7	24·3	87	..	7·3	..	20·4	0	14	16	0	0	0	0	0	3	23	4	1	0
	0830	,,	1004·7	944·6	+0·7	24·1	22·0	21·0	24·9	83	+2	7·6	+1·2	24·3	0	21	10	0	0	0	0	0	3	22	6	0	0
	1130	,,	1003·7	944·3	..	27·1	23·0	21·1	25·0	70	..	7·5	..	29·4	0	25	6	1	0	0	0	0	3	18	9	0	0
	1730	,,	1000·6	941·5	..	27·7	23·2	21·1	25·2	68	..	7·1	..	17·3	0	7	24	2	0	0	0	0	5	13	11	0	0
	2330	,,	1004·2	944·2	..	24·0	22·0	21·1	25·0	84	..	7·0	..	22·1	0	15	16	2	0	0	0	0	2	22	5	0	0
Hakimpet	0830	613	1003·8	936·5	..	23·8	21·7	20·6	24·2	82	..	7·4	..	25·8	0	27	4	0	0	0	0	0	13	16	2	0	0
	1730	,,	1000·7	934·3	..	27·3	22·9	20·8	24·7	69	..	7·0	..	20·2	0	11	20	0	0	0	0	0	15	14	2	0	0
Hanamkonda	0830	269	1004·0	974·0	+0·4	26·2	23·3	22·0	26·4	78	+4	6·9	+0·7	14·2	0	4	27	1	0	0	0	3	4	16	7	0	0
	1730	,,	1000·9	971·4	..	29·9	24·6	22·0	26·7	64	..	6·8	..	9·2	0	1	30	3	0	0	0	2	3	10	13	0	0
Bhadrachallam	0830	111	1004·0	991·6	..	27·2	24·9	23·6	29·7	81	..	7·0	..	8·2	0	0	29	1	0	0	1	0	10	12	5	2	0
	1730	,,	1000·6	988·3	..	30·2	25·9	24·6	29·8	72	..	7·3	..	7·9	0	0	31	1	3	2	0	2	7	7	9	0	0
Khammameth	0830	112	1004·2	991·6	..	26·6	24·3	23·3	28·6	81	..	6·4	..	5·5	0	0	25	0	0	0	0	0	0	23	2	6	0
	1730	,,	1000·6	988·3	..	30·5	26·0	24·0	29·9	69	..	6·7	..	4·2	0	0	26	3	0	0	0	1	0	18	4	5	0
Rayalaseema																											
Arogyavaram	0830	701	1006·8	930·2	..	24·1	20·5	18·5	21·4	71	..	7·5	..	11·5	0	0	31	0	0	0	0	1	3	15	12	0	0
	1730	,,	1002·3	927·0	..	28·5	21·5	17·8	20·7	53	..	7·4	..	8·7	0	0	31	0	0	0	0	0	3	12	16	0	0
Cuddapah	0830	130	1006·6	992·1	+0·6	28·6	24·3	21·7	27·1	67	+2	6·4	+0·2	5·7	0	0	22	0	0	0	0	0	0	22	0	9	0
	1730	,,	1002·2	987·9	..	32·3	24·9	21·6	25·4	55	..	5·4	..	9·2	0	0	27	0	1	0	0	0	0	26	0	4	0
Anantapur	0530	350	1005·0	965·9	..	24·1	21·7	20·5	23·8	81	..	6·2	..	12·3	0	3	28	0	0	0	0	0	3	27	1	0	0
	0830	"	1006·1	967·1	..	25·8	22·6	20·8	24·9	74	..	6·5	..	14·3	0	2	29	0	0	0	0	0	6	24	1	0	0
	1130	"	1005·1	966·7	..	29·6	23·2	19·8	23·0	56	..	6·9	..	17·9	0	5	26	0	0	0	0	0	4	25	2	0	0
	1730	"	1002·1	963·9	..	30·2	22·9	19·3	22·1	54	..	7·1	..	22·1	0	16	15	0	1	0	0	0	3	25	2	0	0
	2330	"	1006·0	967·0	..	25·2	22·1	20·3	23·9	74	..	6·4	..	19·9	0	16	15	0	0	0	0	0	4	25	2	0	0
Kurnool	0830	281	1006·2	974·6	+0·6	25·3	22·9	21·7	26·0	81	+9	7·0	+0·7	23·2	0	19	12	0	0	0	0	0	7	22	2	0	0
	1730	"	1002·1	971·2	..	30·6	23·6	19·9	23·5	55	..	7·2	..	24·7	0	21	10	1	0	1	0	0	10	11	8	0	0
Madras																											
Palayamcottai	0830	51	1007·9	1002·3	..	29·9	23·0	19·3	22·5	54	..	3·4	..	15·2	0	6	25	0	0	0	0	0	0	28	3	0	0
	1730	"	1005·1	999·5	..	31·1	23·3	18·9	22·3	49	..	6·6	..	21·7	0	16	15	0	0	3	0	0	1	23	4	0	0
Tuticorin	0830	4	1008·1	1007·7	..	29·8	23·6	20·4	23·8	57	..	3·5	..	21·7	0	19	12	1	1	0	0	0	4	23	2	0	0
	1730	"	1005·1	1004·7	..	31·6	23·9	20·2	23·3	52	..	3·6	..	27·6	0	26	5	0	0	0	4	2	0	24	1	0	0
Pamban	0830	11	1007·9	1006·6	+0·2	29·1	25·8	24·3	30·6	76	+1	3·5	+0·5	7·6	0	2	22	0	0	1	1	4	13	5	0	7	0
	1730	"	1004·8	1003·5	..	29·0	26·4	25·3	32·0	80	..	3·4	..	13·2	0	4	27	0	1	1	1	17	10	0	1	0	0
Mathurai	0830	133	1007·2	992·4	—0·1	29·4	23·7	20·7	24·7	61	+4	3 8	+0·3	3·0	0	0	31	0	1	0	1	0	2	4	23	0	0
	1730	"	1003·8	989·2	..	33·8	24·7	20·5	23·7	49	..	6 2	..	3·7	0	0	31	1	1	0	4	0	2	15	8	0	0
Nagapattinam	0830	9	1007·7	1006·6	+0·6	28·7	24·0	21·8	25·8	67	+2	6·3	+1·7	12·3	0	0	31	1	0	0	1	1	9	18	1	0	0
	1730	"	1004·2	1003·2	..	31·1	25·5	22·9	28·2	63	..	6·1	..	12·4	0	1	30	0	2	2	5	10	8	3	1	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, Km per hour	Wind speed (Km p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb.	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—(*Contd.*)																											
Tiruchirapalli . .	0230	88	1005·9	995·9	..	27·4	22·7	20·2	23·7	65	..	4·5	..	27·9	0	21	8	0	0	0	0	1	1	26	1	2	0
	0530	"	1006·0	996·1	..	26·7	22·5	20·2	23·9	68	..	6·5	..	26·8	0	20	10	0	0	0	0	0	2	27	1	1	0
	0830	"	1007·3	997·3	—0·2	28·8	22·9	19·8	23·4	59	0	5·9	+0·9	31·9	0	26	4	0	0	0	0	0	0	29	1	1	0
	1130	"	1006·3	996·6	..	33·2	23·8	18·9	21·9	44	..	6·2	..	38·9	0	27	3	0	0	0	0	0	0	27	3	1	0
	1730	"	1003·5	993·8	..	33·5	23·8	18·7	21·5	44	..	6·8	..	35·5	0	24	6	2	0	1	0	0	1	25	1	1	0
	2330	"	1007·0	997·1	..	27·9	22·8	20·2	23·2	63	..	4·3	..	30·4	0	22	7	0	0	1	1	0	4	23	0	2	0
Coimbatore . .	0830	409	1008·3	962·8	+0·5	24·5	21·9	20·6	24·1	76	—4	7·0	+2·1	19·0	0	7	24	0	0	0	0	13	16	1	1	0	0
	1730	"	1005·4	960·3	..	26·6	22·3	20·0	23·4	68	..	7·3	..	18·4	0	7	24	0	0	0	0	8	18	5	0	0	0
Coimbatore (Peelamedu Aerodrome)	0530	398	1006·8	962·2	..	22·3	21·2	20·7	24·3	91	..	6·7	..	24·0	0	18	13	0	0	0	0	8	20	3	0	0	0
	0830	"	1008·0	963·5	..	24·3	22·0	20·8	24·6	81	..	6·4	..	26·2	0	26	5	0	0	0	0	8	20	3	0	0	0
	1130	"	1006·9	963·1	..	28·1	22·9	20·1	23·9	62	..	6·4	..	33·8	0	27	4	0	0	0	1	3	25	2	0	0	0
	1730	"	1004·9	960·9	..	26·5	22·3	20·1	23·6	69	..	6·7	..	37·8	0	31	0	0	0	0	0	3	27	1	0	0	0
	2330	"	1008·0	963·3	..	23·1	21·8	21·1	25·1	89	..	4·6	..	32·1	0	30	1	0	0	0	0	5	25	1	0	0	0
Salem . . .	0530	278	1006·4	975·1	..	24·0	23·3	23·0	27·9	95	..	6·6	..	4·8	0	0	27	0	0	0	0	1	11	12	3	4	0
	0830	"	1007·6	976·5	+0·1	25·5	24·2	23·6	29·0	89	+12	6·6	+1·1	6·9	0	0	31	0	0	0	0	1	19	10	1	0	0
	1130	"	1006·6	976·0	..	30·1	25·5	23·3	28·8	67	..	6·4	..	7·5	0	0	29	0	0	0	1	1	13	12	2	2	0
	1730	"	1003·2	972·8	..	31·3	27·5	25·8	32·9	73	..	7·0	..	5·3	0	0	29	1	0	0	0	5	2	21	0	2	0
	2330	"	1007·3	976·3	..	25·8	24·7	24·0	30·0	89	..	6·3	..	5·4	0	0	24	0	0	0	0	2	10	9	3	7	0
Kallakurichi . .	0830	127	1006·8	992·6	..	28·1	23·8	21·6	26·0	69	..	5·6	..	2·7	0	0	15	0	0	1	0	9	5	0	0	16	0
	1730	"	1002·6	988·7	..	32·9	24·4	20·1	23·5	49	..	6·8	..	4·2	0	0	23	1	1	0	2	14	3	0	2	8	0
Cuddalore . .	0530	12	1005·3	1004·0	..	26·5	23·4	22·0	27·1	76	..	6·8	..	4·9	0	0	24	0	0	0	0	6	15	2	1	7	0
	0830	"	1007·0	1005·7	+0·4	28·9	24·3	22·1	25·6	67	—2	6·1	+1·0	4·8	0	0	26	0	0	0	0	1	23	2	0	5	0
	1130	"	1006·0	1004·7	..	33·0	24·8	20·8	23·6	50	..	5·7	..	6·3	0	0	30	0	1	0	1	1	14	9	4	1	0
	1730	"	1003·2	1001·9	..	31·6	25·6	22·8	28·2	62	..	7·4	..	7·3	0	0	28	0	0	2	12	2	10	2	0	3	0
	2330	"	1006·1	1004·8	..	28·7	24·5	22·4	27·4	70	..	6·1	..	7·0	0	0	25	0	0	0	2	8	11	4	0	6	0
Vellore . . .	0530	214	1005·4	981·4	..	26·1	22·1	20·0	23·3	69	..	7·5	..	6·1	0	0	20	0	0	0	0	0	5	12	3	11	0
	0830	"	1006·7	982·8	+0·7	27·8	22·9	20·3	24·0	64	—3	7·0	+2·2	9·3	0	0	29	0	1	0	0	0	1	22	5	2	0
	1130	"	1005·6	982·0	..	31·6	23·8	19·8	23·3	50	..	7·3	..	13·7	0	4	26	0	0	0	0	0	3	20	7	1	0
	1730	"	1002·3	978·9	..	32·7	23·8	19·1	22·4	46	..	7·4	..	5·8	0	1	26	0	1	0	3	1	11	7	4	4	0
	2330	"	1006·1	982·2	..	27·8	23·1	20·7	24·0	66	..	(a) 6·8	..	(a) 10·1	0	3	22	0	0	0	0	0	8	13	4	5	0
Madras . . .	0230	16	1004·6	1002·8	..	27·1	23·8	22·0	26·9	75	..	6·3	..	12·5	0	4	26	0	0	0	0	9	6	12	3	1	0
	0530	"	1005·0	1003·3	..	26·5	23·3	21·7	26·7	76	..	6·8	..	10·0	0	3	25	1	0	1	0	1	14	10	1	3	0
	0830	"	1006·6	1004·8	+0·7	28·2	23·9	21·8	27·8	69	+7	6·6	+0·9	13·8	0	8	22	0	0	0	0	4	10	15	1	1	0
	1130	"	1005·8	1004·1	..	31·5	24·6	21·3	25·3	56	..	6·2	..	19·1	0	15	15	0	0	0	0	1	3	24	2	1	0
	1730	"	1002·7	1001·0	..	32·0	25·4	22·1	27·1	58	..	6·9	..	12·3	0	1	29	0	0	4	4	8	5	7	1	1	1
	2330	"	1005·6	1003·9	..	28·0	24·9	23·4	29·1	78	..	5·6	..	9·0	0	2	26	0	1	0	4	11	6	6	0	3	0
Madras (Nungambakkam).	0830	6	1006·0	1005·3	..	28·3	23·9	21·7	26·0	69	..	7·2	..	6·2	0	0	27	1	0	0	0	1	10	14	1	4	0
Coastal Mysore																											
Karwar . . .	0830	4	1007·5	1007·0	+0·1	26·8	25·1	24·3	30·5	86	..	7·9	..	20·3	0	15	3	0	0	1	0	0	1	8	8	4	9
	1730	"	1005·9	1005·5	..	27·1	25·1	24·2	30·3	84	..	7·8	..	17·4	0	13	15	1	0	0	1	0	5	12	9	1	2
Honavar . .	0830	26	1007·9	1005·0	—0·3	25·7	24·7	24·1	30·2	92	+1	7·6	+0·6	5·3	0	0	27	0	0	5	0	2	13	5	2	4	0
	1730	"	1006·2	1003·3	..	26·6	25·1	24·5	31·1	89	..	7·6	..	8·3	0	0	29	0	0	1	0	1	19	8	0	2	0
Mangalore . .	0230	22	1007·4	1004·9	..	25·1	24·1	23·7	29·1	92	..	6·5	..	10·6	0	6	18	0	0	2	3	0	2	12	5	7	0
	0530	"	1007·3	1004·8	..	25·0	24·0	23·3	29·0	92	..	7·3	..	13·1	0	7	24	2	2	3	3	0	6	13	2	0	0
	0830	"	1008·8	1006·3	+0·4	25·8	24·6	24·0	30·0	90	0	7·2	+0·2	7·7	0	1	28	0	1	2	6	0	6	11	3	2	0
	1130	"	1009·1	1006·6	..	26·9	25·1	24·3	30·4	86	..	7·3	..	9·6	0	3	25	1	1	0	1	1	7	13	4	3	0
	1730	"	1007·1	1004·6	..	26·5	24·7	23·9	29·7	85	..	7·6	..	14·0	0	6	24	2	0	0	3	0	6	16	3	1	0
	2330	"	1009·0	1006·5	..	25·4	24·3	23·8	29·4	92	..	6·5	..	10·3	0	2	27	2	0	4	2	0	3	13	5	2	0
Mangalore	0530	103	1007·7	996·0	..	23·8	23·4	23·1	28·4	96	..	7·5	..	10·5	0	7	11	1	0	1	1	0	0	13	2	13	0
(Bajpe Aerodrome) .	0830	"	1009·1	997·4	..	24·9	24·0	23·6	29·2	93	..	7·2	..	9·3	0	3	18	0	1	4	2	0	1	11	2	10	0
	1730	"	1007·4	995·8	..	25·7	24·3	23·6	29·2	89	..	7·3	..	10·3	0	4	18	0	0	2	0	0	1	16	3	9	0
Mysore (North)																											
Bidar . . .	0830	664	1004·4	931·5	..	22·8	21·3	20·6	24·1	87	+5	7·6	+2·0	26·2	0	23	8	0	0		0	0	11	19	1	0	0
	1730		1000·1	928·7	..	26·7	22·2	20·0	24·2	69	..	7·5	..	24·7	0	21	10	0	0	1	2	0	4	18	8	0	0
Gulbarga . .	0830	458	1005·3	954·5	+0·5	24·6	22·2	21·1	25·3	81	+2	7·5	+1·7	19·4	0	11	20	0	0	0	0	0	16	12	3	0	0
	1730	"	1000·6	950·9	..	29·2	22·	19·7	23·8	58	..	7·8	..	25·5	0	22	9	2	0	0	0	0	10	15	4	0	0

(a) Mean of 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, Km. per hour	Wind speed (Km. p. h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (North)— *(Contd.)*																											
Bijapur	0830	594	1005·5	939·9	+0·2	23·7	22·1	21·3	25·3	87	+10	7·7	+1·6	14·1	0	2	29	0	0	0	0	1	13	16	1	0	0
	1730	"	1001·9	937·4	..	26·7	23·3	21·7	26·2	75	..	7·2	..	13·3	0	0	31	0	0	0	0	0	11	16	4	0	0
Belgaum	0830	781	1007·3	921·6	+1·0	21·2	20·5	20·3	23·6	94	+4	..	..	3·4	0	0	17	0	0	0	3	6	4	2	2	14	0
	1730	"	1006·3	920·9	..	22·1	20·8	20·3	22·7	89	..	..	..	9·5	0	0	31	1	0	0	0	4	8	14	4	0	0
Belgaum (C.T.O.)	0830	753	1006·7	924·1	+0·4	21·9	20·9	20·5	24·1	92	+4	7·2	—0·2	8·2	0	0	31	0	0	0	0	0	3	25	3	0	0
	1730	"	1005·1	922·7	..	22·4	21·0	20·4	23·9	88	..	7·9	..	15·0	0	0	31	0	0	0	0	0	0	26	5	0	0
Belgaum (Sambre Aerodrome)	0530	761	1005·6	921·8	..	20·7	20·0	19·7	22·7	94	..	7·1	..	13·5	0	4	27	0	0	0	0	0	1	30	0	0	0
	0830	"	1006·6	923·2	..	22·1	20·9	20·3	24·2	90	..	7·4	..	16·3	0	7	24	0	0	0	0	0	2	29	0	0	0
	1130	"	1006·1	923·3	..	24·1	21·8	20·7	20·4	81	..	7·2	..	28·5	0	24	7	0	0	0	0	0	0	31	0	0	0
	1730	"	1004·7	921·6	..	22·7	21·0	20·3	23·8	86	..	7·5	..	26·2	0	13	18	0	0	0	0	0	1	29	1	0	0
Gadag	0830	650	1006·4	934·9	+0·2	23·4	21·6	20·6	24·5	85	+2	6·6	+0·2	12·0	0	0	31	0	0	0	0	0	2	29	0	0	0
	1730	"	1003·8	933·0	..	25·8	22·3	20·5	24·0	74	..	6·2	..	14·6	0	4	27	0	0	0	0	0	1	30	0	0	0
Gadag (P.B.O.)	0530	661	1005·6	932·6	..	21·7	21·0	20·5	24·4	93	..	7·0	..	17·7	0	4	27	0	0	0	0	0	6	25	0	0	0
	0830	"	1006·6	933·9	..	23·5	21·5	20·6	24·4	85	..	7·4	..	15·7	0	1	30	0	0	0	0	0	7	24	0	0	0
	1130	"	1005·6	933·8	..	26·7	22·7	21·0	24·5	72	..	7·3	..	17·8	0	5	26	0	0	0	0	0	7	24	0	0	0
	1730	"	1003·8	931·9	..	25·6	22·3	20·9	24·4	76	..	7·2	..	17·4	0	11	20	0	0	0	0	0	5	26	0	0	0
	2330	"	1007·1	934·1	..	22·2	21·0	20·4	24·2	90	..	6·0	..	18·6	0	3	28	0	0	0	0	0	2	29	0	0	0
Raichur	0830	400	1006·4	961·9	+0·9	25·2	22·8	21·3	24·6	79	+5	6·3	+1·5	17·1	0	8	23	0	0	0	0	1	12	14	4	0	0
	1730	"	1001·4	957·9	..	30·0	23·5	20·1	23·6	57	..	6·7	..	20·7	0	15	16	1	0	1	0	0	9	15	5	0	0
Mysore (South)																											
Bellary	0830	449	1006·0	956·3	+0·2	25·7	23·8	23·2	27·7	84	+19	5·7	—0·2	12·0	0	2	29	0	0	0	0	0	8	2	21	0	0
	1730	"	1002·4	953·4	..	28·9	25·4	23·9	25·7	74	..	5·9	..	14·7	0	7	24	0	0	0	0	0	13	0	18	0	0
Chitaldrug	0830	733	1007·1	926·5	+0·4	22·1	20·5	19·7	23·0	86	+5	7·4	+0·3	12·4	0	0	31	0	0	0	0	0	17	14	0	0	0
	1730	"	1004·3	924·6	..	24·8	21·1	19·3	23·1	72	..	7·2	..	15·4	0	3	28	0	0	0	0	0	9	22	0	0	0
Shimoga	0830	571	1007·6	944·5	..	23·1	21·6	20·9	24·7	87	..	7·4	..	2·2	0	0	14	0	0	0	0	2	7	5	0	17	0
	1730	"	1005·5	942·7	..	24·4	21·9	20·7	24·5	80	..	7·0	..	6·0	0	0	30	0	0	0	0	1	15	12	2	1	0
Balehonnur	0830	..	..	..	..	20·1	19·6	19·3	22·2	95	+1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1484·8	903·6	..	20·2	19·4	19·1	22·2	92	+7	7·4	+0·4	12·7	0	1	30	0	0	0	0	0	6	25	0	0	0
	1730	"	1472·2	902·0	..	21·7	19·9	19·0	22·1	84	..	7·5	..	15·5	0	2	29	0	0	0	0	0	5	26	0	0	0
Mysore	0830	767	1008·8	924·3	+0·4	21·6	20·2	19·4	22·8	88	+8	5·0	—1·6	13·4	0	1	30	3	0	0	0	7	12	4	5	0	0
	1730	"	1006·0	922·5	..	24·4	20·9	19·0	22·0	73	..	5·3	..	18·1	0	9	22	0	0	0	0	0	15	16	0	0	0
Bangalore (Central Observatory)	0230	921	1469·8	906·1	..	20·1	18·9	18·2	21·0	90	..	6·9	..	16·0	0	4	27	0	0	0	0	0	6	24	1	0	0
	0830	"	1484·0	907·4	+0·3	21·1	19·5	18·7	21·4	86	+1	7·8	+0·7	17·4	0	7	24	0	0	0	0	0	10	19	2	0	0
	1130	"	1487·9	907·3	..	24·5	20·4	18·3	20·7	68	..	7·5	..	18·7	0	12	19	0	0	0	0	0	3	26	2	0	0
	1730	"	1468·7	905·1	..	24·9	20·2	17·8	22·2	65	..	7·5	..	20·0	0	10	21	0	0	0	0	0	4	22	5	0	0
Bangalore (Aerodrome)	0530	897	1468·7	908·6	..	20·0	19·0	18·6	21·3	91	..	7·1	..	20·2	0	13	18	0	0	0	0	0	10	21	0	0	0
	0830	"	1485·3	910·0	..	21·6	19·6	18·6	21·6	83	..	7·5	..	24·1	0	24	7	0	0	0	0	0	8	23	0	0	0
	1130	"	1489·7	909·7	..	25·1	20·5	18·0	20·7	65	..	7·3	..	27·2	0	26	5	0	0	0	0	0	5	25	1	0	0
	1730	"	1469·7	907·6	..	25·6	20·2	17·2	19·7	60	..	7·1	..	27·2	0	23	7	0	0	0	0	0	2	28	0	1	0
	2330	"	1485·2	910·0	..	21·4	19·5	18·5	21·2	83	..	6·0	..	20·6	0	14	17	0	0	0	0	0	9	21	1	0	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1008·7	1008·2	..	24·1	23·6	22·9	28·7	95	..	7·6	..	6·7	0	0	28	7	7	4	1	0	1	6	2	3	0
	0830	"	1009·7	1009·2	+0·3	24·8	24·1	23·8	29·5	94	+2	7·3	+0·2	6·4	0	0	31	6	7	5	0	0	2	3	8	0	0
	1130	"	1010·1	1009·6	..	26·5	25·0	24·3	30·5	88	..	7·4	..	8·5	0	0	31	3	0	1	1	0	2	13	11	0	0
	1730	"	1008·0	1007·5	..	26·7	25·1	24·4	30·3	87	..	7·1	..	10·7	0	0	31	5	0	1	0	0	0	11	14	0	0
	2330	"	1010·1	1009·6	..	25·2	24·2	23·7	29·3	92	..	6·5	..	9·8	0	1	27	7	3	0	0	0	0	5	13	3	0
Palghat	0830	97	1009·7	998·6	..	24·3	23·5	23·1	28·3	93	..	7·5	..	13·5	0	1	30	0	0	0	0	0	14	17	0	0	0
	1730	"	1007·2	996·4	..	25·4	23·7	22·9	30·9	87	..	7·4	..	14·5	0	1	30	0	0	0	0	0	8	21	2	0	0
Fort Cochin	0830	3	1010·2	1009·9	+0·1	25·7	24·5	23·8	29·7	88	+1	7·5	+0·9	5·1	0	0	18	2	3	3	1	0	1	5	3	13	0
	1730	"	1008·1	1007·8	..	26·4	24·8	23·9	29·8	87	..	7·5	..	12·7	0	3	25	3	0	0	1	0	0	12	12	3	0
Cochin (Naval Air Station)	0230	3	1009·5	1009·3	..	24·7	24·0	23·6	29·3	93	..	6·7	..	5·0	0	0	19	5	2	1	0	2	0	5	4	12	0
	0530	"	1009·2	1009·0	..	24·4	23·7	23·1	28·8	94	..	7·1	..	4·3	0	0	20	1	1	9	0	0	0	4	5	11	0
	0830	"	1010·1	1009·9	..	25·6	24·2	23·6	29·0	89	..	7·2	..	6·4	0	1	22	3	3	5	1	0	2	5	4	8	0
	1130	"	1010·3	1010·1	..	27·1	24·7	23·6	29·3	81	..	7·1	..	9·8	0	4	27	4	2	0	0	1	0	11	13	0	0
	1730	"	1008·5	1008·3	..	26·6	24·5	23·7	29·1	84	..	7·4	..	11·0	0	2	25	4	1	0	0	0	0	7	15	4	0
	2330	"	1010·2	1010·0	..	25·3	24·3	23·9	29·5	92	..	6·8	..	4·0	0	0	21	6	1	3	1	0	2	4	4	10	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Wind speed (Km. p. h.)			No. of observations										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal	Mean wind speed, Km. per hour	62 or more	20 to 61	1 to 19	Wind direction N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives)—(*Contd.*)																											
Alleppey	0830	4	1010·0	1009·6	..	25·5	24·6	24·1	30·3	93	..	7·2	..	10·4	0	3	28	3	2	2	2	0	2	7	13	0	0
	1730	,,	1007·8	1007·4	..	27·2	25·4	24·7	31·1	86	..	6·9	..	14·8	0	7	24	4	1	0	0	0	0	8	18	0	0
Punalur	0830	34	1010·2	1006·4	..	24·2	23·6	23·2	28·5	95	..	6·2	..	1·4	0	0	13	1	2	0	3	0	3	0	4	18	0
	1730	,,	1007·7	1003·9	..	27·1	24·3	22·7	28·2	77	..	6·5	..	4·1	0	0	24	3	2	0	0	0	5	3	11	7	0
Trivandrum	0230	64	1008·8	1001·5	..	24·3	23·5	23·1	28·3	93	..	4·7	..	8·2	0	0	31	9	1	0	0	0	0	3	18	0	0
	0530	,,	1008·4	1001·5	..	24·0	23·3	23·0	28·3	94	..	6·1	..	7·1	0	0	30	13	0	0	0	0	0	3	14	1	0
	0830	,,	1010·1	1002·8	+0·2	25·4	23·9	23·2	28·1	88	+1	6·7	—0·1	8·9	0	0	31	2	1	0	0	0	1	0	27	0	0
	1130	,,	1009·7	1002·5	..	27·5	24·7	23·2	28·9	75	..	6·8	..	18·1	0	9	22	1	0	0	0	0	1	5	24	0	0
	1730	,,	1007·7	1000·5	..	27·4	24·3	22·9	27·9	77	..	6·8	..	19·4	0	6	25	2	0	0	0	0	0	5	24	0	0
	2330	,,	1010·2	1002·9	..	24·6	23·6	23·1	28·4	91	..	5·4	..	9·8	0	0	31	10	0	0	0	0	1	1	19	0	0
	0830	8	1010·0	1009·1	..	26·2	24·2	23·3	28·6	84	..	6·4	..	8·8	0	0	31	9	2	0	0	0	0	2	18	0	0
Trivandrum (Aerodrome) Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1485·0	858·0	..	21·8	20·4	19·7	23·0	89	..	7·6	..	..	0	0	31	0	4	3	3	1	1	2	17	0	0
	1730	,,	1477·8	857·0	..	21·8	21·0	20·5	24·6	94	..	7·8	..	..	0	0	31	8	2	1	1	0	0	1	18	0	0
Aijal*	0830	1097																									
	1730	,,																									
Shillong	0830	1500	1450·8	845·4	+1·0	21·8	19·4	18·1	20·7	80	—1	7·2(a)	+0·5	1·0(a)	0	0	5	0	0	0	0	2	3	0	0	25	0
	1730	,,	1429·5	843·4	..	21·9	19·1	17·6	19·5	77	..	6·0	..	1·6	0	0	7	0	0	0	0	1	5	1	0	24	0
Cherrapunji	0830	1313	1443·9	863·1	0	19·5	19·3	18·9	22·2	96	+6	..	..	4·5	0	0	31	0	0	0	0	0	31	0	0	0	0
	1730	,,	1429·8	861·7	..	21·8	20·0	19·3	22·0	92	..	..	..	4·9	0	0	31	0	0	0	0	0	31	0	0	0	0
Darjiling (Raj Bhawan)	0830	2127	1464·1	787·6	+2·7	17·7	17·2	16·9	19·2	96	+7	8·0	+0·9	0·2	0	0	2	0	1	0	0	0	0	1	0	29	0
	1730	,,	1444·9	785·6	..	17·5	17·0	16·8	18·9	97	..	8·0	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Kalimpong	0830	1209	1466·1	875·8	+2·9	20·9	19·0	17·1	20·5	83	—8	4·5	—2·1	2·8	0	0	29	0	0	0	1	0	0	0	28	2	0
	1730	,,	1455·4	874·9	..	21·2	19·4	18·0	21·5	84	..	4·8	..	2·9	0	0	30	0	0	0	30	0	0	0	0	1	0
Katmandu	0830	1337	1450·6	861·2	..	24·1	21·4	20·1	23·3	79	—1	6·7	+0·1	1·1	0	0	10	2	1	1	4	0	1	0	1	21	0
	1730	,,	1427·0	858·9	..	25·0	22·1	20·9	24·1	78	..	7·0	..	1·9	0	0	15	3	1	1	3	0	3	0	4	16	0
Mukteswar (Kumaon)	0830	2311	3097·3	768·4	+0·2	16·6	16·0	15·9	18·0	94	+4	6·7	+0·1	11·9	0	5	25	0	6	6	1	0	2	8	7	1	0
	1730	,,	3086·6	766·9	..	18·4	17·2	16·6	18·8	90	..	6·6	..	14·5	0	6	24	0	3	4	3	1	5	9	5	1	0
Nainital	0830	1953	1422·2	799·6	..	18·8	17·3	16·5	19·1	86	..	7·0	..	8·2	0	2	24	0	3	9	9	0	0	3	2	5	0
	1730	,,	1400·8	797·8	..	19·6	17·9	17·5	19·2	84	..	6·7	..	6·4	0	1	25	3	1	9	6	1	0	6	0	5	0
Tapoban	0830	..	..	..	..	18·8	17·3	16·7	19·2	89	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath (R)	0830																										
Lokpal (R)	0830																										
Mussooree	0830	2042	1421·2	791·3	—1·1	18·3	17·7	17·1	18·7	95	+2	7·2	+0·2	1·8	0	0	17	1	0	0	5	8	2	0	1	14	0
	1730	,,	1402·1	789·9	..	19·6	18·6	18·4	20·7	93	..	7·1	..	2·9	0	0	28	2	0	0	6	9	6	1	4	3	0
Simla	0830	2202	1426·8	777·1	+0·1	18·4	16·0	14·2	16·4	83	+3	5·9	—0·4	2·7	0	0	26	5	2	4	6	6	2	1	0	5	0
	1730	,,	1405·3	775·9	..	20·2	17·5	15·7	17·9	81	..	6·4	..	3·8	0	0	27	6	5	1	1	4	4	2	4	4	0
Dalhousie	0830	1959	..	..	..	19·3	17·7	16·7	19·3	87	..	3·7	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	..	..	..	23·2	21·9	20·6	25·5	87	..	4·1	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Dharamshala	0830	1211	1458·2	874 3	..	24·3	20·9	19·3	22·6	73	..	5·1	..	1·6	0	0	15	3	2	0	2	2	1	3	2	16	0
	1730	,,	1437·1	873·0	..	27·5	22·4	19·6	23·1	63	..	5·0	..	2·9	0	0	28	1	3	0	1	1	15	3	4	3	0
Abu (R)	0830	1195																									
(R)	1730	,,																									
Pachmarhi	0830	1075	1441·0	886·9	+0·7	21·5	20·8	20·4	24·0	94	+6	7·7	+0·5	11·4	0	3	26	0	0	0	0	0	0	27	2	2	0
	1730	,,	1420·1	884·6	..	23·9	21·9	20·8	24·8	84	..	7·4	..	12·4	0	3	27	0	0	0	0	0	0	29	1	1	0
Mahabaleshwar	0830	1382	1462·3	858·2	—0·1	17·8	17·8	17·8	20·4	100	+3	8·0	0	18·6	0	11	20	0	0	0	0	0	22	9	0	0	0
	1730	,,	1449·8	857·0	..	17·8	17·8	17·8	20·4	100	..	8·0	..	17·8	0	9	22	1	0	0	0	0	26	4	0	0	0
Nandi Hills	0830	..	..	..	..	17·3	17·0	16·7	19·1	97	..	6·5	..	19·7	0	14	17	4	0	0	0	1	1	9	16	0	0
Mercara	0830	1152	1490·2	884·4	+0·9	18·2	18·1	18·1	20·8	99	+4	7·3	—0·3	11·5	0	0	31	0	0	0	0	0	1	15	15	0	0
	1730	,,	1476·8	882·9	..	18·8	18·5	18·4	21·3	97	..	7·2	..	10·4	0	0	31	0	0	0	0	0	0	16	15	0	0
Kodaikanal	0530	2343	3117·4	768·7	..	12·3	11·0	10·0	12·2	86	..	6·7	..	13·5	0	7	23	0	0	0	0	1	3	14	12	1	0
	0830	,,	3135·5	769·9	+1·0	13·7	12·0	10·9	13·0	82	+5	6·2	+0·4	10·2	0	3	24	1	0	0	1	0	4	6	15	4	0
	1130	,,	3144·2	770·1	..	16·1	14·0	12·8	14·6	79	..	6·8	..	9·4	0	2	25	1	0	0	0	1	2	8	15	4	0
	1730	,,	3121·4	768·5	..	13·9	13·1	12·6	14·6	92	..	7·5	..	10·8	0	4	23	1	1	0	0	0	2	7	16	4	0
	2330	,,	3133·0	770·0	..	12·6	11·3	10·2	12·5	87	..	7·1	..	18·3	0	14	15	1	0	0	0	0	2	10	16	2	0

(R) Register not received. (a) Mean of 30 days. * Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations excluding Kashmir (*Contd.*)																											
Ootacamund	0830	2249	1491·9	778·1	+0·7	13·2	12·2	11·7	13·6	90	+1	6·9	—0·2	3·6	0	0	19	0	0	0	0	0	8	10	1	12	0
	1730	,,	1474·9	776·7	..	14·2	13·1	12·5	14·3	89	..	7·0	..	5·0	0	0	25	1	0	0	0	0	10	12	2	6	0
Coonoor	0830	1747	1487·8	825·2	..	18·2	15·3	13·4	15·7	74	+5	5·2	—1·2	7·3	0	2	21	0	0	0	5	3	9	3	3	8	0
Sikkim																											
Lachen	0830	..	..	..	..	15·2	14·5	13·9	16·3	97	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (Chumbi)	0830	..	..	..	..	15·1	14·5	14·0	16·1	94	+7	0·6	—3·7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa (R)	0830	3685																									
Ceylon																											
Colombo	0830	7	1010·6	1009·5	+0·3	26·4	24·4	23·4	29·1	82	—2	6·8	+0·6	13·0	0	1	29	0	0	0	0	0	14	16	0	1	0
	1730	,,	1008·4	1007·3	..	26·9	23·9	22·9	27·2	80	..	7·3	..	13·5	0	0	31	0	0	0	0	0	12	19	0	0	0
Trincomalee	0830	3	1007·8	1007·5	+0·7	28·0	24·1	22·2	26·9	70	—6	5·3	+1·2	24·1	0	26	5	0	0	0	0	1	29	1	0	0	0
	1730	,,	1005·3	1004·9	..	30·8	25·3	22·1	28·1	62	..	5·8	..	29·2	0	20	10	3	1	0	2	0	21	1	1	1	1
Batticoloa	0830	3	1008·2	1007·9	..	28·4	23·1	20·4	24·3	62	..	4·8	..	8·5	0	0	29	3	0	0	3	5	6	7	5	2	0
	1730	,,	1005·6	1005·3	..	30·0	24·4	21·6	26·6	61	..	5·9	..	16·7	0	12	18	1	1	2	13	5	2	5	1	1	0
Hambantota	0830	15	1009·3	1007·6	+0·6	27·2	24·2	23·2	27·8	79	—6	3·9	—0·1	22·9	0	24	7	0	0	0	0	0	6	25	0	0	0
	1730	,,	1006·6	1004·9	..	29·0	24·6	22·0	27·4	67	..	5·4	..	25·7	0	26	5	0	0	0	0	0	9	21	1	0	0
Mannar	0830	4	1008·4	1008·0	..	28·2	25·4	24·3	30·3	79	..	6·3	..	14·8	0	6	25	0	0	0	0	6	25	0	0	0	0
	1730	,,	1005·9	1005·5	..	28·6	25·6	24·2	30·2	77	..	5·8	..	17·1	0	13	18	1	0	0	0	5	25	0	0	0	0
Hydrometeorological Observatories Damodar Catchment																											
Bokaro	0830	239	999·4	973·0	..	28·1	25·7	24·5	31·0	82	..	6·5	..	7·4	0	0	30	2	0	1	11	2	7	5	2	1	0
	1730	,,	996·6	970·3	..	28·9	26·0	24·8	31·3	79	..	6·8	..	8·1	0	0	31	0	3	5	10	3	5	2	2	1	0
Hazaribagh	0830	615	997·6	930·8	..	25·5	22·1	20·5	23·8	74	..	4·0	..	9·9	0	0	30	0	1	7	7	2	7	6	0	1	0
	1730	,,	996·3	929·6	..	26·1	22·5	20·7	24·5	67	..	3·8	..	18·3	0	8	23	0	1	2	9	1	10	8	0	0	0
Tilaiya	0830	..	..	..	..	27·2	25·0	24·0	29·9	83	..	6·5	..	9·9	0	0	29	1	1	8	2	1	0	12	1	2	3
	1730	..	..	..	..	28·9	25·7	24·3	30·3	77	..	6·6	..	8·3	0	0	28	2	1	14	1	0	1	4	3	3	2
Ramgarh	0830	..	..	..	..	27·5	25·5	24·6	31·2	84	..	7·5	..	4·4	0	0	27	0	0	7	4	0	0	10	6	4	0
	1730	..	..	..	..	28·3	25·7	24·5	31·2	81	..	7·1	..	3·3	0	0	19	0	0	9	4	0	1	5	0	12	0
Panchet Hills	0830	..	..	..	..	28·5	26·3	25·3	32·4	83	..	7·3	..	7·5	0	1	28	1	3	7	1	5	6	6	0	2	0
	1730	..	..	..	..	29·6	26·6	23·9	32·3	79	..	7·0	..	8·4	0	3	26	1	2	13	3	4	3	3	0	2	0
Durgapur	0830	..	..	..	..	29·3	26·9	25·7	33·5	82	..	4·3	..	17·0	0	7	24	1	0	12	5	0	3	10	0	0	0
	1730	..	..	..	..	30·1	28·3	26·4	34·7	81	..	3·9	..	16·1	0	7	24	0	0	9	7	2	2	11	0	0	0
Mahanadi Catchment																											
Baramul	0830	64	1000·9	993·8	..	28·2	25·9	25·4	32·0	84	..	6·3	..	4·3	0	0	18	1	5	0	0	3	7	2	0	13	0
	1730	,,	998·3	991·2	..	28·4	26·3	25·4	32·0	85	..	6·8	..	2·0	0	0	9	0	1	0	0	0	2	3	3	22	0
Hirakud	0830	159	1000·8	983·1	..	27·0	25·1	24·3	30·6	86	..	7·1	..	4·7	0	0	25	0	0	0	1	4	18	2	0	6	0
	1730	,,	997·8	980·3	..	29·1	25·9	24·5	30·8	77	..	6·5	..	3·0	0	0	19	0	0	0	0	0	3	9	7	0	12	0
Khijrawan*	0830	..	..	..	..	25·6	23·7	22·9	27.7	85	..	5·8	..	9·5 (c)	0	0	25	0	0	0	0	0	4	16	7	0	4	0
	1730	..	..	..	..	26·7	24·3	23·2	28·4	81	..	5·5	..	9·9 (c)	0	0	25	0	1	0	0	1	16	7	1	5	0
Sonepur	0830	..	..	..	..	28·5	22·3	24·0	21·8	79	..	..	..	13·5	0	2	29	0	0	2	0	1	19	7	2	0	0
Ginabahar	0830	..	..	..	..	26·0	24·3	23·6	29·3	87	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Narbada Catchment																											
Punasa	0830	..	..	..	..	26·5	24·3	23·1	28·5	82	..	6·3	..	5·8	0	3	20	0	0	0	0	1	7	12	3	8	0
	1730	..	..	..	..	29·6	25·1	23·0	28·3	69	..	6·4	..	5·3	0	3	19	0	0	0	0	1	9	11	0	9	1
Bagra Tawa (R)	0830																										
(R)	1730																										
Thikri	0830	..	..	..	..	27·4	25·7	25·1	31·7	87	..	7·2	..	7·2	..	..	..	..	..	..	..	..	..	..	..	..	..
Tapti Catchment																											
Nandurbar ‡	0830	..																									
Sabarmati Catchment																											
Jhadol(R)	0830																										
Dharoi†	0830																										
	1730																										

(R) Register not rcieved. ‡ Converted to Class II Surface Observatoryfrom 12th July 1957. (c) Mean of 28 days. *Wind directions for complete month. † Data not availbale.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed, Km. per hour: Mean wind speed	Wind speed (Km. p. h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories (*Contd.*)																											
Ganga Catchment																											
Mukhim . .	0830	..	..	..	..	19·7	18·0	17·0	19·5	86	..	6·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·8	19·1	17·7	20·3	79	..	6·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri . . .	0830	..	..	..	..	26·2	23·3	22·0	26·6	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	31·5	24·5	21·4	25·6	55	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha . . .	0830	..	..	..	..	22·6	22·0	21·7	26·0	94	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·0	22·7	21·6	26·0	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara . . .	0830	..	..	..	..	24·9	23·2	22·6	27·3	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·8	23·8 (a)	22·9 (a)	28·1 (a)	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot . .	0830	..	..	..	..	25·5	23·6	22·7	27·6	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	24·5	23·5	23·1	28·2	92	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jomosom . .	0830	..	..	..	..	18·9	15·3	13·3	15·3	70	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·1	15·0	12·6	14·7	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timure . . .	0830	..	..	..	..	20·7	18·9	18·3	20·7	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·6	19·6	18·7	20·5	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dalcikh . .	0830	..	..	..	..	22·0	21·2	20·9	24·7	93		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	23·0	21·1	20·3	23·7	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura . .	0830	..	..	..	..	19·2	18·7	18·3	21·1	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·4	19·5	18·9	22·1	92	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari* .	0830																										
	1730																										
Sallyana . . .	0830	..	..	..	..	22·7	19·9 (a)	18·3 (a)	21·3 (a)	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·5 (a)	20·0 (a)	18·6 (a)	21·6 (a)	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal . . .	0830	..	..	..	..	28·1	26·1 (a)	25·3 (a)	32·3 (a)	85 (a)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	29·6	27·1 (a)	26·3 (a)	33·9 (a)	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu . .	0830	1333	1431·3	860·4	..	23·1	20·9	20·0	23·1	82	..	6·8	..	0·9	0	0	9	2	1	1	3	0	1	0	1	22	0
	1130	"	1432·0	860·7	..	25·9	22·2	20·5	24·1	72	..	6·3	..	1·5	0	0	8	1	0	1	2	0	0	1	3	23	0
	1730	"	1412·2	858·8	..	24·2	21·7	20·5	24·2	80	..	6·8	..	2·0	0	0	16	3	1	2	3	0	3	0	4	15	0
Kosi Catchment																											
Chautara . .	0830	..	..	..	..	21·2	20·7	20·7	24·1	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·2	21·0	20·3	24·1	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldunga . .	0830	..	..	..	..	20·0	19·3	18·9	21·9	94	..	7·6	..	1·0	0	0	8	0	1	1	0	1	4	1	0	23	0
	1130	..	..	..	..	21·8	20·5	19·9	23·3	89	..	7·3	..	1·3	0	0	11	0	0	1	0	4	3	3	0	20	0
	1730	..	..	..	..	20·0	19·1	18·3	21·6	92	..	7·4	..	0·8	0	0	7	0	0	0	0	0	3	3	1	24	0
Barahkshetra . .	0830	146	1001·1	984·8	..	26·9	25·6	25·2	31·5	90	..	7·4	..	2·7	0	0	14	1	0	1	0	0	4	6	2	17	0
	1130	"	1000·5	984·3	..	28·7	26·3	25·4	32·4	82	..	7·7	..	5·7	0	1	18	0	0	0	0	0	10	9	0	12	0
	1730	"	997·6	982·1	..	29·0	26·8	26·0	33·4	84	..	7·1	..	2·3	0	0	13	0	0	1	0	0	2	10	0	18	0
Angbung . .	0830	..	..	..	..	23·1	22·2	21·9	26·2	93	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung . .	0830	..	..	..	..	20·3	19·4	18·9	22·1	92	..	7·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	22·4	20·6	19·7	23·1	85	..	7·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·3	19·7	19·0	21·8	87	..	7·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok . .	0830	..	..	..	..	20·6	19·5	18·9	21·9	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallungchung Gola(*)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(*)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhojpur . . .	0830	..	..	..	..	20·8	19·9 (b)	19·6 (b)	22·8 (b)	92 (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·5	19·8	19·4	22·7	94	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur . .	0830	..	..	..	..	22·9	21·9	21·3	25·7	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tista Catchment*																											
Gangtok . . .	0830	1812	1442·0	814·6	..	18·9	18·5	18·2	21·1	97	..	7·7	..	4·3	0	0	25	3	1	1	2	5	7	3	3	5	0
	1130	"	1437·9	814·3	..	20·0	19·0	18·8	21·3	93	..	7·6	..	5·1	0	0	30	0	0	0	1	11	12	4	2	1	0
	1730	"	1420·3	812·7	..	19·0	18·4	18·1	20·9	94	..	8·0	..	4·5	0	0	26	2	2	0	8	9	4	1	0	5	0
Geyzing	0830	..	..	..	..	21·5	20·4	19·7	23·3	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·6	20·4	20·0	23·2	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

*Data not reliable. (a) Mean of 30 days. (b) Mean of 29 days. (R) Register not received. *Data not available.

MONTHLY MEANS OF UPPER WINDS, JULY, 1957 (Asadha 10-Sravana 9, 1879 Saka)

During the month, observations of velocity and direction of upper winds were made at 54 stations in India. Out of these, 42 stations recorded observations by means of pilot balloons only and the remaining 12 stations made some observations by means of radiowind method and the other observations by the pilot balloon method. Particulars of these stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the Table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a. m. s. l. are given under Table IV and data above 9.0 km. a. m. s. l. under Table V.

In Tables IV and V :

n—represents the number of observations ;

V—represents the mean wind speed in knots irrespective of direction ;

v—represents the resultant mean velocity in knots ;

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0.15 km. a. g., 0.3, 0.6, 0.9, 1.5, 2.1, 3.0, 3.6, 4.5, 5.4, 6.0, 7.2, 9.0, 10.5, 12.0, 14.1, 16.2, 18.0, 21.0, 24.0, 27.0, 30.0, 33.0 and 36.0 km. a. m. s. l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km. a. m. s. l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

Station	Lat. N	Long. E.	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November, 1951	0530	1730	2330	
Ahmedabad	23°04′	72°38′	60	19th May, 1928	0530	1730	2330	
Amausi	26°45′	80°53′	132	20th November, 1950	0530	1730	2330	
Ambala	30°23′	76°46′	283	1st April, 1941	0530	1730	2330	
Anantapur	14°41′	77°37′	364	12th February, 1946	0530	1730	2330	
Asansol	23°41′	86°59′	136	29th May, 1942	0530	1730	2330	
Baghdogra	26°38′	88°19′	140	7th June, 1953	0530	1730	2330	
Bairagarh	23°17′	77°21′	532	26th February, 1943	0530	1730	2330	
Bamrauli	25°27′	81°44′	103	20th February, 1930	0530*	1130	1730*	2330
Bangalore	12°58′	77°35′	936	19th May, 1915	0530	1730	2330	
Bareilly	28°22′	79°24′	180	12th January, 1943	0530	1730		
Begumpet	17°27′	78°28′	553	1st September, 1929	0530	1730	2330	
Bhagalpur	25°14′	86°57′	61	19th May, 1950	0530	1730		
Bhubaneshwar	20°15′	85°50′	55	5th December, 1942	0530	1730	2330	
Bhuj	23°15′	69°48′	111	14th September, 1937	0530	1730	2330	
Bikaner	28°00′	73°18′	229	18th October, 1946	0530	1730	2330	
Chikalthana	19°51′	75°24′	583	7th October, 1951	0530	1730	2330	
Cochin†	09°56′	76°14′	3	16th March, 1942	0530	1730	2330	
Darjeeling	27°03′	88°16′	2115	21st May, 1956	0530	1730		
Dum Dum	22°39′	88°27′	19	14th May, 1921	0530*	1130	1730*	2330
Gadag	15°25′	75°38′	650	3rd May, 1943	0530	1730	2330	
Gannavaram	16°32′	80°48′	24	8th April, 1942	0530	1730	2330	
Gauhati	26°05′	91°43′	51	12th March, 1955	0530*	1130	1730*	2330
Gaya	24°45′	84°57′	119	19th March, 1937	0530	1730	2330	
Gopalpur	19°16′	84°53′	24	15th February, 1946	0530	1730	2330	
Gorakhpur	26°45′	83°22′	83	5th January, 1943	0530	1730		
Gwalior	26°14′	78°15′	219	7th May, 1938	0530	1730	2330	
Imphal	24°51′	93°58′	805	8th March, 1952	0530	1730	2330	
Jabalpur	23°10′	79°57′	402	30th July, 1928	0530	1730	2330	
Jagdalpur	19°05′	82°02′	562	25th March, 1948	0530	1730	2330	
Jaipur	26°49′	75°48′	404	6th June, 1953	0530	1730		
Jamshedpur	22°49′	86°11′	147	23rd July, 1942	0530	1730		
Jharsuguda	21°55′	84°05′	234	1st May, 1944	0530	1730	2330	
Jodhpur	26°18′	73°01′	229	15th October, 1934	0530*	1130	1730*	2330
Madras	13°00′	80°11′	29	8th April, 1926	0530*	1130	1730*	2330
Mangalore	12°52′	74°51′	40	4th June, 1928	0530	1730	2330	
Minicoy	08°18′	73°00′	16	14th April, 1941	0530	1730	2330	
Mohanbari	27°29′	95°01′	110	1st June, 1948	0530	1730	2330	
Mussoorie	30°27′	78°05′	2050	3rd November, 1955	0530	1730		
Nagpur	21°06′	79°03′	316	23rd April, 1943	0530*	1130	1730*	2330
Nanpara	27°50′	81°30′	141	23rd April, 1957	0530	1730		
New Delhi	28°35′	77°12′	227	20th October, 1936	0530*	1130	1730*	2330
Poona	18°32′	73°51′	593	5th January, 1925	0530	1730	2330	
Port Blair	11°40′	92°43′	93	29th October, 1945	0530*	1130	1730*	2330
Raipur	21°14′	81°39′	308	15th July, 1944	0530	1730	2330	
Santa Cruz	19°07′	72°51′	12	14th May, 1933	0530*	1130	1730*	2330
Tezpur	26°37′	92°47′	79	12th August, 1932	0530	1730	2330	
Tiruchirapalli	10°46′	78°43′	96	22nd June, 1936	0580	1730	2330	
Trivandrum	08°29′	76°57′	73	8th December, 1928	0530*	1130	1730*	2330
Udaipur	24°35′	73°42′	587	24th June, 1947	0530	1730	2330	
Vengurla	15°52′	73°38′	8	22nd November, 1941	0530	1730	2330	
Veraval	20°54′	70°22′	17	13th October, 1941	0530*	1130	1730*	2330
Visakhapatnam	17°43′	83°14′	10	24th September, 1928	0530	1730	2330	
Amritsar	31°38′	74°52′	230	21st June, 1957	0530*	1730*		

*Radiowind ascents.

†Naval Meteorological office.

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TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5·9	5·3	147	31	5·6	4·8	169	31	6·3	5·7	155	31	6·0	4·9	220	31	7·8	5·0	220	31	7·8	6·4	215
0·15 a. g. . .	28	13·7	12·8	152	31	12·1	11·3	177	31	14·5	13·8	167	28	12·5	11·2	237	30	11·2	8·4	225	30	14·5	12·8	226
0·3 a.m.s.l. .	27	18·1	16·9	167	31	14·6	13·8	179	31	17·3	16·5	174	28	16·2	14·7	241	30	12·1	9·2	230	30	16·4	14·7	230
0·6 ,, .	26	19·5	17·9	173	29	17·2	16·4	177	29	18·7	18·0	183	26	20·5	19·1	258	30	13·0	10·6	237	30	19·6	18·3	240
0·9 ,, .	25	17·6	15·6	180	28	18·6	17·5	180	28	17·0	16·1	184	22	20·0	18·9	188	30	14·1	11·7	245	28	16·9	15·7	246
1·5 ,, .	19	15·3	13·4	184	26	17·6	15·7	181	23	12·9	12·2	184	17	16·9	15·7	251	25	14·8	11·1	258	18	12·5	9·2	256
2·1 ,, .	13	12·9	11·8	175	19	14·4	11·4	181	19	11·3	9·8	186	10	12·0	9·0	250	16	12·7	9·6	250	15	10·6	0·8	168
3·0 ,, .	11	12·2	10·3	171	16	13·8	9·9	190	18	10·9	8·2	184	9	11·2	0·7	298	9	11·0	5·8	107	11	11·6	3·9	063
3·6 ,, .	9	11·1	7·6	158	13	13·3	8·5	175	10	7·7	3·1	214	8	12·6	2·8	353	8	9·7	5·7	103	4	13·7	5·3	120
4·5 ,, .	5	8·0	6·5	198	10	8·8	4·1	170	3	3·3	2·6	332	4	10·3	9·2	079	5	10·4	7·9	117	2	11·5	10·7	170
5·4 ,, .	4	10·5	9·6	147	7	7·7	1·7	127					3	13·7	10·6	228	2	14·0	12·5	085	1	10·0	10·0	205
6·0 ,, .	4	11·5	9·1	116	6	8·2	5·3	103					3	13·7	13·5	112	1	4·0	4·0	060	1	9·0	9·0	130
7·2 ,, .	1	11·0	11·0	85	4	16·7	16·3	090					2	19·0	18·7	112								
9·0 ,, .	1	10·0	10·0	90	1	21·0	21·0	090																

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·9	1·5	132	31	4·9	0·5	178	30	3·4	1·6	110	31	4·7	3·5	109	31	5·9	1·3	115	31	5·1	2·9	120
0·15 a. g. . .	27	11·1	3·7	140	28	9·2	2·7	127	30	10·3	4·8	135	30	13·2	8·7	114	30	11·5	2·8	124	31	15·1	5·4	124
0·3 a.m.s.l. .	27	11·5	3·8	147	28	9·5	2·1	158	30	10·8	4·8	141	30	6·8	4·3	105	30	7·8	2·2	125	31	7·8	3·4	124
0·6 ,, .	25	14·6	4·5	198	28	10·9	2·3	160	30	12·5	5·7	144	30	14·4	7·6	132	30	11·9	2·6	126	31	16·0	6·0	131
0·9 ,, .	15	22·4	6·9	196	28	11·6	2·3	162	30	11·5	5·1	145	27	14·3	5·1	138	30	12·0	2·4	143	31	15·6	5·2	143
1·5 ,, .	24	11·0	3·1	211	28	12·5	2·2	202	27	9·6	2·9	185	26	14·3	2·1	297	29	12·8	1·8	261	29	12·2	2·2	245
2·1 ,, .	23	10·5	1·3	270	26	13·3	3·8	245	23	9·6	3·5	285	20	15·9	5·4	316	26	13·7	7·9	310	29	12·9	5·2	302
3·0 ,, .	16	11·4	6·3	348	21	14·2	5·3	298	13	9·6	2·9	343	15	16·2	10·0	327	24	15·4	13·1	316	23	12·9	5·7	325
3·6 ,, .	6	8·3	4·7	304	17	14·7	5·8	304	2	5·0	4·3	074	12	13·8	10·5	324	18	14·6	13·9	325	10	9·1	6·6	325
4·5 ,, .	2	6·0	1·9	228	8	8·9	2·9	083					9	10·7	9·4	331	15	12·8	12·0	326	8	9·5	2·3	048
5·4 ,, .	1	7·0	7·0	120	5	7·8	6·1	096					5	8·4	3·8	274	13	10·2	8·7	306	5	5·8	4·4	151
6·0 ,, .	1	9·0	9·0	130	4	10·0	6·3	088					3	10·7	10·7	207	12	9·5	8·6	284	4	7·7	2·0	026
7·2 ,, .					1	12·0	12·0	085					3	14·7	13·9	200	8	14·5	11·0	252	1	2·0	2·0	270
9·0 ,, .													3	13·7	12·3	219	6	19·0	17·1	263				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 **Km.** above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	ANANTAPUR												ASANSOL											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	9·0	8·8	257	31	17·0	16·3	264	31	12·9	12·7	265	31	3·2	2·1	146	31	3·3	2·5	136	31	3·3	2·7	146
0·15 a.g.	30	16·0	15·7	254	30	23·2	22·3	261	29	20·3	20·2	256	26	8·8	3·3	175	30	9·3	6·3	142	29	10·8	8·2	159
0·3 a.m.s.l.													26	9·3	3·3	188	30	9·4	6·3	143	29	11·0	8·4	163
0·6 ,,	30	18·6	18·3	255	30	23·5	22·7	263	29	21·9	21·8	260	26	12·8	3·6	225	30	10·9	7·2	143	29	13·8	10·4	173
0·9 ,,	30	24·5	23·9	268	30	21·7	21·3	267	29	25·9	25·6	265	25	12·5	4·5	243	28	10·7	7·0	142	25	13·7	8·8	175
1·5 ,,	29	28·5	27·9	277	30	23·2	22·8	270	29	27·9	27·5	276	18	9·3	3·8	241	20	10·8	6·3	149	17	9·7	4·0	180
2·1 ,,	26	25·2	24·6	284	28	22·7	22·3	275	26	23·8	23·5	282	15	8·5	5·4	249	18	11·2	4·4	153	13	8·0	2·4	219
3·0 ,,	25	23·0	22·5	285	23	22·1	21·4	287	16	17·9	17·5	282	9	7·3	5·1	251	11	8·8	3·2	191	6	4·8	4·0	307
3·6 ,,	23	20·3	19·3	288	17	20·8	20·3	287	8	11·7	11·3	275	9	6·3	3·8	234	7	8·3	4·0	202	4	3·5	1·7	261
4·5 ,,	17	14·4	12·7	279	12	20·3	19·3	286	4	10·7	9·6	276	7	7·3	2·4	247	4	9·3	8·1	221				
5·4 ,,	13	13·4	6·6	285	8	24·7	22·8	289	2	14·5	11·2	256	4	4·3	2·6	124	3	7·3	6·5	149				
6·0 ,,	11	10·0	6·7	299	6	23·7	23·3	287					3	4·7	2·9	082	2	4·5	2·7	161				
7·2 ,,	5	9·0	2·1	349	3	15·0	14·7	286																
9·0 ,,	1	10·0	10·0	270	1	12·0	12·0	310																

Station	BAGHDOGRA												BAIRAGARH											
Time in I. S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·9	3·3	053	31	4·4	3·0	088	31	3·6	3·6	059	31	7·9	7·4	264	31	7·6	5·3	283	31	6·7	5·7	255
0·15 a.g.	19	11·1	10·5	066	29	8·3	5·4	087	25	10·8	10·6	066	25	18·4	17·6	267	30	13·4	10·1	273	31	16·2	14·1	260
0·3 a.m.s.l.	19	11·4	10·4	070	29	8·4	5·7	088	25	10·9	10·4	074												
0·6 ,,	19	11·3	8·3	093	29	8·5	7·2	089	25	11·2	10·0	096	27	15·2	14·4	260	30	12·0	9·6	271	31	14·4	12·6	254
0·9 ,,	17	11·6	10·7	098	28	9·3	7·1	094	24	11·6	10·8	101	20	23·3	22·1	281	30	15·5	9·8	280	31	18·2	16·0	266
1·5 ,,	11	12·8	9·0	099	24	11·2	9·7	106	19	11·4	10·6	100	11	14·3	10·3	307	26	15·4	13·3	283	27	15·6	12·4	283
2·1 ,,	6	13·3	13·3	087	20	12·8	9·9	100	14	10·8	10·5	102	11	11·3	3·2	339	21	12·0	8·8	297	23	10·3	4·6	304
3·0 ,,	5	13·0	10·9	117	13	14·4	10·7	106	8	6·6	2·2	164	9	10·3	5·5	024	11	8·7	4·6	279	12	10·0	5·8	345
3·6 ,,	3	7·0	4·1	224	9	14·1	11·1	115	6	8·7	5·7	242	4	7·7	4·9	078	7	7·7	3·0	164	5	7·6	2·9	356
4·5 ,,	2	9·5	8·0	234	7	13·6	8·1	133	2	11·5	11·3	264	2	6·5	6·5	105	5	6·0	4·4	136	2	8·5	7·6	107
5·4 ,,	2	7·5	7·5	260	3	9·7	4·6	124					2	7·5	6·7	101	4	11·5	11·4	126				
6·0 ,,	2	6·5	5·1	267	1	23·0	23·0	120					2	6·0	4·9	078	4	11·7	11·4	117				
7·2 ,,	2	5·0	4·9	348									1	15·0	15·0	070	1	21·0	21·0	105				
9·0 ,,																	1	26·0	26·0	105				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	BAMRAULI												BANGALORE							
Time in I. S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·3	0·9	177	31	6·7	0·4	308	31	4·9	0·9	149	31	3·2	1·5	201	31	10·1	9·8	257	31	12·2	11·9	264
0·15 a. g. . .	28	6·0	1·2	214	30	9·1	0·7	330	28	6·3	0·3	244	31	10·9	4·1	152	23	17·4	17·1	254	31	20·6	20·1	264
0·3 a.m.s.l. .	28	6·9	1·6	220	30	8·9	0·8	318	28	6·9	0·5	241	31	11·8	3·7	149								
0·6 ,, .	28	10·0	2·6	240	28	9·9	1·7	313	28	9·1	1·0	280	31	12·7	3·6	164								
0·9 ,, .	28	11·8	5·4	254	23	11·0	2·0	313	28	10·7	1·7	276	29	12·9	3·5	203								
1·5 ,, .	28	11·4	2·0	287	16	13·9	2·6	013	28	10·9	2·0	303	27	14·7	0·8	242	12	27·8	27·5	275	31	21·9	21·5	272
2·1 ,, .	28	11·8	2·3	330	11	16·0	6·3	017	28	10·2	2·3	297	21	19·7	1·3	281	4	22·0	21·1	285	27	24·0	24·0	280
3·0 ,, .	28	11·2	2·1	320	7	16·3	8·6	049	28	10·5	1·5	334	13	8·9	2·6	341	4	17·0	16·3	289	15	14·1	13·6	290
3·6 ,, .	28	10·6	0·1	083	4	20·3	14·6	060	26	10·3	1·8	006	8	7·8	1·3	057	1	13·0	13·0	260	8	10·7	9·7	282
4·5 ,, .	28	9·9	2·9	128	2	8·0	3·0	086	26	10·1	2·7	064	4	8·7	3·4	260	1	20·0	20·0	255	5	14·2	13·6	292
5·4 ,, .	27	10·1	4·0	108					25	10·3	4·0	104	1	6·0	6·0	285					4	11·7	10.1	286
6·0 ,, .	27	10·8	4·5	102					24	11·6	5·6	103									4	11·5	8·6	274
7·2 ,, .	26	12·9	9·1	100					24	13·5	9·1	090									2	7·0	6·3	186
9·0 ,, .	19	17·0	15·7	095					20	17·4	14·8	086												

Station	BANGALORE				BAREILLY								BEGUMPET											
Time in I. S. T.	2330				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	10·3	10·0	261	31	3·9	3·5	086	31	4·6	1·9	080	31	8·4	7·7	267	31	8·1	6·7	278	31	11·0	10·6.	270
0·15 a. g. . .	31	18·3	18·2	255	29	10·0	6·1	101	31	8·7	3·6	095	29	18·5	17·8	266	30	17·1	15·4	272	28	20·1	19·5.	266
0·3 a.m.s.l. .					29	9·0	5·7	095	31	8·5	3·3	091												
0·6 ,, .					27	14·6	5·1	155	31	10·3	4·9	127	29	12·4	11·9	265	30	12·7	11·3	271	28	13·3	12·9	266
0·9 ,, .					26	15.4	3.6	182	29	10·6	4·9	138	29	25·9	25·0	282	30	18·9	17·1	274	28	25·5	24·8	274
1·5 ,, .	29	28·3	28·0	269	11	30·1	8·6	262	26	11·1	10.0	166	25	30·8	30·1	286	29	21·4	20·4	276	28	28·5	27·8	280
2·1 ,, .	21	21·9	21·4	279	16	13·3	4·2	228	24	12·7	2·4	291	23	27·5	26·9	288	26	23·0	22.2	280	21	25·1	24·1	283
3·0 ,, .	14	14·8	13·9	289	8	11·3	8·6	329	19	13·0	1·7	345	21	22·4	21·5	292	22	20·2	19·3	282	12	15·3	14·1	290
3·6 ,, .	10	11·9	10·3	291	6	8·2	5·5	334	16	11·0	5·4	307	16	18·7	18·0	281	11	19·0	17·5	290	1	6·0	6·0	305
4·5 ,,	7	10·3	7·9	310	6	5·0	1·5	300	15	10·8	4·9	301	12	15·3	13·3	277	5	15·6	11·7	290				
5·4 .	4	7·5	3·2	297	5	7·6	4·0	168	12	10·3	3·9	300	4	10·0	9·3	292	2	3·5	3·4	310				
6·0 .	4	7·5	4·7	303	5	4·2	3·1	134	12	9·7	2·5	273	4	9·7	8·3	283	1	2·0	2·0	165				
7·2 ,, .	2	7·5	7·5	056	5	10·6	5·1	136	9	10·9	1·8	014					1	2·0	2·0	200				
9·0 ,, .					1	24·0	24·0	135	8	9·5	1·9	173					1	8·0	8·0	095				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	BHAGALPUR								BHUBANESHWAR												BHUJ			
Time in I. S. T.	0530				1730				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·2	2·8	099	31	4·1	2·8	102	31	4·0	3·6	236	31	7·5	6·2	205	31	4·4	3·6	213	31	6·5	6·2	236
0·15 a. g.	25	11·4	7·6	136	29	10·4	7·1	108	30	11·7	9·8	241	28	12·7	9·3	205	27	12·1	10·4	214	31	16·1	15·5	245
0·3 a.m.s.l.	25	13·2	7·9	146	29	11·4	7·4	114	30	13·3	11·2	246	28	13·4	10·2	217	27	13·2	11·7	226	31	17·5	16·6	245
0·6 ,,	21	13·5	8·2	164	29	13·5	8·7	119	29	14·1	12·6	251	27	14·3	10·7	223	27	14·8	12·1	235	31	23·2	22·0	251
0·9 ,,	20	12·2	7·1	167	29	13·7	8·6	124	26	17·0	14·5	263	26	12·8	8·4	234	26	14·8	11·2	244	31	22·0	11·3	250
1·5 ,,	18	11·5	5·3	151	26	13·1	7·4	127	24	15·5	13·1	275	20	10·1	6·6	262	23	12·0	8·5	247	24	16·8	12·8	238
2·1 ,,	17	10·7	4·2	141	22	12·3	6·5	126	19	13·8	2·9	234	14	9·9	3·5	259	21	11·3	6·9	256	17	12·3	5·5	206
3·0 ,,	17	10·3	4·4	145	17	12·2	5·0	129	13	12·2	7·0	120	9	8·9	2·5	191	17	7·5	3·7	181	12	10·7	7·7	099
3·6 ,,	16	9·0	2·9	179	14	10·3	2·0	197	9	8·9	2·7	196	5	7·2	6·3	168	3	4·0	0·5	052	10	11·1	7·3	087
4·5 ,,	12	8·4	2·7	123	9	7·9	1·9	254	6	8·2	3·3	136	2	4·0	2·3	205	3	5·3	2·4	094	8	11·5	6·4	108
5·4 ,,	9	6·3	2·9	136	8	6·7	0·9	300	5	10·2	6·6	134	1	7·0	7·0	145	1	8·0	8·0	030	5	11·6	6·7	067
6·0 ,,	6	7·2	3·3	121	7	6·1	1·4	090	4	16·3	11·3	129	1	13·0	13·0	100	1	7·0	7·0	130	4	11·5	6·1	093
7·2 ,,	4	10·5	6·6	105	5	6·4	5·2	063	2	19·0	1·9	086									2	9·0	7·9	134
9·0 ,,	2	9·5	9·5	060	3	17·3	16·2	099	1	37·0	37·0	105									2	11·5	11·5	096

Station	BHUJ								BIKANER												CHIKALTHANA			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	9·7	9·3	234	31	7·6	7·4	230	31	6·5	5·4	235	31	5·9	4·4	230	31	7·4	5·9	202	31	10·4	9·9	267
0·15 a.g.	31	17·5	17·1	240	30	18·0	17·7	235	30	16·4	11·2	265	31	10·1	6·2	227	31	18·0	14·5	207	31	16·3	15·8	263
0·3 a.m.s.l.	31	18·0	17·6	239	30	18·8	18·3	236	30	12·5	8·3	225	31	10·1	6·3	225	31	15·2	12·3	201				
0·6 ,,	31	18·5	18·0	243	30	23·3	22·5	242	30	23·7	20·8	245	31	12·0	8·5	235	31	20·2	16·7	214				
0·9 ,,	30	17·0	16·3	246	29	21·1	20·1	243	30	21·2	19·1	254	31	11·4	6·6	238	31	18·3	14·7	224	31	20·1	19·6	270
1·5 ,,	24	11·8	8·8	247	24	14·9	10·6	225	29	12·1	8·8	272	29	9·5	6·3	253	29	13·1	9·1	261	23	27·8	27·0	276
2·1 ,,	21	9·9	2·5	242	20	9·1	3·1	145	28	8·3	3·0	326	28	7·4	4·6	300	28	9·5	3·9	291	6	19·0	17·6	281
3·0 ,,	19	10·6	4·0	064	19	10·0	5·7	074	22	8·9	4·5	036	26	9·1	7·6	350	24	9·6	7·0	015	5	8·4	6·4	278
3·6 ,,	19	9·8	5·7	057	18	11·4	7·6	063	18	10·1	6·2	045	25	10·4	8·4	348	18	10·8	6·6	013	2	7·5	7·3	322
4·5 ,,	19	10·2	7·3	054	15	11·2	8·4	045	14	12·6	10·0	011	20	11·1	8·5	354	5	10·8	9·6	016	1	6·0	6·0	040
5·4 ,,	17	10·3	6·6	049	10	12·8	9·3	045	9	12·1	7·7	018	18	12·9	7·1	332								
6·0 ,,	16	9·5	4·6	076	9	12·4	8·1	056	8	12·1	2·6	061	18	15·7	9·0	310								
7·2 ,,	15	11·3	5·4	104	5	10·4	10·0	086	4	18·5	2·2	342	16	15·3	8·0	246								
9·0 ,,	9	16·4	9·2	099					3	16·3	8·5	172	11	14·5	4·4	216								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	CHIKALTHANA								COCHIN												DARJEELING			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	15·2	14·5	265	31	10·9	10·2	267	31	2·6	0·3	323	31	5·8	4·8	303	31	3·3	2·1	309	31	CALM		
0·15 a.g. .	29	21·7	20·7	263	27	17·8	16·7	265	11	7·9	5·5	268	19	11·5	10·3	291	12	9·3	6·8	277	4	2·5	1·6	026
0·3 a.m.s.l. .									11	14·3	13·3	276	19	15·8	14·5	287	12	12·7	10·1	279				
0·6 ,, .									11	19·4	18·8	280	19	19·5	13·8	303	12	16·8	15·5	286				
0·9 ,, .	29	21·8	21·5	270	27	20·8	20·2	267	11	22·4	21·7	286	19	21·0	20·4	295	12	21·5	19·6	284				
1·5 ,, .	26	24·7	24·0	271	26	26·0	25·4	273	11	22·6	22·4	288	18	20·6	20·3	298	10	23·3	21·8	292				
2·1 ,, .	18	23·2	21·3	275	22	22·5	21·3	273	10	21·6	21·4	284	14	16·3	16·0	300	5	14·2	14·4	311				
3·0 ,, .	5	12·8	6·4	289	12	13·6	10·4	296	6	21·1	20·6	281	10	15·9	15·6	285	1	8·0	8·0	335	4	6·3	0·3	058
3·6 ,, .					3	12·3	10·8	344	4	17·3	16·8	270	4	7·7	7·1	287	1	12·0	12·0	320	3	6·3	2·2	228
4·5 ,, .					1	21·0	21·0	340	1	13·0	13·0	275	1	3·0	3·0	289					3	8·7	5·6	220
5·4 ,, .					1	15·0	15·0	315													2	4·0	1·0	020
6·0 ,, .																					1	5·0	5·0	040
7·2 ,, .																								
9·0 ,, .																								

Station	DARJEELING				DUM DUM												GADAG			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	0·3	0·2	167	31	4·3	2·9	183	31	5·0	3·3	169	31	5·1	4·0	176	31	4·4	3·4	170	31	9·6	9·0	255
0·15 a.g. . .	3	5·3	4·7	118	31	10·2	7·7	194	31	9·5	6·9	179	30	13·4	11·4	191	30	12·9	10·9	190	30	20·3	20·1	255
0·3 a.m.s.l. .					31	11·5	8·4	202	31	10·6	7·5	179	30	12·9	11·1	192	30	16·0	13·7	197				
0·6 ,, .					30	13·1	8·8	207	28	11·5	7·0	182	30	12·2	10·0	193	29	17·4	15·1	205				
0·9 ,, .					29	12·8	8·3	214	27	12·8	7·4	193	29	11·8	8·9	191	26	16·8	14·4	208	30	23·3	22·9	263
1·5 ,, .					28	10·7	6·6	204	22	11·6	6·7	187	29	11·3	7·6	196	23	12·7	10·0	205	20	28·2	27·6	274
2·1 ,, .					28	9·9	5·4	199	12	9·0	4·4	009	29	11·1	4·0	215	19	9·2	6·7	200	9	22·9	20·8	274
3·0 ,, .	3	5·0	2·4	110	27	10·7	5·6	197	11	9·3	4·2	172	29	11·0	6·1	198	15	6·9	3·8	157	2	11·0	10·9	293
3·6 ,, .									7	9·6	7·5	200					6	6·0	4·5	146	1	11·0	11·0	255
4·5 ,, .					27	9·9	5·9	156	4	6·5	5·7	142	29	10·3	5·5	148								
5·4 ,, .					27	12·0	7·7	124	3	7·7	7·1	127	29	11·1	6·0	137								
6·0 ,, .					27	12·6	8·8	115	3	8·7	8·3	125	29	11·1	7·0	117								
7·2 ,, .					25	14·3	12·8	103					28	13·9	10·3	108								
9·0 ,, .					24	22·7	21·8	100					26	18·8	17·0	101								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	GADAG								GANNAVARAM												GAUHATI			
Time in I.S.T.	1730				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	12·7	12·5	270	31	9·9	9·7	266	31	8·3	7·7	266	31	8·1	6·7	281	31	6·5	4·7	246	31	1·6	0·6	053
0·15 a.g.	29	25·0	24·5	259	29	20·7	20·5	259	26	15·0	13·9	268	30	12·3	10·3	283	25	10·6	8·2	245	29	5·8	2·0	023
0·3 a.m.s.l.									26	19·3	18·2	272	30	12·7	11·3	281	25	11·7	9·7	255	29	5·7	1·7	357
0·6 ,,									26	25·8	24·8	279	30	13·8	13·1	284	25	16·2	14·9	265	29	6·4	1·4	335
0·9 ,,	29	25·4	25·0	263	29	23·8	23·5	267	26	27·6	26·6	284	30	17·6	16·9	283	25	19·4	18·8	268	29	7·3	1·5	229
1·5 ,,	23	26·3	26·1	271	21	29·3	29·0	275	25	24·6	23·8	292	29	22·5	21·8	283	24	21·1	20·5	273	29	10·0	5·1	229
2·1 ,,	10	22·1	21·7	281	14	25·0	24·4	283	24	21·2	19·9	284	28	26·6	26·0	284	20	20·9	20·4	284	29	12·0	7·9	220
3·0 ,,	3	17·6	17·6	294	3	10·0	8·8	301	20	17·9	17·3	270	23	22·8	21·6	287	15	18·9	17·5	290	29	12·3	7·6	226
3·6 ,,					1	16·0	16·0	335	14	18·6	17·6	269	19	19·6	18·7	282	8	9·5	7·8	293	27	11·4	6·7	215
4·5 ,,									4	16·3	12·3	271	12	11·9	11·3	288	2	3·0	2·9	201	26	11·2	5·0	217
5·4 ,,									2	7·0	3·4	278	8	9·6	7·6	280	2	4·5	3·7	151	26	10·6	4·9	219
6·0 ,,									1	10·0	10·0	235	7	11·1	7·5	265	2	6·5	4·7	169	25	10·5	4·3	196
7·2 ,,									1	5·0	5·0	120	4	13·3	3·0	085	1	3·0	3·0	035	25	9·6	2·7	124
9·0 ,,													3	17·7	17·7	089					19	11·9	7·6	098

Station	GAUHATI									GAYA										
Time in I.S.T.	1130				1730*				2330	0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·8	2·4	010	30	3·2	1·4	285	31	1·8	1·0	189	31	2·6	0·9	141	31	4·6	1·5	082	31	3·3	1·2	129
0·15 a.g.	28	6·7	4·2	014	30	7·3	2·2	265	28	4·3	2·1	242	29	11·5	3·3	195	27	8·5	2·6	097	26	11·0	5·8	140
0·3 a.m.s.l.	28	7·5	3·9	025	30	6·9	2·5	272	28	4·6	2·8	279	29	12·1	4·1	204	27	8·8	2·5	096	26	11·7	6·5	144
0·6 ,,	28	7·6	2·3	011	30	7·2	3·0	275	28	6·2	3·9	281	27	14·8	5·1	204	27	9·4	4·6	090	26	12·2	7·2	135
0·9 ,,	28	8·1	1·7	182	28	8·4	3·3	263	27	7·7	4·0	246	26	13·7	5·1	210	24	10·5	4·2	098	25	11·7	7·5	140
1·5 ,,	27	11·6	6·9	214	28	10·0	6·8	235	22	10·0	7·9	237	21	12·2	2·9	195	21	11·5	5·5	134	23	11·8	5·2	146
2·1 ,,	22	12·6	7·7	212	28	10·6	7·5	228	17	11·5	8·2	220	20	11·8	1·9	169	18	10·8	4·7	178	19	12·0	4·2	145
3·0 ,,	13	13·2	7·6	202	28	12·2	5·7	227	14	8·7	5·5	203	9	9·7	4·6	190	13	10·7	5·5	187	4	10·3	5·3	165
3·6 ,,	13	12·5	6·7	205	27	11·9	6·6	216	5	9·2	8·4	191	9	10·0	6·6	173	9	7·5	3·1	206	1	9·0	9·0	295
4·5 ,,	10	10·4	4·6	197	27	11·4	6·2	211	1	8·0	8·0	245	6	8·3	5·3	179	5	6·6	4·1	145				
5·4 ,,	9	9·0	5·1	219	27	10·4	4·1	203	1	8·0	8·0	215	3	3·0	2·2	278	2	6·0	5·1	212				
6·0 ,,	7	10·9	6·0	204	28	9·5	3·3	198									1	6·0	6·0	060				
7·2 ,,	3	6·7	5·8	121	28	9·5	3·3	115																
9·0 ,,	2	11·5	9·7	090	22	11·4	9·1	078																

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	GOPALPUR												GORAKHPUR								GWALIOR			
Time in I. S T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5·2	5·1	222	31	9·4	9·0	204	31	6·0	5·5	220	31	2·4	1·5	081	31	3·6	2·6	127	31	3·2	2·2	255
0·15 a.g. . .	31	11·8	10·4	223	29	16·1	15·0	207	27	12·6	12·2	220	24	11·1	7·7	094	28	10·0	6·5	108	29	11·7	7·4	247
0·3 a.m.s.l. .	31	11·6	10·6	235	29	14·1	12·3	215	27	11·6	10·2	232	24	12·7	9·0	101	28	10·3	7·2	110	29	8·7	4·9	247
0·6 ,, . .	31	12·5	10·9	248	29	11·6	9·0	230	27	11·3	9·2	240	23	13·8	8·1	119	28	11·3	7·8	107	29	16·6	10·7	279
0·9 ,, . .	31	13·3	11·1	260	29	11·9	9·0	257	27	12·4	9·5	251	22	13·7	7·2	120	28	10·9	7·0	105	26	17·6	12·7	288
1·5 ,, . .	28	17·5	15·2	285	28	12·9	10·4	282	23	13·0	10·2	267	21	14·9	5·6	113	27	13·9	7·1	106	25	12·8	8·4	309
2·1 ,, . .	20	15·6	13·7	282	23	13·8	9·8	276	19	12·6	10·7	264	19	13·3	1·1	155	26	14·2	7·6	118	23	12·9	8·2	326
3·0 ,, . .	12	9·7	6·3	265	17	12·5	8·1	248	12	10·1	7·0	264	14	10·5	0·4	126	22	12·1	4·5	120	17	12·9	8·7	357
3·6 ,, . .	8	8·6	3·1	298	14	11·4	6·3	241	7	8·0	3·7	228	8	7·3	2·5	121	19	12·4	7·3	113	13	12·5	8·8	351
4·5 ,, . .	5	7·2	4·1	104	12	9·3	4·0	191	3	11·0	10·4	124	6	6·9	4·4	168	16	11·4	7·1	120	8	5·7	1·3	330
5·4 ,, . .	5	8·6	7·4	108	10	10·5	6·0	147					3	6·0	4·5	125	15	12·9	8·3	117	6	8·0	1·8	160
6·0 ,, . .	5	13·8	12·7	094	10	12·2	8·4	121					3	6·7	5·6	127	15	12·0	8·8	110	6	9·5	2·9	165
7·2 ,, . .	2	21·5	21·4	090	10	12·3	10·5	090					3	5·3	4·4	124	12	10·0	2·7	127	4	12·3	4·5	117
9·0 ,, . .	1	36·0	36·0	100	6	21·8	21·3	091									8	12·3	9·7	081	3	16·0	6·9	110

Station	GWALIOR								IMPHAL												JABALPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5·1	2·6	254	31	3·7	1·9	205	31	1·5	0·6	264	31	4·4	3·1	222	31	2·3	0·9	201	31	3·2	2·8	249
0·15 a.g. . .	30	11·3	4·9	265	31	12·7	6·3	231	30	3·3	0·8	233	30	7·6	5·8	223	27	4·5	2·3	200	24	12·6	11·1	251
0·3 a. m. s. l. .	30	10·2	4·2	262	31	9·9	5·0	221																
0·6 ,, . .	30	13·0	5·5	280	31	14·9	5·9	241													24	13·9	12·0	258
0·9 ,, . .	27	14·0	4·9	299	29	14·8	5·6	267	30	2·2	0·8	240	30	6·9	5·1	222	27	4·1	1·7	192	19	16·9	14·4	275
1·5 ,, . .	26	13·8	5·0	310	26	10·4	4·7	286	30	7·3	4·7	237	30	8·0	5·2	229	27	7·5	4·9	234	15	15·5	11·4	300
2·1 ,, . .	21	14·7	7·1	315	21	12·1	7·0	321	24	11·3	7·1	229	27	9·3	6·2	221	21	9·9	7·0	236	11	9·4	4·6	291
3·0 ,, . .	12	13·4	7·6	321	15	11·3	8·0	353	12	10·9	10·1	238	23	9·1	6·8	219	12	8·7	6·6	252	10	10·6	5·5	281
3·6 ,, . .	8	14·1	11·1	321	9	8·4	6·7	354	6	8·7	7·7	240	16	7·9	5·3	212	8	6·7	5·7	252	6	8·3	5·1	202
4·5 ,, . .	7	14·6	9·6	331	4	4·0	3·1	341	2	6·0	4·6	247	9	5·8	3·1	239	6	5·3	2·7	261	6	7·7	3·9	145
5·4 ,, . .	5	12·4	6·9	309	1	10·0	10·0	360					6	6·8	1·8	176	2	2·5	2·2	347	6	11·7	8·2	076
6·0 ,, . .	2	7·0	4·7	334	1	12·0	12·0	015					4	4·0	1·9	324	1	CALM			5	13·0	11·8	085
7·2 ,, . .	2	6·5	4·7	052									3	7·0	5·8	077					2	17·0	17·0	092
9·0 ,, . .	2	11·5	7·5	104									3	9·3	9·1	065					2	25·0	25·0	100

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	JABALPUR								JAGDALPUR												JAIPUR			
Time in I. S. T.	1730				2330				0530				1370				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4·1	2·9	262	31	2·6	2·2	218	31	2·5	2·1	229	31	4·2	3·5	232	31	2·3	2·1	215	31	4·6	3·2	299
0·15 a. g. .	28	11·3	8·0	267	30	11·9	9·9	240	22	11·4	10·8	233	20	10·9	9·2	240	18	11·8	9·7	235	28	13·3	10·4	288
0·3 a. m. s. l. .																								
0·6 ,, . .	28	11·4	8·6	268	30	13·4	8·4	244	22	7·0	6·7	225	20	7·9	6·7	237	18	8·4	7·3	225	28	15·9	13·6	285
0·9 ,, . .	26	12·8	9·7	276	30	15·6	12·6	258	18	15·3	14·3	249	20	12·5	11·4	251	18	14·5	13·2	247	27	21·2	18·3	284
1·5 ,, . .	23	14·0	10·1	292	26	13·3	8·8	291	11	16·9	14·5	269	15	14·2	13·3	267	15	14·8	13·8	264	25	15·4	12·4	330
2·1 ,, . .	19	12·9	6·8	314	21	9·9	3·7	302	7	15·0	12·2	264	9	16·7	14·9	277	10	15·5	13·4	268	21	11·5	7·4	354
3·0 ,, . .	8	8·9	3·3	263	15	9·9	3·1	28	2	3·5	0·7	165	4	12·5	9·3	293	5	7·2	4·7	225	15	10·6	7·2	020
3·6 ,, . .	6	8·3	4·5	297	5	6·8	4·3	072	1	4·0	4·0	115	2	6·0	3·5	196	3	11·7	8·6	220	11	11·9	8·4	032
4·5 ,, . .	6	9·0	3·8	331	3	8·7	4·5	029					1	6·0	6·0	265					6	8·7	7·5	060
5·4 ,, . .	4	8·5	1·4	154	1	5·0	5·0	20													3	6·7	3·8	010
6·0 ,, . .	2	6·5	3·3	023	1	12·0	12·0	050													2	9·5	6·2	225
7·2 ,, . .					1	13·0	13·0	55													2	16·0	12·9	213
9·0 ,, . .																					2	10·0	9·9	175

Station	JAIPUR				JAMSHEDPUR								JHARSUGUDA											
Time in I. S. T.	1730				0530				1730				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4·3	2·6	260	31	2·8	0·9	197	31	3·8	2·0	130	31	3·8	2·4	218	31	4·5	3·2	237	31	4·6	3·4	212
0·15 a. g. .	26	10·9	6·2	250	27	6·0	2·6	207	25	7·7	5·6	130	22	11·2	8·5	230	20	8·3	7·0	232	23	10·3	8·0	208
0·3 a.m.s. l. .					27	6·2	3·0	210	25	8·3	5·1	137	22	8·8	6·5	220	20	7·7	6·3	233	23	8·6	6·8	198
0·6 ,, . .	26	11·5	6·3	250	27	11·4	7·7	240	25	8·8	4·4	155	21	13·1	10·0	249	20	8·5	6·9	247	23	13·0	10·1	228
0·9 ,, . .	26	12·1	5·5	265	22	12·1	8·9	251	23	8·7	4·5	160	21	14·7	11·5	258	19	8·8	6·3	257	21	12·8	9·3	241
1·5 ,, . .	24	10·9	4·4	300	20	11·3	7·2	254	18	9·1	4·4	198	12	12·7	8·8	267	16	9·0	4·9	264	18	18·0	6·8	242
2·1 ,, . .	18	9·9	5·1	345	15	9·7	3·9	230	14	7·6	2·6	229	6	12·7	8·7	267	13	10·3	4·5	279	15	8·9	3·7	260
3·0 ,, . .	13	12·2	10·6	360	11	7·4	2·9	220	10	6·6	3·4	263	5	9·2	5·6	267	12	9·0	3·0	275	10	7·3	2·1	205
3·6 ,, . .	10	13·8	11·1	360	7	4·4	2·6	128	9	7·9	1·5	245	3	6·3	5·8	165	9	5·3	0·8	251	5	5·2	3·9	138
4·5 ,, . .	9	13·6	12·4	004	7	5·4	4·2	097	7	7·1	1·2	261	3	7·0	5·8	123	5	7·2	4.2	132				
5·4 ,, . .	6	7·2	4·0	035	7	8·3	7·9	096	4	7·5	2·0	118	3	8·7	6·9	101	4	6·3	5·1	078				
6·0 ,, . .	6	9·8	3·3	350	6	8·0	7·7	104	3	8·7	3·0	096	2	10·0	9·8	100	3	7·0	6·0	118				
7·2 ,, . .	5	12·4	3·8	225	5	10·6	10·2	090					1	14·0	14·0	080	1	8·0	8·0	140				
9·0 ,, . .	4	12·2	9·3	185	4	19·0	18·4	091																

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TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.9 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	JODHPUR												MADRAS							
ıe in I. S. T.	0530*				1130				1730*				2330				0530*				1130			
. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
.face . .	31	9·5	8·8	246	31	9·8	8·8	231	31	11·2	4·2	206	31	9·8	7·2	226	31	6·7	5·5	254	31	10·3	10·0	265
5 a. g. . .	30	11·6	10·7	244	30	14·8	15·3	229	31	10·4	6·7	216	29	17·7	15·9	218	31	12·5	10·9	257	30	14·5	14·1	266
a.m.s.l .	30	11·0	10·9	245	30	13·4	12·0	227	31	10·8	6·6	218	29	14·5	11·7	220	31	15·1	14·0	262	30	14·8	14·3	266
„ .	30	15·7	14·5	242	30	14·2	12·7	230	31	13·1	8·4	208	29	20·7	16·6	217	31	19·9	19·3	269	30	16·2	15·7	272
„ .	30	19·8	16·7	250	30	13·8	11·7	232	31	13·6	8·5	211	28	20·8	16·0	223	31	23·5	22·9	275	30	18·6	17·7	277
„ .	30	13·7	10·3	237	21	11·7	4·8	246	29	12·5	6·6	222	26	16·2	13·2	241	31	25·2	24·5	282	30	23·1	22·0	285
.	28	10·1	0·6	308	14	9·6	2·1	234	28	8·7	1·1	267	17	10·4	0·5	319	31	22·6	21·9	281	30	22·3	21·7	280
„ .	26	10·8	6·8	050	10	10·7	3·6	148	23	9·1	5·1	015	13	10·8	8·7	048	31	20·4	19·9	274	29	20·4	20·0	277
„ .	26	11·3	7·6	040	10	10·5	3·6	123	23	10·4	5·6	009	7	10·1	8·3	046	31	20·0	19·0	270	27	19·4	18·9	277
„ .	25	11·9	6·0	043	9	5·5	2·7	190	23	11·0	5·2	004	3	29·3	9·8	011	30	18·8	17·7	265	20	17·3	16·0	277
„ .	24	11·0	5·4	070	8	7·5	4·2	197	23	10·3	3·5	023	3	11·3	22·7	0 7	29	16·7	12·8	261	11	11·4	7·8	269
„ .	24	11·4	5·6	072	8	10·3	5·3	194	23	10·3	3·7	025	3	11·3	9·0	016	29	15·9	10·8	259	9	9·9	8·7	228
„ .	24	14·3	6·3	080	6	11·0	8·0	163	22	12·7	3·5	061	3	7·0	4·5	026	28	15·3	3·3	229	6	13·2	2·9	191
„ .	23	17·3	10·1	082	3	15·0	14·7	120	17	14·3	10·5	081					27	19·3	14·2	090	4	14·0	7·6	091

Station	MADRAS								MANGALORE												MINICOY			
ıe in I.S.T.	1730*				2330				0530				1730				2330				0530			
. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
face . .	30	6·3	3·8	193	31	6·1	4·1	212	31	8·1	5·5	262	31	8·1	6·8	269	31	7·8	5·8	277	31	11·5	11·3	275
5 a.g. . .	30	8·7	5·5	209	31	16·0	11·9	222	25	15·2	14·1	271	27	13·7	12·7	270	28	13·8	12·5	271	31	20·0	19·5	275
a.m.s.l .	30	9·9	6·3	220	31	16·9	13·1	232	25	16·7	15·9	275	27	14·9	14·2	276	28	15·1	14·3	275	31	20·5	20·1	272
„ .	30	11·8	9·8	252	31	17·7	15·4	250	24	20·9	20·4	278	27	20·1	19·8	281	28	19·4	18·7	281	31	22·2	21·6	275
„ .	30	14.0	12·7	268	31	17.8	16·6	262	23	23·0	22 6	282	27	22·8	22·6	285	26	21.7	21 2	282	31	24 4	23 9	280
„ .	30	18·4	17·5	275	31	18·6	17·4	274	17	21·6	21·2	287	14	18·3	18·0	288	15	19·5	19·4	290	31	26·1	25·4	287
„ .	30	20·8	20·2	260	31	19·6	18·5	284	8	23 0	22·5	286	7	17·0	17·0	294	12	15·3	14·8	293	31	23·8	22·8	286
„ .	30	22·8	22·2	279	19	17·5	15·9	285	2	11·0	11·0	266	4	18·3	18·1	297	3	12·3	12·3	280	27	17·3	16·2	282
„ .	29	21·3	20·5	280	9	14·8	13·4	281	2	10·0	10·0	273	2	9·5	9·3	288	2	9·5	9·3	275	22	13·4	12·0	281
„ .	29	19·3	18·0	275	2	4·5	3·3	282	1	9·0	9·0	280									16	14·0	12·6	280
„ .	29	17·2	14·1	278	1	4·0	4·0	080	1	12·0	12·0	265									12	7·8	6·1	280
„ .	29	14·9	10·1	277	1	8·0	8·0	160	1	9·	9·0	270									11	8·9	5·0	297
„ .	29	11·7	4·5	254																	4	7·5	1·1	013
„ .	28	16·7	11·5	099																	2	8·5	2·1	244

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	MINICOY								MOHANBARI												MUSSOORIE			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface	31	10·5	10·1	274	31	10·2	9·7	275	31	1·3	1·0	060	31	2·3	2·1	051	31	1·8	1·5	045	31	1·7	0·9	
0·15 a.g.	30	18·4	17·7	273	31	20·3	19·6	275	21	6·8	3·5	060	30	6·5	4·6	061	22	7·8	6·8	057	7	5·0	2·1	2
0·3 a.m.s.l	30	19·7	19·0	275	31	20·6	19·7	274	21	7·4	3·8	073	30	7·1	5·1	064	22	8·1	7·2	062				
0·6 ,,	30	21·1	20·2	279	31	22·6	21·7	275	21	7·9	2·8	167	30	7·2	3·6	098	22	7·3	5·5	076				
0·9 ,,	30	25·5	24·7	282	31	25·8	24·9	280	19	8·0	3·9	202	29	5·8	2·8	190	22	5·1	3·7	087				
1·5 ,,	30	27·2	26·5	289	31	26·0	26·0	286	16	9·3	6·4	220	26	9·8	9·5	229	22	7·1	3·5	200				
2·1 ,,	30	24·8	24·4	290	30	22·1	21·7	290	8	6·1	3·5	202	23	10·7	10·4	225	18	9·8	8·0	217	7	5·1	2·2	2
3·0 ,,	27	19·9	19·2	288	19	19·5	18·7	292	3	7·3	5·1	216	18	9·9	8·3	220	10	9·4	8·4	211	6	10·3	3·7	3
3·6 ,,	27	16·2	15·2	286	14	13·3	12·3	286	2	6·5	5·5	224	13	9·8	8·2	233	3	11·0	10·5	223	4	10·0	9·5	3
4·5 ,,	21	13·3	12·1	283	10	11·7	10·5	284	2	9·0	9·0	244	11	10·0	6·7	251	1	14·0	14·0	235	3	6·7	4·9	3
5·4 ,,	16	12·4	10·1	275	5	8·6	4·0	280	1	9·0	9·0	160	6	8·0	7·5	248	1	12·0	12·0	255	3	8·7	6·8	2
6·0 ,,	13	8·7	5·5	278	3	5·7	2·6	233					4	8·0	6·0	238					3	12·0	9·9	2
7·2 ,,	9	5·9	3·3	047	2	6·5	6·0	198					2	8·0	4·1	242					3	21·7	21·0	2
9·0 ,,	7	15·7	14·2	094									2	4·0	1·4	070					1	21·0	21·0	1

Station	MUSSOORIE				NAGPUR												NANPARA			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	
Surface	31	3·3	2·2	189	31	4·8	4·5	260	31	8·6	7·3	276	30	8·6	7·6	262	31	4·9	3·9	253	31	4·1	3·9	1
0·15 a.g.	7	5·1	2·4	253	31	8·7	8·1	272	29	13·2	11·6	271	30	10·0	8·9	267	26	13·1	9·8	268	26	14·0	13·0	1
0·3 a.m.s.l																					26	14·7	13·7	1
0·6 ,,					31	11·9	11·2	276	29	11·9	10·8	279	30	11·1	10·1	268	26	15·1	12·1	272	25	19·6	18·8	1
0·9 ,,					31	18·5	17·1	286	28	13·2	11·7	283	30	13·8	12·1	275	25	16·1	14·2	279	22	18·5	14·4	1
1·5 ,,					31	18·9	16·8	295	14	13·6	11·5	290	30	16·0	14·3	284	22	15·8	14·6	287	19	17·5	10·8	1
2·1 ,,	7	7·4	3·4	237	31	16·5	13·4	300	6	10·0	8·0	279	30	15·6	12·9	293	17	14·0	12·1	286	13	11·7	1·0	0
3·0 ,,	6	12·2	11·5	292	31	13·9	8·5	307	4	13·3	10·4	251	30	14·7	7·4	294	10	8·2	6·7	283	9	12·0	4·6	2
3·6 ,,	5	9·8	8·2	316	31	12·7	7·0	313	1	17·0	17·0	295	29	13·9	6·7	299	6	8·3	4·5	302	7	7·9	2·3	3
4·5 ,,	4	6·7	6·7	314	31	11·7	4·6	346					28	12·9	4·1	303	4	12·5	8·5	299	5	6·4	5·4	3
5·4 ,,	4	5·7	2·3	241	31	11·9	5·2	022					28	12·0	2·2	002	1	9·0	9·0	055	4	5·3	2·5	0
6·0 ,,	4	9·7	6·3	232	30	12·9	6·7	049					28	12·1	2·7	049					3	5·7	5·4	0
7·2 ,,	4	24·0	24·0	227	30	15·0	11·8	079					28	12·1	7·0	075					2	6·5	6·4	1
9·0 ,,	2	26·5	25·9	214	29	22·3	21·2	090					23	19·0	17·3	091					2	17·0	16·5	1

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	NANPARA				NEW DELHI												POONA			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·5	2·0	088	31	6·9	1·5	226	31	8·1	0·8	259	31	6·7	0·1	322	31	5·6	2·5	154	31	4·9	4·7	266
0·15 a.g. .	31	9·3	5·6	128	31	14·3	4·2	202	30	9·8	0·5	210	31	11·2	1·4	132	31	14·2	7·9	130	31	14·6	14·4	258
0·3 a.m.s.l .	31	9·1	5·5	130	31	14·3	4·2	202	30	10·4	0·2	149	31	11·2	1·4	132	31	11·9	5·4	150				
0·6 ,, .	31	10·3	7·3	127	31	14·5	5·3	243	30	10·8	1·1	272	31	11·0	1·0	046	31	16 1	6·3	164	31	7·7	7·6	260
0·9 ,, .	30	12·5	7·9	123	31	14·5	6·4	262	27	11·9	3·1	302	31	10·7	0·3	125	30	16·0	6·2	179	31	17·8	17·7	260
1·5 ,, .	23	13·9	4·7	142	31	14·5	5·9	293	24	13·4	7·9	325	31	10·5	1·5	320	27	11·8	2·3	253	20	25·3	25·0	265
2·1 ,, .	19	15·3	2·3	133	31	13·4	4·4	341	23	14·1	9·1	330	31	11·7	4·5	326	27	12·3	5·9	317	10	21·0	20·7	274
3·0 ,, .	11	17·9	2·0	117	31	13·6	6·2	359	23	14·1	8·5	348	31	12·9	7·0	343	25	13·0	8·4	347	3	12·7	11·6	295
3·6 ,, .	9	14·9	1·9	173	31	13·4	5·9	002	22	13·0	6·9	342	31	12·7	6·9	342	17	14·9	11·5	343	1	12·0	12·0	325
4·5 ,, .	6	11·7	0·9	223	31	9·5	1·2	359	20	10·7	5·0	294	31	11·0	4·5	340	9	8 5	5·5	327				
5·4 ,, .	3	8·7	2·8	195	31	8·7	2·0	203	20	10·4	5·1	235	31	9·0	1·4	320	6	8·8	2·3	328				
6·0 ,, .	3	8·7	3·9	127	31	8·2	4·3	163	16	10·8	6·5	208	31	9·1	1·3	293	5	9·4	4·2	193				
7·2 ,, .	3	11·0	5·6	082	31	9·0	3·8	172	15	12·2	7·1	188	31	10·9	1·4	297	3	7·3	5·7	110				
9·0 ,, .	3	9·0	7·2	150	29	11·4	4·7	149	14	15·0	8·7	183	28	12·7	3·4	170								

Station	POONA								PORT BLAIR															
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	7·5	7·0	265	31	4·8	4·6	265	31	9·0	8·2	229	31	11·1	10·3	236	31	9·3	6·8	218	31	6·4	5·8	231
0·15 a.g. .	31	16·5	16·2	260	31	13·8	13·6	259	31	14·9	14·1	245	30	16·3	14·7	241	31	14·3	13·2	240	30	14·7	13·4	239
0·3 a.m.s.l. .									31	17·0	16·3	243	30	15·7	14·4	242	31	15·5	14·6	242	30	15·3	13·9	237
0·6 ,, .	31	10·7	10·3	261	31	7·1	7·0	260	31	18·5	17·7	243	29	17·9	16·7	243	31	17·2	16·0	243	30	16·8	15·7	240
0·9 ,, .	31	18·5	18·2	260	31	17·6	17·5	261	31	19·2	17·9	248	26	16·7	15·6	242	31	19·0	17·8	247	27	14·9	13·9	241
1·5 ,, .	21	29·6	29·3	263	17	26·2	25·8	264	30	17·8	16·3	252	14	14·3	12·6	239	31	16·5	14·9	257	22	13·1	12·0	247
2·1 ,, .	10	29·3	28·7	268	8	21·9	20·7	269	29	15·6	13·6	251	6	9·8	6·0	218	31	15·9	13·5	263	17	9·5	6·8	254
3·0 ,, .	3	29·3	27·4	251	7	11·1	7·5	301	29	15·8	12·1	260	4	7·5	3·9	066	31	14·5	10·4	258	14	8·1	4·2	253
3·6 ,, .	3	26·7	24·7	277	7	9·7	4·8	309	27	12·5	7·2	267	2	7·0	6·9	071	30	11·4	7·1	260	10	6·5	1·4	238
4·5 ,, .	2	13·5	13·3	310	1	5·0	5·0	345	27	13·6	6·5	253	2	6·5	5·9	045	30	13·5	4·5	267	7	8·1	6·9	112
5·4 ,, .	1	11·0	11·0	275	1	6·0	6·0	225	27	14·3	5·8	270	2	10·5	8·5	077	30	12·1	3·6	229	6	10·8	8·0	084
6·0 ,, .	1	21·0	21·0	285	1	2·0	2·0	325	26	15·0	4·7	248	1	9·0	9·0	020	30	12·3	3·2	243	5	13·6	9·6	079
7·2 ,, .	1	19·0	19·0	275	1	19·0	19·0	085	26	13·1	4·5	180					30	14·1	2·3	121	2	20·0	19·0	098
9·0 ,, .					1	14·0	14·0	080	19	19·0	16·1	092					24	17·7	13·7	073				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	RAIPUR												SANTA CRUZ											
Time in I.S.T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·1	4·6	229	31	4·7	4·1	249	31	5·1	4·2	230	31	10·5	10·0	252	31	9·7	9·0	257	31	12·4	11·9	258
0·15 a.g.	25	16·2	15·3	243	27	12·4	10·4	246	24	16·0	13·5	237	29	14·7	14·1	254	26	17·5	16·7	244	29	18·6	17·2	260
0·3 a.m.s.l.													29	15·6	15·0	154	26	18·4	17·9	248	29	18·9	17·6	258
0·6 ,,	25	20·2	18·5	259	27	14·6	12·3	248	24	17·0	14·5	247	29	17·1	16·4	254	26	22·5	22·2	253	29	20·9	19·7	258
0·9 ,,	23	21·5	19·5	275	24	14·6	12·9	251	23	15·2	13·7	256	29	19·0	17·9	253	19	25·7	25·4	255	28	22·6	21·8	257
1·5 ,,	15	17·2	14.6	302	22	12·2	8·9	264	21	12·6	9·3	268	29	18·6	17·4	253	8	26·9	26·3	251	28	22·2	21·8	256
2·1 ,,	11	14·2	10·6	303	18	11·4	7·8	281	17	9·9	5·2	265	29	16·8	15·8	252	2	31·0	27·0	230	28	21·7	21·1	252
3·0 ,,	5	9·0	4·4	240	11	9·7	3·6	287	8	7·9	3·3	179	29	15·5	13·4	260	1	7·0	7·0	285	28	18·4	17·1	257
3·6 ,,	2	7·5	7·3	107	6	7·5	2·5	277	4	8·3	6·6	125	28	13·1	10·1	262					28	16·0	13·0	259
4·5 ,,	1	3·0	3·0	125	4	9·0	6·7	254	2	7·0	5·1	118	27	10·8	6·9	271					28	12·2	7·4	270
5·4 ,,	1	6·0	6·0	035	2	2·0	1·7	063	1	13·0	13·0	110	27	10·6	2·4	300					27	10·3	3·8	270
6·0 ,,	1	7·0	7·0	065	1	6·0	6·0	185	1	12·0	12·0	165	26	9·7	1·6	340					27	9·8	1·9	294
7·2 ,,	1	16·0	16·0	095									25	10·2	4·2	063					26	12·7	6·9	065
9·0 ,,	1	33·0	33·0	115									17	14·3	11·6	086					22	18·2	16·8	076

Station	SANTA CRUZ				TEZPUR												TIRUCHIRAPALLI							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	7·6	6·6	239	31	1·0	0·3	137	31	1·4	0·3	092	31	0·8	0·3	124	31	14·0	13·8	270	31	19·4	17·8	271
0·15 a.g.	28	15·4	14·9	239	25	9·0	4·7	177	31	7·5	0·9	169	26	9·4	3·9	169	31	19·5	19·3	271	31	22·1	20·6	272
0·3 a.m.s.l.	28	16·8	16·4	244	25	9·3	3·9	190	31	7·8	1·4	216	26	9·9	4·1	183	31	21·9	21·8	270	31	22·5	21·2	273
0·6 ,,	27	19·1	18·9	250	25	10·4	5·3	230	31	8·0	4·1	230	25	10·3	6·2	232	31	30·1	30·0	273	31	24·9	24·4	272
0·9 ,,	19	19·3	18·8	254	23	12·9	8·4	241	31	9·2	7·1	230	25	11·3	8·3	242	31	29·4	29·0	273	31	24·2	23·8	269
1·5 ,,	12	16·1	15·7	257	18	11·9	9·0	240	28	12·8	11·6	235	18	12·0	10·5	240	31	25·2	24·7	271	31	23·5	23·0	265
2·1 ,,	3	14·3	14·3	263	14	12·1	9·7	242	22	14·0	12·6	232	10	12·3	11·5	222	30	19·4	18·6	270	31	22·9	22·2	269
3·0 ,,	2	19·5	19·1	271	8	11·5	8·3	205	16	10·5	7·9	228	5	10·6	7·9	220	28	14·5	13·6	275	28	20·8	19·8	276
3·6 ,,					6	10·0	7·3	213	15	10·4	7·4	228	3	12·3	11·7	264	26	13·7	13·0	276	24	17·5	15·8	280
4·5 ,,					5	15·4	9·0	236	8	9·3	6·5	243	2	11·0	0·5	169	16	11·6	10·0	275	13	11·8	8·8	292
5·4 ,,					3	11·0	8·2	090	7	10·1	2·9	190					9	10·4	7·6	259	11	10·3	6·9	262
6·0 ,,					2	9·0	5·2	095	5	10·2	3·6	122					6	6·0	3·4	261	8	8·3	5·0	228
7·2 ,,					2	11·0	10·8	176	1	7·0	7·0	135					3	7·3	3·5	128	3	7·0	3·7	012
9·0 ,,									1	3·0	3·0	120					1	12·0	12·0	068	3	10·0	9·6	060

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	TIRUCHIRAPALLI				TRIVANDRUM												UDAIPUR			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	17·3	16·1	267	31	5·6	4·8	320	31	9·6	8·8	314	31	10·9	9·5	310	31	6·5	5·5	320	31	3·8	3·6	248
0·15 a.g.	29	19·0	17·5	265	30	9·9	9·0	318	30	15·4	14·4	303	30	12·9	12·3	309	29	16·7	15·9	320	31	10·2	9·3	249
0·3 a.m.s.l.	29	20·4	19·1	266	30	12·5	11·5	315	30	16·5	15·5	305	30	14·6	14·1	307	29	20·2	19·4	315				
0·6 ,,	29	25·7	25·0	273	29	18·0	17·1	252	30	21·9	20·8	302	30	19·2	18·6	306	28	26·3	25·4	307				
0·9 ,,	29	25·4	24·9	272	27	22·6	21·8	300	23	24·4	23·0	302	29	23·7	22·9	304	24	28·1	27·3	307	31	12·0	10·8	254
1·5 ,,	29	20·6	20·1	274	26	26·1	25·7	300	8	27·6	26·7	300	26	25·0	24·2	304	17	28·2	27·8	309	20	9·7	6·9	268
2·1 ,,	27	17·0	16·3	280	24	23·7	23·2	296	4	31·7	31·1	298	26	22·8	22·2	300	13	23·5	23·0	307	18	7·3	2·1	051
3·0 ,,	22	13·1	11·4	286	24	20·8	20·2	286					26	19·4	18·6	285	6	10·7	10·0	320	14	8·9	7·2	069
3·6 ,,	13	11·3	9·6	295	23	17·7	17·1	282					26	15·5	14·8	283	5	7·8	7·1	298	8	11·9	9·6	081
4·5 ,,	9	8·8	8·3	280	23	14·2	12·8	276					26	13·4	12·4	279	4	6·5	4·7	320	2	10·5	10·3	150
5·4 ,,	5	7·6	6·2	235	23	12·9	10·5	279					26	13·2	11·2	282	2	5·5	4·5	309				
6·0 ,,	3	9·3	5·1	280	23	12·5	7·9	281					26	13·0	9·4	280	1	9·0	9·0	290				
7·2 ,,	2	11·5	3·7	009	23	10·1	0·9	041					26	10·2	0·9	134								
9·0 ,,					22	16·1	10·8	094					25	19·3	15·7	100								

Station	UDAI PUR								VENGURLA												VERAVAL			
Time in I.S.T.	1730				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·5	2·6	253	31	3·7	2·7	244	31	7·3	6·5	261	31	4·9	4·8	274	31	5·0	4·5	265	30	19·1	18·7	257
0·15 a.g.	31	9·4	6·6	242	30	9·4	7·4	239	28	16·3	14·7	271	22	17·3	16·9	272	26	14·4	12·6	273	30	20·0	19·4	260
0·3 a.m.s.l.									28	18·0	17·2	269	22	19·5	19·1	271	26	16·9	16·2	271	30	21·0	20·5	260
0·6 ,,									25	22·8	22·6	269	19	23·2	22·7	273	22	21·3	21·0	276	30	22·4	22·0	260
0·9 ,,	31	10·0	7·0	256	30	11·4	9·1	246	12	25·4	24·9	271	9	24·7	24·3	278	11	23·5	23·2	286	30	23·9	23·2	262
1·5 ,,	28	12·7	7·7	274	25	13·0	8·8	264	10	22·8	22·2	269	2	30·5	30·3	277	6	24·5	24·3	286	30	21·8	20·7	260
2·1 ,,	21	11·7	5·2	299	21	9·6	2·0	313	3	14·7	13·2	264	1	25·0	25·0	255	1	17·0	17·0	275	30	17·3	14·3	260
3·0 ,,	15	12·0	6·3	033	19	8·8	6·1	048									1	16·0	16·0	290	30	12·1	5·3	280
3·6 ,,	14	11·0	4·1	042	15	10·2	8·3	030													29	11·4	3·3	330
4·5 ,,	10	10·0	2·5	340	8	10·0	7·1	051													29	11·1	3·9	040
5·4 ,,	9	9·3	3·2	270	1	7·0	7·0	155													28	12·5	5·9	042
6·0 ,,	8	10·0	5·1	225																	28	13·0	5·9	060
7·2 ,,	7	11·4	6·6	230																	28	14·0	9·6	084
9·0 ,,	7	10·8	6·7	143																	26	22·8	20·4	090

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	VERAVAL												VISAKHAPATNAM											
Time in I.S.T.	1130				1730*				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Su face	31	14·2	12·4	255	30	19·6	19·0	257	31	14·6	13·0	256	31	4·3	4·1	233	31	9·8	8·0	236	31	5·0	4·4	236
0·15 a.g. . .	28	18·6	17·7	252	30	21·9	21·3	258	30	16·8	16·1	250	30	10·2	9·5	243	30	13·4	11·9	230	30	10·0	9·8	242
0·3 a.m.s.l. .	28	20·4	19·2	255	30	22·9	22·3	257	30	18·7	18·1	254	30	11·7	11·2	247	30	13·8	12·8	238	30	11·8	11·3	250
0·6 ,, . .	26	22·3	21·5	258	30	25·0	24·4	260	26	19·8	19·4	254	30	14·2	13·3	258	30	14·2	13·4	254	29	14·3	13·2	260
0·9 ,, . .	14	22·6	21·7	261	30	26·9	26·3	260	18	20·7	20·2	255	29	15·8	14·7	266	29	14·6	13·3	268	29	15·4	14·1	270
1·5 ,, . .	4	15·3	14·4	257	30	22·1	21·3	259	5	21·6	21·6	253	18	15·8	14·3	273	29	17·6	15·8	283	28	19·2	18·0	275
2·1 ,, . .	1	14·0	14·0	220	30	18·6	16·7	257	1	17·0	17·0	235	15	12·5	10·6	283	27	19·9	17·4	284	26	14·1	12·8	283
3·0 ,, . .	1	6·0	6·0	155	30	14·5	6·5	264					7	8·1	3·4	009	22	17·4	14·1	284	18	13·2	10·2	271
3·6 ,, . .					30	12·6	3·7	274					5	7·8	3·6	070	16	13·3	8·3	283	9	10·6	4·2	235
4·5 ,, . .					30	11·0	0·8	360					5	7·6	6·6	102	6	13·2	2·3	200	3	9·7	9·1	129
5·4 ,, . .					30	10·9	1·7	067					5	9·2	7·9	115	4	10·3	2·2	181	2	8·0	7·6	141
6·0 ,, .					30	11·3	3·0	067					4	14·3	12·7	108	3	13·7	4·0	181	1	9·0	9·0	070
7·2 ,, . .					30	14·4	10·5	077					3	19·0	18·9	095	2	13·0	9·4	087				
9·0 ,, . .					26	24·3	22·9	083					1	34·0	34·0	090	1	28·0	28·0	085				

Station	AMRITSAR							
Time in I.S.T.	0530*				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D
Surface . .	24	6·1	2·3	084	25	6·0	1·3	135
0·15 a.g. . .	23	7·8	2·6	134	25	6·1	1·5	209
0·3 a.m.s.l. .	23	7·2	2·5	113	25	6·0	1·3	196
0·6 ,, . .	23	9·2	2·5	184	25	6·6	2·4	228
0·9 ,, . .	23	10·7	2·8	230	25	7·4	3·6	233
1·5 ,, . .	23	11·0	4·8	272	25	7·4	3·4	244
2·1 ,, . .	22	9·9	6·1	295	25	8·2	5·1	281
3·0 ,, . .	23	8·9	5·9	307	25	10·6	9·3	324
3·6 ,, .	22	9·3	6·9	304	25	10·7	7·4	314
4·5 ,, . .	22	10·6	6·6	315	25	10·7	7·8	321
5·4 ,, . .	23	11·3	6·3	286	23	10·9	6·6	303
6·0 ,, . .	23	12·4	7·3	269	23	12·7	7·7	289
7·2 ,, . .	23	17·0	12·7	257	23	19·7	15·7	260
9·0 ,, . .	23	22·3	17·4	248	18	22·2	20·4	248

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 Km. above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Ht. in Km.	n	V	v	D
	AGARTALA			
	1730 hrs.			
10·5	1	29·0	29·0	085
	AMBALA			
	0530 hrs.			
10·5	3	21·0	18·4	195
12·0	2	30·5	27·3	195
14·1	2	35·0	31·4	187
16·2	1	66·0	66·0	185
	1730 hrs.			
10·5	5	23·0	20·8	253
12·0	5	26·0	23·2	239
14·1	4	30·7	30·4	237
16·2	3	24·0	21·8	223
18·0	1	13·0	13·0	200
	BAIRAGARH			
	1730 hrs.			
10·5	1	63·0	63·0	105
12·0	1	63·0	63·0	085
	BAMRAULI			
	0530 hrs.*			
10·5	17	22·8	22·0	093
12·0	13	29·2	28·0	094
14·1	7	35·6	34·3	090
16·2	2	39·0	39·0	100
18·0	1	38·0	38·0	090
21·0	1	68·0	68·0	080
	1730 hrs*			
10·5	15	20·9	18·2	086
12·0	10	24·4	23·5	082
14·1	3	28·3	27·7	089
	BAREILLY			
	0530 hrs.			
10·5	1	27·0	27·0	150
	1730 hrs.			
10·5	3	11·3	10·1	151
12·0	3	18·0	17·1	161
14·1	2	21·0	20·5	164
16·2	1	17·0	17·0	120

Ht. in Km.	n	V	v	D
	BHAGALPUR			
	0530 hrs.			
10·5	1	14·0	14·0	080
	1730 hrs.			
10·5	1	23·0	23·0	060
	BHUBANESHWAR			
	0530 hrs.			
10·5	1	56·0	56·0	090
12·0	1	60·0	60·0	085
14·1	1	109·0	109·0	080
	BHUJ			
	0530 hrs.			
10·5	1	8·0	8·0	070
12·0	1	22·0	22·0	120
14·1	1	29·0	29·0	115
	1730 hrs.			
10·5	7	22·0	17·0	097
12·0	6	26·5	22·8	102
14·1	4	43·7	40·9	119
16·2	1	35·0	35·0	140
18·0	1	31·0	31·0	120
	BIKANER			
	0530 hrs.			
10·5	2	21·0	17·3	218
12·0	2	23·0	21·3	134
	1730 hrs.*			
10·5	5	10·8	5·0	092
12·0	3	16·3	4·4	337
14·1	2	24·0	23·3	078
	DUM DUM			
	0530 hrs.*			
10·5	18	30·2	30·2	100
12·0	17	37·4	36·7	094
14·1	14	49·8	48·6	091
16·2	9	64·7	63·6	090
18·0	8	74·5	54·0	093
21·0	3	84·7	83·7	098

Ht. in Km	n	V	v	D
	DUM DUM			
	1730 hrs.*			
10·5	23	28·3	27·7	090
12·0	21	34·8	33·3	090
14·1	15	50·6	47·3	088
16·2	7	61·3	59·4	086
18·0	3	81·7	80·6	094
21·0	1	115·0	115·0	110
24·0	1	122·0	122·0	100
	GANNAVARAM			
	1730 hrs.			
10·5	2	28·0	25·5	079
12·0	1	37·0	37·0	105
	GAUHATI			
	0530 hrs.*			
10·5	14	16·9	13·7	080
12·0	9	25·2	24·0	090
14·1	7	43·7	40·5	092
16·2	5	61·4	57·9	088
18·0	4	65·8	63·3	092
21·0	1	66·0	66·0	050
	1130 hrs.			
10·5	2	22·5	22·5	109
12·0	1	24·0	24·0	125
	1730 hrs.*			
10·5	16	19·1	16·3	075
12·0	13	24·2	22·5	084
14·1	6	27·1	26·0	072
16·2	3	38·3	37·7	080
18·0	1	42·0	42·0	060
	GOPALPUR			
	1730 hrs.			
10·5	5	31·8	31·1	090
12·0	2	48·5	48·0	085
14·1	1	33·0	33·0	105

Ht. in Km.	n	V	v	D
	GORAKHPUR			
	1730 hrs.			
10·5	5	11·6	11·0	074
12·0	5	16·8	16·5	082
14·1	3	28·0	28·0	085
16·2	2	34·5	34·0	079
18·0	1	36·0	36·0	085
21·0	1	41·0	41·0	130
	GWALIOR			
	0530 hrs.			
10·5	3	16·7	16·4	108
12·0	3	21·3	20·5	104
14·1	3	27·0	27·0	098
16·2	1	29·0	29·0	075
18·0	1	30·0	30·0	100
	1730 hrs.			
10·5	2	17·0	14·8	097
	IMPHAL			
	1730 hrs.			
10·5	2	23·5	21·5	086
12·0	1	12·0	12·0	025
	JAIPUR			
	0530 hrs.			
10·5	1	17·0	17·0	215
	1730 hrs.			
10·5	2	16·0	15·9	205
12·0	2	32·5	31·1	185
	JODHPUR			
	0530 hrs*			
10·5	23	18·6	11·4	093
12·0	21	22·4	16·1	107
14·1	14	27·4	21·8	091
16·2	8	40·1	35·6	103
18·0	5	44·4	42·8	094
21·0	2	69·0	64·5	062
24·0	2	69·5	69·5	077
27·0	1	108·0	108·0	070

Ht. in Km.	n	V	v	D
	JODHPUR			
	1130 hrs.			
10·5	2	20·0	19·9	122
12·0	2	26·5	15·5	112
14·1	1	16·0	16·0	080
16·2	1	22·0	22·0	085
18·0	1	37·0	37·0	090
	1730 hrs*			
10·5	15	17·6	13·1	092
12·0	12	25·5	21·0	100
14·1	9	33·8	31·9	110
16·2	4	32·5	32·1	111
18·0	3	34·3	34·2	103
21·0	1	26·0	26·0	080
24·0	1	23·0	23·0	080
	MADRAS			
	0530 hrs.*			
10·5	25	29·6	26·6	082
12·0	22	40·8	39·8	080
14·1	14	68·4	67·6	081
16·2	8	71·0	70·0	036
18·0	3	51·7	51·7	083
	1130 hrs.			
10·5	3	25·0	24·7	098
12·0	2	38·5	38·5	087
14·1	2	69·0	68·9	088
	1730 hrs.*			
10·5	27	27·7	27·0	087
12·0	22	46·1	45·2	082
14·1	18	69·5	68·5	084
16·2	11	78·5	76·8	092
18·0	5	54·8	53·0	087
21·0	1	72·0	72·0	090
	MINICOY			
	1730 hrs.			
10·5	2	30·5	29·5	098
12·0	1	61·0	61·0	090
14·1	1	81·0	81·0	095

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 Km above mean sea level.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Ht. in Km.	n	V	v	D
	MOHANBARI			
	1730 hrs.			
10·5	1	4·0	4·0	100
12·0	1	16·0	16·0	070
	MUSSOORIE			
	1730 hrs.			
10·5	2	23·0	22·8	204
12·0	2	32·0	32·0	192
	NAGPUR			
	0530 hrs.*			
10·5	21	29·6	29·3	089
12·0	19	38·3	37·1	089
14·1	10	58·3	56·9	087
16·2	6	66·7	65·1	085
18·0	4	60·7	58·6	090
21·0	2	43·5	43·5	097
	1730 hrs.*			
10·5	21	30·7	29·6	091
12·0	17	41·6	40·7	089
14·1	14	54·9	53·8	087
16·2	9	61·0	60·0	081
18·0	3	52·0	51·7	092
	NANPARA			
	0530 hrs.			
10·5	2	18·0	18·0	134
12·0	2	28·0	27·7	117
	1730 hrs.			
10·5	2	8·0	4·7	120
12·0	2	9·0	8·7	118
14·1	1	20·0	20·0	095
16·2	1	22·0	22·0	040
	NEW DELHI			
	0530 hrs.*			
10·5	26	13·0	7·2	152
12·0	25	14·9	8·9	160
14·1	23	20·9	17·1	143
16·2	18	19·3	12·5	115
18·0	14	19·3	13·5	097
21·0	7	32·3	30·8	086
24·0	2	39·0	37·6	085
27·0	1	48·0	48·0	080

Ht. in Km.	n	V	v	D
	NEW DELHI			
	1130 hrs.			
10·5	12	17·9	7·5	188
12·0	9	22·3	10·5	162
14·1	6	33·0	28·6	156
16·2	3	42·7	41·0	140
18·0	3	33·3	30·6	102
	1730 hrs.*			
10·5	27	13·7	6·7	154
12·0	23	14·6	10·2	153
14·1	20	21·6	16·5	158
16·2	16	18·7	9·8	153
18·0	15	25·0	20·0	114
21·0	8	25·0	21·2	107
24·0	4	28·0	27·0	109
27·0	2	38·0	37·5	097
30·0	1	52·0	52·0	120
	PORT BLAIR			
	0530 hrs.*			
10·5	16	28·6	26·9	084
12·0	11	39·1	37·7	085
14·1	9	49·6	47·9	083
16·2	6	66·2	65·0	089
18·0	3	79·7	79·7	080
21·0	1	85·0	85·0	090
	1730 hrs.*			
10·5	21	27·4	26·2	076
12·0	17	42·4	40·9	072
14·1	9	46·1	45·6	075
	SANTA CRUZ			
	0530 hrs.*			
10·5	11	20·7	19·8	082
12·0	9	38·4	38·0	086
14·1	8	59·7	59·3	090
16·2	6	78·2	77·1	087
18·0	5	69·0	67·5	090
21·0	1	58·0	58·0	070
24·0	1	56·0	56·0	080

Ht. in Km.	n	V	v	D
	SANTA CRUZ			
	1730 hrs.*			
10·5	16	25·2	24·4	081
12·0	16	36·3	35·3	087
14·1	12	60·3	59·2	090
16·2	9	78·2	76·7	090
18·0	6	80·0	76·7	094
21·0	2	78·5	78·5	100
	TIRUCHIRAPALLI			
	1730 hrs.			
10·5	2	34·5	34·3	101
12·0	1	63·0	63·0	085
	TRIVANDRUM			
	0530 hrs.*			
10·5	19	30·3	26·8	086
12·0	16	49·3	48·4	081
14·1	7	84·6	62·9	074
16·2	1	76·0	76·0	080
	1730 hrs*			
10·5	24	30·5	28·3	091
12·0	19	48·3	48·0	082
14·1	14	66·0	65·0	080
16·2	6	60·2	59·7	088
18·0	1	44·0	44·0	080
21·0	1	30·0	30·0	060
	UDAIPUR			
	1730 hrs.			
10·5	5	45·4	10·7	148
12·0	4	19·5	12·8	144
14·1	3	35·5	30·4	133
	VERAVAL			
	0530 hrs.*			
10·5	22	31·7	29·5	090
12·0	16	47·9	46·9	090
14·1	13	66·4	64·3	092
16·2	7	60·9	59·7	100
18·0	2	54·5	54·0	100
21·0	1	45·0	45·0	100

Ht. in Km.	n	V	v	D
	VERAVAL			
	1730 hrs.*			
10·5	25	36·5	35·3	088
12·0	21	52·3	51·0	094
14·1	20	69·1	67·0	093
16·2	18	65·7	64·3	094
18·0	8	95·7	94·0	097
21·0	4	94·7	93·3	084
24·0	1	130·0	130·0	090
	VISAKHAPATNAM			
	0530 hrs.			
10·5	1	48·0	48·0	100
12·0	1	52·0	52·0	085
14·1	1	91·0	91·0	095
	AMRITSAR			
	0530 hrs.*			
10·5	22	24·8	20·5	249
12·0	21	27·2	21·5	242
14·1	17	26·4	21·1	243
16·2	10	17·4	12·9	256
18·0	4	23·5	12·7	282
21·0	1	28·0	28·0	250
24·0	1	26·0	26·0	250
	1730 hrs.*			
10·5	15	25·9	22·5	243
12·0	13	29·1	23·0	240
14·1	10	29·0	23·9	234
16·2	5	21·2	16·8	273
18·0	1	28·0	28·0	230

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RADIOSONDE DATA

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

During the month, observations of upper air temperature, pressure and humidity were made at 13 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I. M. D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

Serial No.	Name of Station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks.
1	Allahabad	Clock type	1st October, 1944	00 and 12	
2	Amritsar	Clock type	21st June, 1957	00 and 12	
3	Bombay	Clock type	7th September, 1954	00 and 12	
4	Calcutta	Clock type	13th December, 1946	00 and 12	Fan type used from 13-12-46 to 30 -11-47.
5	Gauhati	Clock type	22nd July, 1955	00 and 12	
6	Jodhpur	Clock type	17th April, 1946	00 and 12	
7	Madras	Fan type	29th June, 1946	00 and 12	
8	Nagpur	Fan type	1st October, 1946	00 and 12	
9	New Delhi	Clock type	3rd December, 1943	00 and 12	
10	Port Blair	Fan type	4th December, 1949	00 and 12	
11	Trivandrum	Fan type	1st July , 1947	00 and 12	
12	Veraval	Fan type	3rd October, 1944	00 and 12	
13	Visakhapatnam	Fan type	8th December, 1946	00 nd 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 hrs G.M.T.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (987 mb.)						AMRITSAR (971 mb.)						BOMBAY (1002 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew point.
Surface	31	98	300·5	304	298	298·7	27	230	300·4	304	297	295·9	31	13	300·3	303	297	297·5
1000	31	—23	..	..	..	..	25	—27	..	..	..	..	30	30	..	..	..	..
900	27	911	296·7	301	294	293·5	25	907	300·4	308	294	290·8	29	957	294·5	300	292	291·5
850	27	1410	294·1	298	291	290·8	25	1412	298·2	304	293	288·7	29	1452	291·6	297	288	288·5
800	27	1934	291.4	295	288	288·0	25	1942	295·0	300	290	286·7	29	1971	288·9	294	286	285·7
700	27	3068	285·6	291	281	282·0	25	3087	287·8	291	283	280·4	28	3098	284·1	287	281	278·8
600	27	4350	279·1	283	274	273·9	25	4373	279·2	286	275	271·2	28	4372	277·5	281	272	272·7
500	26	5827	271·6	277	265	269·5	24	5849	271·9	279	265	262·5	28	5840	270·5	274	266	..
400	25	7576	262·3	268	255	..	24	7603	264·0	273	258	..	25	7595	262·4	269	257	..
300	21	9737	248·8	256	241	..	24	9764	251·2	263	242	..	21	9756	252·4	260	243	..
250	20	11036	239·6	246	232	..	21	11102	242·8	257	231	..	16	11069	240·4	250	234	..
200	15	12563	228·5	236	220	..	19	12633	231·1	241	218	..	13	12571	227·9	236	220	..
175	13	13489	224·3	233	216	..	18	13510	223·7	239	210	..	13	13452	221·1	230	213	..
150	11	14514	217·6	229	207	..	15	14511	216·7	224	210	..	13	14434	214·0	223	207	..
125	9	15692	211·4	224	195	..	15	15649	207·4	215	201	..	11	15555	205·9	214	198	
100	6	17107	208·2	219	197	..	14	16992	202·8	211	193	..	8	16867	198·4	205	191	..
80	..	..	..	..	..	..	10	18228	197·2	206	187	..	6	18193	195·8	213	180	..

	CALCUTTA (999 mb.)						GAUHATI (995 mb.)						JODHPUR (974 mb.)					
Surface	29	6	300·4	303	298	299·1	30	49	300·3	303	298	299·9	28	218	301·6	306	299	296·1
1000	29	—5	..	..	..	..	29	6	..	..	..	..	28	—17	..	..	..	..
900	29	921	295·4	299	293	293·3	29	935	295·1	299	291	294·0	28	916	297·6	302	294	292·6
850	29	1416	293·2	296	290	290·3	29	1429	292·9	297	289	291·7	28	1431	296·3	303	292	288.3
800	29	1940	290·4	294	288	287·0	29	1953	290·1	296	285	288·8	28	1945	294·4	302	290	285·2
700	29	3072	285·4	289	281	281·4	29	3084	284·7	292	280	283·4	27	3091	288·1	294	284	278·5
600	29	4353	279·4	285	274	273·1	27	4362	279·3	286	274	276·8	27	4378	280·2	286	274	271·3
500	29	5835	275·7	279	266	267·4	27	5838	271·9	279	265	271·4	27	5859	272·7	280	265	263·4
400	27	7584	263·0	271	255	..	27	7590	263·6	271	258	..	27	7621	264·9	275	260	..
300	22	9756	250·5	256	244	..	22	9792	253·0	266	245	..	25	9794	250·6	259	245	..
250	19	11067	241·1	249	234	..	15	11100	243·6	253	235	..	24	11115	242·3	249	234	..
200	19	12610	230·2	239	225	..	14	12643	234·1	248	223	..	22	12673	232·3	244	224	..
175	18	13488	223·4	233	216	..	11	13542	228·7	246	218	..	19	13571	226·4	235	218	..
150	16	14484	217·3	227	207	..	9	14534	221·0	230	211	..	18	14589	219·8	233	210	..
125	12	15660	212·7	224	198	..	8	15690	212·9	225	203	..	16	15738	212·8	227	197	..
100	12	16996	204·9	221	191	..	7	17130	208·3	220	200	..	13	17130	206·7	224	197	..
80	9	18357	198·7	213	181	..	5	18375	203·6	215	193	..	7	18389	198·3	206	191	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 hrs. G. M. T.

July, 1957 (Aanadina 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1003 mb.)						NAGPUR (966 mb.)						NEW DELHI (974 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	15	300·8	303	298	294·8	31	311	298·5	302	296	296·0	31	210	300·5	306	298	297·2
1000	31	43	..	..	..	..	31	3	..	..	..	..	31	−29	..	..	..	..
900	30	971	295·2	298	292	290·0	31	929	295·5	301	293	291·9	31	905	298·5	304	293	293·3
850	30	1466	292·6	295	289	287·5	31	1425	293·0	298	290	289·6	31	1406	295.9	301	292	290·6
800	30	1987	289·7	293	285	285·2	31	1946	290·4	296	287	287·6	31	1934	293·0	298	289	288·3
700	30	3113	283·1	286	281	278·8	31	3077	284·6	288	283	281·5	31	3072	286·4	291	284	281·9
600	30	4379	275·4	281	271	272·1	31	4353	278·4	283	275	273·0	31	4353	279·3	287	276	271·5
500	28	5831	268·0	272	264	..	31	5825	270·6	275	265	..	31	5829	271·8	275	268	266·8
400	28	7554	258·1	267	254	..	30	7567	261·1	268	256	..	31	7584	263·8	271	260	..
300	27	9673	243·6	259	238	..	30	9708	247·4	257	239	..	26	9753	250·3	259	244	..
250	24	10944	233·4	242	227	..	25	10995	236·5	249	229	..	26	11066	240·2	248	229	..
200	20	12434	221·5	234	214	..	23	12503	224·7	238	216	..	23	12596	228·4	237	222	..
175	16	13279	214·3	230	207	..	20	13381	218·1	233	209	..	23	13476	221·4	231	214	..
150	15	14256	207·6	225	199	..	17	14331	210·3	225	199	..	21	14465	215·0	225	205	..
125	10	15359	202·7	219	189	..	10	15432	205·9	217	200	..	19	15581	204·8	217	195	..
100	8	16715	199·0	211	191	..	8	16795	201·9	211	196	..	14	16937	198·0	208	190	..
80	..	..	..	..	..	..	6	18071	200·8	211	195	..	10	18223	196·4	206	190	..

	PORT BLAIR (998 mb.)						TRIVANDRUM (1002 mb.)						VERAVAL (1000 mb.)					
Surface	30	79	298·5	300	297	297·3	29	64	298·2	301	297	296·0	31	8	301·0	303	300	298·3
1000	30	60	..	..	..	..	28	77	..	..	..	..	30	12	..	..	..	..
900	30	985	294·2	297	291	291·4	28	995	293·0	295	289	289·1	30	939	294·7	299	291	291·7
850	30	1479	291·9	295	289	288·7	28	1486	290·0	293	287	286·1	30	1433	291·9	296	289	288·7
800	30	1998	289·4	292	287	285·3	28	2000	286·9	292	284	282·5	30	1953	289·3	293	284	285·1
700	30	3123	283·6	287	281	278·8	28	3117	282·4	285	277	274·3	30	3082	285·2	291	280	277·8
600	30	4388	276·4	279	273	273·0	27	4382	275·5	279	271	266·3	28	4358	277·8	281	275	270·0
500	30	5842	267·9	273	261	..	27	5834	267·2	270	264	..	28	5807	268.1	273	263	..
400	29	7561	257·9	268	251	..	27	7548	256·7	260	252	..	28	7551	259·6	266	252	..
300	23	9666	244·1	251	237	..	27	9652	241·3	249	231	..	25	9681	245·4	258	237	..
250	21	10935	234·8	241	227	..	25	10917	231·9	240	223	..	22	10966	235·2	251	227	..
200	15	12444	224·0	231	216	..	20	12390	219·3	226	211	..	18	12430	221·8	229	212	..
175	15	13296	218·0	225	204	..	15	13292	214·9	221	206	..	17	13283	214·7	222	204	..
150	13	14312	212·4	221	196	..	14	14235	208·1	215	201	..	16	14228	207·1	219	199	..
125	9	15452	210·3	223	201	..	11	15326	202·3	211	195	..	14	15292	198·9	210	192	..
100	7	16795	207·8	215	202	..	10	16646	199·2	207	192	..	11	16610	195·9	204	187	..
80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 hrs. G. M. T.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (996 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	25	48	300·5	302	299	297·0
1000	25	11	..	..	..	..
900	25	940	295·9	298	292	291·9
850	25	1437	293·2	295	290	289·8
800	25	1958	290·2	293	288	286·9
700	25	3085	284·0	287	281	281·2
600	25	4355	277·3	282	272	274·8
500	25	5820	269·8	273	262	..
400	23	7548	259·4	266	253	..
300	20	9666	244·3	252	237	....
250	18	10946	234·0	240	230	
200	17	12433	221·7	230	213	..
175	12	13268	215·4	222	210	..
150	11	14235	208·5	215	201	..
125	9	15332	200·8	207	194	..
100	6	16583	193·3	200	186	..
80	..	..	..	..	..	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 hrs. G. M. T.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (985 mb.)						AMRITSAR (969 mb.)						BOMBAY (1002 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	31	98	304·4	311	299	298·7	27	230	309·4	317	298	294·8	31	13	300·9	303	299	297·6
1000	28	—32	..	..	..	..	26	—56	..	..	..	..	29	30	..	..	..	..
900	28	907	298·6	304	295	293·2	26	900	304·0	312	297	290·0	28	958	294·5	299	290	291·6
850	28	1408	295·7	301	292	290·4	26	1409	300·1	308	293	287·2	28	1453	292·1	297	289	288·5
800	28	1935	292·7	297	288	287·3	26	1942	296·0	304	289	284·4	28	1973	289·4	293	287	285·4
700	28	3074	286·1	290	283	280·9	26	3091	288·7	296	282	274·1	28	3103	284·7	288	281	279·2
600	26	4358	280·0	284	277	273·3	26	4378	280·3	292	273	265·4	28	4381	278·3	282	274	272·8
500	25	5837	272·5	277	269	266·9	24	5853	271·3	276	265	..	27	5854	271·4	275	267	268·5
400	24	7592	262·7	267	256	..	24	7604	263·3	273	255	..	26	7603	262·6	269	257	..
300	19	9759	249·7	255	241	..	19	9755	249·7	258	243	..	20	9756	249·7	262	243	..
250	13	11071	240·8	248	233	..	16	11003	240·3	250	234	..	17	11057	239·6	248	232	..
200	7	12621	232·0	242	226	..	15	12594	228·4	242	220	..	17	12590	228·9	240	219	..
175							14	13470	221·6	238	212	..	14	13510	223·4	234	217	..
150							13	14467	216·6	234	204	..	13	14495	216·7	224	208	..
125							10	15517	206·5	230	193	..	10	15627	209·8	219	203	..
100							9	16774	199·1	216	184	..	8	16958	203·8	214	196	..
80							6	18120	203·7	219	197	..	7	18303	202·3	216	191	..

	CALCUTTA (997 mb.)						GAUHATI (993 mb.)						JODHPUR (972 mb.)					
Surface	29	6	302·2	306	298	299·6	30	49	302·9	305	299	302·3	25	218	308·8	315	299	294·5
1000	29	—20	..	..	..	..	29	—12	..	..	..	..	25	—42	..	..	..	..
900	29	913	297·1	301	293	293·6	29	925	297·1	303	293	295·7	25	910	302·6	311	293	290·9
850	29	1412	294·3	298	290	290·8	29	1425	294·5	301	291	292·6	25	1416	298·2	305	292	288·9
800	29	1936	291·7	295	286	288·1	29	1951	291·4	298	288	289·8	25	1945	294·7	301	286	285·3
700	29	3074	287·1	292	282	281·7	29	3085	285·9	293	281	283·3	25	3092	288·3	295	281	276·9
600	29	4362	280·7	288	275	274·3	29	4367	279·8	283	276	276·9	25	4379	280·0	287	273	267·2
500	29	5846	273·1	283	265	268·2	29	5846	272·4	277	265	266·5	25	5858	272·7	279	264	256·3
400	28	7602	263·5	276	255	..	29	7599	263·4	272	253	..	25	7619	264·5	278	259	..
300	25	9775	250·4	267	238	..	22	9765	250·5	259	242	..	22	9795	250·4	262	242	..
250	20	11076	240·9	254	227	..	17	11092	242·9	251	234	..	20	11115	242·1	254	232	..
200	19	12614	229·8	245	200	..	15	12617	230·7	241	222	..	17	12653	230·4	245	219	..
175	15	13489	223·4	241	195	..	10	13502	224·8	240	216	..	16	13538	224·3	243	210	..
150	12	14539	218·7	236	207	..	9	14505	218·1	237	209	..	16	14543	217·1	237	199	..
125	10	15670	211·8	230	200	..	7	15666	218·3	233	200	..	15	15690	210·1	233	196	..
100	8	16956	205·3	228	194	..	6	17102	209·0	229	196	..	12	17023	204·6	228	193	..
80	5	18467	202·4	212	195	..							9	18444	202·1	223	186	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 hr. G. M. T.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1001 mb.)						NAGPUR (964 mb.)						NEW DELHI (972 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dwe point			Mean	Max.	Min.	Dew point
Surface	30	15	304·2	307	301	296·7	30	311	301·9	307	298	296·7	31	210	306·1	314	299	296·9
1000	30	23	..	..	..	..	30	—14	..	..	..	..	31	—45	..	..	..	..
900	30	962	297·9	301	292	290·4	30	922	297·9	303	293	292·4	31	901	301·2	310	295	292·6
850	30	1461	294·1	299	289	288·3	30	1422	293·9	297	291	289·9	31	1405	298·0	306	292	290·1
800	30	1983	290·1	297	286	285·9	30	1949	291·1	294	288	287·5	31	1934	294.6	301	290	287·2
700	30	3109	282·8	287	277	278·4	30	3080	285·1	290	282	280·9	31	3078	287·1	294	283	180·8
600	29	4375	275·7	279	272	270·7	29	4358	278·6	282	272	274·2	31	4363	280·4	286	274	272·5
500	29	5832	268·3	271	264	..	29	5830	271·1	275	268	266·5	31	5844	272·7	276	267	264·9
400	29	7554	257·8	266	254	..	27	7571	261·9	266	254	..	30	7603	264·0	268	257	..
300	28	9665	242·6	249	235	..	26	9718	247·9	252	241	..	27	9777	250·3	255	243	..
250	27	10943	233·3	240	225	..	24	11016	237·2	243	230	..	28	11084	241·1	247	233	..
200	22	12434	222·2	234	211	..	18	12531	226·1	232	219	..	23	12625	230·4	237	221	..
175	20	13291	215·3	231	204	..	17	13407	220·1	231	213	..	20	13510	223·1	233	213	..
150	18	14245	207·8	226	195	..	17	14377	212·6	220	200	..	18	14521	217·3	230	207	..
125	13	15343	201·8	221	188	..	8	15565	206·5	213	199	..	17	15672	210·6	227	200	..
100	9	16697	201·0	215	193	..	8	16915	200·0	207	195	..	16	17030	203·3	222	193	..
80													12	18345	198·6	215	186	..

	PORT BLAIR (997 mb.)						TRIVANDRUM (1001 mb.)						VERAVAL (1000 mb.)					
Surface	31	79	300·1	301	297	297·8	31	64	300·7	302	297	296·8	31	8	302·3	305	301	298·9
1000	31	53	..	..	..	..	31	70	..	..	..	..	31	11	..	..	..	..
900	31	980	294·7	298	291	292·0	31	993	293·2	297	291	289·1	31	941	295·0	298	292	292·1
850	31	1475	292·1	295	290	288·5	31	1485	290·3	294	287	286·0	30	1437	291·9	295	286	289·3
800	31	1995	289·1	291	287	285·0	31	2004	287·8	291	285	282·6	30	1957	289·8	295	285	286·0
700	31	3120	283·3	285	279	278·2	31	3123	282·9	288	278	274·0	30	3088	285·8	291	281	277·9
600	31	4386	276·4	279	272	268·6	31	4391	276·3	281	273	266·8	30	4365	278·2	282	273	271·2
500	31	5840	268·2	273	261	..	31	5846	268·8	273	263	..	30	5831	269·7	274	263	..
400	31	7557	257·0	264	245	..	31	7570	257·9	265	252	..	30	7567	260·6	267	252	..
300	25	9673	243·5	257	236	..	30	9672	241·4	254	235	..	26	9718	247·4	253	241	..
250	22	10952	234·8	253	226	..	28	10946	232·5	247	222	..	24	11013	237·0	244	227	..
200	18	12440	223·8	237	216	..	25	12423	221·1	237	211	..	22	12522	225·4	235	215	..
175	12	13274	216·7	235	208	..	23	13259	215·0	233	204	..	22	13388	219·2	231	210	..
150	11	14253	210·0	232	199	..	21	14246	208·4	227	198	..	22	14369	211·9	226	202	..
125							17	15346	205·1	219	193	..	18	15507	205·1	213	197	..
100							14	16690	204·1	218	195	..	18	16854	200·8	208	189	..
80													11	18200	202·0	211	182	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 hrs. G. M. T.

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (994 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	29	48	302·6	305	300	297·8
1000	29	—7	..	..	..	..
900	29	926	296·9	301	295	292·3
850	29	1424	294·1	299	291	289·2
800	29	1947	291·2	295	289	286·2
700	29	3079	285·8	295	280	279·4
600	29	4354	278·0	283	273	272·5
500	28	5819	269·9	278	264	..
400	28	7549	258·7	272	248	..
300	26	9672	243·3	256	230	..
250	22	10967	234·0	245	215	..
200	13	12442	222·5	235	212	..
175	5	13281	214·8	223	205	..
150						
125						
100						
80						

Note : Number of observations refer to those of dynamic height.

Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273 °A.

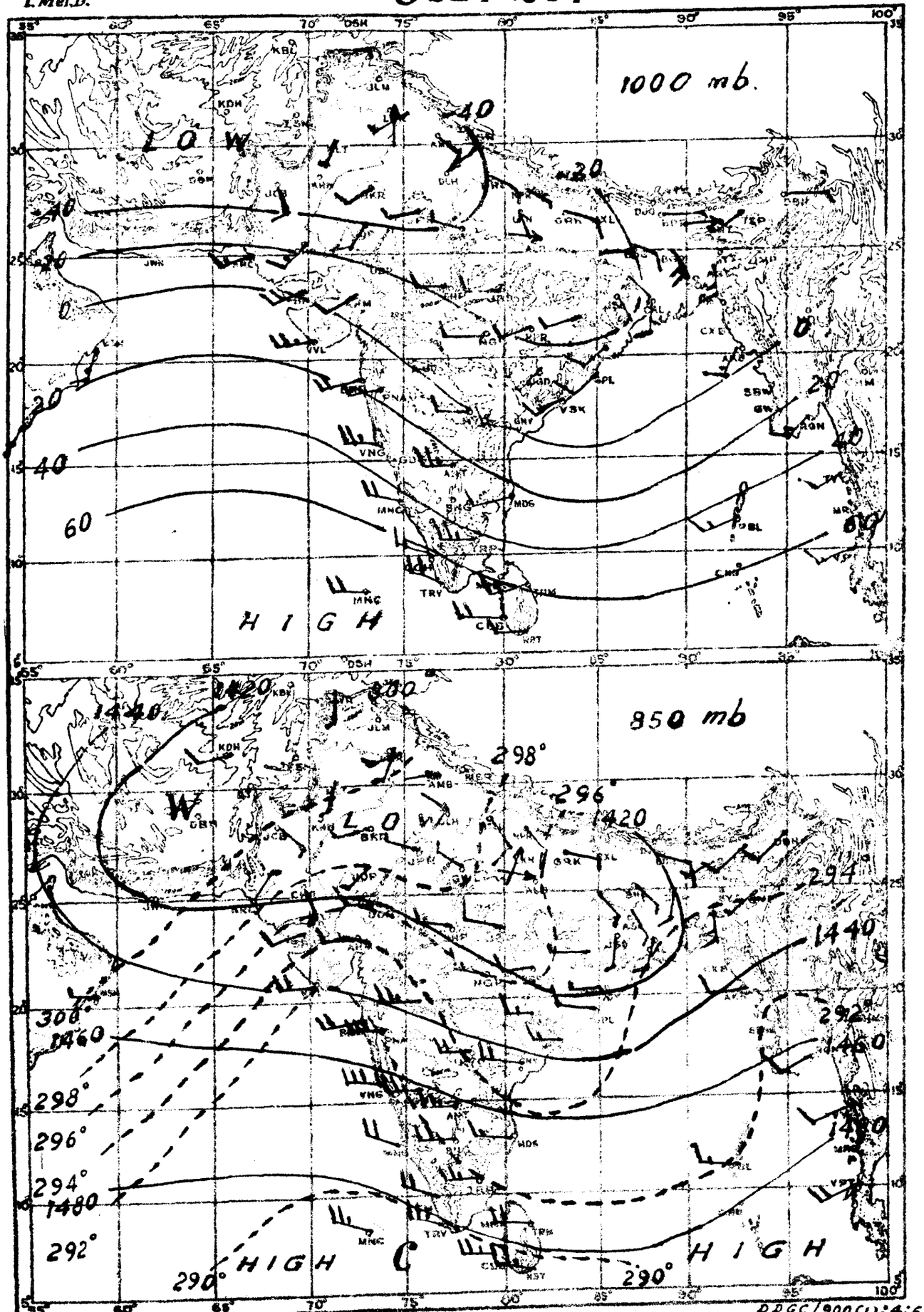
Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—67—336 D. D. G. Obs. Poona/62—[illegible]

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JULY 1957

I. Met. D. Plate I



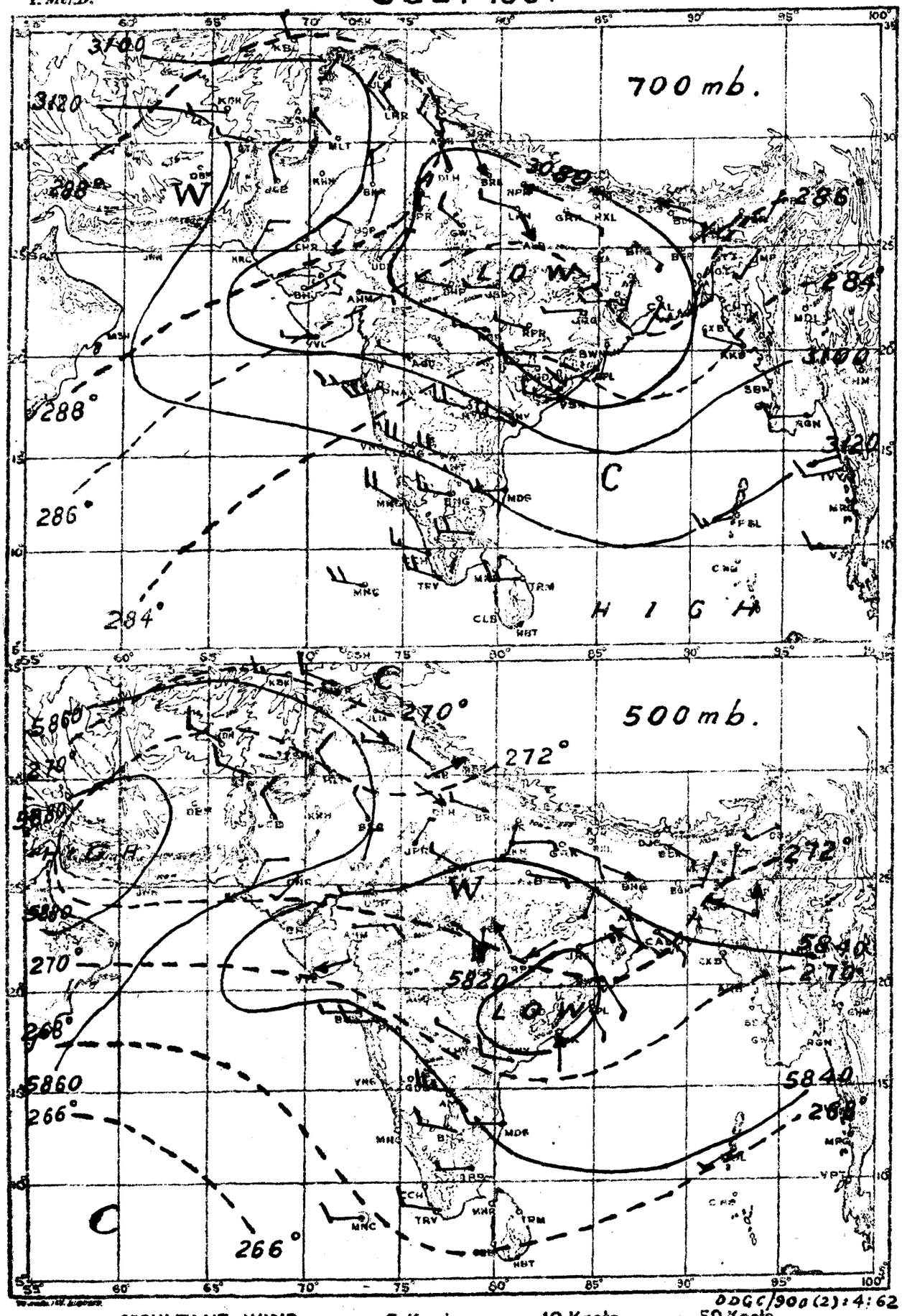
DDGC/300(1):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I. Met.D. **JULY 1957** *Plate II*



DDGC/900(2):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

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INDIA WEATHER REVIEW, 1957.

Monthly Weather Report

August

Published by authority of the Government of India

Chief features—

(1) Good and well distributed rainfall over the central parts of the country and the northern parts of the Peninsula, (2) formation of a cyclonic storm in the north Bay of Bengal and its movement across the interior of the country as a depression, and (3) a spell of very heavy rains in Jammu and Kashmir during the last week.

An upper air cyclonic circulation developed over southeast Madhya Pradesh on the 1st. Moving slowly westwards it lay over north Maharashtra and Vidarbha on the 3rd. Under its influence, the monsoon was active in Telangana on the 1st and 2nd, in Vidarbha, the Konkan and Maharashtra on the 2nd and 3rd and in Gujarat on the 3rd. With the dissipation of the cyclonic circulation on the 4th, there was a weakening of the monsoon over the interior of the country and an increase of rainfall along and near the foot of the Himalayas. Some very heavy falls of rain occurred in Bihar and Assam, Cooch Behar recording 32 cms. on the 4th and Cherrapunji 37 cms. and Motihari 39 cms. on the 5th.

Under the influence of an easterly wave, conditions became unsettled in the north Bay of Bengal on the 8th and by the same evening a shallow depression formed in the northwest angle of the Bay off the Orissa coast. Moving westwards and passing inland across the Orissa coast during the course of the night, it lay as a low pressure area over Orissa and the adjoining parts of east Madhya Pradesh on the 9th morning. The low pressure area moved into central Madhya Pradesh on the 10th and weakening further, merged into the seasonal trough by the next day. In association with the above disturbance, the monsoon was active in Gangetic West Bengal, east Madhya Pradesh, the Konkan and Vidarbha between the 8th and 10th, in coastal Andhra Pradesh, Telangana,and north Mysore on the 8th, in Chota Nagpur, Bihar, Telangana, Mysore and Kerala on the 9th and in west Madhya Pradesh and coastal Mysore on the 10th.

An easterly wave moved into the east central Bay and the adjoining areas of north Andaman Sea on the 11th morning. It moved slowly westnorthwestwards and under its influence a well marked trough of low pressure appeared in the west central Bay and the adjoining land areas on the 13th. The trough remained stationary till the 15th and became unimportant by the 16th but a residual feeble upper air cyclonic circulation persisted over Orissa and the adjoining areas till the 17th. In association with the above features, fairly widespread rain occurred in Madhya Pradesh, coastal Andhra Pradesh and Telangana on the 13th and 14th and in Orissa on the 15th and 16th; Neemuch recorded 19 cms. and Jagdalpur 11 cms. on the 15th. An upper air cyclonic circulation which appeared over east Rajasthan and neighbourhood on the 15th and persisted there for a day was responsible for a spell of widespread rains in the Punjab (I) and Himachal Pradesh on the 15th.

Under the influence of another easterly wave, conditions became unsettled in the north Bay of Bengal on the 18th and on the evening of 19th a depression formed with its centre near Lat. 20.5°N and Long. 90.5°E. Moving slowly westwards and intensifying, it became deep and was centred about 150 kms to the east of Puri on the morning of 21st. During the course of the day, it intensified further into a cyclonic storm and crossed coast between Puri and Gopalpur on the morning of 22nd. Weakening into a deep depression and moving in a westnorthwesterly direction, it lay over west Madhya Pradesh on the 23rd morning with its centre between Indore and Bhopal and over southeast Rajasthan on the 24th morning with its centre between Ajmer and Udaipur. Thereafter, it moved in a northerly direction under the influence of a westerly wave and broke up over the Kashmir Himalayas on the 26th. The cyclonic storm was responsible for a strengthening of the monsoon over the country. Widespread and locally heavy to very heavy rain occurred along and near the track of the depression. The rainfall in Jammu and Kashmir was particularly heavy due to the combined influence of the depression and the westerly wave. Some noteworthy amounts of rainfall recorded in association with the depression were : Hoshangabad 18 cms. and Seoni Malwa (Madhya Pradesh) 20 cms. on the 23rd; Sirohi and Pindwara (both in east Rajasthan) 19 cms. and 21 cms. respectively on the 24th; Mount Abu 17 cms. on the 25th and Udhampur (Kashmir) 28 cms. and Jammu 15 cms. on the 26th.

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According to press reports, the 75- miles stretch of the Kashmir valley extending from Anantnag to Sepore was under one vast sheet of water, Srinagar and a few villages alone having escaped the ravages of the floods. Considerable damage to crops and loss of property were reported to have been caused by the floods which were described as the worst in living memory.

A shallow low pressure area formed over Gangetic West Bengal on the evening of the 26th. It moved slowly westnorthwestwards during the course of the next two days and then merged with the seasonal trough. It was responsible for a good spell of rains in the northeast India, Uttar Pradesh and east Madhya Pradesh during the last four days of the month.

The total rainfall of the month was in large excess in the Konkan, coastal Andhra Pradesh, Telangana and north Mysore, in moderate excess in the Bay Islands, Sub-Himalayan West Bengal, Jammu and Kashmir, West Madhya Pradesh, Maharashtra and Vidarbha and in slight excess in Rajasthan. It was in slight defect in west Uttar Pradesh, Gujarat, south Mysore and Kerala and in moderate defect in Gangetic West Bengal, Chota Nagpur, Bihar, the Punjab (I) and the Madras State. Elsewhere, it was normal. Averaged over the plains of India, the month's rainfall was 8 per cent in excess.

Mean maximum temperature was below normal in Rayalaseema and normal elsewhere. Mean minimum temperature was generally normal over the country.

Mean relative humidity was in excess in Saurashtra and Kutch, Maharashtra, Telangana and north Mysore, in defect in Rayalaseema and normal elsewhere.

Mean cloud amount was in excess in Vidarbha, the Madras State and north Mysore and normal over the rest of the country.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA, 5
The 19th December, 1958.

S. S. LAL,
For *Director General of Observatories.*

Errata to M.W.R. for August 1957(Sravana 10-Bhadra 9 1879 Saka)

Page No.	Station	Hour	Column	For	Read
Table I - Sub-division					
377	Rajastan (East)		9	56	5.6
Table II					
381	Baroda		8	Blank	24.0
381	Baroda (Aerodrome)		8	Blank	24.2
381	Surat		2	0.7	30.7
382	Rajkot (Aerodrome)		20	10	18
383	Nidadavolu		10	224.3	124.3
385	Mannar		16	Blank	..
Table III					
389	Berhampore	0830	2	0330	0830
390	Gopalpur	0530	5	999.8	998.8
391	Dumka	0830	12	..	-1
392	Dehra Dum	0530	3	82	682
394	Kotah	0530	10	29.7	29.6
397	Rajkot (Aerodrome)	1730	28	Blank	0
400	Hyderabad (Begumpet)	0230	25	Blank	4
401	Salem	1130	27	22	2
401	Kallakurichi	0830	1	Kallkurichi	Kallakurichi
401	Mangalore	0230	3	221	22
401	Belgaum	0830	1	elgaum	Belgaum
402	Bangalore (Central Observatory)	0230	6	Blank	..
403	Kohima	0830	14	Blank	..
403	Darjiling (Raj Bhawan)	1730	23	P	0
404	Panchet Hills	1730	25	11	1
405	Foot note	-	-	(e) Mean of 25 days	(e) Mean of 26 days

P.T.O.

SG.5-11

Errata to Monthly Weather Report - August 1957 (Sravan 10 - Bhadra 9, 1879 Saka)

Page No.	Station	Time in I.S.T	Ht.in Km.	Entry under Column	Existing entry	Correct entry
407	Ambala (S.No.4)			Long.E	76°45'	76°46'
411	Begumpet	2330	3.0	D	250	290
411	Bhubaneshwar	1730	1.5	D	213	263
413	Gannavaram	0530		First Column	a	n
414	Gopalpur	1730	7.2	D	0 3	093
414	Imphal	0530	1.5	D	2 3	253
415	Jabalpur	2330	0.6	D	329	229
415	Jagdalpur	2330	Surface	v	2.8	2.3
417	Mangalore	2330	0.15 a.g.	V	1.20	12.0
418	New Delhi	1130	0.15 a.g.	v	1.4	1.8
419	Tezpur	2330	Surface	v	0.0	0.1
420	Trivandrum	0530*	1.5	v	24.3	24.7
		0530*	2.1	v	24.7	24.9
421				Line 3 - Saka era	187 Saka	1879 Saka
422	Ambala	0530	27.0	D	136	135
422	Anantapur	0530	12.0	D	0 9	090
		1730	10.5	D	0.9	099
422	Bamrauli	0530"		'Ht.in Km.	6.2	16.2
		1730*		Ht. in Km.	0.5	10.5
		1730*	14.1	v	2.0	20.0
422	Bhuj	1730	16.2	V	4.7	41.7
		1730	21.0	V	6 .0	62.0
422	Bikaner	1730		Ht.in Km.	0.5	10.5
422	Dum Dum	0530*	24.0	V	1 1.0	111.0
		1730*		Ht. in Km.	8.0	18.0
422	Gopalpur	1730		Ht. in Km.	10.2	12.0
422	Gorakhpur	1730	12.0	V	2 .2	21.2
422	Jodhpur	1130		Ht.in Km.	8.0	18.0
4 23	New Delhi	0530*		Ht.in Km.	21.1	21.0
425	Gauhati	00 G.M.T.		Against Standard pressure surface mb.800-Temperature °A Min	285	283
429	Madras	12 G.M-T.		Against standard pressure surface Mb.400, Ht. gpm	7563	7573
429	Port Blair	12 G.M.T.		Against standard pressure surface mb.900, Temperature °A Mean	291.5	294.5

Note :-

At some places on pp. 408-423 under Col.V and v decimal points have not come clear. All values of V and v have been given upto first place of decimal.

SG.5-11-1963

TABLE I—DIVISIONAL AND SUB-DIVISIONAL MEANS—AUGUST, 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity. %		Cloud	
					0830 hrs. I.S.T.	1730 hrs. I.S.T.	0830 hrs. I.S.T.	1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur & Tripura)	322·9 —36·5	90	32·4 +0·8	25·6 +0·4	86 +1	79	6·2 —0·1	4·5
2. West Bengal .	349·2 —15·9	96	32·2 +0·6	26·3 +0·5	84 —1	80	5·6 —0·6	5·5
3. Orissa . .	293·4 —29·8	91	31·8 +0·7	26·0 +0·4	84 +2	82	6·4 +0·5	6·7
4. Bihar . .	229·9 —99·7	70	32·1 +1·0	25·6 +0·4	83 +1	80	5·8 —0·5	6·1
5. Uttar Pradesh .	259·9 —47·7	84	32·9 +0·7	25·5 0	84 +1	76	5·4 —0·2	5·6
6. Punjab (I) (Including Himachal Pradesh and Delhi)†	106·9 —81·4	57	34·5 +0·1	26·3 +0·4	79 +3	62	4·0 —0·5	4·1
7. Jammu and Kashmir.	136·9 +39·0	140	25·8 —1·3	14·6 —1·3	70 —5	58	4·1 +0·1	4·5
8. Rajasthan . .	180·1 +22·8	114	34·0 +1·0	25·4 +0·4	77 +1	59	4·6 —0·3	4·7
Sub-Division								
1. Bay Islands .	591·3 +177·5	143	29·1 +0·5	24·1 +0·4	85 +1	88	7·1 +0·5	7·1
2. Assam (Including Manipur & Tripura)	322·9 —36·5	90	32·4 +0·8	25·6 +0·4	86 +1	79	6·2 —0·1	4·5
3. Sub-Himalayan West Bengal.	664·1 +155·8	131	13·1 —0·6	25·6 —0·1	86 +1	79	5·7 +0·5	4·9
4. Gangetic West Bengal.	231·1 —80·3	74	32·6 +1·0	26·5 +0·6	83 —1	81	5·5 —0·9	5·7
5. Orissa . .	293·4 —29·8	91	31·8 +0·7	26·0 +0·4	84 +2	82	6·4 +0·5	6·7
6. Chota Nagpur .	229·3 —118·1	66	31·4 +1·3	24·5 +0·4	83 —1	79	6·2 —0·6	6·7
7. Bihar . .	230·2 —91·5	72	32·6 +0·8	26·4 +0·5	84 +2	81	5·6 —0·5	5·7
8. Uttar Pradesh, (East)	283·1 —20·5	93	32·9 +0·7	25·9 +0·1	85 +1	78	6·0 +0·2	5·6
9. Uttar Pradesh (West).	236·7 —74·9	76	32·9 +0·7	25·1 —0·1	83 +2	72	4·8 —0·7	5·6
10. Punjab(India) (Including Delhi.)	106·9 —81·4	57	34·5 +0·1	26·3 +0·4	79 +3	62	4·0 —0·4	4·1
11. Himachal Pradesh	317·1 ..	..	31·5 ..	22·1 ..	85 ..	72	5·0 ..	5·3
12. Jammu and Kashmir.	136·9 +39·0	140	25·8 —1·3	14·6 —1·3	70 —5	58	4·1 +0·1	4·5
13. Rajasthan (West)	107·3	112	36·5	26·5	74	49	3·6	3·5
14. Rajasthan (East)	+11·2 252·8 +34·4	116	+1·3 31·9 +0·8	+0·5 24.6 +0·3	+1 79 +1	66	—0·4 5·3 —0·2	56
15. Madhya Pradesh (West)	378·9 +88·0	130	30·4 +0·9	23·3 +0·2	88 +3	75	6·7 +0·3	6·7
Division—*contd.*								
9. Madhya Pradesh	378·3 +57·1	118	30·3 +1·0	23·4 +0·3	88 +3	77	6·7 +0·3	6·9
10. Bombay . .	350·2 +104·4	142	30·0 —0·1	23·7 +0·1	88 +6	75	6·9 +0·4	6·5
11. Andhra Pradesh	225·2 +82·0	157	30·7 —1·8	24·1 —0·7	82 +4	72	6·4 +0·5	6·7
12. Madras . .	64·9 —24·3	73	33·2 —0·7	25·0 +0·1	72 0	61	5·9 +1·2	6·4
13. Mysore . .	275·6 +33·3	114	27·4 —1·2	20·9 +0·1	88 +5	74	7·0 +0·9	7·0
14. Kerala . .	248·8 —54·1	82	28·5 0	24·0 +0·5	89 +1	82	6·5 +0·2	6·7
Mean of India . (Excluding Jammu & Kashmir and Himachal Pradesh).	272·9 +20·8	108	30·3 +0·2	24·3 +0·2	84 +3	73	6·1 +0·2	6·1
Sub-Division—*contd.*								
16. Madhya Pradesh (East).	377·5 +13·0	104	30·2 +1·1	23·6 +0·4	87 +3	80	6·7 +0·2	7·1
17. Gujarat . .	168·5 —31·5	84	31·3 +0·3	24·7 +0·3	89 +5	71	7·1 +0·3	5·9
18. Saurashtra & Kutch. . .	91·4 —7·6	92	31·6 +0·4	24·9 0	88 +6	74	6·1 —0·1	5·7
19. Konkan . .	685·7 +273·2	166	28·6 —0·4	24·4 —0·3	90 +5	85	6·9 —0·2	6·9
20. Maharashtra .	355·3 +115·6	148	29·1 —0·3	21·5 +0·2	86 +7	72	7·1 +0·9	7·0
21. Vidarbha .	321·3 +87·4	137	30·3 —0·2	23·7 +0·3	87 +5	74	7·3 +1·2	7·3
22. Coastal Andhra Pradesh.	218·1 +80·2	158	31·5 —1·8	25·1 —0·8	81 +5	74	6·7 +0·7	6·6
23. Telangana .	358·2 +171·6	192	28·8 —1·3	22·6 —0·3	86 +8	75	5·4 —0·3	6·7
24. Rayalaseema .	106·5 —3·9	96	31·3 —2·4	23·3 —1·1	79 —7	62	6·9 +0·9	6·7
25. Madras . .	64·9 —24·3	73	33·2 —0·7	25·0 +0·1	72 0	61	5·9 +1·2	6·4
26. Coastal Mysore.	638·8 +43·8	107	28·3 —0·4	23·4 —0·1	92 +1	86	7·1 +0·5	7·3
27. Mysore (North).	233·9 +100·6	175	27·7 —1·9	21·0 0	87 +6	74	7·2 +1·6	7·4
28. Mysore (South).	135·7 —39·3	78	26·7 —0·9	20·0 +0·2	87 +5	69	6·8 +0·2	6·5
29. Kerala(Including Laccadives).	248·8 —54·1	82	28·5 0	24·0 +0·5	89 +1	82	6·5 +0·2	6·7

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

†Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																											
Maya Bandar	28·3	..	31·9	25	24·5	..	21·0	21	195·7	394·6	..	64·5	20	18	..	19·9	15·0	..	18	0	0	0	0	0	0	0	0	0
Long Island	30·2	..	31·8	16	24·4	..	22·3	6	122·7	423·7	..	95·8	7	17	..	5·7	3·2	..	21	0	0	2	0	0	0	0	0	0
Port Blair	29·1	+0·5	30·0	11,26, 27	24·1	+0·4	21·9	8	184·2	591·3	+177·5	103·2	6	20	—0·9	21·7	17·0	—4·6	28	0	0	4	0	0	0	1	0	0
Car Nicobar	30·0	..	31·2	7	24·6	..	22·4	10	44·9	163·9	..	27·2	27	15	..	9·1	5·9	..	20	0	0	0	0	0	0	0	0	0
Nancowry	29·4	..	30·6	25	24·9	..	22·3	13	94·5	164·2	..	21·8	13	17	..	15·1	12·9	..	23	0	0	3	0	0	0	0	0	0
Kondul	29·5	..	31·7	6	25·1	..	23·3	28	89·6	173·8	..	30·5	29	15	..	12·5	10·2	..	19	0	0	1	0	0	0	0	0	0
Assam (Including Manipur & Tripura)																												
Pasighat	31·1	..	37·6	21	24·0	..	22·2	7	138·0	542·4	..	185·9	6	14	..	4·6	4·0	..	19	0	0	0	4	0	0	0	0	0
Digboi	31·8	..	37·1	21,22	24·5	..	23·2	6	103·8	434·9	..	88·9	26	21	..	5·9	4·2	..	26	0	0	0	0	0	0	0	0	0
Dibrugarh	31·7	+1·0	37·2	21	24·7	+0·3	22·5	6	28·8	290·5	—160·6	52·1	5	12	—6·7	3·4	2·2	+0·6	18	0	0	6	0	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	31·2	..	36·6	21	24·7	..	23·1	1	48·2	286·1	..	69·9	5	16	..	6·0	4·1	..	20	0	1	20	1	0	0	0	0	0
North Lakhimpur	31·3	..	36·7	22	24·6	..	23·2	6	72·6	309·4	..	66·5	6	12	..	..	..	..	22	0	0	4	0	0	0	0	0	0
Sibsagar	32·5	+0·9	37·1	22	26·1	+0·7	24·1	9	61·7	287·8	—128·0	43·9	3	16	—2·1	5·0	4·3	+1·1	21	0	0	15	0	0	0	0	0	0
Jorhat	33·0	..	36·8	23	25·1	..	23·2	9	18·7	374·4	..	63·7	24	17	..	..	..	..	22	0	0	11	0	0	0	0	0	0
Golaghat	32·5	..	36·7	21,22, 23	..	..	..	..	29·2	328·0	..	59·7	30	14	..	..	..	..	17	0	0	0	0	0	0	0	0	0
Gohpur (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tezpur	32·7	+0·8	36·8	22	25·9	+0·5	23·4	13	21·5	230·4	—100·3	79·5	11	8	—7·9	..	..	..	14	0	0	3	0	0	0	0	0	0
Tezpur (P.B.O.)	32·4	..	36·4	22	25·7	..	23·4	11,13	13·0	206·6	..	71·6	11	8	..	3·8	2·0	..	18	0	1	13	0	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	75·7	458·9	..	115·4	7	11	..	7·6	4·2	..	16	0	0	12	0	0	0	0	0	0
Chaparmukh (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tangla	33·2	..	37·7	19	25·3	..	23·6	11,13	28·7	203·1	..	56·1	11	11	..	7·4	4·5	..	11	0	0	0	0	0	0	0	0	0
Gauhati	32·4	0	36·8	22	26·6	+1·0	24·5	12	12·7	384·8	+124·2	83·3	10	10	—3·1	4·9	2·5	+0·4	13	0	0	1	0	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	32·0	..	35·9	22	25·9	..	24·4	1 2,9	35·4	355·7	..	67·1	9	12	..	7·5	4·8	..	17	0	0	13	0	0	0	0	0	0
Rangiya	33·1	..	37·3	2	..	..	..	..	38·4	310·6	..	118·1	11	12	..	(c) 6·9	(b) 4·4	..	12	0	0	0	0	0	0	0	0	0
Goalpara	33·0	..	37·8	22	26·0	..	21·4	5	226·9	341·6	..	104·9	8	11	..	..	..	..	12	0	0	0	0	0	0	0	0	0
Dhubri	31·1	+0·9	34·4	23	26·1	+0·3	21·7	28	162·1	382·1	+44·5	94·0	6	8	—6·6	4·7	4·9	—0·7	13	0	0	5	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome)	31·9	..	36·1	22	25·1	..	15·1	12	219·7	787·6	..	195·8	6	14	..	6·0	4·2	..	15	0	0	3	0	0	0	0	0	0
Tura	29·7	..	35·6	21,22	24·1	..	22·3	12	273·4	435·8	..	21·4	7	19	..	6·2	5·2	..	23	0	0	0	0	0	0	0	0	0
Agartala	32·0	..	36·4	21	25·1	..	24·2	12	209·7	297·7	..	64·5	7	18	..	10·1	7·7	..	24	0	0	15	0	0	0	0	0	0
Silchar	32·4	+0·5	37·7	22	25·0	+0·1	23·7	2	46·5	300·4	—214·2	56·6	2	14	—8·2	3·1	1·8	—0·6	23	0	0	9	0	0	0	0	0	0
Silchar (Kumbhigram Aerodrome)	32·6	..	38·6	20	24·2	..	23·3	10,15	51·5	565·7	..	102·1	17	20	..	6·2	5·5	..	26	0	0	13	0	0	0	0	2	0
Imphal	29·2	..	32·9	20	21·7	..	19·2	14	40·7	153·6?	..	64·5	24	12	..	8·8	5·4	..	18	0	0	7	1	0	0	0	0	0
Haflong	28·3	..	33·2	22	21·1	..	20·3	9	58·1	220·6	..	35·8	13	19	..	..	..	..	22	0	0	5	2	0	0	0	0	0
Lumding	33·9	+1·6	38·1	22	24·9	+0·1	23·1	15	30·3	384·2	+179·0	110·7	16	13	+1·7	3·4	2·1	..	18	0	0	4	0	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar (C.W.O.)	31·9	..	36·3	21	25·2	..	23·4	4	104·2	827·1	+224·1	315·5	4	14	—4·7	5·7	3·3	..	18	0	0	15	1	0	0	0	0	0
Jalpaiguri	29·9	—1·7	35·4	21	24·5	—0·7	22·4	12	264·4	976·6	+334·7	111·5	5	20	—0·4	7·6	5·2	+2·5	22	0	0	14	0	0	0	0	0	0
Bagdogra	31·4	..	36·7	20	24·2	..	22·1	21	155·9	1040·1	..	202·3	7	18	..	3·3	1·7	..	22	0	0	15	0	0	0	0	0	0
Malda	32·2	+0·5	36·7	21	26·7	+0·5	25·2	7,31	66·7	188·6	—91·3	50·8	28	13	—1·6	9·3	6·9	—0·7	18	0	0	12	0	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	32·7	..	35·5	21	26·2	..	23·9	14,25	133·2	233·2	..	34·1	24	17	..	11·8	8·6	..	20	0	0	11	0	0	0	0	0	0
Calcutta	32·9	+1·2	35·9	21	26·6	+0·9	24·9	7	167·2	232·0	—96·2	36·6	7	18	0	8·0	5·7	+0·2	25	0	0	15	0	0	0	0	3	0
Barrackpore	32·6	..	36·3	21	26·1	..	24·3	6	220·5	353·4	..	81·5	6	17	..	..	..	..	23	0	0	16	0	0	0	0	0	0
Saugor Island	31·3	+0·8	33·6	21	27·2	+0·8	25·2	30,31	66·8	236·2	—101·1	54·6	2	15	—1·3	..	..	..	23	0	0	3	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	62·2	101·0	—123·5	36·8	31	8	—4·0	..	..	..	17	0	0	5	0	0	0	0	0	0
Contai	31·6	..	35·0	21	26·5	..	25·0	14	118·5	258·1	..	38·6	22	17	..	14·0	11·2	..	19	0	0	2	0	0	0	0	0	0
Midnapore	32·6	+0·8	34·5	19,25	26·1	+0·3	24·6	7,31	179·4	301·9	—22·0	69·1	31	15	—1·8	6·7	5·2	+1·7	17	0	0	4	0	0	0	0	0	0
Purulia	32·1	..	34·9	21	25·5	..	23·9	25	128·1	213·4	..	35·1	30	14	..	7·2	5·5	..	16	0	0	4	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	188·4	—119·7	36·8	29	15	—1·0	..	..	..	16	..	..	..	..	..	..	..	..	..	..
Burdwan	32·2	+0·4	35·5	21	26·8	+0·7	24·8	6,31	105·1	267·2	—35·6	90·9	6	12	—4·2	4·8	3·7	0	12	0	0	0	0	0	0	0	0	0
Krishnagar	33·2	+1·3	36·7	21	26·3	+0·5	24·7	6	79·9	240·3	—23·4	57·0	6	16	+0·7	6·6	5·0	—0·6	20	0	0	11	0	0	0	0	0	0
Asansol	32·4	+0·8	35·8	21	26·1	+0·8	24·4	20	127·2	189·2	—148·1	46·3	8	13	—4·0	9·4	7·0	—0·6	17	0	0	13	0	0	0	0	0	0
Suri	32·8	..	36·5	21	26·1	..	24·4	7	59·7	86·9	..	28·2	6	10	..	9·0	7·3	..	16	0	0	1	0	0	0	0	0	0

(b) Mean of 29 days. (c) Mean of 28 days, (R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Gangetic West Bengal—*Contd.*																												
Berhampore	33·4	+1·7	37·1	21	26·5	+0·5	25·1	5,25, 31	89·9	193·6	—96·2	56·6	5	12	—4·3	3·4	1·9	—2·9	19	0	0	0	0	0	0	0	0	0
Orissa																												
Baripada	33·0	..	35·8	6	..	..	..	..	275·2	401·4	..	104·4	7	19	..	3·7	2·5	..	26	0	0	15	0	0	0	0	0	0
Balasore	31·9	+0·6	34·6	25	26·2	+0·4	23·6	13	146·9	301·2	+2·5	81·3	29	17	+2·2	12·9	7·7	+1·9	21	0	0	10	0	0	0	0	0	0
Chandbali	30·6	—0·7	33·9	7	26·3	+0·5	24·4	3	145·8	229·2	—143·4	53·4	30	13	—2·8	14·1 (o)	10·9 (p)	+0·3	13	0	0	2	0	0	0	0	0	0
Cuttack	32·4	+0·7	35·3	19	25·3	—0·3	23·3	31	130·8	337·4	—3·0	62·2	19	20	+4·2	9·5	8·3	..	23	0	0	9	0	0	0	0	0	0
Bhubaneswar	31·7	..	33·9	7,18, 19	25·3	..	23·4	25	192·3	360·9	..	57·9	8	20	..	17·0	13·3	..	23	0	0	18	0	0	0	0	3	0
Puri	31·7	+0·8	34·0	20	26·9	+0·5	24·0	26	168·3	249·8	—27·6	39·9	8	14	+1·1	21·1	19·7	+3·8	16	0	0	10	0	0	0	1	0	0
Gopalpur	31·8	+0·8	35·4	19	26·1	+0·1	24·3	1	138·6	238·7	+43·1	64·3	26	15	+4·2	..	..	..	20	0	0	14	0	0	0	0	0	0
Koraput	25·5	..	28·3	2,3, 12	18·1	..	15·6	27	273·1	695·8	..	143·5	22	24	..	..	..	..	27	0	0	0	0	0	0	0	0	0
Titilagarh	29·3	..	32·8	5	24·8	..	22·6	20	157·8	395·3	..	82·5	22	17	..	4·7	2·9	..	24	0	0	10	0	0	0	0	0	0
Bolangir (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angul	32·5	+1·6	34·2	6	25·6	+0·7	22·6	19	74·6	194·4	—99·2	57·9	19	14	—1·1	10·0	6·9	—1·0	18	0	0	16	0	0	0	0	0	0
Keonjhar	30·9	..	33·3	4	23·3	..	21·8	5,8	120·2	269·8	..	74·5	8	15	..	9·2	6·7	..	20	0	0	11	0	0	0	0	0	0
Sambalpur	31·8	+1·4	34·1	1	25·5	+0·6	22·3	20	150·4	502·9	+19·3	150·1	8	19	+0·1	7·2	5·6	—0·2	20	0	0	18	0	0	0	0	0	0
Jharsuguda	32·1	..	34·5	18	25·1	..	22·3	12,13	220·2	469·8	..	94·2	26	17	..	10·3	8·0	..	21	0	0	20	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	33·0	+1·4	35·6	21,22	26·3	+0·7	24·5	31	176·0	226·7	—164·7	50·0	31	17	—1·0	9·9	7·3	+0·9	20	0	0	12	0	0	0	0	0	0
Jamshedpur(P.B.O)	32·8	..	35·1	21	26·0	..	24·3	16	188·2	237·0	..	49·8	16	15	..	7·1	4·4	..	18	0	0	16	0	0	0	0	0	0
Chaibasa	32·4	+1·1	35·0	19	25·4	+0·5	23·9	20	145·3	191·5	—119·4	54·3	29	12	—4·6	4·5	2·8	—0·6	15	0	0	12	0	0	0	0	0	0
Ranchi	30·1	+1·6	32·8	21,22, 23	22·7	0	20·9	7,18	109·3	358·2	+6·7	71·1	27	18	—0·6	5·5	4·9	—2·5	18	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	29·1	..	31·7	21	22·8	..	21·1	29	54·9	197·4	..	66·5	27	16	..	(i) 14·4	10·9	..	22	0	0	10	1	0	0	0	0	0
Daltonganj	32·8	+1·3	34·8	4,18	25·8	+0·9	24·2	26	97·2	238·2	—104·9	38·9	27	15	—1·4	7·8	4·9	—0·4	17	0	0	9	0	0	0	0	0	0
Hazaribagh	30·1	+1·2	33·7	22	23·4	+0·5	21·7	28	70·2	140·6	—194·9	46·2	27	12	—5·6	10·2	8·3	—1·2	21	0	0	14	1	0	0	0	0	0
Dhanbad	32·0	..	35·6	21	25·3	..	23·2	12	142·9	220·7	..	69·3	29	13	..	9·5	7·3	..	20	0	0	16	1	0	0	0	0	0
Bihar																												
Purnea	32·1	+0·4	37·3	21	26·4	+0·6	23·9	6,31	59·8	221·7	—112·3	49·6	5	9	—7·2	7·4	5·0	+1·3	14	0	0	6	0	0	0	0	0	0
Forbesganj	32·7	..	39·0	21	24·7	..	21·7	31	93·8	401·3	..	111·7	5	13	..	8·0	5·7	..	16	0	0	11	0	0	0	0	0	0
Darbhanga	32·5	+0·8	37·5	21	26·7	+0·5	22·8	12	227·6	406·2	+63·1	92·0	7	15	+1·2	4·4	2·0	—3·1	16	0	0	1	0	0	0	0	0	0
Motihari (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muzaffarpur	..	..	..	..	..	..	..	..	..	889·8	+570·8	193·5	5,6	11	—2·6	..	..	..	11	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	247·5	—39·0	71·9	12	15	+1·6	..	..	..	17	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	185·3	—134·0	58·4	18	12	—2·6	..	..	..	12	..	..	..	..	..	..	..	..	..
Patna	32·7	+1·0	36·9	22	27·0	+0·5	22·7	12	73·5	152·1	—180·4	41·2	6	10	—3·9	8·1	7·2	+0·9	15	0	0	6	0	0	0	0	0	0
Patna (Aerodrome)	32·4	..	36·1	22	26·6	..	22·6	12	48·7	143·4	..	51·3	1	11	..	7·7	6·2	..	13	0	0	12	0	0	0	0	0	0
Dehri	32·9	..	34·4	4,5,21	26·4	..	23·4	12	36·1	179·9	—155·9	48·3	19	11	—3·6	5·8	5·0	..	13	0	0	3	0	0	0	0	0	0
Gaya	33·1	+0·9	36·7	22	26·4	+0·7	23·3	28	230·4	319·0	—30·3	56·1	28	12	—3·7	8·4	6·6	—1·9	17	0	0	16	0	0	0	0	3	0
Jamui	32·8	..	36·7	22	26·3	..	23·9	6	280·0	348·8	..	98·6	25	14	..	6·5	4·6	..	19	0	0	11	0	0	0	0	0	0
Dumka	32·2	+0·8	34·7	20	25·3	0	23·7	6,14	72·1	146·7	—182·0	34·0	14	14	—3·6	..	..	..	14	0	0	11	0	0	0	0	0	0
Bhagalpur	32·9	..	38·5	21	26·6	..	21·7	6	111·5	215·6	..	57·6	6	11	..	7·6	5·6	..	16	0	0	15	0	0	0	0	0	0
Sabour	32·8	+1·1	37·4	21	26·6	+0·4	23·9	13	118·8	213·8	—53·1	57·9	6	12	—3·0	7·7	5·4	—3·6	19	0	0	13	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	32·2	+0·1	36·8	22	25·3	—0·5	22·2	7	70·9	222·0	—175·5	50·8	12	14	+0·5	2·2	2·2	—3·6	14	0	0	0	0	0	0	0	0	0
Nautanwa	32·9	..	37·6	22	25·8	..	24·0	13	57·1	280·1	..	37·3	26	16	..	8·3	6·6	..	17	0	0	0	0	0	0	0	0	0
Gorakhpur	33·0	+1·0	36·7	22	26·1	+0·2	23·9	14	152·9	360·6	+11·3	128·3	6	16	+1·1	5·4	3·9	+0·7	19	0	0	4	0	0	0	0	0	0
Azamgarh (R)																												
Ballia (R)																												
Varanasi (Banaras) (R)																												
Varanasi (Banaras) (Babatpur Aerodrome)	32·4	..	36·4	22	26·3	..	24·0	7	58·3	300·9	..	94·0	28	11	..	9·5	7·7	..	17	0	0	14	0	0	0	0	0	0
Allahabad (Bamrauli)	33·6	+1·7	36·9	6	26·2	+0·4	23·7	7	137·1	347·6	+92·8	65·5	28	14	—0·7	7·7	5·6	—1·3	21	0	0	17	0	0	0	0	1	0
Banda	34·2	..	37·2	7	26·0	..	21·7	7	310·1	535·1	..	138·7	19	14	..	1·1	0·6	..	20	0	0	0	0	0	0	0	0	0
Fatehpur	31·5	—0·6	35·1	7	26·0	+0·2	22·8	7	44·2	287·3	+32·5	56·1	19	12	—2·4	8·6	3·8	—1·3	13	0	0	0	0	0	0	0	0	0
Kanpur	33·2	+1·1	35·9	6	26·3	+0·4	24·4	2,29	65·2	225·5	—59·0	76·2	19	12	—1·3	11·3	8·4	—1·9	16	0	0	4	0	0	0	0	0	0
Lucknow	33·4	+0·9	37·4	6	25·5	—0·4	22·5	14	133·5	256·2	—35·9	69·3	30	12	—1·7	..	..	..	14	0	0	0	0	0	0	0	0	0

(i) = Mean of 22 days. (o) = Mean of 16 days. (p) = Mean of 15 days. (R)—Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (East)—*Contd.*																												
Lucknow (Amausi Aerodrome)	33·1	+0·6	36·9	6	25·8	+0·4	22·8	7,29	143·6	282·6	—9·5	70·4	30	11	—2·7	11·1	8·5	..	18	0	0	11	0	0	0	0	1	0
Hardoi . .	33·4	..	36·8	22	26·1	..	22·3	7	121·1	210·9	..	59·9	30	14	..	6·3	5·2	..	18	0	0	1	0	0	0	0	0	0
Lakhimpur Kheri (R)																												
Bahraich (R)																												
Uttar Pradesh (West)																												
Orai . . .	33·2	..	37·8	7	23·4	..	21·1	13,30	186·2	433·8	..	232·4	30	13	..	10·4	7·9	..	16	0	0	0	0	0	0	0	0	0
Jhansi . .	32·2	+0·4	35·9	6	25·5	+0·6	22·8	30	142·3	339·0	+44·6	65·3	18	16	+2·7	6·5	4·5	—1·1	16	0	0	3	0	0	0	0	0	0
Agra . .	33·7	+0·7	38·8	6	26·0	—0·1	20·8	13	93·0	134·5	—71·5	55·1	13	7	—3·3	5·0	4·7	—1·3	10	0	0	0	0	0	0	0	0	0
Agra (Aerodrome) (R)																												
Mainpuri . .	34·3	+1·1	38·9	7	25·7	—0·1	24·0	20	91·2	130·3	—99·6	24·9	16	7	—3·5	7·0	4·0	+0·9	13	0	0	0	0	0	0	0	0	0
Aligarh . .	33·8	+0·7	38·6	6	23 2	—2·5	20·1	13	202·9	271·9	+70·5	155·7	19	11	+1·6	8·7	7·0	+0·4	12	0	0	1	0	0	0	0	0	0
Bareilly . .	33·0	+0·7	36·7	23	26·0	+0·3	22·6	7	156·4	204·3	—90·3	34·1	7	13	+0·7	6·9	4·6	+1·7	15	0	0	4	0	0	0	0	0	0
Meerut . .	33·4	+0·6	37·8	5	26·4	+0·7	24·0	13	..	144·4	—79·1	44·5	13	9	—0·8	..	5·4	..	9	0	0	0	0	0	0	0	0	0
Najibabad . .	32·7	..	36·2	23	25·1	..	20·9	7	64·4	106·6	..	31·0	7	10	..	4·4	2·3	..	13	0	0	0	0	0	0	0	0	0
Roorkee (R) .																												
Dehra Dun .	30·1	+0·9	34·1	23	23·2	+0·5	20·1	1	256·2	432·4	—298·9	54·6	19	17	—4·3	4·1	2·8	+0·5	21	0	0	9	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
New Delhi . .	34·3	+0·7	38·1	6,7	26·8	+0·7	24·8	14	39·5	104·1	—79·5	38·3	14	8	—1·0	8·3	6·5	—2·4	11	0	0	6	0	0	0	0	0	0
Hissar . .	36·2	+0·5	40·3	5,7	26·4	+0·3	24·4	17	36·2	53·1	—70·6	19·7	16	5	—0·5	8·1	7·0	—0·9	7	0	0	4	0	0	0	0	0	0
Karnal . .	33·2	..	37·3	5	24·3	..	20·3	1	67·5	251·6	..	76·2	16	10	..	0	0	..	11	0	0	4	0	1	0	0	0	0
Patiala . .	34·0	..	37·9	22	25·7	..	21·6	1	23·1	129·8	—115·6	41·1	26	6	—3·2	8·7	6·9	..	8	0	0	3	0	0	0	0	0	0
Ambala . .	33·0	—1·0	38·0	6	25·7	+0·1	21·2	8	60·6	140·6	—59·8	45·7	27	7	—2·0	7·7	6·7	+3·0	9	0	0	0	0	0	0	0	0	0
Ambala (Aerodrome) (R)																												
Chandigarh .	33·5	..	37·4	23	24·9	..	20·5	1	65·8	123·0	..	28·5	1	7	..	..	..	..	9	0	0	1	0	0	0	0	0	0
Ludhiana (R) .																												
Ferozepur . .	34·6	..	38·3	6	25·6	..	21·3	1	99·2	105·7	..	58·4	17	7	..	4·1	2·4	..	8	0	0	0	0	0	0	0	0	0
Amritsar . .	33·6	..	37·4	6	24·5	..	19·3	8	74·3	295·9	..	62·7	26	9	..	9·8	7·5	..	11	0	0	7	0	0	0	0	0	0
Pathankot . .	32·6	..	36·2	23,24	24·1	..	21·0	1	202·3	574·0	..	149·1	13	14	..	4·5	2·6	..	16	0	0	1	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur . .	32·0	..	35·4	23	23·3	..	20·0	1	116·1	378·1	..	68·6	1	17	..	5·5	3·8	..	17	0	0	8	0	0	0	0	0	0
Mandi . .	30·9	..	34·2	22	20·9	..	16·6	2	49·8	256·2	..	72·1	10	13	..	2·9	2·2	..	19	0	0	3	0	0	0	0	0	0
Jammu and Kashmir.																												
Srinagar . .	28·1	—2·2	33·3	18	17·0	—0·4	11·9	2	43·2	113·3	+51·8	64·2	26	5	—0·3	5·0	5·3	+1·6	10	0	0	4	0	0	0	0	0	0
Gulmarg . .	19·1	—1·4	23·1	18	8·2	—2·7	3·8	30	102·0	182·5	+64·6	85·4	26	10	+0·1	7·0	4·3	0	17	0	0	13	0	0	0	0	0	0
Sonamarg* .																												
Dras* . .																												
Kargil . .	..	..	..	..	..	..	..	..	..	7·5	—1·6	6·5	27	1	—0·2	..	..	..	3	..	..	..	..	..	..	..	..	..
Leh . . .	22·6	—1·8	28·1	18	8·7	—1·1	4·4	2	2·8	21·9	+6·9	10·7	2	4	+2·1	5·3	5·2	+2·5	5	0	0	1	0	0	0	0	0	0
Skardu (R) .																												
Gurez . .	..	..	..	..	..	..	..	..	..	26·7	—59·2	12·7	25,26	2	—5·4	..	..	..	3	..	..	..	..	..	..	..	..	..
Gilgit (R) . .																												
Misgar (R) .																												
Jammu . .	33·5	+0·3	37·0	24	24·5	—0·9	21·1	26	..	469·8	+171·3	150·4	26	14	+2·9	..	..	..	17	0	0	2	0	0	0	0	0	0
Gund . .	..	..	..	..	..	..	..	..	..	143·3	..	49·3	26	11	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Pandras . .	..	..	..	..	..	..	..	..	..	133·5	..	73·7	26	6	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Panamik (R) .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Khangral . .	..	..	..	..	..	..	..	..	..	27·9	..	12·7	2	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Digar . .	..	..	..	..	..	..	..	..	..	21·6	..	5·1	27	6	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Khalatse . .	..	..	..	..	..	..	..	..	..	28·0	..	17·8	26	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Mulbik . .	..	..	..	..	..	..	..	..	..	60·0	..	30·5	26	3	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar .	37·6	—0·1	42·7	6	26·9	0	24·6	9	8·1	36·8	—15·3	15·7	16	4	+0·7	6·9	5·9	—3·6	6	0	0	4	0	0	0	0	0	0
Churu . .	35·6	..	41·4	6	26·1	..	23·7	14,28	27·5	43·4	..	25·2	14	3	..	12·9	9·8	..	9	0	0	6	0	0	0	0	0	0

(R) Register not received. *Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hour	Departure from normal	Precipitation(0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (West) —*Contd.*																												
Bikaner	36·7	+0·3	42·7	6	26·9	0	22·2	13	19·9	56·9	—34·5	36·6	13	4	—0·9	10·9	9·7	—0·4	6	0	0	4	0	0	0	0	0	0
Jaisalmer (R)																												
Phalodi	34·4	..	43·1	5	26·3	..	23·1	27	44·1	129·2	+48·7	57·1	24	6	+1·6	18·1	15·7	..	6	0	0	0	0	0	0	0	0	0
Jodhpur	35·4	+2·2	42·9	5	26·1	+1·1	22·8	25	36·0	187·8	+64·9	85·1	24	7	+1·1	15·1	13·7	—0·9	8	0	0	5	0	0	0	0	0	0
Barmer	36·2	+2·6	43·3	5	25·9	+1·0	22·4	15	18·3	125·9	—8·0	38·1	24	5	—0·8	15·0	13·5	+3·2	7	0	0	5	0	0	0	0	0	0
Rajasthan (East)																												
Alwar (R)																												
Sikar	33·9	..	40·0	5	24·8	..	22·2	20,28	18·5	31·9	..	8·3	18	6	..	8·7	6·6	..	13	0	0	0	0	0	0	0	0	0
Jaipur	32·4	—0·3	37·9	6	25·0	+0·6	22·2	24	172·5	279·1	+74·4	51·3	19	12	+1·8	9·3	6·2	—1·0	13	0	0	7	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	32·5	..	37·9	6	24·7	..	21·7	13	164·0	274·9	..	103·6	18	12	..	..	..	..	13	0	0	7	0	0	0	0	0	0
Dholpur (R)																												
Ajmer	32·2	+1·3	37·8	5	24·4	0	21·1	24	147·1	243·8	+72·3	109·2	21	8	—0·4	12·3	10·4	+2·2	10	0	0	8	0	0	0	0	0	0
Kotah	32·8	+0·8	37·9	5,6	25·8	+0·4	23·3	13	120·0	283·6	+38·2	96·8	13	11	+0·6	10·1	8·1	+2·6	13	0	0	5	0	0	0	0	0	0
Chambal	31·7	..	36·9	5	23·0	..	15·6	13	81·9	233·7	..	52·3	14	10	..	9·5	6·3	..	12	0	0	6	0	0	0	0	0	0
Jhalawar	31·8	+1·2	36·2	5,6	24·5	+0·6	22·2	9,22, 31	44·5	212·9	—79·4	72·6	23	8	—4·8	11·3	9·2	+2·9	13	0	0	2	0	0	0	0	0	0
Udaipur	30·5	+0·8	35·5	5	23·1	—0·1	19·9	29	75·0	244·7	+66·6	105·7	24	10	+1·4	5·6	4·5	..	14	0	0	8	0	0	0	0	0	0
Erinpura (Jawai Dam)	32·5	..	38·3	5	25·3	..	22·3	24	56·1	271·4	..	180·9	24	10	..	9·7	9·6	..	10	0	0	0	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	32·5	+0·6	36·9	6	25·9	+0·6	23·2	30	103·7	388·9	+158·5	81·8	19	14	+1·3	10·7	7·6	..	18	0	0	7	0	0	0	0	0	0
Sheopur Kalan	32·3	..	37·3	6	25·2	..	22·3	24	174·6	312·7	..	87·6	18	11	..	10·3	8·0	..	11	0	0	5	0	0	0	0	1	0
Guna	30·7	+1·1	35·6	6	23·7	+0·6	21·1	24	173·6	317·3	—75·1	68·8	20	13	—0·6	13·3	9·1	—0·4	18	0	0	7	0	0	0	0	1	0
Rajgarh	31·0	..	34·9	6	23·9	..	20·9	31	98·9	278·2	..	55·6	14	15	..	15·1	11·5	..	17	0	0	0	0	0	0	0	0	0
Neemuch	30·7	+1·4	35·0	5	23·2	+0·5	21·2	24	319·7	501·3	+268·9	186·0	15	13	+3·0	13·9	12·9	+0·2	15	0	0	5	0	0	0	0	0	0
Ratlam	29·1	..	31·9	23	22·6	..	21·4	29	164·3	511·3	..	153·4	23	19	..	13·1	9·7	..	22	0	0	4	0	0	0	0	0	0
Alirajpur	29·9	..	32·3	16	23·7	..	22·1	24	130·8	331·8	..	140·7	24	12	..	14·8	12·2	..	20	0	0	1	0	0	0	0	0	0
Indore	28·6	+0·5	32·3	23	22·1	+0·3	20·3	30	92·0	307·6	+100·6	105·9	23	12	+0·7	24·5	20·1	..	21	0	0	5	2	0	0	1	0	0
Bhopal (Bairagarh)	29·5	+0·8	32·7	4,5	22·7	+0·1	20·7	31	90·2	500·1	+222·2	102·1	23	15	+0·2	16·6	13·2	+1·8	23	0	0	9	2	0	0	0	0	0
Khandwa	30·5	+0·6	33·0	25	23·4	+0·1	21·1	24	69·1	327·3	+168·6	203·2	23	10	+0·1	15·9	11·5	+0·6	17	0	0	2	0	0	0	0	0	0
Hoshangabad	30·5	+1·3	33·6	5	23·7	+0·1	21·1	24	66·7	415·7	+33·2	178·3	23	15	—0·7	4·4	2·6	—2·2	20	0	0	3	0	0	0	0	0	0
Betul	27·7	..	30·6	5	22·1	..	20·2	14	113·7	289·7	..	94·0	23	12	..	9·6	7·2	..	24	0	0	5	0	0	0	0	0	0
Chhindwara	29·3	..	31·3	26,28	22·2	..	18·2	24	129·0	304·0	..	64·5	6	13	..	10·1	7·5	..	13	0	0	0	0	0	0	0	0	0
Seoni	29·0	+0·8	31·7	22	22·5	+0·6	21·1	27,28, 29	97·3	254·3	—83·8	77·5	19	12	—4·5	10·7	6·8	+0·7	26	0	0	9	0	0	0	0	0	0
Sagar	29·7	+1·1	32·7	6	22·5	+0·4	19·9	31	100·1	337·6	—19·8	57·7	19	14	—1·6	11·2	9·2	..	20	0	0	13	0	0	0	0	0	0
Nowgong	32·5	+1·3	35·6	17	23·2	—1·7	20·6	8	213·3	440·4	+107·9	105·2	19	17	+3·1	7·3	5·7	+1·7	18	0	0	5	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	31·7	+1·7	33·9	6,12, 22	24·9	+0·3	21·5	7	102·0	228·2	—107·1	54·6	7	15	—0·1	(b) 8·0	5·5	—1·4	17	0	0	11	0	0	0	0	0	0
Umaria	30·9	+1·5	33·7	22	23·7	+0·1	20·7	8	109·6	356·8	+23·6	93·0	19	17	+1·0	6·3	5·2	—1·1	20	0	0	7	0	0	0	0	0	0
Jabalpur	31·0	+1·8	33·8	4	23·8	+0·7	21·7	8,28	85·1	260·5	—170·5	35·8	20	16	—1·4	8·8	6·5	+1·5	21	0	0	8	0	0	0	0	0	0
Mandla	30·1	..	32·9	22	22·8	..	19·9	8	138·8	557·5	..	157·8	27	22	..	(a) 6·4	4·0	..	27	0	0	18	0	0	0	0	0	0
Pendra	28·9	+1·0	31·9	22	22·7	+0·5	21·7	7	247·6	370·0	+6·3	64·5	17	20	+1·6	29·3	8·3	..	26	0	0	20	4	0	0	0	0	0
Ambikapur	29·9	..	32·1	22	23·2	..	21·3	13	125·2	297·6	..	47·5	21	18	..	11·7	8·3	..	24	0	0	14	0	0	0	0	0	0
Champa	31·8	..	35·1	22	25·3	..	22·2	12	121·0	468·6	..	87·1	26	17	..	6·1	4·1	..	21	0	0	16	0	0	0	0	0	0
Raigarh	32·1	..	35·1	22	25·2	..	23·2	13	130·6	506·8	..	94·2	28	21	..	5·6	4·3	..	23	0	0	1	0	0	0	0	0	0
Raipur	30·7	+0·8	33·8	27	24·1	+0·3	21·7	7,8	161·2	443·9	+80·2	89·4	23	20	+4·5	10·5	8·6	—3·3	25	0	0	9	0	0	0	0	0	0
Kanker	29·6	+0·5	31·8	4,25	23·7	+0·5	21·1	6	257·2	505·3	+194·4	162·6	22	19	+3·8	7·3	5·9	—2·1	22	0	0	10	0	0	0	0	0	0
Jagdalpur (P.B.O.)	28·5	+0·2	32·2	1	22·6	+0·6	20·9	9	214·6	478·4	+64·9	135·9	22	18	—0·9	9·1	6·6	..	26	0	0	13	0	0	0	0	0	0
Gujarat																												
Deesa	33·9	..	39·4	4 ,5	25·2	..	22·6	24	14·5	179·3	..	83·8	24	4	..	11·1	10·0	..	8	0	0	6	0	0	0	0	0	0
Idar	31·4	..	34·7	5	23·6	..	21·6	31	42·4	153·2	..	91·2	24	9	..	10·4	7·5	..	13	0	0	2	0	0	0	0	0	0
Ahmedabad	33·0	+0·9	37·0	8	25·0	+0·6	23·2	21	8·7	43·3	—161·2	11·7	24	6	—5·0	9·7	8·4	0	12	0	0	2	0	0	0	0	3	0
Dohad	29·3	—0·3	31·7	10	23·3	—0·2	21·5	24	131·0	275·1	+98·1	87·1	24	10	—0·7	21·0	20·7	+8·0	17	0	0	3	0	0	0	0	0	0
Baroda	32·0	0	33·9	6,10	25·0	+0·2		24	46·3	108·7	—120·4	32·3	20	8	—1·7	6·7	5·1	—2·8	18	0	0	3	0	0	0	0	0	0
Baroda (Aerodrome)	31·8	..	33·8	6	25·2	..		27	39·2	104·2	..	30·7	20	8	..	10·2	9·5	..	19	0	0	5	0	0	0	0	0	0
Broach	31·7	..	33·8	10	25·3	..	23·9	6,14	97·1	236·0	..	91·4	6	12	..	11·3	9·4	..	22	0	0	0	0	0	0	0	0	0
Surat	0 7	+0·4	32·5	10	25·6	+0·6	24·1	13	147·3	246·9	+57·7	116·6	6	13	+0·6	11·3	9·7	+02	20	0	0	0	0	0	0	0	0	0

(b)—Mean of 29 days. (R)—Register not received. (a)—Mean of 30 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days 2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Totalfall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Saurashtra & Kutch																												
Bhuj*																												
Bhuj (P.B.O.)	33·3	+2·0	37·0	4	25·2	+0·5	22·8	23	46·8	52·0	—22·4	44·7	16	1	—2·7	15·8	13·9	—2·7	7	0	0	1	0	0	0	0	0	0
Bhuj (Aerodrome)	33·3	..	37·0	4	25·4	..	22·8	31	58·6	64·1	..	53·9	16	3	..	18·6	17·5	..	7	0	0	1	0	0	0	0	0	0
Kandla	32·5	..	35·6	3,5	26·3	..	24·9	19,31	18·3	38·1	..	10·4	24	4	..	28·7	25·9	..	9	0	0	2	0	0	0	2	0	0
Mandvi	31·1	..	34·4	24	26·6	..	25·1	3	3·6	17·7	..	8·2	16	3	..	35·5	34·3	..	5	0	0	0	0	0	0	2	0	0
Dwarka	30·2	+0·9	31·7	11	25·9	0	24·9	13	3·0	12·5	—53·0	6·1	19	1	—2·8	21·4	21·2	+0·9	7	0	0	0	0	0	0	0	0	0
Porbander	29·8	..	32·3	4	25·7	..	23·9	22	99·1	197·1	..	72·1	4	10	..	16·3	15·1	..	15	0	0	1	0	0	0	0	0	0
Porbander (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	0	0
Jamnagar	..	..	..	..	25·1	—0·3	23·4	31	8·2	31·3	—66·5	10·2	16	3	—2·2	..	..	..	9	0	0	3	0	0	0	4	0	0
Rajkot (Aerodrome)	30·7	—0·9	33·8	10	23·4	—0·4	21·1	30	43·2	71·7	—57·8	14·0	2	10	+3·0	26·9	21·6	+5·2	10	0	0	2	0	0	0	0	0	0
Surendranagar	33·5	..	35·6	5	25·1	..	23·4	27	25·4	69·7	..	16·8	4	6	..	17·5	16·1	..	8	0	0	3	0	0	0	0	0	0
Bhavnagar	32·3	—0·4	35·2	9	24·8	0	23·5	4	53·8	104·9	—30·5	26·4	15	11	+3·7	13·6	12·0	+1·9	14	0	0	2	0	0	0	0	0	0
Bhavnagar (Aerodrome)	32·5	..	35·3	9	25·0	..	23·8	27	..	131·8	..	21·8	6	13	..	..	18·4	..	15	0	0	3	0	0	0	0	0	0
Mahuva	30·8	..	32·7	9,26	24·2	..	22·0	30,31	162·8	187·8	..	77·2	15	12	..	20·3	15·2	..	18	0	0	0	0	0	0	0	0	0
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26·6	19·3	..	..	0	0	3	1	0	0	0	0	0
Veraval	28·6	..	30·4	4	25·3	..	24·1	4	175·6	276·1	+184·4	100·1	23	15	+9·1	22·6	22·3	..	20	0	0	2	0	0	0	0	0	0
Konkan																												
Dahanu	29·3	—0·3	31·4	5	25·0	—0·3	23·8	2,7,31	197·3	422·4	+28·7	70·9	15	22	+5·2	25·7	23·0	—0·5	25	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	29·2	—0·2	30·6	1	24·6	+0·1	23·5	3	178·7	578·9	+238·8	95·3	5	23	+4·0	15·6	14·3	—1·6	29	0	0	2	0	0	0	0	5	0
Bombay (Santacruz Aerodrome)	29·0	—0·2	30·8	9	24·4	+0·4	23·2	5,10	310·6	804·0	+463·9	143·6	20	27	+8·0	17·2	13·7	..	30	0	0	1	0	0	0	0	0	0
Alibag	28·4	—0·4	29·7	30	24·4	—0·6	23·4	18	..	704·6	+287·0	109·5	3	27	+5·9	..	23·7	..	30	0	0	1	0	0	0	0	0	0
Harnai	27·7	—0·8	28·9	30	23·9	—0·6	22·9	7,19	260·1	771·3	+259·7	120·7	21	27	+7·2	20·1	19·9	+0·7	29	0	0	0	0	0	0	0	0	0
Ratnagiri	28·0	..	29·5	30	23·7	..	21·9	3	349·5	876·8	+390·9	148·6	17	28	+4·7	..	..	..	29	0	0	0	0	0	0	0	0	0
Devgad	28·2	—0·6	30·3	31	24·1	—0·9	22·8	3,9	178·9	641·7	+243·7	79·0	19	24	+3·8	25·0	24·5	0	28	0	0	1	0	0	0	0	0	0
Vengurla	28·5	..	29·8	14,16	23·6	..	22·2	8	251·4	697·1	..	134·4	22	25	..	..	..	..	29	0	0	0	0	0	0	0	0	0
Maharashtra																												
Nandurbar	30·2	..	32·7	10	..	..	..	..	60·8	152·6	..	39·4	14	8	..	12·2	10·3	..	21	0	0	0	0	0	0	0	0	0
Jalgaon	31·6	..	33·6	25	23·6	..	21·1	31	64·4	155·7	—5·8	35·1	4	13	+1·7	20·3	15·0	..	18	0	0	0	0	0	0	0	0	0
Malegaon	30·6	—0·1	32·9	31	22·6	+0·4	20·2	29	77·2	161·3	+84·1	58·2	4	8	+2·7	14·1	10·7	—3·1	11	0	0	2	0	0	0	0	0	0
Deolali	27·0	..	29·3	5	21·4	..	20·0	31	40·0	75·4	..	12·7	3	9	..	20·0	16·1	..	20	0	0	0	0	0	0	0	0	0
Aurangabad	29·1	—0·2	31·5	25	21·4	+0·5	20·0	31	48·3	182·2	+60·5	51·6	3	12	+3·1	19·7	17·3	+1·0	21	0	0	6	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome).	29·0	..	31·3	25	21·3	..	19·4	31	82·6	165·3	..	31·7	3	11	..	20·5	16·6	..	21	0	0	5	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	1663·8	+401·4	147·3	9	29	—0·3	..	..	..	31	..	..	..	..	..	..	..	..	..
Ahmednagar	28·7	—0·9	31·2	25	21·0	+0·4	18·2	30	60·3	250·3	+181·2	147·3	3	9	+4·4	11·4	8·1	—6·1	12	0	0	0	0	0	0	0	0	0
Parbhani	29·4	..	31·9	25	22·3	..	20·4	31	57·2	458·6	+311·0	95·5	18	17	+8·0	14·9	11·6	..	23	0	0	5	0	0	0	0	0	0
Poona	28·1	+0·5	30·1	5	21·3	—0·1	19·7	9	32·5	91·0	+0·8	27·4	8	9	+0·7	8·0	5·4	—8·9	24	0	0	0	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	27·8	..	29·4	12	20·7	..	18·3	31	19·3	60·2	..	16·0	8	7	..	..	..	..	19	0	0	0	0	0	0	0	0	0
Baramati	29·8	..	32·3	25	21·3	..	18·1	29	29·7	62·9	..	21·8	11	7	..	20·5	17·0	..	11	0	0	0	0	0	0	0	0	0
Jeur	30·1	..	32·7	25	21·2	..	17·4	31	45·7	166·2	..	47·2	3	10	..	18·8	14·1	..	18	0	0	3	0	0	0	0	0	0
Sholapur	30·1	—1·5	32·9	15	21·8	+0·1	20·1	31	48·7	181·9	+73·2	42·9	17	12	+5·0	12·6	10·3	—3·7	20	0	0	4	0	0	0	0	0	0
Miraj	27·9	+0·1	29·9	31	21·1	0	18·9	30	23·3	53·3	—66·3	15·2	8	8	—1·2	22·5	16·0	+1·2	13	0	0	0	0	0	0	0	0	0
Kolhapur	26·1	..	28·4	30	20·6	..	19·0	30	62·8	201·3	..	38·8	8	16	..	19·7	15·3	..	27	0	0	0	0	0	0	0	0	0
Vidarbha																												
Buldhana	26·9	..	29·0	24	21·5	..	20·4	5days	36·7	228·4	..	60·2	23	13	..	13·2	10·8	..	20	0	0	0	0	0	0	0	0	0
Akola	30·8	0	33·4	5	23·8	+0·6	22·4	13	23·1	116·3	—44·2	31·2	13	8	—1·1	15·5	11·4	+1·1	14	0	0	4	0	0	0	0	0	0
Amravati	29·8	—0·1	32·8	22	23·3	+0·5	21·7	23	52·3	201·3	+36·4	52·8	23	14	+4·2	15·2	12·5	+1·9	16	0	0	3	0	0	0	0	0	0
Yeotmal	28·8	..	31·4	18	22·5	..	21·4	14,23	127·0	272·9	..	52·6	6	21	..	18·5	15·2	..	25	0	0	4	0	0	0	0	0	0
Nagpur	30·7	0	36·6	12	23·8	0	21·5	23	186·8	326·5	+36·4	58·4	26	18	+4·7	14·2	9·5	..	25	0	0	12	0	0	0	0	1	0
Gondia	30·4	..	32·8	18	24·4	..	21·6	7	159·3	388·5	..	72·1	8	17	..	6·3	4·6	..	24	0	0	10	0	0	0	0	0	0
Brahmapuri	29·7	..	32·8	18	21·5	..	19·6	8	164·4	447·9	..	58·7	9	20	..	7·8	7·1	..	23	0	0	6	0	0	0	0	0	0
Chanda	29·9	—0·8	33·4	18	23·9	—0·1	22·4	12	281·9	651·6	+331·6	157·5	18	23	+8·2	13·2	8·9	+1·5	24	0	0	19	0	0	0	0	0	0
Sironcha	30·2	..	33·9	12	24·2	..	22·7	29	222·6	568·4	..	69·6	17	22	..	7·8	5·5	..	29	0	0	11	0	0	0	0	0	0

* Observatory closed on 1st August 1957.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hour	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Thin squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Coastal Andhra Pradesh.																												
Nellore	33·1	—2·5	36·8	26	25·7	—0·6	23·2	26	7·2	125·2	+48·5	61·2	26	9	+3·5	11·4	8·6	—0·3	15	0	0	3	0	0	0	0	0	0
Ongole	31·3	..	34·4	26	25·4	..	23·3	13	58·2	235·0	..	60·5	14	12	..	10·0	8·7	..	13	0	0	1	0	0	0	0	0	0
Rentachintala	31·8	—2·0	34·7	25	24·8	—1·0	22·8	1,13	60·3	193·3	+103·4	61·0	13	11	+3·2	12·5	8·4	—5·4	12	0	0	2	0	0	0	0	0	0
Gannavaram	30·9	..	33·9	5	24·5	..	22·9	8,31	102·2	343·9	..	51·8	13	17	..	18·6	14·7	..	23	0	0	6	0	0	0	0	0	0
Masulipatam	30·6	—2·3	33·4	12	25·1	—0·4	22·6	13	97·6	317·0	+158·0	79·8	14	13	+2·8	14·9	12·1	+2·4	18	0	0	8	0	0	0	0	0	0
Nidadavolu	29·9	..	32·8	29	24·3	..	22·4	26	224·3	453·5	..	66·5	16	17	..	16·0	12·1	..	22	0	0	8	0	0	0	0	0	0
Kakinada	31·0	—2·0	34·0	31	25·0	—0·7	22·8	8	48·7	169·5	—28·3	26·7	21	13	+3·4	15·5	13·2	—4·5	18	0	0	0	0	0	0	0	0	0
Visakhapatnam	31·7	—1·5	35·4	18	25·5	—0·2	23·3	18	135·5	232·8	+101·7	121·4	22	12	+3·8	16·5	11·8	—0·4	22	0	0	11	0	0	0	0	0	0
Calingapatam	31·5	—0·7	35·6	7	26·2	+0·3	23·9	22	77·6	270·8	+98·1	101·6	22	14	+4·5	15·9	12·7	+2·9	14	0	0	4	0	0	0	0	0	0
Telangana																												
Ramagundam	30·4	..	34·2	25	24·5	..	22·3	10	69.1	320·4	..	51·5	10	21	..	8·4	6·7	..	25	0	0	4	0	0	0	0	0	0
Nizamabad	29·1	—1·3	31·9	26	22.8	0	20·7	18	59·6	428·6	+180·7	86·6	26	18	+4·2	10·4	8·2	+0·5	21	0	0	0	0	0	0	0	0	0
Mahbubnagar	28·2	..	31·2	6	22·0	..	20·9	2	39·3	261·3	..	69·3	16	17	..	15·6	13·6	..	20	0	0	1	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome).	27·7	—1·9	30·6	6	21·5	—0·4	20·0	14	53·6	333·9	+199·5	74·4	20	15	+5·1	23·9	19·0	+2·6	19	0	0	2	0	0	0	0	0	0
Hakimpet	..	..	..	..	21·2	..	20·2	8	65·7	333·3	..	50·3	19	16	..	..	..	..	18	0	0	2	0	0	0	0	0	0
Hanamkonda	29·7	—0·7	33·3	25	23·5	—0·4	21·7	13	66·3	312·0	+134·7	86·4	25	17	+6·3	14·6	11·3	+1·6	21	0	0	3	0	0	0	0	0	0
Bhadrachallam	30·5	..	33·4	13,29, 31	24·0	..	22·6	8	96·3	306·6	..	34·3	26	19	..	10·5	7·6	..	22	0	0	0	0	0	0	0	0	0
Khammameth	30·6	..	33·9	25	23·7	..	22·1	8	37·2	210·5	..	45·7	13	14	..	11·6	8·1	..	20	0	0	0	0	0	0	0	0	0
Rayalaseema																												
Arogyavaram	29·1	..	32·2	12	21·5	..	18·9	12	13·2	98·6	..	53·3	12	7	..	16·6	13·1	..	10	0	0	2	0	0	0	0	0	0
Cuddapah	32·1	—2·7	35·8	26	24·3	—1·0	22·1	15	31·5	131·5	—1·6	54·6	16	9	+1·3	10·5	7·6	—3·0	14	0	0	0	0	0	0	0	0	0
Anantapur	31·7	..	34·8	5,12, 13	23·2	..	21·2	9	51·7	75·6	—8·3	37·1	16	6	+1·2	21·5	16·8	..	12	0	0	0	0	0	0	0	0	0
Kurnool	30·4	—2·1	33·3	6	22·5	—1·0	21·1	1	2·8	112·3	—2·0	31·0	1	9	+0·4	24·6	18·5	+3·7	9	0	0	0	0	0	0	0	0	0
Madras																												
Palayamcottai	35·1	..	37·8	12	26·9	..	25·2	25	0	0	—16·8	0	..	0	—1·0	21·7	18·6	..	0	0	0	0	0	0	0	0	0	0
Tuticorin	35·6	..	37·8	6	27·3	..	26·4	5,25	0	1·0	..	1·0	16	0	..	23·0	20·8	..	1	0	0	0	0	0	0	0	0	0
Pamban	29·6	—2·1	30·9	16	26·5	+0·5	24·9	2	0	3·6	—11·4	1·8	1,30	0	—1·0	13·6	12·1	—0·9	2	0	0	0	0	0	0	0	0	0
Mathurai	36·2	+1·1	37·9	25	25·3	+0·6	21·8	12	20·6	83·0	—20·6	30·2	30	5	—1·0	8·1	6·9	+0·8	7	0	0	0	0	0	0	0	0	0
Nagapattinam	34·1	—0·4	36·0	11	25·7	+0·3	22·3	13	10·4	131·4	+53·9	68·1	2	7	+2·1	12·8	10·5	+2·1	9	0	0	5	0	0	0	0	0	0
Tiruchirapalli	35·4	—0·4	37·4	29	25·8	+0·7	23·9	12	6·6	33·9	—63·4	11·4	12	4	—0·7	29·7	26·1	+1·6	10	0	0	0	5	0	0	0	0	0
Coimbatore	28·5	—2·3	31·1	31	22·1	+0·4	21·1	10,22, 24	0·8	4·1	—27·1	3·3	22	1	—2·1	20·6	16·7	+8·0	2	0	0	0	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	30·7	..	33·0	12	21·9	..	21·1	9,10, 24	2·1	3·4	..	1·8	3	0	..	35·2	31·5	..	3	0	0	2	0	0	0	0	0	0
Salem	33·2	—0·3	35·5	13	23·4	—0·5	20·4	26	18·1	94·3	—72·6	33·5	5	7	—2·9	11·5	8·8	+2·8	9	0	0	3	0	0	0	0	0	0
Kallakurichi	34·9	..	37·8	26	25·1	..	23·0	11	44·2	107·2	..	40·6	11	7	..	7·7	7·1	..	12	0	0	6	0	0	0	0	0	0
Cuddalore	34·3	—0·3	37·1	23	25·8	—0·8	24·5	8	1·3	37·7	—84·2	12·7	2	4	—3·1	9·5	8·4	+1·6	7	0	0	4	0	0	0	0	0	0
Vellore	34·3	+0·3	37·6	26	25·3	+0·6	21·6	12	5·8	64·0	—81·8	21·3	12	6	—1·4	12·3	10·1	+3·7	10	0	0	5	0	0	0	0	0	0
Madras	33·0	—1·9	35·1	6,24	24·9	—0·7	21·5	15	27·5	197·3	+81·0	62·2	15	9	+1·1	14·4	10·6	—5·0	14	0	0	13	0	0	0	0	3	0
Madras (Nungambakkam).	32·9	..	35·3	31	25·1	..	21·7	15	..	139·1	..	48·8	15	9	..	..	6·2	..	13	0	0	10	0	0	0	0	0	0
Coastal Mysore																												
Karwar	27·6	..	29·2	13,16	24·0	..	22·3	9	294·3	769·2	+226·1	112·5	26	28	+4·1	15·0	13·7	..	29	0	0	0	0	0	0	0	0	0
Honavar	28·1	—0·6	31·8	23	23·3	—0·3	20·9	9	352·8	567·5	—77·2	45·0	26	26	+0·7	9·9	8·8	+3·8	29	0	0	0	0	0	0	0	0	0
Mangalore	28·6	—0·2	30·3	9	23·5	+0·1	21·9	1	160·6	579·8	—17·6	123·5	26	25	—0·1	8·5	7·7	+0·5	25	0	0	0	2	0	0	0	4	0
Mangalore (Bajpe Aerodrome).	28·1	..	29·3	21,30	22·8	..	20·9	9	241·2	643·9	..	89·9	26	22	..	..	..	..	26	0	0	0	0	0	0	0	0	0
Mysore (North)																												
Bidar	27·0	—1·9	29·3	12,25, 29	20·9	—0·2	19·0	31	64·7	301·9	+144·9	53·1	3	15	+4·6	20·6	18·2	+0·5	21	0	0	0	0	0	0	0	0	0
Gulbarga	29·3	—2·3	32·2	11	21·8	—0·1	20·1	31	28·8	306·8	+178·0	76·7	17	17	+9·3	19·5	15·8	+1·2	20	0	0	1	0	0	0	0	0	0
Bijapur	29·2	—1·2	32·2	26	20·9	+0·2	19·1	30	69·3	169·3	+108·3	32·0	17	11	+7·3	15·5	12·8	—1·4	20	0	0	1	0	0	0	0	0	0
Belgaum	24·5	—0·2	26·7	30	19·5	+0·2	15·7	8	135·6	754·1	+509·2	131·3	21	23	+5·4	12·6	8·1	—0·4	31	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	22·6	—3·0	24·8	30	19·4	+0·4	17·9	29,30	74·3	308·8	+70·8	74·2	9	21	+3·4	13·8	10·7	—2·1	24	0	0	0	0	0	0	0	0	0
Belgaum (Sambre Aerodrome).	25·5	..	27·5	15	19·2	..	16·8	30	39·1	167·6	..	39·1	9	13	..	31·0	24·6	..	23	0	0	0	0	0	0	0	0	0
Gadag	27·9	—0·8	30·9	31	20·7	—0·1	18·7	30	58·7	190·2	+86·6	80·0	26	10	+1·7	19·2	16·2	—0·4	19	0	0	1	0	0	0	0	0	0
Raichur	30·1	—2·1	33·2	6	22·3	—0·3	20·6	15	35·0	126·4	+14·9	25·4	1	12	+4·2	19·2	16·5	+1·1	19	0	0	0	0	0	0	0	0	0

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	25	27	28	29
Mysore (South)																												
Bellary	30·3	—2·2	32·0	13,26	23·0	—0·3	22·0	29	17·8	51·7	—8·8	10·9	3	10	+6·0	16·1	13·1	+0·4	12	0	0	0	0	0	0	0	0	0
Chitaldrug	26·9	—1·2	30·0	25	20·6	+0·3	18·4	9	22·8	50·0	—35·9	20·8	10	5	—2·4	13·6	12·9	+1·0	17	0	0	0	0	0	0	0	0	0
Shimoga	27·0	..	29·9	13	21·1	..	18·9	9	75·8	124·3	..	30·8	26	14	..	9·0	5·6	..	21	0	0	0	0	0	0	0	0	0
Balehonnur	22·8	—0·5	25·8	14	18·5	—0·1	16·7	9	..	587·7	—6·7	79·8	26	25	+0·5	..	..	..	30	0	0	0	0	0	0	0	0	0
Hassan	24·9	—1·0	27·1	12	18·7	+0·2	17·0	31	15·2	48·2	—50·9	14·7	22	5	—4·2	17·3	13·2	+3·2	21	0	0	0	0	0	0	0	0	0
Mysore	27·9	—0·4	29·7	12,31	19·8	+0·5	18·3	7,31	13·8	26·0	—57·6	19·3	5	2	—5·0	19·6	13·7	+1·3	6	0	0	0	0	0	0	0	0	0
Bangalore (Central Observatory)	27·4	0	30·3	12	19·5	+0·8	17·9	31	24·5	50·6	—75·9	9·7	20	17	+7·7	19·4	16·2	+4·5	17	0	0	1	0	0	0	0	0	0
Bangalore (Aerodrome)	27·9	..	29·8	26	19·6	..	18·1	31	17·6	31·3	..	7·6	20	4	..	..	..	..	13	0	0	3	0	0	0	0	5	0
Kerala (Including Laccadives).																												
Kozhikode	28·1	—0·2	29·8	9	23·6	+0·1	22·4	5	76·8	334·4	—101·5	42·7	16	18	—1·3	8·4	8·3	+1·1	25	0	0	0	0	0	0	0	0	0
Palghat	28·7	..	30·4	12	23·0	..	21·8	22	112·9	242·9	..	38·1	23	18	..	17·0	13·0	..	25	0	0	2	0	0	0	0	0	0
Fort Cochin	28·0	0	30·1	23	24·8	+0·9	22·8	12	66·8	335·4	—17·4	51·6	25	19	+0·3	10·2	7·9	—0·1	25	0	0	0	0	0	0	0	0	0
Cochin (Naval Air Station).	29·0	..	30·3	23	23·8	..	21·9	12	81·7	321·7	..	55·1	26	19	..	8·2	5·3	..	25	0	0	3	0	0	0	0	7	0
Alleppey	28·8	..	30·1	10	23·4	..	21·7	23	105·4	426·0	..	95·3	26	19	..	13·0	10·7	..	21	0	0	1	0	0	0	0	0	0
Punalur	29·7	..	31·4	12	22·2	..	21·3	16,23, 29	123·9	247·1	..	37·6	24	17	..	8·2	4·5	..	17	0	0	0	0	0	0	0	0	0
Trivandrum	29·4	+0·3	30·6	15	23·7	+0·4	22·6	1,25	36·2	76·6	—43·5	21·1	25	10	+0·2	16·4	11·2	+0·6	20	0	0	1	0	0	0	0	0	0
Trivandrum (Aerodrome)	29·1	..	30·5	13	23.8	..	22·6	24,28	..	91·1	..	21·8	25	10	..	..	8·7	..	16	0	0	1	1	0	0	0	1	0
Hill Stations excluding Kashmir																												
Walong (R).																												
Kohima	24·7	..	30·6	21	19·1	..	17·1	30	191·0	352·8	..	46·7	13	18	..	..	..	..	23	0	0	25	0	0	0	0	0	0
Aijal*																												
Shillong	24·5	+0·6	29·2	21	17·8	0	16·2	15,16	142·2	234·5	—82·8	39·9	6	14	—4·5	2·5	1·2	—1·5	19	0	0	4	4	0	0	0	0	0
Cherrapunji	23·7	+1·2	29·2	20	18·6	+0·1	17·3	5,6	347·0	1344·9	—435·1	363·2	5	24	—2·2	9·6	9·0	+1·6	25	0	0	0	21	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	2887·7	..	659·9	4	23	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan)	19·8	+0·4	26·7	21	15·3	+0·1	14·4	6	144·6	488·3	—186·3	137·4	7	20	—3·7	0·3	0	—2·9	23	0	0	28	0	0	0	0	0	0
Kalimpong	24·7	+0·5	30·9	23	17·5	—2·1	15·7	1,6,29	185·4	447·1	—57·8	96·5	1	16	—5·5	6·8	5·2	—3·3	16	0	0	0	0	0	0	0	0	0
Katmandu	28·8	+0·2	32·3	22	20·0	—0·2	18·5	14	83·2	365·6	+18·1	59·0	6	20	—0·8	2·7	1·5	+0·1	24	0	0	7	0	0	0	0	0	0
Mukteswar (Kumaon).	21·1	+1·1	24·9	22	14·5	+0·4	12·9	29	103·2	205·8	—105·6	70·6	29	13	—4·9	10·5	12·1	+3·9	20	0	0	10	15	0	0	0	0	0
Nainital	21·6	..	25·1	22,23	15·9	..	14·4	9,22	240·5	466·2	..	88·9	1	19	..	9·2	7·0	..	27	0	0	0	6	0	0	0	0	0
Tapoban	24·4	..	27·2	5,6,22	15·9	..	10·0	21	..	56·4	..	10·2	28	10	..	..	..	..	19	..	..	..	..	..	..	..	..	..
Badrinath (R)																												
Lokpal	8·8	..	10·6	3	4·2	..	3·3	8 days	..	263·2	..	43·2	1	19	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Jamuna Chetty	..	..	..	..	..	..	..	..	..	319·4	..	63·5	13	17	..	..	..	..	20	..	..	..	..	..	..	..	..	..
Mussooree	20·9	+0·8	25·6	23	15·8	+0·3	12·6	1	219·3	440·8	—253·6	93·5	1	21	—2·8	6·4	5·9	+0·1	24	0	0	8	15	0	0	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	379·3	..	57·1	12	21	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	420·0	..	57·4	12	21	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Simla	20·4	+0·2	24·2	22	15·2	+0·1	10·6	1	167·9	229·0	—199·0	65·5	30	14	—5·7	3·6	2·7	—0·8	22	0	0	6	0	0	0	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	281·6	—37·4	58·9	1	14	—2·5	..	..	..	16	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	39·9	+4·6	16·5	26	4	+0·2	..	..	..	4	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	113·3	..	63·5	27	6	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	394·0	..	71·9	26	22	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Koksar (R)																												
Dalhousie	22·6	..	26·2	24	16·1	..	11·7	1	160·5	644·4	+81·8	118·1	26	16	—5·5	2·7	2·7	..	18	0	0	2	0	0	0	0	0	0
Dharamshala	26·9	..	29·5	23	20·1	..	16·2	15	180·6	907·2	..	188·5	13	23	..	6·8	4·6	..	24	0	0	22	0	0	0	0	0	0
Abu (R)																												
Pachmarhi	24·5	+0·7	27·4	5	20·1	+0·7	18·3	29,30	259·3	588·4	—16·6	117·9	23	24	+2·1	10·3	9·6	—0·7	31	0	0	10	14	0	0	0	0	0
Mahabaleshwar	21·9	+3·2	22·9	24	15·5	—0·9	13·9	30	806·5	2086·8	+229·8	269·2	21	30	+0·2	17·1	17·7 (a)	+0·3	31	0	0	0	31	0	0	0	0	0
Nandi Hills	22·4	..	23·9	18	15·6	..	13·9	8	..	71·1	..	16·8	1	8	..	..	..	..	8	0	0	0	0	0	0	0	0	0
Mercara	20·5	—0·2	22·9	12,13	17·3	+0·6	16·8	5 days	164·9	612·9	—67·8	87·7	23	27	—0·5	15·0	14·0	+3·7	28	0	0	0	0	0	0	0	0	0
Kodaikanal	17·4	+0·3	19·6	7	11·3	+0·2	10·0	8	126·6	141·6	—36·2	30·0	13	9	—3·1	15·3	15·3	+2·5	18	0	0	3	8	0	0	2	0	0
Ootacamund	16·6	—0·5	20·0	18	10·1	—0·8	6·7	8	53·0	92·7	—51·8	32·3	26	9	—3·3	11·2	9·4	+0·9	19	0	0	2	0	0	0	0	0	0
Coonoor	21·7	+0·1	23·0	27	14·7	+0·4	11·9	31	..	67·4	—59·3	17·8	5	5	—4·1	..	6·3	—0·1	12	0	0	1	0	0	0	0	0	0

(a)—Mean of 30 days.

*Temporarily closed.

(R)—Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Sikkim																												
Thangu (R)																												
Chungthang	..	..	..	..	..	..	..	..	..	433·1	..	71·6	1	21	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Lachen	18·9	..	20·0	4 days	7·8	..	6·7	26	..	240·7	..	28·2	27	25	..	..	..	..	27	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung (Chumbi)	20·4	+2·2	21·7	23	9·7	—0·5	8·4	22	..	87·6	—67·6	20·3	7	11	—6·4	..	..	..	11	0	0	0	0	0	0	0	0	0
Lhasa (R)																												
Ceylon																												
Colombo	..	..	..	..	24·5	—0·5	20·0	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trincomalee	34·1	+0·4	36·0	30	25·7	+0·7	23·0	2	46·5	49·8	—48·0	3·3	2	1	—3·8	..	..	..	1	0	0	0	0	0	0	0	0	0
Batticoloa	33·2	..	37·0	23	24·8	..	24·0	6	11·2	18·0	..	8·6	27	2	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Hambantota	31·1	+0·7	35·0	10	24·8	+0·3	23·0	days 8,29	10·2	19·1	—22·3	8·4	29	2	—1·9	..	..	..	6	0	0	0	0	0	0	0	0	0
Mannar	30·4	..	32·0	11	26·0	..	25·0	3	..	0·8	..	0·8	3	0		..	..	..	1	0	0	0	0	0	0	0	0	0
Hydrometeorological Observatories																												
Damodar Catchment																												
Bokaro	32·0	..	35·2	21	25·3	..	23·7	12	156·0	268·4	..	78·7	27	16	..	9·4	7·6	..	23	0	0	20	0	0	0	0	0	0
Hazaribagh	32·2	..	34·6	22	22·1	..	21·1	9,16	112·0	177·9	..	52·8	27	14	..	8·0	4·7	..	22	0	0	0	0	0	0	0	0	0
Tilaiya	31·5	..	34·7	22	25·3	..	22·4	19	104·2	260·1	..	156·2	19	8	..	10·7	8·3	..	17	0	0	18	0	0	0	0	0	0
Ramgarh	32·2	..	34·6	21	24·8	..	23·3	28	106·5	272·7	..	67·8	7	17	..	5·0	3·5	..	24	0	0	23	0	0	0	0	0	0
Panchet Hills	32·8	..	36·1	21	26·3	..	23·4	5	184·2	218·0	..	53·1	25	15	..	11·2	8·8	..	22	0	0	17	0	0	0	0	0	0
Durgapur	33·9	..	36·7	21	24·8	..	23·8	4	..	71·7	..	33·0	6	9	..	..	..	..	15	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	189·0	..	46·2	8	13	..	..	..	..	17	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	166·0	..	59·7	7	11	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	158·5	..	25·7	20	18	..	..	..	..	20	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	311·6	..	83·1	27	19	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	314·5	..	75·4	28	16	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	248·6	..	51·3	28	15	..	..	..	..	18	..	..	..	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	112·3	..	16·5	5,6	10	..	..	..	..	17	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Baramul	34·3	..	41·1	6,7,8	24·6	..	18·7	23	233·7	325·5	..	56·6	26	18	..	3·1	2·3	..	26	0	0	2	0	0	0	0	0	0
Hirakud	32·4	..	35·0	22	25·7	..	23·4	20	87·4	352·1	..	100·3	8	18	..	6·5 (b)	5·5 (c)	..	22	0	0	12	0	0	0	0	0	0
Khijrawan	29·4	..	32·1	1	..	..	..	..	169·7	393·5	..	76·2	22	17	..	12·6	9·0	..	21	0	0	2	0	0	0	0	0	0
Sonepur	32·3	..	35·6	4,16	24·6	..	20·5	17	..	418·0	..	110·2	30	15	..	..	6·7	..	20	..	..	..	..	..	..	..	..	..
Ginabahar	32·1	..	35·0	21	23·4	..	21·7	13,17	..	304·6	..	81·3	27	16	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Bhimkund	31·2	..	33·5	1	24·4	..	23·2	2	218·3	347·4	..	54·7	9	18	..	(c) 3·8	30	..	25	0	0	21	6	0	0	0	0	0
Narbada Catchment																												
Punasa	31·6	..	33·9	9	23·5	..	20·9	24	72·4	278·4	..	168·4	23	12	..	3·7	2·3	..	17	0	0	2	0	0	0	0	0	0
Bagra Tawa (R)																												
Thikri	31·4	..	33·4	9	24·0	..	21·8	24	..	380·0	..	209·8	23	14	..	..	..	..	15	0	0	3	0	0	0	0	0	0
Sabarmati Catchment																												
Jhadol	29·7	..	34·2	1,4	22·9	..	17·7	30	..	135·2	..	84·6	24	6	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Sainwara (Surajgarh) (R)																												
Bikrani	..	..	..	..	..	..	..	..	..	328·8	..	114·3	24	16	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	335·0	..	190·5	23	9	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	327·2	..	90·2	23	10	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Dharoi	32·3	..	36·1	11	25·3	..	23·3	31	19·5	209·9	..	105·9	16	6	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Ganga Catchment																												
Mukhim	23·8	..	26·7	21	17·1	..	14·5	..	65·9	195·0	..	48·8	15	9	..	..	..	..	17	0	0	0	0	0	0	0	0	0
Tehri	33·2	..	36·1	23	23·6	..	21·1	1	27·7	93·1	..	22·3	13	8	..	..	..	..	10	0	0	0	3	0	0	0	0	0

(c)—Mean of 28 days. (b) Mean of 29 days. (R)—Register no received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hydrometeorological Observatories—(*Contd.*)																												
Gandak Catchment																												
Gorkha	27·4	..	40·2	22	20·7	..	19·5	8,31	55·2	634·3	..	109·5	6	22	..	..	..	..	28	..	..	..	..	..	..	..	..	..
Pokhara	29·4	..	33·4	23	21·4	..	19·6	21	139·7	1233·7	..	284·0	5	21	..	..	..	..	26	..	..	..	..	..	..	..	..	..
Nawakot	30·1	..	33·1	21	(a) 21·4	..	20.5	29	33·4	778·5	..	95·3	29	24	..	..	..	..	28	..	..	..	..	..	..	..	..	..
Jomosom	(a) 23·1	..	25·7	22	13·3	..	10·3	22	9·2	60·8	..	10·4	24	7	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Timure	(d) 25·6	..	28·5	20	(a) 17·2	..	18·6	17	4·0	308·6	..	43·2	29	23	..	..	..	..	24	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh	..	..	..	..	..	..	..	..	165·6	579·7	..	65·3	10	23	..	..	..	..	26	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	(f) 23·9	..	26·8	22,24	(d) 16·9	..	13·5	10	38·1	216·6	..	48·5	8	16	..	..	..	..	19	..	..	..	..	..	..	..	..	..
Munsiyari	..	..	..	..	..	..	..	..	52·1	483·4	..	58·2	12	24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sallyana	(b) 18·1	..	29·4	22	..	..	..	..	28·4	166·1	..	45·7	27	9	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Butwal	32·4	..	36·8	22	(e) 25·3	..	23·6	12	341·7	903·6	..	157·5	25	19	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	28·1	..	31·7	22	19·6	..	17·7	21	82·2	361·6	..	57·7	6,12	21	..	2·6	1·4	..	28	0	0	10	0	0	0	0	0	0
Kosi Catchment																												
Chautara	(o) 26·0	..	28·9	20	(a) 18·9	..	17·4	16	26·4	514·1	..	62·3	26	22	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Okhaldunga	24·7	..	28·9	21	17·0	..	15·3	12	251·2	554·6	..	87·9	12	19	..	1·4	1·1	..	26	0	0	5	9	0	0	0	0	0
Barahkshetra	31·0	..	36·7	21	24·4	..	22·8	12	262·6	568·3	..	115·6	1	17	..	7·3	4·3	..	26	0	0	7	0	0	0	0	0	0
Angbung	28·2	..	32·6	21	20·6	..	19·2	7	..	294·4	..	53·6	24	18	..	..	..	..	22	..	..	..	..	..	..	..	..	..
Taplejung	24·4	..	28·6	20	17·5	..	16·2	12	115·3	551·4	..	54·4	15	24	..	..	..	..	28	0	0	3	8	0	0	0	0	0
Taplethok	28·6	..	30·9	20	18·5	..	17·4	11	..	293·0	..	37·9	28	17	..	..	..	..	18	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)																												
Bhojpur	(c) 24·3	..	29·6	21	18·0	..	15·9	12	106·4	252·8	..	40·4	6,26	15	..	..	..	..	19	..	..	..	..	..	..	..	..	..
Chainpur	27·9	..	30·9	22	19·9	..	18·3	27	..	180·6	..	45·0	27	16	..	..	..	..	21	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	22·5	..	27·6	21	16·2	..	15·2	14	111·6	495·8	..	63·0	9	26	..	4·7	3·8	..	26	0	0	3	24	0	0	0	0	0
Geyzing	26·6	..	32·2	21	18·3	..	17·2	12	77·0	423·2	..	50·0	24	19	..	..	..	..	23	..	..	..	..	..	..	..	..	..

(R)—Register not received.
(o)—Mean of 16 days.
(c)—Mean of 28 days.
(b)—Mean of 29 days.
(a)—Mean of 30 days.
(d)—Mean of 27 days.
(f)—Mean of 25 days.
(e)—Mean of 26 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed km. per hour	Wind speed (km. p. h.): 62 or more	Wind speed (km. p. h.): 20 to 61	Wind speed (km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1007·4	1004·8	..	27·4	25·4	25·2	30·9	85	..	5·7	..	9·9	0	1	28	0	0	0	0	0	26	3	0	2	0
	1730	"	1005·4	1002·8	..	27·3	25·2	24·3	30·0	86	..	5·8	..	8·6	0	2	26	0	0	0	0	0	26	2	0	3	0
Long Islands	0830	33	1009·0	1005·4	..	27·2	25·7	25·0	32·1	86	..	5·9	..	3·0	0	0	19	0	0	0	0	3	13	3	0	12	0
	1730	"	1007·1	1003·5	..	27·4	25·4	24·6	30·9	85	..	6·4	..	2·5	0	0	20	0	0	0	0	2	14	4	0	11	0
Port Blair	0530	79	1007·2	998·2	..	25·0	24·1	23·7	29·5	93	..	7·1	..	12·4	0	5	26	0	0	0	0	1	19	10	1	0	0
	0830	"	1008·4	999·5	0	27·0	25·1	24·3	30·2	85	+1	7·1	+0·5	15·0	0	6	24	0	0	0	0	0	24	6	0	1	0
	1130	"	1007·4	998·6	..	27·9	25·3	24·2	30·4	80	..	7·2	..	22·7	0	16	15	0	0	0	0	0	23	8	0	0	0
	1730	"	1006·3	997·5	..	26·3	24·7	23·9	29·6	88	..	7·1	..	15·3	0	6	24	0	0	0	0	1	20	9	0	1	0
	2330	"	1007·9	998·9	..	25·3	24·4	24·0	30·0	93	..	6·3	..	16·7	0	10	21	0	0	0	0	1	26	4	0	0	0
Car Nicobar	0830	10	1009·3	1008·1	..	27·9	25·6	24·6	31·1	82	..	5·8	..	7·6	0	0	31	0	0	0	0	0	19	12	0	0	0
	1730	"	1007·2	1006·0	..	27·3	25·6	24·8	31·5	86	..	6·1	..	3·2	0	0	22	0	0	0	0	0	15	7	0	9	0
Nancowry	0830	26	1010·0	1007·1	..	27·6	25·1	23·8	29·8	80	..	5·7	..	6·6	0	1	29	0	0	0	0	0	22	8	0	1	0
	1730	"	1008·0	1005·1	..	27·1	24·7	23·7	28·8	82	..	6·0	..	6·5	0	2	27	0	0	0	0	0	16	12	1	2	0
Kondul	0830	8	1010·2	1009·3	..	28·0	26·3	25·6	32·7	87	..	5·1	..	10·5	0	3	23	0	0	13	9	0	0	0	0	5	4
	1730	"	1007·8	1006·9	..	27·4	26·4	25·9	33·6	92	..	5·6	..	9·2	0	1	23	0	0	12	8	0	0	0	0	7	4
Assam (Including Manipur & Tripura)																											
Pasighat	0830	..	..	..	..	26·9	24·9	23·9	30·4	85	..	6·5	..	7·8	0	0	27	5	2	8	4	2	1	1	4	4	0
	1730	..	..	..	..	28·8	26·3	25·3	32·2	82	..	4·4	..	1·7	0	0	14	2	1	5	0	1	1	1	3	17	0
Digboi	0830	..	..	..	..	26·9	25·5	25·1	31·5	89	..	6·6	..	5·7	0	0	31	2	3	5	2	3	6	3	7	0	0
	1730	..	..	..	..	30·0	26·5	25·0	31·5	76	..	5·0	..	3·1	0	0	31	3	2	5	1	2	4	7	7	0	0
Dibrugarh	0830	106	1004·5	992·6	+0·4	27·2	25·7	24·9	31·4	88	+1	6·5	+0·2	2·8	0	0	22	8	3	2	2	2	3	0	2	9	0
	1730	"	1000·3	988·5	..	29·2	26·6	25·5	32·3	81	..	4·1	..	1·2	0	0	11	1	1	4	1	1	2	0	1	20	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1002·4	989·9	..	25·9	25·2	24·9	31·4	95	..	5·8	..	1·2	0	0	4	0	1	1	0	1	1	0	0	27	0
	0530	"	1003·4	990·9	..	25·5	24·9	24·7	31·1	95	..	6·9	..	1·8	0	0	10	1	1	4	0	2	1	0	1	21	0
	0830	"	1004·8	992·3	..	27·5	25·7	25·0	31·5	87	..	6·8	..	4·5	0	0	21	2	8	3	0	3	2	2	1	10	0
	1130	"	1003·3	990·9	..	28·9	26·3	25·0	32·1	79	..	6·3	..	5·4	0	0	27	1	12	2	1	3	3	4	1	4	0
	1730	"	1000·4	987·8	..	29·6	26·6	25·3	32·7	78	..	4·5	..	2·5	0	0	14	2	4	2	1	1	2	2	0	17	0
	2330	"	1003·0	990·5	..	26·5	25·6	25·2	32·0	92	..	5·5	..	2·7	0	0	12	1	6	2	1	1	0	1	0	19	0
North Lakhimpur	0830	102	1004·4	992·9	..	27·1	25·6	24·9	31·5	89	..	7·1	..	..	0	0	22	5	4	5	0	4	2	1	1	9	0
	1130	"	1003·1	991·8	..	29·6	26·5	25·2	32·2	78	..	6·4	..	..	0	2	23	3	9	3	1	5	2	1	1	6	0
	1730	"	1000·2	988·9	..	29·5	26·9	25·9	33·4	81	..	5·1	..	..	0	1	15	2	2	5	0	4	0	1	2	15	0
Sibsagar	0830	97	1005·1	994·4	+1·3	28·3	26·3	25·4	32·6	85	−1	7·2	+0·2	3·5	0	0	24	3	5	1	4	5	2	2	2	7	0
	1730	"	1001·0	990·3	..	30·3	27·2	26·0	33·6	77	..	4·7	..	2·1	0	0	15	3	4	2	3	2	1	0	0	16	0
Jorhat	0530	90	1002·8	992·7	..	25·6	25·4	25·3	32·2	98	..	6·6	..	4·5	0	0	13	2	0	0	1	8	1	1	0	18	0
	0830	"	1004·2	994·2	..	28·3	26·6	25·8	33·6	87	..	6·8	..	7·8	0	2	20	6	3	0	2	9	1	0	1	9	0
	1130	"	1002·8	992·9	..	30·7	27·3	26·0	33·6	77	..	6·0	..	10·9	0	2	27	6	5	1	3	5	4	2	3	2	0
	1730	"	999·8	989·8	..	29·8	27·2	26·2	34·0	82	..	4·9	..	6·5	0	2	15	4	3	1	1	2	1	4	1	14	0
Golaghat	0830	..	..	..	..	27·7	26·0	24·7	32·3	86	..	7·5	..	..	0	0	2	0	0	0	2	0	0	0	0	29	0
	1730	..	..	..	..	31·0	27·4	25·6	34·1	75	..	7·1	..	..	0	0	1	0	0	0	1	0	0	0	0	30	0
Gohpur (R)	0830																										
(R)	1730																										
Tezpur	0830	79	1004·6	995·8	+0·4	27·5	26·2	25·4	33·2	90	+3	5·9	−0·6	..	0	0	21	0	6	9	0	0	4	2	0	10	0
	1730	"	1000·3	991·6	..	30·4	27·3	26·1	34·4	78	..	3·4	..	..	0	0	8	0	3	1	1	0	0	3	0	23	0
Tezpur (P.B.O.)	0230	78	1002·8	993·9	..	26·5	25·8	25·5	32·3	94	..	5·9	..	0·8	0	0	5	0	1	1	0	1	2	0	0	26	0
	0530	"	1003·5	994·6	..	26·3	25·6	25·4	31·9	95	..	6·9	..	1·3	0	0	9	0	4	1	1	0	3	0	0	22	0
	0830	"	1004·7	995·9	..	28·2	26·5	25·7	32·9	87	..	6·6	..	3·4	0	0	26	0	8	6	2	3	7	0	0	5	0
	1130	"	1003·5	994·8	..	30·5	26·9	25·6	32·5	75	..	5·2	..	4·4	0	0	29	0	7	10	1	3	7	1	0	2	0
	1730	"	1000·6	991·9	..	29·8	27·1	26·0	33·5	80	..	4·9	..	1·6	0	0	14	1	4	4	1	0	4	0	0	17	0
	2330	"	1003·4	994·6	..	27·1	26·2	25·8	33·4	93	..	5·2	..	0·7	0	0	4	1	0	1	0	0	1	1	0	27	0
Majbat	0830	..	..	..	..	..	..	..	..	..	..	7·1	..	7·8	0	0	29	0	7	9	2	2	5	4	0	2	0
	1730	..	..	..	..	..	..	..	..	..	..	6·0	..	3·8	0	0	19	0	2	6	1	3	4	2	1	12	0
Chaparmukh (R)	0830	66																									
(R)	1730	"																									
Tangla	0830	78	1003·7	995·0	..	28·7	26·4	25·3	32·7	82	..	4·5	..	6·0	0	0	31	1	4	8	6	4	4	4	0	0	0
	1730	"	999·7	991·1	..	30·4	28·1	26·6	36·1	83	..	3·9	..	4·5	0	0	23	0	3	3	2	1	7	7	0	8	0

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed km. per hour	Wind speed (km. p. h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb.	Wet bulb.	Dew point.				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur & Tripura) —*Contd.*																											
Gauhati	0830	55	1004·2	998·0	+0·9	28·2	26·3	25·5	33·1	86	+3	6·7	+0·6	2·7	0	0	26	2	5	2	6	3	1	2	5	5	0
	1730	"	999·9	993·7	..	30·8	27·2	25·6	33·7	75	..	5·3	..	2·3	0	0	21	0	3	0	6	3	7	1	1	10	0
Gauhati (Kaikuchi Aerodrome).	0230	49	1002·5	996·9	..	26·6	25·8	25·4	32·6	93	..	5·8	..	2·2	0	0	15	0	1	0	2	7	5	0	0	16	0
	0530	"	1002·9	997·3	..	26·3	25·6	25·4	31·7	94	..	6·9	..	1·6	0	0	13	0	3	0	0	4	6	0	0	18	0
	0830	"	1004·0	998·5	..	28·9	26·6	25·7	33·0	83	..	6·7	..	5·2	0	0	28	2	16	2	1	2	4	1	0	3	0
	1130	"	1003·1	997·5	..	30·5	27·0	25·5	32·4	75	..	6·5	..	6·6	0	0	31	8	12	4	0	0	2	3	2	0	0
	1730	"	1000·4	994·9	..	29·9	26·8	25·5	33·1	78	..	6·0	..	4·5	0	0	27	2	8	1	1	3	8	3	1	4	0
	2330	"	1003·1	997·5	..	27·2	26·2	25·7	34·4	92	..	5·5	..	2·3	0	0	14	0	3	1	0	4	6	0	0	17	0
Rangiya	0830	..	..	..	..	29·2	26·7	25·3	32·9	83	..	5·2	..	6·0 (b)	0	0	29	7	6	4	2	2	2	3	3	0	0
	1730	..	..	..	..	30·8	27·5	25·8	34·0	77	..	3·4	..	4·3 (c)	0	0	28	5	4	2	1	3	3	8	2	0	0
Goalpara	0830	38	1003·8	1001·2	..	28·4	26·6	25·5	33·5	84	..	7·0	..	..	0	0	25	4	3	4	3	2	7	1	1	6	0
	1730	"	1000·3	996·0	..	30·4	27·2	25·9	33·7	77	..	6·4	..	..	0	0	28	1	3	3	5	1	12	0	3	3	0
Dhubri	0830	35	1004·4	1000·5	+1·1	28·6	27·0	26·3	34·2	88	+3	4·9	—0·9	4·8	0	0	26	0	15	3	2	5	1	0	0	5	0
	1730	"	1001·9	997·9	..	28·6	26·9	26·2	34·2	88	..	4·0	..	3·3	0	0	20	0	7	0	1	6	5	0	1	11	0
Dhubri (Rupsi Aerodrome).	0830	..	..	..	..	28·7	26·6	25·8	33·2	85	..	6·3	..	3·9	0	0	24	1	7	6	3	6	1	0	0	7	0
	1130	..	..	..	..	30·4	27·2	25·9	33·7	78	..	6·1	..	4·8	0	0	25	0	2	5	8	2	6	1	1	6	0
	1730	..	..	..	..	29·3	26·7	25·7	33·0	81	..	5·3	..	2·1	0	0	14	1	1	3	3	3	3	0	0	17	0
Tura	0830	370	1005·4	964·4	..	26·2	24·8	24·1	30·4	89	..	6·6	..	1·9	0	0	15	0	0	4	2	2	5	2	0	16	0
	1730	"	1002·0	961·0	..	27·8	26·0	25·2	32·2	87	..	7·2	..	2·3	0	0	21	0	1	0	2	4	10	3	1	10	0
Agartala	0230	16	1002·2	1000·4	..	25·8	25·2	25·0	31·7	95	..	6·1	..	7·2	0	5	18	0	1	1	16	5	0	0	0	8	0
	0530	"	1002·5	1000·7	..	25·6	25·0	24·8	31·3	96	..	6·6	..	6·4	0	5	18	0	3	1	17	2	0	0	0	8	0
	0830	"	1003·7	1001·9	..	28·8	26·4	25·5	32·4	82	..	6·8	..	9·7	0	4	23	0	1	4	16	5	1	0	0	4	0
	1130	"	1002·9	1001·1	..	30·8	27·1	25·6	33·0	74	..	6·7	..	9·5	0	1	28	1	0	3	8	13	1	2	1	2	0
	1730	"	1000·6	998·8	..	28·7	26·5	25·6	32·8	85	..	7·0	..	6·1	0	1	22	1	0	5	5	8	2	0	2	8	0
	2330	"	1003·1	1001·3	..	26·2	25·5	25·2	32·1	95	..	6·0	..	7·8	0	2	23	0	0	1	13	10	1	0	0	6	0
Silchar	0830	29	1005·1	1001·8	+0·6	28·3	25·9	24·9	31·6	82	—4	6·2	—0·2	1·6	0	0	16	1	5	6	2	1	1	0	0	15	0
	1730	"	1001·1	998·0	..	29·8	26·7	25·2	33·1	78	..	5·3	..	1·5	0	0	15	1	2	3	1	1	2	2	3	16	0
Silchar (Kumbhigram Aerodrome).	0530	97	1002·7	991·8	..	24·5	24·3	24·2	30·0	98	..	6·6	..	4·9	0	1	23	0	3	16	3	0	0	1	1	7	0
	0830	"	1003·6	992·8	..	27·3	25·6	24·8	31·2	87	..	6·5	..	4·2	0	0	24	0	4	13	5	1	0	1	0	7	0
	1130	"	1002·2	991·5	..	30·3	26·6	25·0	32·0	75	..	5·7	..	5·1	0	1	26	2	2	4	2	3	1	5	8	4	0
	1730	"	999·8	989·1	..	29·0	26·4	25·3	32·4	81	..	5·5	..	4·8	0	0	23	0	1	3	2	3	4	6	4	8	0
Imphal	0530	801	1005·0	917·7	..	22·5	21·9	21·2	26·0	93	..	6·5	..	3·5	0	0	18	2	1	2	2	4	4	2	1	13	0
	0830	"	1005·4	918·8	..	25·3	22·7	21·5	25·8	80	..	6·3	..	4·3	0	0	22	0	4	3	8	2	5	0	0	9	0
	1130	"	1003·4	917·6	..	27·6	23·5	21·6	26·0	71	..	5·8	..	10·2	0	2	29	0	1	0	8	8	11	3	0	0	0
	1730	"	1001·7	915·5	..	25·8	23·2	22·0	26·4	80	..	5·9	..	5·5	0	0	28	0	1	2	3	3	13	4	2	3	0
	2330	"	1005·0	917·9	..	23·2	22·2	21·8	26·0	91	..	5·8	..	3·5	0	1	14	1	1	2	3	1	3	1	3	16	0
Haflong	0830	682	1004·6	930·0	..	23·9	22·4	21·7	26·0	88	..	6·1	..	..	0	0	31	1	0	0	2	15	13	0	0	0	0
	1730	"	1000·6	926·8	..	26·3	23·2	21·6	26·2	77	..	5·1	..	..	0	0	31	0	0	0	1	13	17	0	0	0	0
Lumding	0830	149	1004·7	988·0	..	28·1	26·3	25·2	32·7	85	+2	7·1	..	1·7	0	0	14	1	4	3	2	2	1	0	0	17	1
	1730	"	1000·3	983·8	..	30·6	27·6	26·3	34·8	79	..	5·6	..	1·9	0	0	12	1	0	1	3	2	2	1	2	19	0
Sub-Himalayan West Bengal.																											
Cooch-Behar (C.W.O.)	0830	43	1004·2	999·3	..	28·8	26·4	25·4	32·2	83	..	6·0	..	9·2	0	0	26	0	9	10	4	2	1	0	0	5	0
	1130	"	1003·2	998·4	..	30·7	27·1	25·7	32·8	76	..	6·0	..	9·6	0	0	30	1	3	15	5	2	1	0	0	1	3
	1730	"	1000·7	995·9	..	30·1	27·0	25·8	33·2	79	..	5·5	..	4·3	0	1	15	3	1	5	5	1	1	0	0	15	0
Jalpaiguri	0830	83	1004·2	994·8	+1·1	26·6	25·2	24·6	30·9	89	+2	5·5	+0·5	4·9	0	0	19	3	8	6	0	0	0	0	2	12	0
	1730	"	1000·7	991·5	..	29·6	26·4	25·0	31·8	78	..	4·5	..	4·9	0	0	26	4	2	6	5	6	2	1	0	5	0
Bagdogra	0230	131	1001·9	987·1	..	25·7	24·9	24·7	30·7	94	..	6·7	..	2·7	0	0	14	1	6	3	4	0	0	0	0	17	0
	0530	"	1002·3	987·5	..	25·0	24·5	24·2	30·2	96	..	6·6	..	1·6	0	0	9	1	3	4	0	0	0	0	1	22	0
	0830	"	1003·5	988·8	..	27·8	25·6	24·6	30·9	84	..	6·3	..	3·5	0	0	20	1	6	10	3	0	0	0	0	11	0
	1130	"	1002·6	988·1	..	29·6	26·6	25·3	32·1	79	..	6·3	..	5·5	0	0	28	1	4	6	14	3	0	0	0	3	0
	1730	"	1000·1	985·6	..	29·0	26·4	25·3	32·6	81	..	6·5	..	2·2	0	0	14	2	7	2	2	0	0	0	1	17	0
	2330	"	1002·8	988·1	..	26·6	25·5	25·3	31·7	93	..	6·6	..	4·2	0	0	20	3	6	7	1	1	0	1	1	11	0
Malda	0830	31	1002·9	999·4	+0·5	29·5	27·2	26·3	34·4	83	0	6·0	+0·4	9·5	0	0	31	0	2	10	10	6	2	1	0	0	0
	1730	"	999·9	996·4	..	30·2	27·2	26·0	34·3	79	..	5·3	..	6·2	0	0	28	0	4	10	8	6	0	0	0	3	0

(b) Mean of 29 days.

(c) Mean of 28 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Wind speed (km. p. h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal	Mean wind speed km per hour	62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal																											
Dum Dum	0230	6	1000·9	1000·2	..	27·0	26·1	25·8	33·3	94	..	4·4	..	5·4	0	1	24	0	4	3	10	5	1	2	0	6	0
	0530	"	1001·2	1000·5	..	26·7	26·1	25·8	33·4	95	..	6·4	..	3·9	0	1	23	3	3	6	7	4	1	0	0	7	0
	0830	"	1002·3	1001·6	..	29·5	27·0	25·9	33·6	82	..	6·5	..	8·7	0	1	29	3	2	5	10	8	2	0	0	1	0
	1130	"	1001·8	1001·1	..	31·3	27·4	25·9	33·3	73	..	7·0	..	9·8	0	1	29	1	1	6	10	5	6	1	0	1	0
	1730	"	999·3	998·6	..	29·5	26·9	25·8	33·6	81	..	6·5	..	6·4	0	1	28	0	5	3	7	11	2	0	1	2	0
	2330	"	1002·0	1001·3	..	27·4	26·3	26·0	33·3	93	..	4 3	..	5·5	0	0	27	1	1	5	8	10	2	0	0	4	0
Calcutta	0830	6	1002·5	1001·8	+0·6	29·7	27·0	25·9	33·2	80	—5	6·5	—0·2	7·7	0	0	30	2	2	9	4	9	4	0	0	1	0
	1130	"	1001·8	1001·1	..	31·6	27·4	25·8	33·1	72	..	6·9	..	11·3	0	4	26	0	6	2	8	7	6	0	1	1	0
	1730	"	999·5	998·8	..	29·5	26·9	25·7	33·6	81	..	6·6	..	7·2	0	0	28	0	1	6	7	10	3	1	0	3	0
Barrackpore	0530	7	1001·4	1000·6	..	26·5	26·1	25·9	33·1	97	..	6·2	..	3·7	0	0	17	2	1	8	4	1	1	0	0	14	0
	0830	"	1002·5	1001·8	..	29·6	27·2	26·3	33·7	82	..	6·3	..	9·6	0	1	28	0	2	9	10	3	3	1	1	2	0
	1130	"	1001·9	1001·2	..	31·2	27·9	26·7	34·7	77	..	6·7	..	10·8	0	2	25	0	1	7	8	3	6	1	1	4	0
	1730	"	999·4	998·7	..	29·0	27·1	26·3	34·2	86	..	6·1	..	6·5	0	0	22	0	2	2	8	8	2	0	0	9	0
	2330	"	1002·2	1001·5	..	26·9	26·4	26·1	33·8	96	..	3·5	..	3·3	0	0	15	1	1	4	4	4	1	0	0	16	0
Saugor Island	0830	3	1001·8	1001·5	+0·2	29·1	26·8	26·0	33·5	84	0	5·9	—0·9	..	0	14	17	2	3	2	7	8	7	0	2	0	0
	1730	"	999·4	999·1	..	29·4	26·8	25·8	33·4	81	..	5·9	..	..	0	16	15	0	1	2	8	12	8	0	0	0	0
Sandheads	0530	10	1000·5	999·4	..	28·3	27·0	26·3	34·3	87	..	5·8	..	..	0	6	25	2	2	0	4	9	11	2	1	0	0
	0830	"	1001·9	1000·8	—0·2	29·4	27·2	26·2	34·2	84	+1	5·9	+0·1	..	0	4	26	0	2	2	4	7	12	2	1	1	0
	1130	"	1001·6	1000·5	..	29·6	27·2	26·1	33·7	82	..	6·1	..	..	0	8	23	1	2	2	4	8	12	2	0	0	0
	1730	"	999·3	998·2	..	29·4	27·2	26·4	34·2	84	..	5·8	..	..	0	9	22	0	0	3	6	8	12	2	0	0	0
	2330	"	1001·5	1000·4	..	28·8	27·3	26·5	35·4	87	..	5·0	..	..	0	9	21	0	0	2	7	6	12	3	0	1	0
Contai	0830	11	1001·8	1000·6	..	29·4	27·0	26·0	33·4	82	..	5·7	..	6·1	0	2	22	3	3	2	5	4	7	0	0	7	0
	1730	,,	999·5	998·3	..	29·2	26·8	25·7	32·9	82	..	5·5	..	7·5	0	0	29	0	0	0	10	8	9	1	1	2	0
Midnapore	0830	45	1002·1	997·0	+0·4	29·5	26·8	25·8	32·8	82	—1	4·7	—1·0	4·3	0	0	24	2	1	5	3	8	5	0	0	7	0
	1730	,,	999·3	994·2	..	29·3	26·7	25·6	32·7	81	..	5·1	..	4·3	0	0	25	0	5	1	6	6	7	0	0	6	0
Purulia	0830	255	1002·2	974·2	..	28·1	25·6	24·5	30·7	82	..	6·9	..	3·5	0	0	31	4	2	3	13	5	2	0	2	0	0
	1730	,,	998·6	970·7	..	29·0	25·5	24.2	29·5	76	..	6·9	..	3·2	0	0	28	1	4	3	13	3	1	1	2	3	0
Burdwan	0830	32	1002·3	998·7	+0·5	29·6	..	..	..	..	..	4·5	—2·1	2·1	0	0	16	0	1	0	5	5	5	0	0	15	0
	1730	,,	999·4	995·8	..	29·8	..	..	..	..	..	6·0	..	3·0	0	0	19	0	1	6	11	1	0	0	0	12	0
Krishnagar	0830	15	1002·8	1001·2	+0·5	29·6	27·4	26·8	34·5	84	0	4·2	—2·0	2·5	0	0	24	0	0	7	9	8	0	0	0	7	0
	1730	,,	999·7	998·1	..	29·7	27·2	26·4	34·0	82	..	3·9	..	1·8	0	0	19	0	0	4	7	8	0	0	0	12	0
Asansol	0230	126	1000·7	986·6	..	26·3	26·1	25·9	33·4	96	..	4·9	..	4·5	0	0	17	0	0	3	10	4	0	0	0	14	0
	0530	,,	1001·1	986·9	..	26·4	25·9	25·8	32·8	96	..	6·2	..	3·8	0	0	16	0	1	5	6	4	0	0	0	15	0
	0830	,,	1002·0	988·0	+0·8	28·6	26·7	25·9	33·3	85	0	6·5	—0·1	8·4	0	1	27	2	0	12	9	4	1	0	0	3	0
	1130	,,	1001·4	987·5	..	30·9	27·3	25·8	33·3	75	..	6·7	..	7·5	0	1	26	1	1	10	10	3	2	0	0	4	0
	1730	,,	998·8	984·9	..	29·2	26·6	25·5	32·9	82	..	6·6	..	8·3	0	1	27	0	2	11	9	6	0	0	0	3	0
	2330	,,	1001·6	987·5	..	27·0	26·2	25·9	33·3	94	..	4·9	..	4·9	0	0	18	0	0	5	9	3	1	0	0	13	0
Suri	0830	77	1002·6	994·0	..	29·2	26·6	25·6	32·9	81	..	6·1	..	8·7	0	0	30	2	3	11	10	3	1	0	0	1	0
	1730	,,	1000·1	991·6	..	30·0	26·8	25·3	32·3	78	..	6·5	..	8·1	0	0	30	0	3	13	12	2	0	0	0	1	0
Berhampore	0380	19	1002·1	1000·0	+0·1	29·4	27·1	26·0	34·2	83	—2	6·3	—0·3	2·9	0	0	17	0	0	7	2	7	1	0	0	14	0
	1730	,,	999·5	997·4	..	29·9	27·1	26·1	33·7	79	..	6·0	..	1·9	0	0	14	0	0	8	3	1	1	1	0	17	0
Orissa																											
Baripada	0830	54	1002·0	995·9	..	28·4	26·4	25·6	32·7	85	..	6·4	..	2·3	0	0	20	3	4	0	2	1	5	1	3	11	1
	1730	,,	999·0	993·0	..	28·7	26·5	25·5	32·9	83	..	6·3	..	4·5	0	0	27	3	3	2	7	2	6	2	1	4	1
Balasore	0830	20	1001·7	999·5	+0·1	28·9	26·8	25·9	33·2	84	+1	7·7	+1·9	12·1	0	4	23	3	3	1	3	5	10	1	1	4	0
	1730	,,	999·1	996·9	..	29·4	26·7	25·8	32·6	82	..	7·3	..	9·6	0	2	27	0	1	1	12	7	8	0	0	2	0
Chandbali	0830	6	1001·9	1001·2	—0·2	29·3	27·3	26·6	34·8	85	+2	5·4	—0·7	4·5	0	0	31	0	3	0	10	0	9	1	8	0	0
	1730	,,	999·1	998·4	..	29·5	27·1	26·5	33·6	82	..	5·7	..	5·5 (0)	0	0	31	1	4	0	15	2	6	1	2	0	0
Cuttack	0830	27	1001·5	998·5	—0·8	28·1	26·4	25·6	33·0	86	+5	6·0	0	1·4 (0)	0	0	4	0	1	0	1	0	0	0	2	12	0
	1730	,,	998·7	995·8	..	29·6	26·9	25·9	32·9	81	..	6·9	..	3·0	0	1	2	0	1	0	1	0	1	0	0	13	0
Bhubaneswar	0230	46	1000·2	994·9	..	26·1	25·5	25·2	32·2	95	..	6·2	..	9·7	0	4	24	3	2	1	1	6	5	5	5	3	0
	0530	,,	1000·3	995·1	..	26·0	25·4	25·2	32·1	95	..	6·8	..	7·5	0	2	24	2	2	3	1	5	4	6	3	5	0
	0830	,,	1001·7	996·5	..	28·2	26·3	25·4	32·5	85	..	6·7	..	13·1	0	5	24	2	2	1	1	6	8	3	6	2	0
	1130	,,	1001·3	996·1	..	30·2	26·9	25·4	32·6	76	..	6·8	..	11·1	0	2	27	3	3	0	1	7	8	4	3	2	0
	1730	,,	999·1	993·9	..	28·5	26·4	25·5	32·4	84	..	7·1	..	18·6	0	15	16	2	2	1	1	11	10	2	2	0	0
	2330	,,	1001·3	996·1	..	26·4	25·6	25·3	32·0	94	..	5·7	..	9·8	0	4	21	5	1	2	1	5	6	2	3	6	0
Puri	0830	6	1002·0	1001·3	—0·2	29·0	27·0	26·5	34·0	86	+4	6·2	+0·6	19·5	0	13	18	5	3	0	2	1	12	4	4	0	0
	1730	,,	999·9	998·9	..	29·2	27·2	26·4	34·5	85	..	6·7	..	22·6	0	16	15	0	2	1	3	8	14	2	1	0	0

(0) Mean of 16 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed km. per hour	Wind speed (km. p. h.): 62 or more	Wind speed (km. p. h.): 20 to 61	Wind speed (km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—*Contd.*																											
Gopalpur	0530	17	1000·7	999·8	..	26·8	25·5	25·0	31·3	90	..	7·0	..	5·8	0	1	18	3	0	0	1	2	10	1	2	12	0
	0830	,,	1002·1	1000·2	—0·3	28·7	26·3	25·3	32·0	82	+1	6·4	+1·4	11·5	0	9	14	3	0	0	0	6	10	2	2	8	0
	1130	,,	1001·8	999·9	..	30·6	27·1	25·8	32·6	76	..	6·1	..	13·8	0	9	18	3	1	1	2	10	8	0	2	4	0
	1730	,,	999·5	997·6	..	28·5	26·5	25·6	33·5	85	..	6·5	..	13·7	0	7	21	3	0	0	2	10	9	3	1	3	0
	2330	,,	1001·7	999·8	..	27·4	25·9	25·3	32·6	89	..	5·5	..	12·0	0	8	16	2	0	0	0	5	9	2	6	7	0
Koraput	0830	913	1455·3	904·7	..	21·6	20·6	20·1	24·0	91	..	6·9	..	..	0	0	31	3	0	0	0	0	10	8	10	0	0
	1730	,,	1426·7	902·5	..	22·6	21·2	20·5	24·1	88	..	7·5	..	..	0	0	31	3	0	0	1	1	7	14	5	0	0
Titilagarh	0830	211	1001·9	978·5	..	26·9	24·8	23·9	29·2	84	..	6·3	..	2·4	0	0	20	1	0	0	3	7	5	3	1	11	0
	1730	,,	999·0	975·8	..	29·0	25·4	23·8	29·5	74	..	6·0	..	2·5	0	0	25	2	1	1	2	8	7	3	1	6	0
Bolangir (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angul	0830	139	1002·1	986·6	+0·2	27·8	25·4	24·3	30·2	82	+1	6·9	+0·9	4·4	0	0	17	0	1	2	2	1	3	5	3	14	0
	1730	,,	999·0	983·6	..	29·3	25·8	24·2	30·0	75	..	7·4	..	5·0	0	0	24	3	3	2	4	4	2	4	2	7	0
Keonjhar	0830	463	999·0	948·1	..	26·5	24·0	22·9	28·0	81	..	6·3	..	7·5	0	1	30	6	4	4	2	2	5	2	6	0	0
	1730	,,	996·2	945·5	..	27·2	24·4	23·0	28·6	78	..	7·0	..	8·3	0	0	31	3	4	4	3	4	5	6	2	0	0
Sambalpur	0830	148	1002·1	985·6	+0·1	27·9	25·7	24·6	31·1	83	—2	5·9	—0·7	3·9	0	0	27	1	4	1	3	4	9	3	2	4	0
	1730	,,	999·0	982·6	..	28·9	26·3	25·3	32·1	81	..	6·6	..	2·5	0	0	19	1	1	1	2	5	7	1	1	12	0
Jharsuguda	0230	230	1000·4	974·6	..	25·7	24·9	24·5	30·7	94	..	6·3	..	5·4	0	1	21	0	3	5	6	5	2	1	0	9	0
	0530	,,	1000·5	974·9	..	25·4	24·7	24·4	30·2	95	..	6·4	..	6·1	0	1	25	0	5	4	3	2	7	3	2	5	0
	0830	,,	1001·7	976·1	..	27·4	25·4	24·7	30·9	85	..	6·5	..	7·5	0	1	27	0	5	5	1	4	5	6	2	3	0
	1130	,,	1001·0	975·7	..	29·8	26·2	24·5	31·0	74	..	6·7	..	8·2	0	1	28	1	5	5	2	2	6	6	2	2	0
	1730	,,	998·4	973·1	..	29·0	25·7	24·2	30·2	76	..	6·9	..	8·5	0	0	31	2	3	7	2	2	5	8	2	0	0
	2330	,,	1001·3	975·7	..	26·1	25·2	24·9	32·5	94	..	6·3	..	5·5	0	0	27	0	2	6	3	6	3	6	1	4	0
Chota Nagpur																											
Jamshedpur	0830	129	1001·9	987·6	+0·4	28·5	26·0	24·8	31·6	81	—1	6·5	—0·4	6·2	0	2	24	0	2	10	2	1	5	6	0	5	0
	1730	,,	998·7	984·4	..	29·4	26·4	25·2	31·8	79	..	6·8	..	7·5	0	1	27	0	2	12	4	1	5	4	0	3	0
Jamshedpur (P.B.O.)	0530	145	1000·6	984·4	..	26·4	25·5	25·4	32·0	92	..	7·1	..	2·1	0	0	14	1	0	5	2	1	2	3	0	17	0
	0830	,,	1001·8	985·6	..	28·3	25·9	24·8	31·2	82	..	7·1	..	3·8	0	0	24	0	3	6	2	1	7	4	1	7	0
	1130	,,	1001·1	985·1	..	30·6	26·7	25·0	31·8	72	..	6·5	..	4·7	0	0	25	0	6	2	2	2	11	0	2	6	0
	1730	,,	998·6	982·6	..	29·5	26·2	24·9	31·2	77	..	7·1	..	5·7	0	0	26	0	4	8	5	0	8	0	1	5	0
	2330	,,	1001·1	985·1	..	27·4	25·8	25·1	31·7	88	..	5·5	..	2·1	0	0	13	0	2	4	2	2	1	2	0	18	0
Chaibasa	0830	226	1001·6	976·6	+0·6	28·3	25·7	24·5	30·8	81	—2	6·1	—0·3	2·1	0	0	17	0	6	0	4	0	7	0	0	14	0
	1730	,,	998·5	973·6	..	28·9	25·9	24·7	31·0	79	..	6·9	..	0·9	0	0	9	0	4	0	2	0	3	0	0	22	0
Ranchi	0830	655	1001·2	930·0	+0·4	25·7	23·4	22·3	27·3	83	—2	6·1	—0·6	0·8	0	0	11	3	0	4	0	2	2	0	0	20	0
	1730	,,	999·1	928·4	..	26·6	23·8	22·2	27·4	79	..	6·5	..	0·3	0	0	3	2	0	0	0	1	0	0	0	28	0
Ranchi (C.W.O.)	0530	652	1000·7	929·4	..	23·4	22·8	22·5	27·3	95	..	6·5	..	5·9	0	1	22	3	4	5	4	1	3	1	2	8	0
	0830	,,	1001·4	930·6	..	25·7	23·4	22·3	27·1	82	..	6·2	..	6·7	0	1	27	6	4	6	4	2	3	0	3	3	0
	1130	,,	1000·5	930·1	..	27·5	24·2	22·8	27·7	76	..	6·6	..	8·9	0	1	27	2	6	8	4	5	2	1	0	3	0
	1730	,,	998·1	927·9	..	27·4	24·5	23·3	28·6	79	..	(i) 6·3	..	(i) 7·6	0	1	21	1	6	7	2	3	2	1	0	0	0
Daltonganj (R)	0830	221	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	,,	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hazaribagh	0830	611	1001·7	935·2	+0·5	26·3	24·3	23·6	29·0	85	+1	6·0	—1·2	8·4	0	1	24	0	3	5	7	4	4	1	1	6	0
	1730	,,	998·5	932·4	..	27·5	24·7	23·4	29·1	79	..	6·6	..	7·1	0	2	24	2	1	6	8	3	3	0	3	5	0
Dhanbad	0830	257	..	..	..	28·2	26·0	25·1	31·9	80	..	6·8	..	10·2	0	1	30	1	2	12	7	8	1	0	0	0	0
	1730	,,	..	..	..	28·7	25·9	24·8	31·2	80	..	6·8	..	6·8	0	0	28	3	2	10	11	1	0	1	0	3	0
Bihar																											
Purnea	0830	38	1003·1	998·9	+0·9	29·2	27·1	26·3	33·7	85	—1	5·3	—0·5	3·0	0	0	26	2	4	17	2	1	0	0	0	5	0
	1730	,,	999·4	995·2	..	30·1	27·4	26·3	34·0	81	..	4·9	..	3·1	0	0	26	0	2	20	4	0	0	0	0	5	0
Forbesganj	0830	61	1002·9	996·1	..	28·8	26·7	25·7	33·0	84	..	6·1	..	6·9	0	0	27	0	3	21	2	1	0	0	0	4	0
	1730	,,	999·5	992·8	..	30·8	27·2	25·7	33·1	75	..	5·5	..	5·3	0	0	25	3	1	13	4	2	0	0	2	6	0
Darbhanga	0830	49	1002·8	997·3	+1·1	28·2	26·9	26·3	34·1	88	+6	6·3	+0·2	3·4	0	0	25	0	11	11	3	0	0	0	0	6	0
	1730	,,	999·7	994·2	..	30·8	27·6	26·6	33·9	79	..	6·0	..	3·0	0	0	21	0	7	6	7	0	0	0	1	10	0
Motihari (R)	0830	65																									
(R)	1730	,,																									
Patna	0830	53	1002·1	996·2	+0·7	29·6	26·9	25·8	32·9	81	—1	6·5	—0·4	10·2	0	3	26	1	1	19	6	0	1	0	1	2	0
	1730	,,	999·1	993·2	..	30·3	27·0	25·6	32·8	77	..	5·7	..	6·4	0	0	27	1	8	13	3	0	1	0	1	4	0

(i)—Mean of 22 days.

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more.	Wind speed (km.p.h.): 20 to 61.	Wind speed (km.p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*Contd.*																											
Patna (Aerodrome) .	0530	60	1000·3	993·8	..	27·3	26·5	26·0	33·8	93	..	6·1	..	8.5	0	0	27	0	3	18	2	2	1	1	0	4	0
	0830	,,	1001·5	994·8	..	29·4	27·1	26·2	34·2	83	..	6·2	..	10·1	0	1	26	0	1	15	9	0	1	1	0	4	0
	1130	,,	1001·0	994·3	..	31·3	27·6	25·9	33·5	74	..	6·2	..	11·5	0	1	29	0	1	13	11	1	0	3	1	1	0
	1730	,,	998.2	991·6	..	30·8	27·2	25·7	33·1	76	..	5·8	..	9·1	0	1	25	3	4	13	5	0	0	1	0	5	0
	2330	52	1001·5	995·7	..	28·9	27·5	26·9	35·6	90	..	4·9	..	5·2	0	1	13	0	1	8	4	0	0	1	0	17	0
Dehri . . .	0830	107	1001·4	989·5	..	29·1	26·7	26·1	32·7	85	..	5·6	..	3·2	0	0	30	1	2	1	13	3	6	2	2	1	0
	1730	,,	997·7	985·9	..	30·9	27·7	26·6	34·1	79	..	6·3	..	3·0	0	0	30	2	5	5	9	0	3	0	6	1	0
Gaya . . .	0230	116	1000·6	987·5	..	27·4	26·5	26·2	34·1	93	..	4·8	..	4·6	0	0	17	1	2	6	4	1	1	1	1	14	0
	0530	,,	1000·7	987·6	..	26·9	26·2	25·9	33·0	94	..	6·0	..	3·7	0	0	17	0	0	7	5	1	2	2	0	14	0
	0830	,,	1001·9	989·0	+0·9	29·1	26·9	25·8	33·5	84	+7	5·5	+0·3	6·1	0	2	18	0	0	4	8	3	2	2	1	11	0
	1130	,,	1001·4	988·6	..	31·7	27·8	26·3	34·1	73	..	5·3	..	8·3	0	2	17	0	0	9	3	1	1	3	2	12	0
	1730	,,	998·7	985·8	..	30·0	27·4	26·4	34·7	82	..	6·3	..	6·5	0	2	17	1	3	11	4	0	0	0	0	12	0
	2330	,,	1001·4	988·4	..	28·0	27·2	26·9	35·4	93	..	4·9	..	4·9	0	0	17	0	1	8	4	1	2	0	1	14	0
Jamui . . .	0830	82	1002·2	992·8	..	29·9	27·3	26·1	34·2	81	..	6·0	..	4·7	0	0	29	0	2	17	8	0	1	0	1	2	0
	1730	,,	999·1	989·7	..	30·1	27·3	26·0	34·0	79	..	6·1	..	4·6	0	0	27	3	2	12	6	1	0	0	3	4	0
Dumka . . .	0830	149	1002·5	986·0	+0·9	28·7	26·4	25·4	32·6	82	..	3·6	—2·2	..	0	0	30	1	3	12	13	0	1	0	0	1	0
	1730	,,	1000·2	983·5	..	29·6	27·2	26·3	34·3	84	..	4·5	..	..	0	0	28	0	4	13	9	0	1	1	0	3	0
Bhagalpur . .	0530	49	1001·6	996·1	..	26·9	26·2	25·9	33·6	94	..	5·9	..	5·3	0	0	23	0	0	12	9	1	0	0	1	8	0
	0830	,,	1002·7	997·2	..	29·6	27·1	26·2	33·7	83	..	5·7	..	6·7	0	0	29	0	1	9	13	3	0	2	1	8	0
	1130	,,	1002·3	996·9	..	31·2	27·5	26·1	33·9	75	..	6·1	..	6·9	0	0	29	2	1	14	8	4	0	0	0	2	0
	1730	,,	999·5	994·0	..	30·6	27·5	26·1	34·2	78	..	5·7	..	6·5	0	0	27	2	2	16	7	0	0	0	0	4	0
	2330	,,	1002·3	996·8	..	28·1	26·9	26·5	34·7	91	..	4·6	..	4·5	0	0	21	0	0	9	10	2	0	0	0	10	0
Sabour . . .	0830	37	1002·6	998·4	+0·7	29·7	27·6	26·7	34·8	85	0	6·2	—0·4	6·5	0	0	27	0	2	7	12	3	2	1	0	4	0
	1730	,,	999·3	995·1	..	30·2	28·1	27·2	35·9	85	..	6·5	..	5·7	0	0	22	0	2	7	13	0	0	0	0	9	0
Uttar Pradesh (East)																											
Gonda . . .	0830	110	1001·8	989·8	..	29·0	26·6	25·8	32·4	84	0	6·0	—0·2	2·0	0	0	10	0	0	9	0	0	0	1	0	21	0
	1730	,,	998·3	986·0	..	30·4	27·5	26·3	35·1	80	..	4·5	..	0·3	0	0	2	0	0	2	0	0	0	0	0	29	0
Nautanwa . .	0830	..	..	..	..	28·6	26·1	25·1	31·8	83	..	5·4	..	5·9	0	1	27	1	2	13	11	1	0	0	0	3	0
	1730	..	..	..	..	30·5	27·1	25·9	33·4	77	..	4·4	..	4·9	0	0	24	2	2	5	12	2	1	0	0	7	0
Gorakhpur	0830	77	1001·4	992·8	+0·1	29·1	26·9	26·6	33·3	84	—1	6·6	+1·8	3·1	0	0	28	1	2	22	0	1	2	0	0	3	0
	1730	,,	998·4	989·6	..	30·2	27·8	26·4	34·7	81	..	6·1	..	1·8	0	0	17	1	1	12	1	2	0	0	0	14	0
Gorakhpur (P.B.O.) .	0230	78	1000·6	991·8	..	27·2	26·5	26·2	33·7	95	..	5·5	..	3·5	0	0	18	1	8	5	3	1	0	0	0	13	0
	0530	,,	1000·7	991·9	..	26·8	26·2	25·9	33·4	95	..	6·8	..	6·8	0	0	25	3	15	5	1	1	0	0	0	6	0
	1130	,,	1001·7	993·0	..	30·7	27·7	26·5	33·4	79	..	6·6	..	3·4	0	0	26	0	4	15	4	2	0	1	0	5	0
	2330	,,	1001·4	992·6	..	27·7	26·7	26·4	34·1	92	..	5·2	..	3·5	0	0	20	1	6	11	0	2	0	0	0	11	0
Azamgarh (R) .	0830	78																									
(R)	1730	,,																									
Ballia (R) . .	0830	64																									
(R)	1730	,,																									
Varanasi (Banaras) (R)	0830	76																									
(R)	1730	,,																									
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	1000·7	991·0	..	26·8	26·1	25·4	32·6	95	..	6·1	..	5·5	0	0	26	2	9	4	2	3	2	2	2	5	0
	0830	,,	1002·2	992·7	..	28·6	26·6	25·8	33·4	85	..	6·0	..	8·6	0	2	27	1	4	9	6	3	3	2	1	2	0
	1130	,,	1001·9	992·5	..	30·9	27·5	26·2	34·6	77	..	6·0	..	9·8	0	0	29	1	6	7	2	2	7	2	2	2	0
	1730	,,	998·9	989·4	..	30·4	26·8	25·9	32·4	78	..	5·6	..	6·5	0	1	24	1	7	5	4	2	1	3	2	6	0
	2330	,,	1001·4	991·8	..	27·3	26·5	26·2	33·7	91	..	5·5	..	8·6	0	2	23	1	9	7	3	1	1	1	2	6	0
Allahabad (Bamrauli)	0230	98	999·9	989·0	..	27·0	26·0	25·6	32·9	92	..	5·8	..	4·7	0	1	20	1	5	7	2	2	1	2	1	10	0
	0530	,,	1000·1	989·2	..	26·6	25·9	25·6	33·4	94	..	6·6	..	3·8	0	1	20	2	2	8	0	3	3	1	2	10	0
	0830	,,	1001·5	990·5	+0·6	28·6	26·6	25·8	33·1	85	+1	6·7	—0·1	5·8	0	1	21	3	0	7	2	2	4	3	1	9	0
	1130	,,	1001·1	990·2	..	31·3	27·5	26·1	33·4	75	..	6·9	..	6·5	0	1	26	0	3	6	4	0	2	7	5	4	0
	1730	,,	998·1	987·2	..	30·5	27·4	26·3	34·2	79	..	7·0	..	4·2	0	0	22	2	5	7	1	0	1	3	3	9	0
	2330	,,	1000·9	989·9	..	27·7	26·5	26·1	34·1	91	..	5·8	..	5·1	0	2	19	1	2	6	3	3	1	3	2	10	0
Banda . . .	0830	121	1001·3	987·8	..	29·0	27·2	26·2	34·8	89	..	4·5	..	0·3	0	0	3	0	2	0	0	0	1	0	0	28	0
	1730	,,	997·7	984·7	..	30·2	28·1	27·4	36·3	86	..	4·7	..	1·0	0	0	6	0	1	0	0	0	4	0	1	25	0
Fatehpur . . .	0830	114	1001·4	988·7	..	28·4	26·6	25·7	33·6	85	0	5·1	—0·9	0·9	0	0	4	0	2	1	1	0	0	0	0	27	0
	1730	,,	998·5	985·8	..	30·4	27·0	25·4	33·4	76	..	5·1	..	0·2	0	0	1	0	0	1	0	0	0	0	0	30	0
Kanpur . . .	0830	126	1001·8	987·8	+1·1	28·7	26·7	26·0	33·7	84	—3	6·5	+1·9	8·2	0	1	29	4	4	10	4	2	1	5	0	1	0
	1730	,,	998·2	984·3	..	30·7	27·2	25·8	32·6	76	..	6·5	..	6·5	0	1	28	4	2	13	3	1	1	4	1	2	0

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61.	Wind speed (km.p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (East) *Contd.*																											
Lucknow	0830	113	1002·0	989·3	+1·2	28·3	26·4	25·7	34·4	86	+3	4·8	—1·1	..	0	0	31	0	0	27	0	0	1	1	2	0	0
	1730	"	998·5	985·3	..	30·1	27·3	26·3	33·9	79	..	3·7	..	..	0	0	30	0	0	24	2	0	2	2	0	1	0
Lucknow (Amausi Aerodrome)	0230	128	1000·1	985·5	..	26·5	25·7	25·4	32·2	91	..	5·0	..	4·4	0	0	18	1	3	7	2	3	0	0	2	13	0
	0530	"	1000·1	985·9	..	26·4	25·7	25·2	32·6	95	..	6·1	..	5·5	0	0	23	1	4	12	4	2	0	0	0	8	0
	0830	"	1001·4	987·1	+0·6	28·1	26·5	25·7	33·3	86	+5	6·0	+0·1	7·9	0	0	27	1	3	15	3	1	4	0	0	4	0
	1130	"	1001·1	987·2	..	30·9	27·1	25·6	33·3	74	..	6·4	..	10·7	0	0	28	0	5	12	6	1	2	2	0	3	0
	1730	"	998·1	983·9	..	30·3	27·0	25·7	32·6	78	..	6·1	..	4·7	0	0	25	1	7	11	2	2	1	0	1	6	0
	2330	"	1000·7	986·5	..	26·8	26·1	25·5	32·7	92	..	5·5	..	5·6	0	0	15	0	2	8	2	3	0	0	0	16	0
Hardoi	0830	142	1001·1	985·5	..	28·3	26·8	26·4	34·5	89	..	4·7	..	4·2	0	0	28	5	2	7	7	2	5	0	0	3	0
	1730	"	998·3	982·6	..	30·6	27·7	26·9	35·3	81	..	3·9	..	2·2	0	0	19	2	4	7	3	1	2	0	0	12	0
Lakhimpur Kheri (R)	0830	147																									
(R)	1730	"																									
Bahraich (R)	0830	124																									
(R)	1730	"																									
Uttar Pradesh (West)																											
Orai	0830	141	1002·9	987·1	..	28·3	26·6	26·0	33·6	87	..	5·4	..	4·2	0	0	29	0	2	0	6	3	5	2	11	2	0
	1730	"	998·9	983·3	..	30·3	27·3	26·1	34·2	79	..	6·0	..	3·9	0	0	30	4	7	1	6	2	2	2	6	1	0
Jhansi	0830	251	1001·4	973·5	0	26·9	25·5	24·5	31·1	86	+6	5·1	+0·1	2·3	0	0	20	3	0	0	1	4	3	6	3	11	0
	1730	"	998·0	970·4	.	30·0	26·0	24·3	30·7	73	..	5·7	..	3·1	0	0	23	2	3	0	4	1	0	2	11	8	0
Agra	0830	169	1001·4	982·7	+0·7	29·2	26·3	25·1	32·1	78	+1	4·2	—1·4	2·0	0	0	11	0	0	2	2	3	2	1	1	20	0
	1730	"	998·4	979·6	..	31·5	26·8	24·9	31·7	69	..	5·5	..	2·6	0	0	18	1	3	2	0	2	1	1	8	13	0
Agra (Aerodrome) (R)	0530	168																									
(R)	0830	"																									
(R)	1130	"																									
(R)	1730	"																									
(R)	2330	"																									
Mainpuri	0830	157	1001·6	984·3	+1·1	28·7	26·6	25·4	34·0	84	+3	4·5	—1·0	3·3	0	0	25	0	1	13	5	0	2	3	1	6	0
	1730	"	998·7	981·5	..	31·0	26·9	25·4	32·1	71	..	4·4	..	2·5	0	0	24	1	1	14	4	0	1	2	1	7	0
Aligarh	0830	187	1001·3	980·4	..	28·5	26·7	25·2	32·8	83	+5	5·4	+0·8	4·2	0	0	21	0	0	9	3	3	0	5	1	10	0
	1730	"	998·7	977·8	..	31·5	26·8	24·9	31·7	70	..	7·0	..	4·4	0	0	26	3	2	12	1	3	0	3	2	5	0
Bareilly	0830	173	1001·4	982·2	+0·5	28·8	26·5	25·4	33·2	82	—2	5·7	—0·2	6·4	0	0	28	1	0	16	7	1	0	2	1	3	0
	1730	"	998·3	979·3	..	30·5	27·0	25·4	32·6	75	..	5·9	..	1·7	0	0	15	0	0	13	0	0	1	1	0	16	0
Bareilly (P.B.O.)	0230	172	1000·2	981·0	..	27·6	26·2	25·8	32·8	90	..	4·5	..	5·4	0	0	23	0	3	13	7	0	0	0	0	8	0
	0530	"	1000·4	981·2	..	27·0	25·8	25·3	32·3	91	..	5·6	..	5·4	0	0	24	1	1	17	4	0	0	0	1	7	0
	1130	"	1001·5	982·5	..	30·5	27·2	26·1	33·4	78	..	5·7	..	7·2	0	1	26	1	2	8	9	3	1	2	1	4	0
	2330	"	1000·8	981·7	..	28·2	26·4	25·9	33·6	90	..	4·1	..	4·7	0	0	22	0	1	15	5	1	0	0	0	9	0
Meerut	0830	222	1001·5	976·8	+0·6	28·6	26·3	24·6	32·6	83	+3	3·6	—1·6	2·0	0	0	14	0	2	11	1	0	0	0	0	17	0
Najibabad	0830	270	1002·1	972·2	..	27·7	24·7	23·9	28·7	81	..	4·2	..	4·3	0	0	22	0	1	1	11	7	0	0	2	9	0
	1730	"	999·5	969·9	..	31·2	26·4	24·2	30·5	65	..	2·4	..	3·3	0	0	16	0	0	3	6	2	0	0	5	15	0
Roorkee (R)	0830	274																									
(R)	1730	"																									
Dehra Dun	0530	82	1001·2	926·5	..	23·6	22·4	22·0	26·4	91	..	5·1	..	1·4	0	0	14	2	9	0	1	0	0	2	0	17	0
	0830	"	1001·9	927·6	+0·7	25·7	23·6	22·5	26·9	84	—1	4·9	—1·6	1·3	0	0	13	1	3	1	3	2	1	1	1	18	0
	1130	"	1001·4	927·9	..	28·3	24·4	22·8	27·5	73	..	6·0	..	2·5	0	0	25	0	1	2	5	6	6	1	4	6	0
	1730	"	998·3	925·0	..	28·2	24·8	23·4	29·0	76	..	5·2	..	1·9	0	0	20	3	2	1	2	3	3	4	2	11	0
	2330	"	1001·3	927·0	..	24·9	23·6	23·0	28·0	90	..	3·9	..	1·5	0	0	16	3	9	0	2	0	1	0	1	15	0
Punjab (India) (including Delhi)																											
New Delhi	0230	216	999·7	975·7	..	27·9	26·0	25·1	31·7	85	..	3·5	..	4·5	0	0	21	0	1	7	7	4	1	1	0	10	0
	0530	"	999·9	975·8	..	27·2	25·7	25·0	31·4	88	..	5·0	..	4·7	0	0	17	0	0	10	1	2	1	2	1	14	0
	0830	"	1001·1	977·1	+0·3	29·3	26·0	24·6	30·8	77	—1	4·9	—0·8	10·0	0	3	25	1	2	10	5	2	3	2	3	3	0
	1130	"	1001·1	977·3	..	31·8	26·3	23·8	29·3	64	..	5·1	..	9·5	0	2	25	1	2	10	5	1	1	2	5	4	0
	1730	"	997·6	974·0	..	32·9	26·6	23·8	29·2	61	..	4·8	..	6·4	0	0	26	1	5	7	5	1	1	0	6	5	0
	2330	"	1000·2	976·2	..	28·8	26·2	25·1	32·3	81	..	3·6	..	4·8	0	0	21	0	1	8	10	1	1	0	0	10	0
Hissar	0530	221	999·7	975·1	..	26·6	25·2	24·4	31·1	88	..	4·1	..	5·5	0	0	21	1	3	5	6	2	2	2	0	10	0
	0830	"	1000·8	976·2	+0·3	29·2	25·9	24·6	31·1	76	+6	3·5	+0·5	4·8	0	0	27	1	3	6	7	3	3	2	2	4	0
	1130	„	1000·8	976·6	..	33·4	27·2	24·5	31·1	59	..	4·2	..	6·0	0	0	22	0	2	2	6	1	5	3	3	9	0
	1730	„	997·6	973·6	..	33·9	26·9	23·9	29·9	58	..	4·1	..	4·0	0	0	27	3	7	5	4	1	3	1	3	4	0
	2330	„	999·8	975·4	..	28·6	25·7	24·6	30·5	79	..	3·2	..	4·5	0	0	25	0	5	9	3	3	3	2	0	6	0

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas).		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal		62 or more	20 to 61.	1 to 19.	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) (Including Delhi)—*Contd.*																											
Karnal	0830	249	1001·1	973·4	..	27·8	25·7	24·6	30·9	82	..	5·2	..	0·1	0	0	1	0	0	0	0	0	1	0	0	30	0
	1730	,,	998·2	970·9	..	31·5	26·8	24·7	31·7	69	..	5·4	..	0·2	0	0	1	0	0	0	0	0	0	0	1	30	0
Patiala	0830	251	1000·9	973·2	..	28·7	25·9	24·8	31·0	79	..	4·3	..	3·1	0	0	21	1	0	2	16	0	0	0	2	10	0
	1730	,,	998·2	971·0	..	32·0	26·9	24·7	31·0	67	..	4·0	..	5·0	0	0	22	5	3	1	9	1	1	1	1	9	0
Ambala	0830	272	1001·3	971·3	+0·9	27·3	25·2	24·8	29·9	84	+5	3·5	—1·2	6·7	0	3	21	0	1	3	13	0	1	0	6	7	0
	1730	,,	998·3	968·6	..	31·7	26·5	24·4	30·0	66	..	3·4	..	5·4	0	0	25	0	3	0	9	0	6	0	7	6	0
Ambala (P.B.O.)	0230	278	999·3	968·7	..	27·3	25·3	24·6	30·6	85	..	3·3	..	5·4	0	0	20	0	1	5	13	1	0	0	0	11	0
	0530	,,	999·6	968·8	..	26·6	25·0	24·2	30·4	87	..	4·2	..	5·6	0	1	23	0	1	5	18	0	0	0	0	7	0
	1130	,,	1001·0	970·5	..	31·0	26·1	24·5	30·7	70	..	5·4	..	8·6	0	3	24	3	3	2	17	1	1	0	0	4	0
	2330	,,	999·6	969·0	..	28·4	25·8	24·9	31·1	80	..	2·5	..	5·6	0	0	20	1	1	4	9	0	0	3	2	11	0
Ambala (R)	0530	273																									
(Aerodrome) (R)	0830	,,																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									
Chandigarh	0830	347	1000·8	963·0	..	28·8	25·6	24·2	30·0	77	..	2·7	..	..	0	0	17	0	0	0	15	0	0	0	2	14	0
	1730	,,	998·1	960·6	..	31·5	26·6	24·2	30·9	65	..	1·3	..	..	0	0	17	1	1	0	10	0	1	0	4	14	0
Ludhiana (R)	0830	247																									
(R)	1730	,,																									
Ferozepur	0830	200	1000·7	978·5	..	28·7	26·4	25·5	33·0	84	..	2·7	..	1·8	0	0	16	1	4	3	4	1	3	0	0	15	0
	1730	,,	997·6	975·7	..	32·5	27·7	25·9	33·5	71	..	3·2	..	2·2	0	0	21	1	7	1	6	2	2	0	2	10	0
Amritsar	0530	234	999·7	973·7	..	26·2	25·4	25·2	31·4	94	..	3·8	..	6·8	0	0	24	0	5	10	6	1	1	0	1	7	0
	0830	,,	1001·1	975·2	..	28·0	25·8	24·9	31·3	84	..	4·1	..	4·1	0	2	27	1	3	11	4	5	4	1	0	2	0
	1130	,,	1001·1	975·3	..	30·7	26·5	24·8	31·0	71	..	4·3	..	10·7	0	3	26	0	0	12	8	3	3	2	1	2	0
	1730	,,	997·9	972·3	..	31·8	26·7	24·4	30·9	66	..	3·8	..	7·1	0	1	25	2	3	11	3	1	1	5	0	5	0
Pathankot	0830	344	1001·6	963·6	..	27·2	24·7	23·6	29·1	81	..	4·7	..	4·2	0	0	13	1	4	3	2	2	0	1	0	18	0
	1730	,,	999·4	961·7	..	31·2	26·8	24·4	31·8	67	..	5·4	..	2·2	0	0	17	0	1	0	1	5	1	8	1	14	0
Himachal Pradesh																											
Bilaspur	0830	493	1002·5	948·2	..	25·7	24·1	23·4	28·3	87	..	5·9	..	2·0	0	0	19	4	5	2	1	4	2	0	1	12	0
	1730	,,	998·6	945·1	..	29·7	25·1	23·0	27·3	70	..	5·5	..	4·5	0	0	30	4	1	1	2	9	7	0	6	1	0
Mandi	0830	761	1001·1	918·6	..	24·6	22·5	21·4	25·2	83	..	4·1	..	0·7	0	0	7	2	0	2	2	1	0	0	0	24	0
	1730	,,	997·3	915·9	..	27·8	24·3	22·7	27·5	74	..	5·2	..	1·7	0	0	17	0	1	3	5	0	1	4	3	14	0
Jammu and Kashmir																											
Srinagar	0830	1587	1451·3	836·9	+1·7	20·0	17·6	16·3	18·4	80	—3	3·7	—0·1	2·6	0	0	23	1	1	2	9	4	1	3	2	8	0
	1130	,,	1449·0	836·8	..	24·1	19·2	16·8	18·6	65	..	4·0	..	2·8	0	0	24	2	2	2	6	3	4	3	2	7	0
	1730	,,	1423·6	834·6	..	25·4	19·1	15·9	17·8	58	..	4·5	..	4·4	0	1	23	2	1	3	4	1	1	6	6	7	0
Gulmarg	0830	2655	3098·7	737·9	+0·9	14·9	12·6	11·1	13·3	79	—2	3·8	—0·4	3·0	0	0	19	4	9	2	0	0	2	1	1	12	0
	1730	,,	3091·8	737·1	..	16·9	14·1	12·3	14·1	76	..	4·6	..	5·0	0	0	25	1	9	2	6	1	4	0	2	6	0
Leh (a)	0530	3514	3074·1	665·1	..	9·8	4·7	—1·9	5·8	46	..	3·1	..	5·1	0	0	20	7	13	0	0	0	0	0	0	10	0
	0830	,,	3089·9	666·1	+1·0	14·2	7·6	1·7	6·7	42	—17	4·1	+0·3	1·1	0	0	4	0	1	0	0	1	2	0	0	27	0
	1730	,,	3026·7	662·6	..	20·4	12·0	6·0	9·4	41	..	4·3	..	6·3	0	0	28	3	3	1	0	6	10	3	2	3	0
Skardu (R)	0830	2288																									
(R)	1730	,,																									
Gilgit (R)	0830	1491																									
(R)	1730																										
Misgar (R)	0830	3106																									
(R)	1730	,,																									
Jammu	0830	..	..	..	..	26·7	23·9	22·6	27·4	79	0	4·6	+0·4	..	0	0	31	0	22	0	1	0	6	0	2	0	0
Rajasthan (West)																											
Sri Ganganagar	0530	177	998·7	979·0	..	27·5	24·8	23·5	28·4	80	..	2·8	..	4·5	0	0	26	3	3	9	3	2	6	0	0	5	0
	0830	,,	999·9	980·4	..	29·7	25·5	23·3	28·8	71	+8	2·9	+1·2	5·1	0	0	30	1	5	3	8	3	9	0	1	1	0
	1130	,,	999·8	980·5	..	34·1	26·4	23·1	27·5	54	..	3·2	..	5·7	0	1	30	0	5	7	4	3	6	4	2	0	0
	1730	,,	996·3	977·1	..	35·2	26·3	22·0	25·8	49	..	2·8	..	4·3	0	0	26	1	9	6	3	2	1	2	2	5	0
	2330	,,	998·7	979·1	..	29·7	25·8	23·9	29·6	74	..	2·3	..	2·7	0	0	20	0	2	8	3	3	2	0	2	11	0
Churu	0830	291	1000·9	968·7	..	28·7	25·2	23·7	29·3	76	..	3·9	..	12·7	0	5	24	1	2	3	2	3	7	10	1	2	0
	1730	,,	997·6	966·0	..	33·6	26·3	22·8	29·1	57	..	4·4	..	13·3	0	4	26	1	5	3	1	1	5	9	5	1	0

(a)—Observations for 30 days.

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more.	Wind speed (km.p.h.): 20 to 61.	Wind speed (km.p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (West)—*Contd.*																											
Bikaner	0830	224	1000·5	975·6	+0·1	29·1	25·4	23·7	28·5	73	+1	1·3	—1·7	9·9	0	1	29	1	2	2	3	1	16	3	2	1	0
	1730	„	996·8	972·5	..	35·5	26·2	21·5	25·8	48	..	2·2	..	9·9	0	1	30	0	5	0	4	0	13	3	6	0	0
Bikaner (P.B.O.)	0530	224	998·9	974·2	..	27·6	24·7	23·4	29·4	78	..	3·3	..	8·5	0	2	22	0	2	0	0	6	14	2	0	7	0
	1130	„	1000·1	975·6	..	33·5	26·5	23·3	28·7	57	..	3·3	..	10·0	0	2	27	0	7	0	0	6	11	4	1	2	0
	2330	„	999·0	974·2	..	30·4	25·7	23·4	29·4	68	..	3·1	..	11·2	0	4	22	1	3	0	2	10	9	0	1	5	0
Jaisalmer (R)	0830	242																									
(R)	1730	„																									
Phalodi	0830	234	1001·1	975·1	..	28·1	24·6	22·9	28·2	75	..	3·4	..	18·2	0	9	22	0	0	1	2	0	21	6	1	0	0
	1730	„	998·2	972·6	..	34·4	25·4	20·5	25·5	47	..	3·0	..	17·7	0	8	22	2	2	0	3	3	18	1	1	1	0
Jodhpur	0230	224	1000·0	975·3	..	28·0	24·3	22·5	27·2	74	..	3·2	..	11·3	0	4	23	0	1	0	0	2	16	7	1	4	0
	0530	„	1000·2	975·2	..	26·9	23·9	22·4	27·7	77	..	4·0	..	12·3	0	5	23	0	2	0	0	0	15	11	0	3	0
	0830	„	1001·8	976·7	+1·5	27·7	24·5	22·9	27·9	76	—3	5·1	—0·9	14·3	0	4	26	1	2	0	0	1	18	6	2	1	0
	1130	„	1001·9	977·1	..	31·3	25·3	22·5	26·7	61	..	4·8	..	13·2	0	4	26	2	3	0	1	1	17	5	1	1	0
	1730	„	998·2	973·7	..	33·6	25·6	21·7	26·1	53	..	4·7	..	15·1	0	8	22	1	4	2	0	3	13	5	2	1	0
	2330	„	1000·6	975·7	..	29·1	24·5	22·3	26·3	69	..	3·1	..	12·0	0	5	23	2	1	1	1	3	17	3	0	3	0
Barmer	0530	194	1000·2	978·5	..	26·7	24·1	22·9	28·1	80	..	3·6	..	13·3	0	5	23	0	0	0	1	2	15	8	2	3	0
	0830	„	1001·5	979·8	+0·4	27·7	24·4	23·0	27·9	76	—3	5·2	—0·2	13·0	0	3	28	0	0	0	1	8	14	6	2	0	0
	1130	„	1001·4	980·0	..	32·2	25·2	21·8	26·5	55	..	4·7	..	14·1	0	3	28	0	1	0	0	10	15	1	4	0	0
	1730	„	997·6	976·5	..	35·0	25·7	21·2	25·8	47	..	4·4	..	13·0	0	4	27	0	0	2	4	7	15	3	0	0	0
	2330	„	1000·7	979·1	..	29·5	24·8	22·5	27·3	68	..	3·1	..	13·5	0	4	27	0	0	0	0	9	16	3	3	0	0
Rajasthan (East)																											
Alwar (R)	0830	271																									
(R)	1730	„																									
Sikar	0830	433	999·4	953·0	..	27·3	25·3	23·1	29·1	85	..	4·1	..	3·1	0	0	29	3	0	1	4	2	11	4	4	2	0
	1730	„	997·9	951·2	..	31·4	27·1	24·5	32·5	72	..	5·3	..	2·9	0	0	30	0	3	2	5	2	4	14	0	1	0
Jaipur	0830	436	1001·5	953·6	—0·2	27·2	24·4	23·1	28·4	79	+1	4·6	—0·8	9·2	0	3	26	3	4	5	1	1	2	6	7	2	0
	1130	„	1001·1	953·6	..	30·0	25·2	23·0	28·3	68	..	5·0	..	10·3	0	2	29	1	3	5	3	0	3	8	8	0	0
	1730	„	997·8	950·6	..	30·6	25·5	23·1	28·4	67	..	5·6	..	8.0	0	1	27	3	4	2	3	0	6	6	4	3	0
Jaipur (Sanganer Aerodrome)	0230	390	999·7	956·5	..	25·9	24·5	23·9	29·3	88	..	3·6	..	..	0	1	24	2	3	3	1	5	1	6	4	6	0
	0530	„	999·7	956·5	..	25·4	24·4	23·8	29·7	92	..	4·7	..	..	0	0	24	1	3	6	0	1	2	7	4	7	0
	0830	„	1000·9	957·9	..	27·4	25·1	24·1	29·9	83	..	5·1	..	..	0	0	27	0	3	7	1	1	2	6	7	4	0
	1130	„	1000·9	958·1	..	29·8	25·8	24·2	30·7	75	..	5·6	..	..	0	4	24	1	3	5	2	0	2	10	5	3	0
	1730	„	997·5	955·1	..	30·8	26·2	24·2	29·4	70	..	5·7	..	..	0	0	28	2	5	2	3	2	5	7	2	3	0
	2330	„	1000·2	957·1	..	26·2	24·9	23·9	30·0	86	..	3·8	..	..	0	1	25	1	6	3	2	2	4	6	2	5	0
Dholpur (R)	0830	176																									
(R)	1730	„																									
Ajmer	0830	486	1001·4	948·3	—0·2	26·4	23·2	22·0	26·2	77	0	6·1	+1·1	11·6	0	1	28	1	3	1	1	0	13	10	0	2	0
	1730	„	998·3	945·6	..	30·6	24·1	21·3	25·5	60	..	5·9	..	9·3	0	0	30	2	2	3	1	0	11	10	1	1	0
Kotah	0530	257	1000·0	971·4	..	26·4	24·5	23·6	29·7	85	..	5·5	..	6·7	0	1	21	1	0	0	1	0	2	17	1	9	0
	0830	„	1001·3	972·8	—0·4	27·7	25·0	23·8	29·4	80	+5	5·5	+0·3	6·4	0	0	23	0	1	0	0	0	5	16	1	8	0
	1130	„	1001·4	973·1	..	30·5	25·8	23·8	29·4	69	..	5·7	..	9·6	0	1	25	0	1	1	0	0	3	13	8	5	0
	1730	„	998·2	970·1	..	31·2	25·9	23·5	29·0	65	..	5·6	..	6·1	0	0	28	0	2	3	1	0	7	5	10	3	0
	2330	„	1000·7	972·2	..	27·9	25·1	23·8	29·4	79	..	5·1	..	6·5	0	1	21	1	0	0	2	0	7	11	1	9	0
Chambal	0830	351	1002·1	963·0	..	26·5	24·6	24·0	29·6	87	..	5·5	..	3·6	0	0	22	0	0	2	0	2	3	14	1	9	0
	1730	„	998·8	960·6	..	29·5	26·1	24·1	31·1	74	..	5·4	..	4·1	0	0	27	0	1	1	2	3	4	12	4	4	0
Jhalawar	0830	321	1001·8	965·9	—0·4	26·2	24·1	23·2	27·8	83	—1	4·9	—1·3	4·9	0	0	27	0	2	2	0	1	6	14	2	4	0
	1730	„	998·7	963·6	..	30·0	25·1	22·8	27·6	67	..	4·7	..	7·3	0	0	30	2	4	3	0	0	5	11	5	1	0
Udaipur	0230	582	1001·0	937·2	..	24·0	22·6	22·0	26·1	89	..	4·3	..	3·4	0	0	13	0	0	0	0	0	8	5	0	18	0
	0530	„	1001·3	937·2	..	23·4	22·1	21·6	25·6	89	..	5·3	..	4·0	0	0	16	0	0	0	0	2	9	5	0	15	0
	0830	„	1002·2	938·5	—0·1	25·8	23·0	21·6	26·1	78	0	5·5	—0·3	3·9	0	0	18	0	0	0	0	0	9	4	5	13	0
	1130	„	1002·2	939·1	..	28·4	23·9	21·9	26·0	69	..	6·4	..	4·9	0	0	24	0	0	1	0	0	12	10	1	7	0
	1730	„	999·6	936·5	..	28·0	23·8	22·0	26·1	71	..	6·3	..	4·4	0	0	23	0	0	1	0	0	8	12	2	8	0
	2330	„	1002·4	938·4	..	24·5	22·8	21·9	26·4	86	..	4·2	..	3·2	0	0	15	0	0	0	1	1	8	4	1	16	0
Erinpura (Jawai Dam)	0830	295	1002·6	969·6	..	26·6	24·0	22·8	28·1	79	..	5·4	..	8·1	0	0	27	0	1	0	1	7	12	5	1	4	0
	1730	„	998·9	966·7	..	31·4	25·3	22·4	27·7	61	..	5·9	..	10·2	0	1	27	1	0	2	1	11	10	3	0	3	0

(R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Wind speed (km. p.h.)			No. of observations.										
			A mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal	Dry bulb	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed km. per hour	62 or more.	20 to 61.	1 to 19.	Wind direction.										
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (West)																											
Gwalior (P.B.O.) .	0230	210	999·5	976·2	..	27·0	25·3	24·4	31·0	86	..	5·8	..	4·4	0	0	19	0	1	1	1	6	7	1	2	12	0
	0530	"	999·7	976·4	..	26·4	24·9	24·2	30·4	88	..	5·9	..	5·4	0	1	17	1	3	1	1	3	5	1	3	13	0
	0830	"	1001·1	977·8	+0·4	27·8	25·6	24·6	30·9	83	+1	5·9	—0·2	5·6	0	0	22	1	2	3	1	2	7	3	3	9	0
	1130	"	1000·9	977·8	..	29·9	26·4	24·8	31·5	75	..	6·2	..	5·9	0	1	25	2	3	2	3	2	3	7	4	5	0
	1730	"	997·9	974·9	..	30·5	26·2	24·3	30·4	71	..	6·2	..	6·0	0	0	26	1	5	2	4	1	2	5	6	5	0
	2330	"	1000·4	977·1	..	27·5	25·6	24·6	31·1	85	..	5·9	..	4·7	0	0	19	1	1	1	3	6	3	1	3	12	0
Sheopur Kalan .	0830	235	1001·1	975·0	..	28·1	25·3	24·1	29·9	81	..	6·9	..	7·3	0	1	30	2	2	3	2	7	6	4	5	0	0
	1730	"	997·3	971·6	..	30·3	26·0	24·0	30·1	71	..	6·5	..	10·6	0	1	29	4	2	1	2	5	4	5	6	1	1
Guna . . .	0530	479	1000·8	947·8	..	24·2	23·3	22·9	28·1	92	..	6·3	..	4·7	0	0	20	0	1	0	1	1	9	6	1	11	1
	0830	"	1002·0	949·2	+0·1	25·4	23·9	23·3	28·7	88	+2	6·8	+0·8	3·9	0	0	28	3	0	2	0	5	2	15	1	3	0
	1130	"	1001·9	949·5	..	28·0	24·8	23·5	29·8	77	..	6·8	..	6·9	●	1	26	2	1	1	1	2	6	5	9	4	0
	1730	"	998·9	946·7	..	28·3	24·7	23·2	28·5	75	..	6·2	..	5·7	0	0	27	2	1	1	1	1	7	5	9	4	0
	2330	"	1001·7	948·8	..	25·3	23·7	23·0	28·0	88	..	5·7	..	4·3	0	0	16	1	0	1	0	3	4	5	2	15	0
Rajgarh . . .	0830	382	1002·4	959·9	..	25·6	23·8	22·9	28·2	86	..	6·5	..	10·9	0	1	28	2	0	1	0	1	4	19	2	2	0
	1730	"	998·8	957·0	..	28·7	24·7	22·9	27·9	72	..	6·3	..	11·2	0	2	27	3	0	1	2	2	1	14	6	2	0
Neemuch . .	0830	496	1002·9	948·2	+0·1	25·2	23·3	22·6	27·2	86	+1	6·5	+0·5	14·5	0	5	24	0	3	0	0	0	7	18	1	2	0
	1730	"	999·6	945·7	..	28·6	24·1	22·1	26·8	70	..	6·7	..	15·0	0	7	24	0	5	0	1	1	6	18	0	0	0
Ratlam . . .	0830	486	1003·2	949·1	..	23·4	22·9	22·6	26·7	96	..	7·5	..	10·2	0	1	28	0	0	0	0	0	13	14	2	2	0
	1730	"	1000·0	946·8	..	27·2	23·9	22·6	27·2	77	..	7·3	..	12·3	0	1	29	1	0	0	0	0	11	15	3	1	0
Alirajpur . .	0830	293	1004·2	971·4	..	24·7	23·6	23·1	28·3	90	..	7·7	..	6·7	0	1	30	0	0	0	0	0	7	23	1	0	0
	1730	"	1001·0	968·8	..	28·7	24·7	22·9	27·8	71	..	7·1	..	14·1	0	3	28	0	1	0	0	0	5	23	2	0	0
Indore . . .	0530	567	1001·9	939·1	..	22·6	22·1	21·8	26·1	95	..	6·8	..	22·3	0	16	15	1	0	0	0	1	10	16	3	0	0
	0830	"	1003·1	940·5	—0·7	23·6	22·6	22·3	26·6	91	+4	7·2	0	23·2	0	16	14	1	1	0	0	0	6	19	3	1	0
	1130	"	1002·7	940·6	..	26·4	23·3	21·9	26·5	77	..	7·0	..	25·1	0	21	10	2	1	1	0	0	5	17	5	0	0
	1730	"	999·8	938·0	..	26·9	23·4	21·8	26·3	74	..	6·8	..	22·4	0	16	15	1	1	0	0	3	8	13	5	0	0
	2330	"	1003·0	940·4	..	23·5	22·6	22·2	26·7	92	..	6·1	..	15·7	0	6	25	2	2	0	0	1	14	10	2	0	0
Bhopal (Bairagarh) .	0230	523	1001·0	943·3	..	23·6	22·7	22·2	27·1	92	..	5·9	..	11·0	0	3	23	1	2	0	0	3	6	10	4	5	0
	0530	"	1001·3	943·5	..	23·2	22·5	22·1	26·7	93	..	7·4	..	11·6	0	4	24	2	0	0	1	1	4	15	5	3	0
	0830	"	1002·6	944·9	—0·3	24·3	22·9	22·4	26·9	89	+2	7·1	+0·5	16·0	0	7	21	2	0	0	1	1	2	16	6	3	0
	1130	"	1002·2	945·0	..	26·8	23·9	22·6	27·5	78	..	7·2	..	15·7	0	10	18	3	2	0	1	0	3	12	7	3	0
	1730	"	999·2	942·3	..	27·3	23·9	22·4	27·3	75	..	6·9	..	14·6	0	11	17	2	1	0	0	3	4	9	9	3	0
	2330	"	1002·2	944·5	..	24·1	22·9	22·4	27·2	90	..	6·3	..	9·0	0	1	23	1	0	0	0	1	9	10	3	7	0
Khandwa . .	0830	318	1003·7	968·2	—0·2	25·3	23·6	22·8	27·8	86	+3	7·4	+1·6	13·0	0	3	28	0	0	0	0	1	7	21	2	0	0
	1730	"	1000·3	965·3	..	28·6	24·6	22·6	27·7	71	..	7·4	..	13·6	0	3	27	0	0	0	0	0	7	18	5	1	0
Hoshangabad . .	0830	302	1002·9	969·2	—0·5	25·9	24·2	23·7	28·9	89	+1	7·1	+0·1	1·9	0	0	12	1	0	0	0	3	1	7	0	19	0
	1730	"	999·5	966·1	..	28·4	25·2	23·7	29·5	76	..	6·6	..	3·1	0	0	13	2	0	0	0	1	7	2	1	18	0
Betul . . .	0830	653	1003·5	931·7	..	23·4	22·4	21·9	26·4	91	..	7·8	..	7·1	0	0	28	2	0	0	0	2	3	14	7	3	0
	1730	"	999·8	928·9	..	26·1	23·5	22·2	27·0	83	..	7·9	..	9·0	0	1	30	3	0	0	0	2	4	13	9	0	0
Chhindwara . .	0830	685	1001·5	926·8	..	23·9	22·5	22·1	26·3	89	..	6·6	..	3·3	0	0	31	1	2	3	0	0	3	9	13	0	0
	1730	"	998·6	924·5	..	26·2	23·3	22·0	26·6	78	..	6·7	..	3·8	0	0	31	4	0	1	0	4	10	6	6	0	0
Seoni . . .	0830	618	1001·2	933·5	—1·2	24·4	22·9	22·4	26·9	90	+6	7·5	+1·3	5·1	0	0	31	4	2	1	1	5	7	6	5	0	0
	1730	"	998·9	931·7	..	26·7	23·7	22·5	27·0	77	..	7·5	..	5·3	0	0	31	4	1	2	2	5	6	5	6	0	0
Sagar . . .	0830	551	1001·8	941·1	—0·2	24·6	23·5	23·0	28·2	91	+3	6·2	—0·4	10·7	0	2	27	0	2	1	2	0	2	13	9	2	0
	1730	"	998·4	938·5	..	27·3	24·3	23·0	28·0	79	..	6·4	..	7·5	0	0	29	1	5	1	3	0	7	8	4	2	0
Nowgong . .	0830	229	1001·6	976·2	+0·3	27·5	25·8	24·9	31·9	87	+4	5·5	—0·8	5·6	0	0	29	0	3	3	1	4	12	5	1	2	0
	1730	"	998·2	973·0	..	29·6	26·2	24·8	31·3	77	..	6·5	..	4·7	0	0	30	6	4	2	1	4	12	0	1	1	0
Madhya Pradesh (East)																											
Sutna . . *	0530	317	1000·2	964·9	..	25·3	24·5	24·0	30·1	93	..	5·8	..	3·1	0	0	15	0	2	2	1	4	2	4	0	15	0
	0830	"	1001·2	966·1	+0·3	27·3	25·3	24·4	30·7	85	+1	6·2	—0·2	3·5	0	0	25	0	2	3	0	3	3	10	4	6	0
	1130	"	1000·6	965·9	..	30·4	26·4	24·8	31·1	74	..	6·0 (b)	..	6·4 (b)	0	1	20	0	1	3	2	3	5	5	2	10	0
	1730	"	997·8	963·2	..	29·0	25·7	24·3	30·2	77	..	6·8	..	4·5	0	1	23	1	3	2	1	3	5	5	4	5	0
*	2330	"	1001·0	965·8	..	26·2	25·2	24·6	31·3	91	..	6·2	..	3·4	0	1	14	0	1	4	1	2	3	3	1	15	0
Umaria . . .	0830	459	1001·4	950·9	..	26·1	24·4	23·7	29·4	86	+3	5·5	—1·5	6·7	0	0	25	1	1	1	4	0	6	9	3	6	0
	1730	"	998·1	948·1	..	27·9	25·1	24·1	29·9	81	..	7·1	..	2·8	0	0	12	0	1	0	0	0	6	2	3	19	0
Jabalpur . .	0530	393	1000·8	957·1	..	24·3	23·6	23·3	28·9	94	..	6·4	..	4·1	0	0	21	0	1	0	2	6	6	5	1	10	0
	0830	"	1001·9	958·4	0	26·0	24·4	23·8	29·5	88	+4	6·7	—0·1	6·3	0	0	30	0	3	0	2	4	9	8	4	1	0
	1130	"	1001·4	958·4	..	28·7	25·4	23·7	29·7	76	..	6·5	..	7·2	0	0	30	0	2	1	1	6	6	12	2	1	0
	1730	"	998·5	955·5	..	28·5	25·2	23·9	29·3	77	..	7·1	..	7·1	0	0	29	2	2	1	5	5	5	6	3	2	0
	2330	"	1001·5	958·0	..	25·3	24·2	23·7	29·2	91	..	6·7	..	4·3	0	1	18	0	1	0	4	3	5	6	0	12	0

* Observations for 30 days.

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal	Dry bulb.	Wet bulb.	Dew point.				Mean amount	Departure from normal.		62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (East)—*Contd.*																											
Mandla	0830	443	1002·1	953·3	..	25·3	24·0	23·3	28·8	88	..	7·1	..	4·5	0	0	28	8	1	1	3	4	1	1	3	3	6
												(a)		(a)													
	1730	"	998·9	950·4	..	26·9	24·7	23·7	29·3	83	..	7·0	..	4·5	0	0	26	3	1	1	0	6	1	5	4	4	5
Pendra	0530	625	1000·8	932·2	..	23·1	22·6	22·3	26·9	96	..	7·1	..	8·0	0	1	29	9	2	0	4	6	5	1	3	1	0
	0830	"	1001·9	933·6	+0·1	24·9	23·5	23·0	27·9	89	+4	7·1	+1·5	7·6	0	0	29	8	2	0	3	6	5	3	2	2	0
	1130	"	1001·0	933·3	..	27·1	24·3	23·1	28·3	79	..	7·2	..	9·3	0	0	31	8	4	2	0	7	3	2	5	0	0
	1730	"	999·1	931·1	..	25·8	24·0	23·2	28·5	86	..	7·5	..	8·1	0	2	26	4	2	1	3	8	5	2	3	3	0
	2330	"	1001·6	933·1	..	23·8	23·0	22·6	27·5	93	..	6·5	..	7·3	0	1	24	4	0	0	0	9	6	2	4	6	0
Ambikapur	0830	611	1001·7	935·0	..	25·9	23·9	23·0	28·3	88	..	5·2	..	9·4	0	2	25	2	5	1	5	4	5	4	1	4	0
	1730	"	998·6	932·4	..	27·0	24·3	23·2	28·5	81	..	6·0	..	10·3	0	1	29	8	2	1	1	5	5	7	1	1	0
Champa	0830	245	1002·0	974·7	..	26·7	24·9	24·1	30·2	85	..	7·2	..	3·7	0	0	22	0	2	3	0	4	3	7	3	9	0
	1730	"	998·6	971·6	..	29·1	25·8	24·4	30·4	77	..	7·2	..	5·3	0	0	21	3	0	2	1	0	5	7	3	10	0
Raigarh	0830	220	1001·8	977·3	..	27·4	25·4	24·5	30·9	85	..	6·6	..	5·3	0	0	29	0	8	0	6	1	8	5	1	2	0
	1730	"	998·4	974·2	..	29·7	26·1	24·7	30·9	75	..	7·2	..	3·1	0	0	23	0	3	0	7	1	5	3	4	8	0
Raipur	0530	298	1001·0	967·7	..	24·7	23·9	23·5	29·0	93	..	7·5	..	5·0	0	0	22	0	0	0	0	3	8	8	3	9	0
	0830	"	1002·0	968·8	—0·4	26·2	24·5	23·8	29·4	86	0	7·0	+0·7	6·9	0	0	30	0	2	1	1	5	8	10	3	1	0
	1130	"	1001·9	968·8	..	28·4	25·2	23·8	28·5	76	..	6·9	..	8·6	0	0	28	1	0	2	0	6	6	6	7	3	0
	1730	"	998·8	965·9	..	28·6	25·2	23·7	29·4	76	..	7·1	..	8·7	0	2	26	1	1	1	0	3	9	10	3	3	0
	2330	"	1001·7	968·6	..	25·9	24·5	23·8	29·6	89	..	6·8	..	7·5	0	0	24	0	0	2	0	2	7	11	2	7	0
Kanker	0830	402	1002·7	958·2	—0·4	25·5	23·8	22·8	28·2	86	+4	6·4	—0·4	1·9	0	0	8	0	0	0	0	0	6	0	2	23	0
	1730	"	999·8	955·7	..	27·1	24·7	23·6	29·3	81	..	6·7	..	1·1	0	0	11	0	0	0	0	0	8	0	3	20	0
Jagdalpur (P.B.O.)	0530	553	1001·9	940·8	..	22·9	22·2	21·9	26·3	94	..	7·5	..	3·1	0	0	18	0	0	0	0	5	6	4	3	13	0
	0830	"	1003·2	942·4	—0·3	24·2	22·8	22·1	26·7	88	+3	7·7	+1·6	6·1	0	0	25	0	0	0	0	5	9	7	4	6	0
	1130	"	1002·5	942·1	..	26·2	23·5	22·0	27·1	80	..	7·3	..	7·2	0	0	29	0	1	0	0	3	8	11	6	2	0
	1730	"	1000·4	940·1	..	25·4	23·4	22·6	27·4	85	..	7·4	..	5·5	0	0	27	2	0	0	0	6	4	12	3	4	0
	2330	"	1003·1	942·2	..	23·5	22·5	22·2	27·0	92	..	7·0	..	4·7	0	0	22	1	0	0	0	3	11	7	0	9	0
Gujarat																											
Deesa	0830	136	1003·0	987·7	0	26·9	25·3	24·8	30·8	87	..	5·8	..	8·1	0	0	31	2	0	0	2	8	6	10	3	0	0
	1730	"	999·3	984·4	..	32·5	27·3	24·9	32·0	67	..	6·0	..	9·3	0	2	27	0	0	1	2	7	7	8	4	2	0
Idar	0830	219	1003·3	978·8	..	25·3	24·4	23·9	30·0	92	..	7·3	..	7·4	0	0	31	0	0	0	3	1	9	16	2	0	0
	1730	"	1000·0	975·9	..	29·9	25·6	23·6	29·1	70	..	6·2	..	5·3	0	0	31	1	0	1	0	3	11	14	1	0	0
Ahmedabad	0230	55	1002·2	996·0	..	26·3	24·5	23·7	29·2	86	..	5·0	..	11·5	0	0	29	0	0	0	0	2	13	13	1	2	0
	0530	"	1002·2	995·9	..	25·4	24·2	23·6	29·3	90	..	6·1	..	10·6	0	1	29	0	0	0	0	3	10	15	2	1	0
	0830	"	1003·6	997·4	—0·2	26·7	25·0	24·2	30·3	87	+5	6·7	+0·5	13·6	0	1	28	0	0	0	1	0	13	12	3	2	0
	1130	"	1008·8	997·6	..	29·6	25·6	24·0	29·5	72	..	6·9	..	14·5	0	5	26	1	0	0	1	1	8	13	7	0	0
	1730	"	1000·3	994·2	..	31·6	25·9	23·4	28·9	63	..	6·2	..	14·5	0	2	29	0	1	0	2	4	8	13	3	0	0
	2330	"	1003·0	996·8	..	27·1	25·0	24·0	30·0	84	..	5·1	..	13·1	0	4	26	0	0	0	2	4	16	7	1	1	0
Dohad	0830	333	1003·8	966·6	..	24·6	23·5	22·9	28·1	91	+2	7·0	—0·3	17·9	0	8	23	0	0	0	0	0	0	14	17	0	0
	1730	"	1001·3	964·7	..	28·4	24·4	22·6	27·4	72	..	5·1	..	15·7	0	2	29	0	0	0	0	0	0	19	12	0	0
Baroda	0530	35	1002·7	998·8	..	25·5	24·8	24·5	30·8	95	..	5·5	..	2·7	0	0	21	0	0	0	0	0	0	15	5	1	10	0
	0830	"	1004·2	1000·2	..	26·3	25·2	24·7	31·1	91	+9	7·3	+0·7	4·1	0	0	27	0	0	0	0	0	0	16	10	1	4	0
	1130	"	1004·4	1000·5	..	29·2	26·0	24·6	31·0	77	..	6·7	..	5·9	0	0	28	2	1	0	0	0	1	11	3	3	0
	1730	"	1001·1	997·2	..	30·4	26·4	24·6	31·2	73	..	5·9	..	5·2	0	0	26	0	1	0	0	0	11	10	4	5	0
	2330	"	1003·8	999·8	..	26·6	25·4	25·0	31·7	91	..	4·9	..	4·5	0	0	27	0	0	0	0	1	22	4	0	4	0
Baroda (Aerodrome)	0830	38	1004·3	1000·0	..	26·8	25·3	24·6	31·0	88	..	7·4	..	8·2	0	0	31	1	0	0	1	1	23	5	0	0	0
	1130	"	1004·4	1000·2	..	29·1	25·7	24·3	30·3	75	..	6·8	..	9·8	0	0	31	0	0	0	1	2	17	11	0	0	0
	1730	"	1001·1	996·9	..	30·0	26·0	24·3	30·4	72	..	6·2	..	9·9	0	2	29	0	0	0	0	0	25	6	0	0	0
Broach	0830	17	1004·2	1002·2	..	26·6	25·1	24·3	30·7	88	..	6·5	..	6·2	0	0	31	0	0	0	0	3	22	5	1	0	0
	1730	"	1001·4	999·4	..	29·5	25·9	24·3	30·4	74	..	6·0	..	8·9	0	0	31	0	0	0	0	0	27	3	1	0	0
Surat	0530	12	1003·3	1002·0	..	26·1	25·0	24·7	30·8	92	..	7·0	..	5·5	0	1	20	0	0	0	1	1	11	7	1	10	0
	0830	"	1004·6	1003·3	—0·1	27·1	25·6	25·0	31·7	88	+6	7·2	+0·3	4·4	0	0	25	0	0	0	1	1	14	5	4	6	0
	1130	"	1005·0	1003·7	..	29·1	26·4	25·1	32·1	80	..	6·8	..	7·8	0	0	28	0	0	0	0	1	15	11	1	3	0
	1730	"	1002·3	1001·0	..	29·2	26·0	24·6	31·0	76	..	6·6	..	11·3	0	0	29	0	0	0	0	2	24	3	0	2	0
	2330	"	1004·6	1003·3	..	26·8	25·3	24·7	31·0	88	..	5·9	..	11·0	0	3	26	0	0	0	0	6	17	6	0	2	0
Saurashtra & Kutch																											
Bhuj*	0830	105																									
	1730	"																									

(a) Mean of 30 days.

* Observatory closed on 1st August 1957.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas),		Mean wind speed, km. per hour.	Wind speed (km.p.h.)			No. of observations.										
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61.	1 to 19.	Wind direction.								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch —*Contd.*																											
Bhuj (P.B.O.)	0230	106	1001·9	990·0	..	26·4	24·8	24·0	29·9	87	..	3·5	..	13·2	0	4	24	0	0	0	0	0	18	9	0	3	1
	0530	„	1001·7	989·8	..	25·6	24·6	24·0	30·1	90	..	5·3	..	11·5	0	4	20	0	0	0	0	0	13	11	0	7	0
	0830	„	1002·7	990·9	+0·2	27·2	25·1	24·2	30·0	84	+5	6·0	0	10·9	0	1	27	0	0	0	0	0	11	12	5	3	0
	1130	„	1002·8	991·1	..	31·0	26·2	24·0	30·0	68	..	6·0	..	17·2	0	10	21	1	2	0	0	0	12	15	1	0	0
	1730	„	1000·4	988·8	..	31·6	26·4	24·3	30·4	66	..	5·5	..	18·8	0	16	13	1	0	0	0	1	14	12	1	2	0
	2330	„	1002·9	991·1	..	27·0	25·3	24·6	31·0	86	..	4·2	..	15·5	0	6	25	0	0	0	1	0	17	13	0	0	0
Bhuj (Aerodrome)	0830	80	1002·4	993·4	..	27·6	25·9	25·2	32·1	87	..	6·1	..	12·7	0	4	26	0	0	0	0	0	5	18	7	1	0
	1130	„	1002·8	993·9	..	31·1	27·5	26·0	33·8	75	..	6·5	..	18·7	0	14	17	1	1	1	0	0	10	13	5	0	0
	1730	„	1000·0	991·1	..	31·8	27·7	25·9	33·9	74	..	6·0	..	22·0	0	16	15	1	1	0	0	1	8	16	4	0	0
Kandla	0830	5	1003·5	1003·0	..	27·4	25·3	24·4	30·4	84	..	6·0	..	16·9	0	7	24	0	0	0	0	0	18	12	1	0	0
	1730	„	1001·0	1000·5	..	30·8	26·4	24·5	31·0	70	..	4·9	..	34·9	0	27	4	0	0	0	0	1	20	10	0	0	0
Mandvi	0830	9	1003·2	1002·2	..	28·1	26·0	25·3	31·9	83	..	5·4	..	33·9	2	25	4	1	0	0	0	0	4	16	1	0	9
	1730	„	1001·3	1000·3	..	29·1	26·6	25·5	32·8	81	..	4·9	..	38·4	0	30	1	0	0	0	0	0	8	19	0	0	4
Dwarka	0830	11	1003·9	1002·6	+0·4	27·1	25·5	24·8	31·4	87	+1	6·9	+0·1	18·5	0	11	19	0	0	0	0	0	7	20	3	1	0
	1730	„	1002·2	1000·9	..	28·6	26·0	24·8	31·5	80	..	6·2	..	24·1	0	19	12	0	0	0	0	0	7	21	3	0	0
Porbander	0830	7	1004·1	1003·3	..	26·9	25·7	25·1	32·1	90	..	6·4	..	15·3	0	7	22	0	0	0	0	0	4	20	5	2	0
	1730	„	1002·3	1001·5	..	28·4	25·9	24·8	31·5	81	..	6·9	..	17·6	0	7	24	0	0	0	0	0	9	17	5	0	0
Porbander (Aerodrome)	0830	7	1004·1	1003·2	..	27·8	26·0	25·5	32·2	88	..	6·0	..	15·9	0	8	19	1	0	0	0	0	8	12	6	4	0
	1130	„	1004·7	1003·9	..	29·7	26·6	25·5	32·4	79	..	6·1	..	24·5	0	25	6	1	0	0	0	0	7	17	6	0	0
Jamnagar	0530	23	1002·1	999·5	..	25·5	24·6	24·1	30·2	92	..	5·0	..	13·5	0	5	26	0	0	0	0	4	21	6	0	0	0
	0830	„	1003·7	1001·1	+0·4	27·5	25·4	24·6	30·7	85	+3	6·3	+1·4	20·0	0	12	19	0	0	0	0	1	16	13	1	0	0
	1130	„	1003·9	1001·4	..	30·3	25·9	23·9	29·8	69	..	6·5	..	28·3	0	26	5	1	0	0	0	0	1	27	2	0	0
	1730	„	1001·2	998·6	..	30·3	25·8	23·7	29·6	68	..	5·7	..	34·8	0	27	4	0	0	0	0	0	2	28	1	0	0
Rajkot (Aerodrome)	0830	134	1003·9	988·9	+0·4	26·0	24·8	24·2	30·4	91	+8	5·8	—0·7	18·5	0	14	17	0	0	0	0	2	21	8	0	0	0
	1130	„	1003·8	988·9	..	29·3	25·4	23·6	29·2	72	..	5·9	..	24·0	0	20	11	1	0	0	0	0	14	12	4	0	0
	1730	„	1001·0	986·2	..	29·5	25·3	23·5	28·9	71	..	5·4	..	25·1	0	22	8	1	0	1	0	2	13	11	2	1	
Surendranagar	0830	74	1003·7	995·2	..	26·9	24·8	24·1	29·7	85	..	6·4	..	15·0	0	4	26	0	0	0	1	9	14	8	7	1	0
	1730	„	1000·3	992·0	..	31·9	26·1	23·6	29·1	63	..	6·6	..	15·2	0	6	24	0	0	0	1	0	19	3	7	1	0
Bhavnagar	0830	17	1004·8	1002·9	+0·6	26·2	24·8	24·3	30·2	89	+12	5·5	—0·8	6·6	0	0	31	0	1	0	1	1	12	14	2	0	0
	1730	„	1001·7	999·8	..	30·3	26·0	24·2	30·1	72	..	5·0	..	5·3	0	0	31	0	0	0	8	0	18	3	2	0	0
Bhavnagar (Aerodrome)	0830	11	1004·2	1003·0	..	26·9	24·8	23·8	29·7	83	..	5·0	..	13·6	0	1	29	0	0	0	0	0	6	24	0	1	0
	1130	„	1004·4	1003·2	..	29·8	25·2	23·2	28·2	68	..	5·8	..	17·0	0	8	22	0	2	0	0	1	1	23	3	1	0
Mahuva	0830	16	1004·4	1002·6	..	26·2	25·9	25·8	33·3	98	..	5·3	..	9·3	0	0	29	1	0	0	0	0	13	14	1	2	0
	1730	„	1002·2	1000·5	..	28·4	27·4	27·2	35·7	93	..	6·1	..	22·8	0	17	13	0	0	1	1	6	13	9	0	1	0
Keshod	0830	51	1004·6	998·8	..	26·9	25·2	24·6	30·6	87	..	6·3	..	17·0	0	13	15	2	0	0	0	2	11	13	0	3	0
	1130	„	1005·1	999·3	..	29·2	26·0	24·6	31·0	78	..	7·2	..	29·4	0	23	8	1	0	0	0	0	9	18	3	0	0
	1730	„	1002·7	996·9	..	28·5	25·5	24·3	30·2	80	..	7·1	..	33·2	0	28	3	1	0	0	0	0	4	25	1	0	0
Veraval	0230	8	1003·6	1002·7	..	26·2	25·4	25·1	31·7	94	..	5·1	..	19·2	0	13	16	2	0	0	0	0	1	24	2	2	0
	0530	„	1003·1	1002·2	..	26·0	25·2	24·8	31·3	93	..	5·1	..	18·9	0	11	18	2	1	0	0	0	0	23	3	2	0
	0830	„	1004·6	1003·7	—0·2	26·5	25·6	25·2	32·0	93	+7	6·4	—0·3	16·2	0	11	18	0	0	0	0	0	2	21	6	2	0
	1130	„	1005·3	1004·4	..	27·4	26·1	25·5	32·6	89	..	6·7	..	18·6	0	10	21	0	0	0	0	0	1	24	6	0	0
	1730	„	1003·0	1002·1	..	27·5	26·1	25·5	32·7	89	..	6·4	..	20·3	0	12	19	0	0	0	0	0	0	27	4	0	0
	2330	„	1004·8	1003·9	..	26·5	25·6	25·2	32·0	93	..	5·5	..	19·2	0	14	14	1	0	0	0	0	2	23	2	3	0
Konkan																											
Dahanu	0830	5	1004·9	1004·5	+0·6	26·7	24·9	24·2	30·2	86	—2	5·2	—2·1	21·9	0	16	15	0	0	2	3	1	3	22	0	0	0
	1730	„	1003·2	1002·8	..	27·9	25·3	24·0	30·1	80	..	5·8	..	16·8	0	5	26	1	0	0	1	0	2	25	2	0	0
Bombay (Colaba)	0830	11	1006·0	1004·8	—0·5	26·3	25·1	24·7	30·8	91	+8	6·9	—0·1	10·9	0	0	31	0	0	0	1	3	5	19	3	0	0
	1130	„	1006·5	1005·3	..	27·4	25·8	25·0	31·8	87	..	7·0	..	13·0	0	3	27	0	0	0	1	1	2	24	2	1	0
	1730	„	1004·4	1003·2	..	27·0	25·4	24·7	31·1	87	..	7·0	..	14·4	0	4	27	0	0	0	0	0	4	23	4	0	0
Bombay (Santacruz Aerodrome)	0230	8	1004·9	1004·0	..	25·7	24·4	23·6	29·6	89	..	6·8	..	9·0	0	3	20	0	0	0	0	1	8	11	3	8	0
	0530	„	1004·5	1003·6	..	25·6	24·4	23·7	29·7	90	..	7·2	..	10·0	0	3	23	0	0	0	1	3	5	17	0	5	0
	0830	„	1006·0	1005·1	—0·5	26·0	24·7	23·9	29·9	89	+7	7·4	+0·4	10·0	0	2	20	1	0	0	1	0	10	9	1	9	0
	1130	„	1006·6	1005·7	..	27·6	25·2	24·1	30·1	82	..	7·3	..	16·0	0	6	24	0	0	0	0	3	7	17	3	1	0
	1730	„	1004·2	1003·3	..	27·3	25·1	24·0	30·0	84	..	7·5	..	16·3	0	6	24	0	0	0	0	0	10	14	6	1	0
	2330	„	1006·4	1005·5	..	26·2	24·7	23·9	30·0	88	..	6·8	..	10·1	0	2	19	0	0	0	1	2	9	8	1	10	0
Alibag	0830	7	1006·3	1005·5	—0·3	26·3	25·5	25·3	31·9	94	+10	7·6	+0·3	19·1	0	15	15	0	1	0	4	2	8	13	2	1	0

Division and station.	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km. p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Konkan—*Contd.*																											
Harnai	0830	20	1006·3	1004·0	+0·4	25·8	24·5	23·9	29·6	90	+5	7·5	..	20·6	0	15	15	1	0	1	2	3	8	12	3	1	0
	1730	"	1005·0	1002·7	..	26·5	24·8	24·0	30·0	87	..	7·2	..	24·0	0	20	11	1	1	1	0	2	4	20	2	0	0
Ratnagiri	0830	35	1007·5	1003·5	—0·1	25·7	24·4	23·7	29·5	90	..	6·8	..	..	0	16	15	0	0	6	0	0	14	11	0	0	0
	1730	"	1006·0	1002·0	..	26·3	24·7	23·9	29·7	87	..	7·2	..	..	0	20	11	0	0	0	0	0	22	9	0	0	0
Devgad	0830	36	1007·6	1003·6	+1·0	25·9	24·9	24·4	30·7	92	+4	7·4	+0·7	21·3	0	14	17	0	0	2	1	0	2	15	11	0	0
	1730	"	1005·7	1001·7	..	27·0	25·4	24·7	31·3	88	..	7·3	..	27·2	0	21	10	0	0	0	0	1	1	17	12	0	0
Vengurla	0230	9	1006·9	1005·9	..	24·9	24·0	23·5	29·1	93	..	6·9	..	..	0	1	11	0	0	0	0	0	0	12	0	19	0
	0530	"	1006·7	1005·7	..	24·5	23·8	23·4	29·0	94	..	7·5	..	..	0	2	12	0	0	0	0	1	0	13	0	17	0
	0830	"	1008·2	1007·2	..	25·5	24·3	23·8	29·3	90	..	7·1	..	..	0	1	14	0	0	0	0	0	2	13	0	16	0
	1130	"	1008·6	1007·6	..	27·3	25·1	24·2	30·0	84	..	6·9	..	..	0	1	20	0	0	0	0	0	3	17	1	10	0
	1730	"	1006·4	1005·4	..	26·5	24·6	23·8	29·3	85	..	7·4	..	..	0	1	22	0	0	0	0	0	0	23	0	8	0
	2330	"	1008·6	1007·6	..	25·1	24·2	23·7	29·6	92	..	7·4	..	..	0	1	9	1	0	0	0	0	0	9	0	21	0
Maharashtra																											
Nandurbar	0830	206	1004·5	981·4	..	25·7	24·2	23·3	28·9	88	..	7·3	..	11·6	0	0	31	0	0	0	0	0	16	15	0	0	0
	1730	"	1001·6	978·8	..	28·3	24·8	23·2	28·4	75	..	6·8	..	13·2	0	2	29	0	0	0	0	0	16	15	0	0	0
Jalgaon	0830	201	1004·4	981·7	..	25·2	23·9	23·3	28·6	89	..	7·0	..	13·3	0	3	28	0	0	0	0	1	3	23	4	0	0
	1730	"	1000·7	978·5	..	29·5	25·1	23·0	28·2	69	..	6·7	..	16·6	0	9	22	2	1	1	0	0	2	16	9	0	0
Malegaon	0830	437	1004·6	956·2	—0·1	25·3	23·0	21·8	26·3	80	+4	7·3	+1·5	6·0	0	0	29	1	0	0	0	0	2	17	9	2	0
	1730	"	1001·5	953·4	..	27·6	23·5	21·5	26·0	72	..	7·3	..	13·0	0	4	25	0	0	0	0	0	0	21	8	2	0
Deolali	0830	571	1005·9	942·5	..	23·1	21·8	21·1	25·2	89	..	7·7	..	14·1	0	3	28	0	0	0	0	0	18	13	0	0	0
	1730	"	1003·7	940·8	..	24·1	22·2	21·2	25·3	84	..	7·8	..	20·9	0	17	14	0	0	0	0	0	15	16	0	0	0
Aurangabad	0830	581	1005·6	941·2	—0·5	22·8	21·9	21·3	25·7	91	+8	7·6	+0·6	15·9	0	6	25	0	0	0	0	0	7	24	0	0	0
	1730	"	1001·5	938·4	..	27·1	23·3	21·9	25·8	73	..	7·4	..	22·3	0	15	15	1	1	0	0	0	3	22	3	1	0
Aurangabad (Chikalthana Aerodrome).	0230	579	1003·8	939·6	..	22·0	21·0	20·5	24·1	91	..	6·9	..	12·7	0	2	29	0	0	0	0	0	1	20	10	0	0
	0530	"	1003·7	939·5	..	21·6	20·8	20·3	23·9	92	..	7·2	..	11·4	0	17	12	0	0	0	0	0	0	21	8	2	0
	0830	"	1004·8	940·8	..	23·2	21·5	20·7	24·4	86	..	7·4	..	13·1	0	5	25	1	0	0	0	1	3	20	5	1	0
	1130	"	1004·4	941·0	..	25·9	22·6	21·0	24·9	75	..	7·3	..	15·5	0	6	25	0	0	0	0	0	2	15	14	0	0
	1730	"	1001·1	938·1	..	26·8	22·8	20·8	25·0	71	..	7·4	..	16·1	0	9	20	2	0	0	0	0	4	12	11	2	0
	2330	"	1004·9	940·8	..	22·8	21·3	20·6	24·2	88	..	6·9	..	13·3	0	4	25	0	0	0	0	0	0	21	8	2	0
Ahmednagar	0830	657	1005·1	932·9	—0·6	23·1	21·3	20·4	24·2	85	+7	6·3	+0·9	4·0	0	0	31	0	0	0	0	0	25	0	6	0	0
	1730	"	1001·8	930·5	..	26·4	22·3	20·3	23·8	68	..	6·2	..	3·7	0	0	30	0	0	0	0	0	19	0	11	1	0
Parbhani	0830	423	1005·2	958·1	..	24·1	22·4	21·5	25·8	86	..	6·8	..	13·5	0	3	28	0	0	0	0	0	1	26	4	0	0
	1730	"	1001·3	954·9	..	27·3	23·4	21·9	25·6	74	..	6·8	..	9·6	0	0	30	7	0	0	0	0	4	11	8	1	0
Poona	0530	559	1004·7	942·6	..	21·8	21·0	20·6	24·3	93	..	6·5	..	2·2	0	0	14	0	0	0	0	0	1	13	0	17	0
	0830	"	1005·9	943·9	—0·4	23·3	21·8	21·1	25·1	87	+6	7·4	+1·0	1·8	0	0	11	0	0	0	0	1	3	6	1	20	0
	1130	"	1005·5	944·1	..	26·0	22·7	21·2	25·1	75	..	7·2	..	6·5	0	0	29	0	0	0	0	0	2	25	2	2	0
	1730	"	1003·4	942·0	..	25·0	22·3	21·1	24·9	79	..	7·4	..	5·6	0	0	28	0	0	0	0	0	3	25	0	3	0
	2330	"	1006·4	944·2	..	22·4	21·2	20·5	24·4	89	..	5·9	..	4·5	0	0	24	0	0	0	0	0	6	18	0	7	0
Poona (Lohagaon Aerodrome).	0230	593	1005·1	939·1	..	21·3	20·7	20·3	24·0	95	..	6·3	..	11·7	0	2	28	0	0	0	0	0	0	28	2	1	0
	0530	"	1004·9	938·9	..	21·2	20·7	20·4	24·0	95	..	6·8	..	10·3	0	1	30	0	0	0	0	0	0	28	3	0	0
	0830	"	1005·7	940·1	..	22·8	21·4	20·7	24·5	88	..	7·2	..	14·7	0	4	27	0	0	0	0	0	2	27	2	0	0
	1130	"	1005·6	940·4	..	25·4	22·2	20·8	24·5	75	..	7·3	..	23·1	0	19	12	0	0	0	0	0	5	26	0	0	0
	1730	"	1003·4	938·2	..	24·3	21·8	20·7	24·3	80	..	7·1	..	29·0	0	26	5	0	0	0	0	0	1	28	2	0	0
	2330	"	1006·5	940·5	..	21·7	20·8	20·4	24·0	93	..	6·5	..	16·5	0	5	26	0	0	0	0	0	0	26	5	0	0
Baramati	0830	551	1005·7	944·9	..	24·0	22·0	20·7	25·0	82	..	6·9	..	14·8	0	6	25	0	0	0	0	1	9	19	2	0	0
	1730	"	1002·4	942·3	..	26·8	22·3	20·0	23·7	65	..	7·2	..	28·5	0	25	6	0	0	0	0	0	4	25	2	0	0
Jeur	0830	521	1005·4	947·7	..	23·3	21·6	20·8	24·6	86	..	4·7	..	6·3	0	0	28	0	0	0	0	0	2	15	11	3	0
	1730	"	1001·5	944·8	..	27·7	22·7	20·2	24·0	65	..	5·8	..	8·1	0	0	31	0	0	0	0	0	0	16	15	0	0
Sholapur	0530	479	1005·0	951·5	..	22·2	21·1	20·5	24·1	91	..	6·8	..	6·4	0	0	30	0	0	0	0	0	15	13	2	1	0
	0830	"	1006·2	952·9	—0·3	23·3	21·6	20·3	24·6	86	+11	6·8	+1·4	6·0	0	0	31	0	0	0	0	0	21	6	4	0	0
	1130	"	1005·5	952·9	..	27·0	22·9	21·0	24·9	70	..	6·8	..	12·3	0	1	30	0	0	0	0	0	14	13	4	0	0
	1730	"	1001·4	949·2	..	28·0	23·1	20·7	24·6	67	..	6·9	..	8·7	0	0	30	1	0	0	0	0	17	11	1	1	0
	2330	"	1006·3	953·1	..	23·7	21·7	20·6	24·5	83	..	6·4	..	9·8	0	0	31	0	0	0	0	0	13	16	2	0	0
Miraj	0830	554	1007·0	945·5	—0·4	22·8	21·4	20·7	24·5	88	+3	7·0	—0·1	12·3	0	0	31	0	0	0	0	0	8	15	8	0	0
	1730	"	1004·3	943·5	..	25·3	21·8	20·0	23·5	73	..	6·8	..	22·8	0	18	13	0	0	0	0	0	6	15	10	0	0
Kolhapur	0530	570	1005·6	942·2	..	21·2	20·5	20·0	23·6	93	..	6·3	..	13·0	0	3	26	0	0	0	0	0	2	25	2	2	0
	0830	"	1007·0	943·7	..	22·3	21·4	20·9	25·0	92	..	7·3	..	14·0	0	7	24	0	0	0	0	0	3	23	5	0	0
	1130	"	1006·7	943·9	..	24·8	22·3	21·2	25·0	81	..	7·2	..	19·4	0	9	22	0	0	0	0	0	2	24	5	0	0
	1730	"	1004·6	941·8	..	23·8	21·8	20·7	24·7	83	..	7·2	..	20·7	0	15	16	0	0	0	0	0	1	24	6	0	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal	Cloud amount (Oktas).		Mean wind speed. km. per hour.	Wind speed (km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Vidarbha																											
Buldhana . .	0830	650	1003·9	932·3	..	22·6	21·4	20·8	24·7	89	..	7·4	..	5·3	0	0	29	0	0	0	0	0	3	0	26	2	0
	1730	"	1000·8	930·1	..	25·8	23·0	21·9	26·6	79	..	6·9	..	4·5	0	0	24	0	0	0	0	0	0	0	24	7	0
Akola . . .	0830	282	1003·6	972·1	—0·7	25·5	23·4	22·4	27·2	83	+3	7·4	+1·2	9·9	0	3	28	0	0	0	0	0	5	16	10	0	0
	1130	"	1003·3	972·0	..	28·2	24·2	22·3	27·2	71	..	7·5	..	11·4	0	2	29	0	0	0	1	0	4	12	14	0	0
	1730	"	1000·1	969·1	..	28·7	24·3	22·2	26·7	70	..	7·5	..	6·6	0	0	31	0	0	0	0	0	3	14	14	0	0
Akola (Aerodrome) .	0530	309	1002·8	968·3	..	23·8	22·7	22·1	26·7	91	..	7·1	..	10·7	0	2	28	0	0	0	0	0	4	18	8	1	0
	2330	"	1003·5	968·9	..	25·0	23·5	22·7	27·7	87	..	6·0	..	9·1	0	0	28	1	0	0	0	2	5	17	3	3	0
Amravati . .	0830	370	1003·5	962·2	—0·7	24·6	23·3	22·6	27·7	89	+6	7·4	+1·2	11·0	0	0	31	0	0	1	0	0	12	17	1	0	0
	1730	"	999·8	959·2	..	27·8	24·1	22·2	26·9	73	..	7·4	..	7·9	0	0	31	0	2	0	0	2	8	4	15	0	0
Yeotmal . . .	0830	451	1003·7	953·5	..	24·1	22·9	22·3	27·1	90	..	7·0	..	17·7	0	10	20	0	0	0	0	0	3	20	7	1	0
	1730	"	1000·1	950·7	..	26·8	24·3	23·1	28·3	81	..	6·7	..	12·0	0	2	26	2	0	0	1	1	5	13	6	3	0
Nagpur . . .	0230	310	1001·2	966·6	..	24·6	23·7	23·3	28·7	93	..	7·3	..	8·3	0	1	26	1	0	0	0	2	6	9	9	4	0
	0530	"	1001·4	966·7	..	24·2	23·5	23·1	28·4	94	..	7·5	..	5·6	0	1	20	1	0	0	0	1	5	8	6	10	0
	0830	"	1002·9	968·3	—0·5	25·9	24·3	23·5	29·0	87	+5	7·3	+1·0	9·8	0	4	21	1	0	0	0	3	2	10	9	6	0
	1130	"	1002·6	968·2	..	28·3	25·0	23·3	29·0	75	..	7·5	..	15·1	0	9	20	2	0	2	1	2	3	6	13	2	0
	1730	"	999·7	965·4	..	27·8	25·0	23·7	29·4	79	..	7·3	..	6·5	0	2	25	2	1	1	1	2	4	8	8	4	0
	2330	"	1002·4	967·8	..	25·0	24·1	23·6	29·3	92	..	7·1	..	4·7	0	0	22	1	1	0	1	2	8	8	1	9	0
Gondia . . .	0830	313	1002·7	967·8	..	25·9	24·2	23·3	28·9	86	..	7·2	..	5·3	0	0	29	2	1	2	0	3	11	5	5	2	0
	1730	"	999·5	965·0	..	27·5	25·0	23·7	29·7	81	..	7·2	..	6·3	0	0	28	1	1	0	0	2	13	2	8	3	1
Brahmapuri . .	0830	229	1003·3	977·7	..	25·5	24·2	23·6	29·0	89	..	7·4	..	8·5	0	0	29	0	0	0	1	7	5	11	5	2	0
	1730	"	1000·2	974·8	..	27·9	25·0	23·6	29·3	78	..	7·2	..	6·4	0	0	28	2	1	0	1	4	8	8	4	3	0
Chanda . . .	0830	193	1003·5	981·9	—0·5	25·7	24·1	23·4	28·6	87	+7	7·3	+1·3	8·8	0	0	30	0	0	0	0	4	7	12	7	1	0
	1730	"	1000·2	978·8	..	28·7	25·3	23·8	29·6	75	..	7·0	..	10·4	0	2	28	2	0	1	1	3	7	11	5	1	0
Sironcha . .	0830	123	1004·2	990·3	..	25·8	24·4	23·8	29·5	89	..	7·4	..	5·1	0	0	25	1	0	0	4	5	3	7	5	6	0
	1730	"	1001·1	987·3	..	28·2	25·2	23·9	29·5	78	..	7·2	..	5·5	0	0	26	3	1	0	1	3	6	9	3	5	0
Coastal Andhra Pradesh																											
Nellore . . .	0530	20	1004·5	1002·2	..	26·1	23·8	22·8	27·7	82	..	7·2	..	4·6	0	0	29	0	0	0	1	2	12	12	2	2	0
	0830	,,	1006·1	1003·8	—0·2	27·9	24·3	22·5	27·4	73	+8	7·2	+1·2	5·8	0	0	31	0	0	0	1	3	9	15	3	0	0
	1130	"	1005·6	1003·4	..	30·9	24·9	22·0	26·5	60	..	6·8	..	11·0	0	2	29	0	0	0	0	1	6	18	6	0	0
	1730	"	1002·5	1000·3	..	31·3	25·6	22·9	28·0	62	..	7·2	..	5·5	0	0	30	0	0	0	1	3	14	10	2	1	0
	2330	"	1005·6	1003·3	..	27·8	24·7	23·2	28·7	76	..	6·1	..	4·6	0	0	22	0	0	0	3	5	7	6	1	9	0
Ongole . . .	0830	12	1005·4	1004·1	..	27·6	24·8	23·4	30·5	79	..	6·7	..	7·4	0	0	27	0	0	0	0	0	9	11	7	4	0
	1730	"	1002·1	1000·8	..	30·6	25·5	23·6	28·7	67	..	6·0	..	6·7	0	0	29	0	0	0	5	1	6	9	8	2	0
Rentachintala . .	0830	106	1005·1	993·2	..	26·8	23·7	22·4	26·7	77	+10	6·8	+0·1	5·9	0	0	31	0	0	0	0	2	3	25	1	0	0
	1730	"	1001·6	989·8	..	30·3	24·7	22·0	26·6	62	..	6·8	..	5·8	0	0	28	0	0	0	0	0	3	25	0	3	0
Gannavaram . .	0230	23	1002·9	1000·3	..	25·7	24·6	24·1	29·9	92	..	6·5	..	12·7	0	3	26	0	0	0	1	0	8	18	2	2	0
	0530	"	1003·1	1000·5	..	25·4	24·3	23·7	29·6	90	..	6·7	..	12·8	0	5	25	0	1	0	0	2	7	18	2	1	0
	0830	"	1004·7	1002·1	..	26·5	24·5	23·6	29·6	85	..	7·1	..	17·8	0	10	20	0	0	0	0	2	9	16	3	1	0
	1130	"	1004·3	1001·7	..	28·6	25·4	23·9	29·9	77	..	7·0	..	22·4	0	18	11	1	0	0	0	0	6	18	4	2	0
	1730	"	1001·4	998·9	..	29·1	25·6	24·1	29·8	76	..	6·5	..	14·5	0	5	25	2	0	0	0	2	5	10	11	1	0
	2330	"	1004·3	1001·7	..	26·3	24·9	24·3	30·0	89	..	6·0	..	11·1	0	4	24	1	0	0	0	2	10	11	4	3	8
Masulipatam . .	0530	3	1003·3	1003·0	..	25·9	24·8	24·3	30·3	91	..	7·4	..	14·9	0	3	27	0	0	0	0	4	8	12	6	1	0
	0830	"	1004·9	1004·6	—0·4	26·8	25·0	24·2	30·0	87	+8	7·4	+1·6	12·8	0	3	27	0	0	0	0	3	7	15	5	1	0
	1130	"	1004·6	1004·3	..	28·7	25·8	24·6	30·9	79	..	7·3	..	15·8	0	2	28	1	0	0	0	0	3	13	13	1	0
	1730	"	1001·9	1001·6	..	29·4	26·2	24·8	31·2	77	..	6·5	..	14·3	0	5	26	1	0	0	3	5	3	9	10	0	0
	2330	"	1004·4	1004·1	..	27·1	25·7	25·2	31·9	89	..	5·7	..	14·5	0	7	21	1	0	0	1	7	7	8	4	3	0
Nidadavolu . .	0830	12	1004·4	1003·0	..	26·2	25·1	24·7	30·9	91	..	7·3	..	13·6	0	9	20	0	0	1	1	0	7	19	1	2	0
	1730	"	1001·1	999·7	..	28·6	26·5	25·4	33·0	84	..	6·9	..	11·4	0	2	29	0	0	0	0	4	5	20	2	0	0
Kakinada . .	0830	8	1004·0	1003·1	—0·5	27·7	25·7	24·9	31·4	85	+5	6·0	+0·1	10·6	0	0	31	0	0	0	0	0	31	0	0	0	0
	1730	,,	1001·3	1000·4	..	29·1	26·5	25·6	32·7	82	..	6·1	..	10·6	0	0	31	0	0	0	0	0	31	0	0	0	0
Visakhapatnam .	0230	3	1001·4	1001·0	..	26·5	25·1	24·5	30·8	89	..	5·7	..	16·5	0	1	14	0	0	0	0	0	10	5	0	16	0
	0530	,,	1001·5	1001·1	..	26·1	24·9	24·2	30·6	90	..	6·7	..	4·3	0	1	14	0	0	0	0	1	10	3	1	16	0
	0830	,,	1002·9	1002·5	—0·7	27·9	25·5	24·4	30·6	81	—3	6·8	+0·3	6·8	0	2	21	0	0	0	0	0	17	3	3	8	0
	1130	,,	1002·5	1002·1	..	30·1	26·3	24·7	31·2	74	..	6·5	..	11·4	0	4	23	0	0	1	2	1	19	3	1	4	0
	1730	,,	1000·2	999·8	..	28·7	25·9	24·6	31·3	79	..	6·5	..	11·1	0	3	24	0	0	1	0	2	16	5	3	4	0
	2330	,,	1002·6	1002·2	..	26·9	25·5	24·8	31·4	89	..	5·1	..	6·3	0	0	20	0	0	0	0	0	16	2	2	11	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.		Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km.p.h.).			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh—*Contd.*																											
Calingapatam	0830	6	1002·3	1001·6	—0·7	28·0	25·9	25·0	31·8	84	+3	6·1	+0·9	6·8	0	0	31	0	0	0	0	0	11	15	5	0	0
	1730	,,	999·8	999·1	..	29·1	26·5	25·5	32·7	81	..	6·5	..	9·3	0	0	31	0	0	1	2	11	12	4	1	0	0
Telangana																											
Ramagundam . .	0830	156	1004·0	986·4	..	26·0	24·2	23·3	29·0	86	..	7·3	..	6·8	0	0	29	0	0	0	0	2	7	11	9	2	0
	1730	,,	1001·0	983·6	..	28·9	25·3	23·6	29·2	75	..	6·7	..	4·0	0	0	24	5	0	0	1	2	4	6	6	7	0
Nizamabad . .	0830	381	1004·9	962·5	—0·2	24·6	22·7	22·0	25·8	86	+7	7·0	+1·9	4·4	0	0	30	0	0	0	0	0	19	7	4	1	0
	1730	,,	1001·1	959·3	..	28·2	24·5	22·7	27·9	73	..	6·5	..	3·3	0	0	26	0	0	0	0	2	11	7	6	5	0
Mahbubnagar .	0830	505	1006·1	950·1	..	23·2	21·6	20·9	24·5	83	..	7·4	..	13·4	0	0	31	1	0	0	0	2	8	11	9	0	0
	1730	,,	1002·1	947·0	..	27·6	23·1	21·4	24·6	71	..	7·3	..	9·8	0	0	31	0	0	0	0	0	9	16	6	0	0
Hyderabad (Begumpet Aerodrome)	0230	545	1003·9	943·7	..	22·8	21·6	21·2	25·1	90	..	6·9	..	18·1	0	12	19	0	0	0	0	0	3	23		1	0
	0530	,,	1004·1	943·7	..	22·2	21·2	20·7	24·2	91	..	7·0	..	17·9	0	12	19	0	0	0	0	0	2	23	6	0	0
	0830	,,	1005·4	945·1	—0·1	23·2	21·7	21·2	25·3	87	+7	7·6	+1·5	20·2	0	17	14	0	0	0	0	0	1	21	9	0	0
	1130	,,	1005·0	945·1	..	25·5	22·6	21·3	18·7	77	..	7·5	..	23·9	0	23	8	0	0	0	0	0	0	16	15	0	0
	1730	,,	1001·8	942·3	..	26·3	23·1	21·7	25·7	77	..	7·2	..	13·8	0	7	24	0	0	0	0	0	4	17	10	0	0
	2330	,,	1005·3	945·1	..	23·5	22·2	21·6	25·6	89	..	6·5	..	16·0	0	12	11	0	0	0	0	0	3	18	2	8	0
Hakimpet . .	0830	613	1004·7	937·2	..	23·8	21·9	21·4	24·7	90	..	7·4	..	24·2	0	23	8	0	0	0	0	0	11	17	3	0	0
	1730	,,	1001·9	935·1	..	25·5	23·3	22·4	27·5	83	..	7·1	..	18·3	0	9	22	0	0	0	0	0	12	17	2	0	0
Hanamkonda . .	0830	269	1004·7	974·7	—0·4	25·4	23·5	22·6	27·3	84	+9	6·5	+0·7	10·4	0	0	30	0	1	0	0	4	2	13	10	1	0
	1730	,,	1002·0	972·3	..	28·2	24·7	22·9	28·1	74	..	6·4	..	6·9	0	0	31	1	2	0	1	0	4	13	10	0	0
Bhadrachallam .	0830	111	1004·5	992·0	..	26·1	24·7	24·1	30·0	90	..	7·3	..	9·0	0	0	25	1	0	0	0	0	9	13	2	6	0
	1730	,,	1001·2	988·9	..	28·7	25·7	24·2	30·7	79	..	7·1	..	8·2	0	0	29	0	1	1	0	3	8	13	3	0	2
Khammameth .	0830	112	1004·7	992·1	..	26·0	24·3	23·3	29·1	87	..	7·0	..	6·7	0	0	27	3	0	0	0	0	5	18	1	4	0
	1730	,,	1001·5	989·0	..	29·3	25·6	23·8	30·0	74	..	6·5	..	5·6	0	0	28	2	0	0	0	0	3	18	5	3	0
Rayalaseema . .																											
Arogyavaram . .	0830	701	1007·2	930·4	..	23·7	20·3	18·5	21·6	73	..	7·1	..	5·3	0	1	27	1	0	0	0	0	0	13	14	3	0
	1730	,,	1002·9	927·3	..	27·4	21·3	18·0	20·9	58	..	7·2	..	8·7	0	1	29	0	0	0	0	0	2	10	18	1	0
Cuddapah . .	0830	130	1007·2	992·6	—0·1	27·7	23·8	21·8	26·3	71	—3	6·5	+0·6	6·2	0	0	28	0	0	0	0	0	0	27	1	3	0
	1730	,,	1003·1	988·6	..	30·4	24·6	21·7	26·1	62	..	6·1	..	6·8	0	0	24	0	0	0	0	0	0	23	1	7	0
Anantapur . .	0530	350	1005·5	966·3	..	23·5	21·4	20·2	23·7	82	..	6·4	..	11·8	0	3	27	0	0	0	0	0	5	23	2	1	0
	0830	,,	1006·7	967·7	..	25·3	22·2	20·5	24·4	75	..	6·8	..	14·7	0	3	28	0	0	0	0	0	6	24	1	0	0
	1130	,,	1005·9	967·3	..	29·0	22·9	19·7	22·7	58	..	6·8	..	20·0	0	14	17	0	0	0	0	0	2	24	5	0	0
	1730	,,	1002·8	964·2	..	29·3	22·9	19·2	23·8	57	..	6·9	..	18·3	0	14	14	0	0	0	0	0	3	20	5	3	0
	2330	,,	1006·6	967·7	..	25·4	22·1	20·2	23·9	74	..	6·2	..	19·0	0	12	19	0	0	0	0	0	4	23	4	0	0
Kurnool . . .	0830	281	1006·4	974·8	—0·6	24·1	22·4	21·5	25·8	86	—12	7·2	+1·3	21·3	0	15	16	0	0	0	0	0	4	27	0	0	0
	1730	,,	1003·1	972·1	..	29·1	23·7	20·8	25·0	62	..	7·4	..	18·6	0	13	16	0	0	0	0	0	3	15	11	2	0
Madras																											
Palayamcottai . .	0830	51	1008·3	1002·5	..	29·5	23·0	19·2	23·0	54	..	5·2	..	12·8	0	7	24	0	0	0	0	0	0	29	2	0	0
	1730	,,	1005·0	999·4	..	31·2	23·3	18·8	22·3	48	..	6·1	..	23·9	0	20	11	0	0	0	0	0	0	28	3	0	0
Tuticorin . .	0830	4	1008·5	1008·1	..	30·1	23·1	19·5	22·6	53	..	3·7	..	19·7	0	15	16	0	1	0	0	0	2	26	2	0	0
	1730	,,	1005·0	1004·6	..	32·6	23·7	19·1	22·1	46	..	2·9	..	25·1	0	23	8	0	0	0	2	2	0	27	0	0	0
Pamban . . .	0830	11	1008·4	1007·1	0	28·8	25·7	24·2	30·6	76	0	4·3	+1·4	18·3	0	1	29	0	1	0	2	6	16	5	0	1	0
	1730	,,	1005·1	1003·8	..	28·4	25·9	24·8	31·4	80	..	5·4	..	13·4	0	0	31	0	0	0	7	17	6	1	0	0	0
Mathurai . .	0830	133	1007·6	992·7	—0·6	28·8	23·3	20·4	24·2	61	—1	5·6	+0·4	3·0	0	0	31	0	1	0	1	0	0	0	29	0	0
	1730	,,	1004·5	990·1	..	32·0	23·9	19·8	23·2	50	..	6·0	..	3·2	0	0	31	1	1	1	3	2	1	17	5	0	0
Nagapattinam . .	0830	9	1007·9	1006·8	—0·3	27·8	24·2	22·4	27·2	73	+3	6·3	+1·7	8·5	0	0	31	0	0	0	0	1	6	19	5	0	0
	1730	,,	1004·4	1003·3	..	30·6	26·0	23·8	29·9	68	..	5·6	..	12·8	0	1	30	0	1	1	10	9	7	3	0	0	0
Tiruchirapalli . .	0230	88	1006·1	996·1	..	26·9	22·4	20·0	23·6	66	..	4·0	..	23·9	0	17	10	0	0	0	0	1	0	25	1	4	0
	0530	,,	1006·3	996·3	..	26·4	22·3	21·6	23·8	69	..	6·3	..	19·3	0	13	16	0	0	0	0	0	2	24	3	2	0
	0830	,,	1007·6	997·7	—0·7	28·1	23·0	20·4	24·0	63	—1	6·1	+1·5	26·0	0	18	12	0	0	0	0	0	0	29	1	1	0
	1130	,,	1006·9	997·1	..	32·5	23·7	18·9	22·3	45	..	5·5	..	33·5	0	25	6	0	0	0	0	0	0	26	5	0	0
	1730	,,	1003·5	993·9	..	32·9	23·4	18·3	21·2	43	..	6·7	..	30·7	0	21	10	0	0	0	0	6	1	20	4	0	0
	2330	,,	1007·5	997·5	..	27·9	22·7	19·8	23·3	63	..	4·9	..	23·6	0	13	13	0	0	0	0	1	2	22	1	5	0
Coimbatore . .	0830	409	1008·7	963·2	+0·1	25·6	21·8	20·1	23·1	73	—8	6·7	+2·4	20·5	0	16	15	0	0	0	0	15	15	1	0	0	0
	1730	,,	1005·2	960·9	..	27·5	22·7	19·7	23·9	63	..	6·5	..	19·9	0	14	17	0	0	0	0	9	16	6	0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars. At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars. At station level.	Mean pressure in millibars. Departure from normal.	Mean temperature in °C. Dry bulb.	Mean temperature in °C. Wet bulb.	Mean temperature in °C. Dew point.	Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas). Mean amount.	Cloud amount (Oktas). Departure from normal.	Mean wind speed, km. per hour	Wind speed (km.p.h.). 62 or more.	Wind speed (km.p.h.). 20 to 61.	Wind speed (km.p.h.). 1 to 19	No. of observations. Wind direction. N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Coimbatore (Peelamedu Aerodrome)	0530	398	1007·1	962·4	..	22·3	21·4	20·9	24·6	92	..	5·8	..	27·8	0	25	6	0	0	0	0	10	20	1	0	0	0
	0830	,,	1008·3	963·9	..	24·8	22·3	20·7	24·7	78	..	5·8	..	26·6	0	25	6	0	0	0	0	3	25	3	0	0	0
	1130	,,	1007·2	963·7	..	28·4	23·2	20·6	24·1	63	..	5·7	..	33·8	0	26	5	0	0	0	2	4	22	3	0	0	0
	1730	,,	1004·7	960·9	..	27·5	22·7	20·1	22·9	65	..	6·0	..	40·2	0	31	0	0	0	0	0	4	25	2	0	0	0
	2330	,,	1008·4	963·8	..	23·3	21·9	21·2	23·9	89	..	3·9	..	34·4	0	30	1	0	0	0	0	8	22	1	0	0	0
Salem	0530	278	1006·7	975·4	..	24·0	23·2	22·8	27·8	93	..	6·6	..	5·0	0	0	26	0	0	0	0	1	10	12	3	5	0
	0830	,,	1008·0	976·8	−0·4	25·6	23·9	23·1	29·3	86	+8	6·1	+0·9	6·5	0	0	30	0	0	0	0	2	14	14	1	0	0
	1130	,,	1006·9	976·3	..	30·0	24·7	22·2	26·9	64	..	5·9	..	7·9	0	0	29	0	0	0	0	1	11	12	5	22	0
	1730	,,	1003·3	972·9	..	31·2	26·1	23·8	29·7	66	..	6·9	..	5·6	0	0	26	1	0	0	0	3	3	16	3	5	0
	2330	,,	1007·6	976·6	..	26·2	24·4	23·4	29·3	86	..	6·2	..	5·2	0	0	23	1	0	0	0	2	8	7	5	8	0
Kallkurichi	0830	127	1007·1	993·2	..	27·9	24·1	22·4	26·7	72	..	5·2	..	6·9	0	1	24	0	0	1	1	6	14	3	0	6	0
	1730	,,	1002·7	988·7	..	32·1	24·8	20·9	25·6	53	..	6·5	..	7·8	0	1	26	1	1	1	4	3	11	2	4	4	0
Cuddalore	0530	12	1005·5	1004·2	..	26·2	23·6	22·3	27·0	80	..	6·6	..	3·4	0	0	15	0	0	0	1	4	10	0	0	16	0
	0830	,,	1007·2	1005·9	−0·4	28·4	24·3	22·5	27·1	71	−2	5·6	+0·6	3·0	0	0	20	0	0	0	0	2	16	2	0	11	0
	1130	,,	1006·5	1005·2	..	32·1	24·8	21·4	25·5	54	..	6·0	..	6·3	0	0	27	1	0	0	3	2	11	7	3	4	0
	1730	,,	1003·5	1002·2	..	30·8	25·4	22·9	28·1	64	..	7·2	..	7·4	0	0	29	1	1	1	15	1	9	0	1	2	0
	2330	,,	1006·5	1005·2	..	27·9	24·5	22·8	27·9	75	..	5·5	..	6·5	0	0	23	0	0	0	1	12	10	0	0	8	0
Vellore	0530	214	1005·7	981·6	..	25·5	22·2	20·4	24·1	74	..	7·3	..	5·2	0	0	19	0	0	0	0	0	0	13	6	12	0
	0830	,,	1007·0	983·1	+0·1	27·6	22·9	20·4	24·2	65	−5	6·2	+1·7	9·4	0	0	30	0	1	0	0	0	0	25	4	1	0
	1130	,,	1006·0	982·4	..	31·4	23·4	19·2	22·3	49	..	6·9	..	14·2	0	4	26	1	0	0	0	0	1	20	8	1	0
	1730	,,	1002·6	979·2	..	32·3	23·9	19·4	22·9	48	..	6·9	..	6·6	0	0	28	4	0	1	0	4	5	6	8	3	0
	2330	,,	1006·6	982·7	..	27·4	23·1	20·8	24·8	69	..	6·9	..	7·4	0	1	23	0	0	0	0	3	4	12	5	7	0
Madras	0230	16	1005·0	1003·3	..	26·3	24·3	23·2	28·9	84	..	6·2	..	9·0	0	2	24	0	1	0	0	6	9	7	3	5	0
	0530	,,	1005·4	1003·6	..	25·7	23·8	22·8	27·9	85	..	6·1	..	8·3	0	1	26	0	0	0	1	5	9	10	2	4	0
	0830	16	1006·9	1005·1	−0·1	27·5	24·3	22·9	27·8	76	+8	6·0	+0·6	11·1	0	4	26	1	0	0	0	4	13	11	1	1	0
	1130	,,	1006·3	1004·6	..	30·8	24·9	22·1	26·5	61	..	5·8	..	17·8	0	7	24	0	0	0	0	1	5	19	6	0	0
	1730	,,	1003·4	1001·7	..	30·4	25·7	23·5	29·2	67	..	6·0	..	10·8	0	6	23	2	0	4	6	6	4	2	5	2	0
	2330	,,	1006·4	1004·6	..	27·0	25·5	24·2	31·1	85	..	5·8	..	7·3	0	0	26	1	0	0	4	14	3	2	2	5	0
Madras (Nungambakkam)	0830	6	1006·3	1005·6	..	27·7	24·3	22·6	28 1	74	..	6·8	..	6·0	0	0	27	0	0	0	0	0	9	17	1	4	0
Coastal Mysore																											
Karwar	0830	4	1008·4	1007·9	−0·4	25·7	24·5	23·8	29·7	90	..	7·5	..	10·7	0	0	23	1	2	1	0	1	2	4	6	8	6
	1730	,,	1006·6	1006·1	..	26·4	24·6	23·9	29·7	85	..	7·7	..	16·7	0	2	29	1	0	0	0	1	1	13	12	0	3
Honavar	0830	26	1008·7	1005·8	−0·1	25·0	24·1	23·5	29·5	93	+2	7·6	+0·9	4·4	0	0	23	0	0	11	0	1	5	6	0	8	0
	1730	,,	1006·6	1004·3	..	26·4	27·1	24·2	30·6	87	..	7·5	..	5·5	0	0	29	0	0	1	0	2	10	16	0	2	0
Mangalore	0230	221	1008·0	1005·5	..	24·5	23·8	23·4	28·9	94	..	6·5	..	8·3	0	5	26	3	1	2	0	1	4	9	5	6	0
	0530	,,	1008·0	1005·5	..	24·3	23·6	23·3	28·8	91	..	7·0	..	7·6	0	0	27	2	2	3	2	0	2	5	6	4	0
	0830	,,	1009·5	1007·0	−0·3	25·3	24·1	23·6	29·2	91	−1	6·7	0	6·4	0	0	27	2	0	6	4	1	4	7	3	4	0
	1130	,,	1009·7	1007·2	..	27·1	24·9	24·0	29·7	84	..	6·7	..	9·9	0	4	24	3	0	0	0	1	6	12	6	3	0
	1730	,,	1007·5	1005·0	..	26·7	24·7	23·8	29·6	85	..	7·1	..	12·3	0	6	23	2	0	0	0	0	3	14	10	2	0
	2330	,,	1009·7	1007·2	..	25·2	24·3	23·8	29·8	92	..	6·2	..	10·5	0	7	23	3	1	1	1	2	3	9	10	1	0
Mangalore (Bajpe Aerodrome)	0530	103	1008·4	996·7	..	23·4	23·0	22·8	26·3	97	..	7·0	..	4·5	0	1	12	0	1	3	2	0	0	7	0	18	0
	0830	,,	1009·8	998·0	..	24·5	23·7	23·3	27·1	94	..	6·9	..	8·3	0	2	20	0	0	6	2	2	1	10	1	9	0
	1730	,,	1007·8	996·2	..	25·5	24·1	23·5	29·0	89	..	6·8	..	15·3	0	6	22	1	0	1	0	0	0	18	8	3	0
Mysore (North)																											
Bidar	0830	664	1005·5	932·2	..	22·1	20·9	20·3	23·9	90	+7	7·9	+2·5	20·5	0	21	10	0	0	0	0	2	5	21	3	0	0
	1730	,,	1001·5	929·4	..	25·5	22·4	20·9	24·7	77	..	7·5	..	17·9	0	10	21	1	0	0	0	2	8	13	7	0	0
Gulbarga	0830	458	1006·3	955·2	−0·3	23·4	21·9	21·1	25·3	87	+9	7·7	+2·2	14·4	0	0	31	0	0	0	0	0	9	16	6	0	0
	1730	,,	1001·7	951·6	..	27·9	23·2	21·0	24·8	67	..	7·9	..	15·4	0	0	31	3	1	0	0	0	8	13	6	0	0
Bijapur	0830	594	1006·6	940·9	−0·2	23·0	21·5	20·8	24·5	87	+10	7·5	+1·9	11·0	0	0	31	0	0	0	0	0	15	14	2	0	0
	1730	,,	1002·6	937·9	..	26 6	22·7	20·8	24·9	72	..	7·5	..	12·3	0	0	31	0	0	0	0	0	11	17	3	0	0
elgaum	0830	781	1008·3	922·3	+0·3	20·7	20·1	19·8	23·1	94	+2	..	..	3·0	0	0	18	0	0	0	3	7	3	5	0	13	0
	1730	,,	1006·8	921·3	..	22·1	20·7	20·1	23·6	89	..	..	..	7·0	0	0	28	1	0	0	1	0	12	11	3	3	0
Belgaum (C.T.O.)	0830	753	1007·7	924·8	−0·3	21·1	20·3	19·8	23·2	92	+1	7·5	+0·4	6·2	0	0	31	0	0	0	0	0	4	25	2	0	0
	1730		1005·4	923·0	..	22·4	20·7	19·9	23·2	86	..	7·9	..	13·5	0	0	31	0	0	0	0	0	1	24	6	0	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour.	Wind speed (km.p.h.).			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (North) —*Contd.*																											
Belgaum (Sambre Aerodrome)	0530	761	1006·6	922·2	..	20·1	19·5	19·1	22·3	95	..	6·9	..	11·4	0	0	31	0	0	0	0	0	2	27	2	0	0
	0830	"	1007·8	924·0	..	21·2	20·3	20·0	23·3	92	..	7·5	..	13·8	0	5	26	0	0	0	0	0	2	28	1	0	0
	1130	"	1007·2	924·1	..	23·5	21·3	20·2	23·7	82	..	7·2	..	24·5	0	22	9	0	0	0	0	0	1	29	1	0	0
	1730	"	1005·3	922·0	..	22·6	20·8	19·9	23·4	85	..	7·7	..	23·7	0	21	10	0	0	0	0	0	2	28	1	0	0
Gadag	0830	650	1007·2	935·6	—0·2	22·8	21·1	20·3	23·7	86	+2	5·9	0	9·7	0	0	31	0	0	0	0	0	4	27	0	0	0
	1730	"	1004·2	933·3	..	25·1	21·9	20·4	23·8	75	..	6·7	..	11·4	0	0	31	0	0	0	0	0	5	26	0	0	0
Gadag (P.B.O.)	0530	661	1006·5	933·3	..	20·9	20·3	20·1	23·5	95	..	6·6	..	14·8	0	3	28	0	0	0	0	0	5	26	0	0	0
	0830	"	1007·4	934·5	..	22·7	21·2	20·5	24·2	88	..	7·0	..	13·5	0	2	29	0	0	0	0	0	3	28	0	0	0
	1130	"	1006·6	934·5	..	25·7	21·9	20·4	23·8	73	..	7·4	..	15·7	0	5	25	0	0	0	0	0	2	28	0	1	0
	1730	"	1004·2	932·1	..	25·2	21·7	20·2	23·5	75	..	7·3	..	18·0	0	6	25	0	0	0	0	0	4	27	0	0	0
	2330	"	1008·1	934·9	..	21·7	20·7	20·3	23·7	92	..	6·0	..	15·8	0	1	30	0	0	0	0	0	4	27	0	0	0
Raichur	0830	400	1006·8	961·9	—0·5	24·3	22·2	21·0	25·1	82	+6	6·9	+2·6	13·5	0	1	30	0	0	0	0	0	10	16	5	0	0
	1730	"	1002·8	958·8	..	28·3	23·2	20·4	24·3	65	..	6·9	..	14·0	0	4	27	0	1	0	0	0	11	13	5	1	0
Mysore (South)																											
Bellary	0830	449	1006·9	957·0	—0·4	24·8	22·8	22·2	27·1	84	+17	6·3	+0·7	8·5	0	1	29	0	0	0	0	0	0	0	30	1	0
	1730	"	1003·2	953·9	..	27·9	24·2	22·4	27·1	73	..	6·4	..	7·5	0	0	31	0	0	0	0	0	1	0	30	0	0
Chitaldrug	0830	733	1007·8	927·0	—0·3	21·6	20·0	19·2	22·2	86	+5	7·8	+0·9	12·3	0	0	31	0	0	0	0	0	13	18	0	0	0
	1730	"	1004·3	924·7	..	25·0	21·1	19·0	22·2	69	..	7·1	..	13·4	0	0	31	0	0	0	0	0	16	15	0	0	0
Shimoga	0830	571	1008·4	945·1	..	22·9	21·2	20·4	23·9	86	..	7·0	..	2·8	0	0	31	0	0	0	0	3	9	4	0	15	0
	1730	"	1005·8	942·9	..	24·4	21·7	20·4	24·1	79	..	7·2	..	7·1	0	0	31	0	0	0	0	1	11	17	1	1	0
Balehonnur	0830	..	..	..	..	19·6	19·1	18·8	21·6	95	+1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1489·4	904·1	..	20·1	19·0	18·5	21·0	90	+6	7·1	+0·5	11·3	0	1	30	0	0	0	0	0	6	25	0	0	0
	1730	"	1474·0	902·1	..	22·5	19·9	18·6	21·7	78	..	6·8	..	16·0	0	11	20	0	0	0	0	0	5	26	0	0	0
Mysore	0830	767	1009·9	924·6	—0·3	21·9	19·9	18·8	21·9	84	+4	4·9	—1·4	12·7	0	3	28	3	0	0	0	4	14	1	9	0	0
	1730	"	1005·5	922·3	..	25·3	20·6	17·9	20·6	63	..	5·0	..	19·7	0	11	20	0	0	0	0	2	16	11	2	0	0
Bangalore (Central Observatory)	0230	921	1472·0	906·4		20·3	19·0	18·3	21·1	89	..	7·5	..	15·2	0	4	27	0	0	0	0	0	5	22	4	0	0
	0830	"	1486·7	907·8	—0·2	21·0	19·3	18·3	21·3	84	—1	7·7	+0·5	16·0	0	7	24	0	0	0	0	0	3	22	6	0	0
	1130	"	1492·2	907·6	..	24·9	20·2	17·7	19·9	64	..	7·3	..	18·0	0	4	26	0	0	0	0	0	2	14	14	1	0
	1730	"	1469·6	905·1	..	25·4	20·1	17·2	19·5	61	..	7·1	..	17·5	0	8	23	0	0	0	0	0	2	15	14	0	0
Bangalore (Aerodrome)	0530	897	1472·2	908·9	..	20·1	19·0	18·4	21·2	90	..	6·8	..	19·1	0	7	24	0	0	0	0	0	6	24	1	0	0
	0830	"	1474·7	910·3	..	21·6	19·4	18·2	21·0	81	..	7·1	..	22·8	0	19	12	0	0	0	0	0	4	26	1	0	0
	1130	"	1493·7	910·1	..	25·6	20·4	17·6	20·2	62	..	6·9	..	27·2	0	6	25	0	0	0	0	0	3	25	3	0	0
	1730	"	1470·4	907·6	..	25·9	20·3	17·3	19·8	60	..	6·7	..	26·1	0	19	12	0	0	0	0	0	4	25	2	0	0
	2330	"	1488·8	910·4	..	21·5	19·5	18·3	21·3	83	..	6·3	..	20·8	0	12	18	0	0	0	0	0	4	23	3	1	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1008·9	1008·4	..	24·2	23·5	23·2	28·4	95	..	7·1	..	5·6	0	1	19	5	3	1	0	0	0	4	7	11	0
	0830	"	1010·0	1009·5	—0·1	25·1	24·1	23·7	29·2	92	+1	6·5	—0·1	5·6	0	0	27	4	3	4	3	0	5	3	5	4	0
	1130	"	1010·3	1009·8	..	27·2	25·2	24·0	30·5	84	..	6·9	..	9·0	0	0	31	0	0	0	0	1	4	16	10	0	0
	1730	"	1008·4	1007·9	..	27·3	25·1	24·1	30·1	83	..	6·2	..	11·5	0	1	30	1	0	0	0	0	1	9	20	0	0
	2330	"	1010·4	1009·9	..	25·3	24·2	23·7	29·3	91	..	6·4	..	6·2	0	0	21	6	3	0	0	0	0	2	10	10	0
Palghat	0830	97	1010·0	998·9	..	24·6	23·5	23·0	28·1	91	..	7·2	..	12·9	0	0	31	0	0	0	0	0	9	20	2	0	0
	1730	"	1007·4	996·5	..	26·3	23·9	22·9	27·8	82	..	6·8	..	16·8	0	2	29	0	0	0	0	0	9	21	1	0	0
Fort Cochin	0830	3	1010·4	1010·1	—0·2	25·7	24·2	23·4	29·0	88	+2	7·2	+1·2	5·9	0	0	21	4	6	1	0	0	0	5	5	10	0
	1730	"	1008·3	1008·0	..	26·6	24·6	23·8	29·3	85	..	7·4	..	10·7	0	2	23	0	0	0	0	0	2	8	15	6	0
Cochin (Naval Air Station)	0230	3	1009·7	1009·5	..	24·6	23·7	23·5	28·9	92	..	6·6	..	4·6	0	0	19	3	4	1	0	0	1	7	3	12	0
	0530	"	1009·5	1009·3	..	24·3	23·7	23·1	28·0	94	..	6·9	..	4·3	0	1	14	1	1	4	0	0	1	5	3	16	0
	0830	"	1010·6	1010·4	..	25·5	23·9	23·2	28·2	87	..	7·0	..	5·6	0	0	23	3	4	1	3	1	1	7	3	8	0
	1130	"	1010·7	1010·5	..	27·2	24·5	23·4	28·4	80	..	6·7	..	12·2	0	5	26	1	1	1	0	0	2	11	15	0	0
	1730	"	1009·0	1008·8	..	26·8	24·4	23·3	28·6	81	..	7·1	..	11·1	0	1	30	2	0	0	0	1	4	12	12	0	0
	2330	"	1010·8	1010·6	..	25·1	24·0	23·4	28·7	91	..	6·6	..	4·4	0	0	15	0	0	1	0	0	3	5	6	16	0
Alleppey	0830	4	1010·4	1010·0	..	25·1	24·2	23·7	29·5	92	..	6·8	..	11·2	0	5	25	4	4	2	0	0	3	3	14	1	0
	1730	"	1008·2	1007·8	..	26·8	24·9	24·0	29·9	85	..	6·9	..	14·4	0	6	25	2	0	0	0	0	0	9	20	0	0
Punalur	0830	34	1010·3	1006·4	..	24·6	23·7	23·2	28·5	91	..	5·8	..	1·6	0	0	15	6	1	0	0	1	0	2	5	16	0
	1730	"	1007·8	1004·0	..	27·7	24·4	22·9	27·9	76	..	5·9	..	6·6	0	0	30	3	1	0	0	0	4	11	11	1	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %.	Departure from normal	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km.p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives)—*Contd.*																											
Trivandrum	0230	64	1008·8	1001·5	..	24·1	23·2	22·8	27·5	93	..	6·0	..	8·8	0	0	31	7	0	0	0	0	0	2	22	0	0
	0530	"	1008·9	1001·6	..	23·8	23·0	22·3	27·5	94	..	5·9	..	7·3	0	0	31	5	0	0	0	0	0	2	24	0	0
	0830	"	1010·4	1002·8	—0·8	25·4	23·8	23·1	28·1	87	+1	5·7	—0·6	8·4	0	1	30	1	1	0	0	0	0	0	29	0	0
	1130	"	1010·2	1003·0	..	27·9	24·4	22·8	28·0	74	..	6·4	..	16·5	0	6	25	3	0	0	0	0	0	4	24	0	0
	1730	"	1008·0	1000·7	..	27·0	23·9	22·6	27·3	77	..	6·5	..	14·7	0	10	21	0	0	0	0	0	1	2	28	0	0
	2330	"	1010·5	1003·2	..	24·6	23·4	22·8	28·0	81	..	5·4	..	10·8	0	0	31	11	0	0	0	0	0	1	19	0	0
Trivandrum (Aerodrome)	0830	8	1010·4	1009·5	..	26·3	24·2	23·2	27·8	83	..	6·2	..	9·5	0	0	31	10	2	0	0	0	0	2	17	0	0
Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1500·3	859·4		21·5	19·9	19·1	21·9	88		7·1		..	0	0	31	5	1	5	7	0	0	2	11	0	0
	1700	"	1481·6	857·6	..	21·9	20·9	20·4	23·8	94	..	7·3	..	..	0	0	31	13	0	1	0	1	0	1	15	0	0
Aijal*	0830	1097																									
	1730	"																									
Shillong	0830	1500	1470·0	847·3	+1·5	21·3	19·1	17·7	20·0	81	0	6·5	—0·1	0·4	0	0	2	0	0	0	0	0	2	0	0	29	0
	1730	"	1443·6	844·7	..	21·6	19·4	18·4	21·0	82	..	6·4	..	0·4	0	0	2	0	0	0	0	1	1	0	0	29	0
Cherrapunji	0830	1313	1461·7	864·8	+0·3	21·2	20·2	19·7	22·8	92	+3	2·5	—4·6	3·6	0	0	31	0	1	11	1	0	18	0	0	0	0
	1730	"	1441·6	863·4	..	21·9	20·7	19·6	24·0	90	..	4·3	..	3·6	0	0	31	1	1	8	2	0	19	0	0	0	0
Darjiling (Raj-Bhawan).	0830	2127	1483·8	789·4	+3·3	18·6	17·1	16·2	18·7	88	+4	6·5	—0·5	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	"	1458·2	787·1	..	18·1	17·0	16·2	18·6	92	..	7·3	..	0·1	0	0	1	0	0	0	0	p	0	1	0	30	0
Kalimpong	0830	1209	1479·3	876·8	+2·4	21·3	19·5	18·6	21·4	85	—6	2·8	—3·7	3·0	0	0	31	0	0	0	0	0	0	0	31	0	0
	1730	"	1458·6	875·0	..	21·7	19·9	18·9	22·0	85	..	3·6	..	2·8	0	0	29	0	0	0	29	0	0	0	0	2	0
Katmandu	0830	1337	1469·3	863·0	..	23·7	20·9	19·5	22·7	78	—3	5·7	—1·0	0·9	0	0	9	2	0	1	1	1	2	0	2	22	0
	1730	"	1442·4	860·4	..	25·0	21·9	20·8	24·1	78	..	6·3	..	1·6	0	0	14	5	0	2	1	2	1	0	3	17	0
Mukteswar (Kumaon)	0830	2311	3120·5	770·4	+1·0	17·0	15·4	14·5	17·1	87	—4	5·9	—0·7	9·6	0	4	22	0	6	7	1	1	2	6	3	5	0
	1730	"	3104·9	768·6	..	18·4	16·9	16·0	18·4	86	..	6·3	..	11·8	0	2	27	0	2	3	2	0	6	13	3	2	0
Nainital	0830	1953	1448·0	800·7	..	18·4	16·6	15·2	17·4	84	..	5·8	..	7·2	0	2	20	1	0	10	9	0	0	1	1	9	0
	1730	"	1423·3	799·2	..	19·6	17·8	16·8	20·0	84	..	6·4	..	6·8	0	0	28	0	0	16	7	2	0	3	0	3	0
Tapoban	0830	..	..	..	..	19·0	17·0	16·1	18·2	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath (R)	0830																										
Lokpal	0830	..	..	..	..	5·4	5·0	4·4	8·7	93	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mussooree	0830	2042	1442·2	793·1	—0·8	18·2	16·9	16·2	18·8	89	—6	6·6	—0·4	2·2	0	0	21	1	2	0	4	8	5	0	1	10	0
	1730	"	1426·5	791·8	..	18·8	18·1	17·8	20·6	90	..	7·3	..	2·4	0	0	25	2	1	0	5	10	6	0	1	6	0
Simla	0830	2202	1442·9	778·8	+0·5	17·6	15·4	14·2	16·0	82	—4	5·5	—1·1	2·3	0	0	24	3	3	2	4	8	2	0	2	7	0
	1730	"	1430·7	777·7	..	18·5	17·2	16·5	18·4	89	..	6·5	..	2·5	0	0	26	3	2	1	5	6	3	2	4	5	0
Dalhousie	0830	1959	1392·8	795·8	..	17·9	16·0	15·1	16·7	84	..	4·1	..	0·7	0	0	5	1	2	0	1	0	1	0	0	26	0
	1730	"	1393·3	796·8	..	20·7	18·9	18·0	20·7	85	..	5·6	..	0·9	0	0	4	0	1	0	1	0	1	1	0	27	0
Dharamshala	0830	1211	1477·3	876·5	..	22·3	20·2	19·3	21·6	82	..	5·5	..	2·7	0	0	21	4	4	2	0	1	3	6	1	10	0
	1730	"	1462·4	874·9	..	23·8	21·4	20·8	23·5	80	..	5·5	..	3·2	0	0	27	1	1	2	2	2	9	9	1	4	0
Abu (R)	0830	1195																									
(R)	1730	"																									
Pachmarhi	0830	1075	1449·1	887·7	+0·2	21·2	20·7	20·5	24·0	96	+6	7·9	+0·6	7·6	0	0	25	0	1	0	0	1	0	19	4	6	0
	1730	„	1429·7	885·5	..	22·9	21·7	21·2	25·0	90	..	7·5	..	10·2	0	1	28	2	0	0	0	0	1	22	4	2	0
Mahabaleshwar	0830	1382	1469·5	859·0	—0·4	17·5	17·5	17·5	20·0	100	+3	8·0	+0·2	13·4	0	0	31	1	0	0	0	0	19	8	3	0	0
	1730	"	1454·9	857·5	..	17·6	17·6	17·6	20·1	100	..	8·0	..	12·0	0	0	31	0	0	0	0	0	23	2	6	0	0
Nandi Hills	0830	..	..	..	..	17·1	16·9	16·5	19·1	97	..	6·7	..	34·2	0	29	2	2	0	0	0	1	10	13	5	0	0
Mereara	0830	1152	1493·3	884·7	+0·5	16·2	18·0	17·9	20·5	98	+3	6·8	—0·6	10·0	0	0	31	0	0	0	0	0	0	13	18	0	0
	1730	"	1478·3	883·1	..	19·3	18·8	18·5	21·3	96	..	6·7	..	7·6	0	0	31	0	0	0	0	0	0	14	17	0	0
Kodaikanal	0530	2343	3118·3	768·6	..	12·0	10·6	9·4	11·8	85	..	6·6	..	16·1	0	9	21	0	0	0	1	0	0	13	16	1	0
	0830	"	3138·2	770·2	+0·6	13·5	11·8	10·4	12·7	82	+5	5·8	+0·7	12·5	0	4	24	0	0	0	1	0	2	12	13	3	0
	1130	"	3147·7	770·4	..	16·1	13·9	11·8	14·4	77	..	6·5	..	10·6	0	4	23	0	1	0	1	0	1	6	18	4	0
	1730	"	3124·1	768·7	..	14·2	12·9	12·0	14·1	87	..	6·9	..	10·6	0	3	23	1	0	0	0	2	0	8	15	5	0
	2330	"	3134·2	770·1	..	12·3	11·0	10·0	12·3	86	..	6·1	..	18·5	1	12	16	0	0	0	0	0	0	15	14	2	0
Ootacamund	0830	2249	1496·7	778·8	+0·8	13·1	12·0	11·5	13·3	89	+2	6·6	0	7·1	0	1	22	0	0	0	0	0	5	17	1	8	0
	1730	"	1474·9	777·1	..	14·3	12·8	12·1	13·7	87	..	7·0	..	7·2	0	2	22	0	0	0	0	0	4	16	4	7	0
Coonoor	0830	1747	1490·3	825·4	..	18·7	16·0	14·5	16·5	77	+8	4·4	—1·1	5·0	0	3	17	0	1	1	1	3	8	2	4	11	0

(R)—Register not received.

*Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars. At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars. At station level.	Mean pressure in millibars. Departure from normal.	Mean temperature in °C. Dry bulb.	Mean temperature in °C. Wet bulb.	Mean temperature in °C. Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas). Mean amount.	Cloud amount (Oktas). Departure from normal.	Mean wind speed, km. per hour.	Wind speed (km.p.h.). 62 or more	20 to 61.	1 to 19.	No. of observations. Wind direction. N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Sikkim																											
Lachen	0830	..	..	..	..	14·4	13·4	12·8	14·6	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (Chumbi)	0830	"	..	..	..	14·7	13·9	13·2	15·4	92	+6	0·3	—3·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa (R)	0830	3685																									
Ceylon																											
Colombo	0830	7	1010·8	1009·9	+0·1	26·7	24·2	23·1	28·2	81	—3	6·5	+0·6	13·1	0	1	30	0	0	0	1	0	15	14	1	0	0
	1730	"	1008·4	1007·6	..	26·2	23·2	22·0	26·0	78	..	6·8	..	15·1	0	5	26	0	0	0	0	0	17	14	0	0	0
Trincomalee	0830	3	1008·2	1008·1	+0·6	28·1	23·9	21·9	26·3	70	—7	5·3	+1·3	23·2	0	23	8	0	0	0	0	1	30	0	0	0	0
	1730	"	1005·4	1005·0	..	31·3	24·7	21·5	25·8	57	..	5·7	..	16·7	0	11	18	2	0	0	1	1	23	1	0	2	1
Batticoloa	0830	3	1008·6	1008·3	..	28·4	23·1	20·4	24·1	63	..	4·0	..	8·6	0	1	27	1	1	2	3	6	2	6	7	3	0
	1730	"	1005·9	1005·6	..	29·9	24·1	21·2	25·1	62	..	5·1	..	18·4	0	13	18	0	1	6	15	2	2	2	3	0	0
Hambantota	0830	15	1009·8	1008·1	+0·6	27·1	24·6	23·4	28·9	80	—5	4·6	+0·8	22·7	0	24	7	0	0	0	0	0	13	18	0	0	0
	1730	"	1007·2	1005·4	..	28·2	24·6	22·7	28·0	73	..	4·7	..	27·5	0	28	3	0	0	0	0	0	13	17	1	0	0
Mannar	0830	4	1008·8	1008·4	..	27·7	25·2	24·0	30·1	81	..	6·5	..	16·4	0	8	23	0	0	0	1	8	22	0	0	0	0
	1730	"	1006·4	1005·7	..	28·1	25·1	24·0	29·8	78	..	5·9	..	19·1	0	21	10	0	0	0	0	10	21	0	0	0	0
Hydrometeorological Observatories																											
Damoder Catchment																											
Bokaro	0830	239	1001·9	975·4		28·5	25·8	24·5	31·1	79	..	6·1	..	6·6	0	1	27	0	1	7	14	2	2	0	2	3	0
	1730	"	998·8	972·4	..	28·6	25·8	24·7	31·0	80	..	6·8	..	7·7	0	0	30	3	0	6	11	2	3	1	4	1	0
Hazaribagh	0830	615	997·9	931·2	..	26·1	22·3	20·5	23·8	72	..	3·6	..	3·6	0	0	20	0	1	7	6	1	5	0	0	11	0
	1730	"	995·9	929·4	..	26·6	22·5	20·4	24·0	70	..	4·3	..	13·3	0	0	30	0	6	5	6	2	5	6	0	1	0
Tilaiya	0830	..	..	..	..	27·6	25·2	24·1	29·6	81	..	5·5	..	9·7	0	2	27	2	0	16	4	0	1	4	1	2	1
	1730	..	..	..	..	28·9	25·7	24·2	30·3	76	..	6·2	..	8·8	0	1	30	7	2	14	4	2	0	1	1	0	0
Ramgarh	0830	..	..	..	..	28·0	25·7	24·7	31·0	82	..	6·6	..	3·7	0	0	27	0	2	10	4	0	1	8	2	4	0
	1730	..	..	..	..	28·5	26·0	24·9	31·6	81	..	7·0	..	3·9	0	0	22	0	1	15	3	0	0	2	0	9	1
Panchet Hills	0830	..	..	..	..	29·2	26·7	25·5	32·9	81	..	6·5	..	4·8	0	0	31	1	5	18	2	1	4	0	0	0	0
	1730	..	..	..	..	29·3	26·3	25·1	31·7	79	..	7·0	..	4·3	0	0	31	1	2	22	3	1	1	11	0	0	0
Durgapur	0830	..	..	..	..	29·8	26·9	25·6	33·1	79	..	4·5	..	13·2	0	2	28	0	0	18	11	0	0	1	0	1	0
	1730	..	..	..	..	29·7	26·9	25·6	33·2	80	..	3·9	..	10·5	0	0	30	0	0	15	13	0	1	0	1	1	0
Mahanadi Catchment																											
Baramul	0830	64	1001·6	994·4	..	27·8	26·3	25·5	33·0	86	..	6·2	..	2·9	0	0	13	0	1	0	0	0	10	2	0	18	0 *
	1730	"	998·7	991·6	..	27·9	26·3	25·7	33·1	88	..	6·5	..	2·7	0	0	13	0	0	0	0	0	11	2	0	18	0
Hirakud	0830	159	1002·0	984·3	..	28·1	25·8	24·7	31·5	82	..	5·7	..	5·2	0	0	22	1	2	2	0	1	9	3	4	9	0
	1730	"	998·9	981·3	..	29·2	26·3	25·1	31·9	79	..	6·6	..	3·3	0	0	19	1	1	0	2	3	4	6	2	12	0
Khijrawan *	0830	..	..	..	..	25·5	23·8	23·1	28·3	86	..	7·0	..	9·4 (b)	0	1	26	0	0	1	2	3	10	12	1	2	0
*	1730	..	..	..	..	27·1	24·7	23·1	29·0	81	..	6·5	..	8·4 (b)	0	0	26	0	1	0	3	0	9	15	0	3	0
Sonepur	0830	..	..	..	..	28·6	26·0	25·2	31·5	80	..	..	..	8 0	0	1	29	2	9	3	3	1	8	3	1	1	0
Ginabahar	0830	..	..	..	..	26·5	24·5	23·1	29·1	79	..	..	..	.. (c)	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhimkund	0830	..	..	..	..	28·3	25·7	24·7	30·8	80	..	7·3	..	4·9	0	0	20	0	3	1	2	1	3	2	8	8	0
	1730	..	..	..	..	27·6	25·5	24·6	31·0	85	..	7·7	..	2·3 (b)	0	0	14	0	1	1	1	3	4	2	2	15	0
Narbada Catchment																											
Punasa	0830	..	..	..	..	25·7	24·1	23·5	28·6	88	..	6·3 (c)	..	2·4 (a)	0	0	20	1	0	0	0	1	8	9	1	11	0
	1730	..	..	..	..	28·6	24·9	23·2	29·0	74	..	5·6	..	1·5	0	0	17	2	0	0	0	0	7	6	2	12	1
Bagra Tawa (R)	0830	..																									
(R)	1730	..																									
Thikri	0830	..	..	..	..	26·0	24·7	24·3	30·0	90	..	7·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	25·3	23·3	21·7	27·1	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dharoi	0830	..	..	..	..	26·9	24·7	23·6	29·2	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	30·5	25·7	23·3	29·2	68	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim	0830	..	..	..	..	19·8	18·0	17·1	19·5	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·0	18·9	18·0	20·5	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri	0830	..	..	..	..	25·9	23·4	22·2	27·0	80	..	4·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	30·3	24·2	21·7	25·7	62	..	5·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R) Register not received. (b) Mean of 29 days. (a) Mean of 30 days. (c) Mean of 28 days. *Wind directions for the complete month.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs	Relative humidity %	Departure from normal.	Cloud amount (Oktas)		Mean wind speed km. per hour.	Wind speed (km.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories— *Contd.*																											
Gandak Catchment																											
Gorkha . . .	0830	..	..	..	..	22·4	21·5	21·1	25·0	92	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·0	22·8	21·7	26·1	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara . . .	0830	..	..	..	..	24·7	22·8	22·1	26·5	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·2	23·5	22·4	26·9	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot . .	0830	..	..	..	..	24·6	23·1	22·6	27·2	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·8	23·3	22·2	26·9	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jomosom . .	0830	..	..	..	..	17·3	14·2	12·2	14·4	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·6	14·3	11·7	13·9	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timure . . .	0830	..	..	..	..	19·9	18·1	16·8	19·5	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·6	19·0	17·5	20·1	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh . . .	0830	..	..	..	..	19·1	18·4 (c)	18·2 (c)	20·8	94 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·5	18·5	18·1	20·6	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura . .	0830	..	..	..	..	19·2 (c)	18·2 (c)	17·8 (c)	20·3 (c)	91 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·3 (a)	19·9 (a)	19·1 (a)	22·4 (a)	88 (a)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari . *	0830																										
*	1730																										
Sallyana . . .	0830	..	..	..	..	22·5	20·7 (a)	19·9 (a)	23·2	85 (a)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·3	20·4	19·6	22·6	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal . . .	0830	..	..		..	28·0	25·6	24·4	30·9	82	..	..	..	..		..		..	..	..	..	..	..		..	..	..
	1730	..	..	..	..	28·7	26·9	26·3	34·1	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu . .	0830	1333	1456·6	863·2	..	22·6	20·4	19·3	22·2	82	..	5·8	..	0·9	0	0	9	2	0	1	1	1	2	0	2	22	0
	1130	"	1452·2	862·6	..	26·2	21·9	19·7	23·2	68	..	4·9	..	1·0	0	0	10	2	1	4	2	0	0	0	1	21	0
	1730		1430·2	860·5	..	24·1	21·5	20·2	23·8	79	..	6·2	..	1·6	0	0	14	5	0	3	1	1	2	0	2	17	0
Kosi Catchment																											
Chautara . .	0830	..	..	..	..	20·9	20·0	19·6	22·8	92	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	23·1	20·8	19·7	23·2	82	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldunga . .	0830	..	..	..	..	20·4	19·2	18·6	21·5	90	..	6·0	..	0·2	0	0	2	0	0	0	0	1	1	0	0	29	0
	1130	..	..	..	..	21·5	19·9	19·3	22·3	87	..	5·8	..	1·3	0	0	11	0	0	1	1	2	4	2	1	20	0
	1730	..	..	..	..	19·9	18·8	18·3	21·0	91	..	6·7	..	0·8	0	0	5	0	0	0	0	1	2	1	1	26	0
Barahkshetra . .	0830	146	1003·4	987·1	..	27·2	25·3	24·5	30·6	86	..	5·9	..	2·3	0	0	11	2	0	0	1	0	2	5	1	20	0
	1130	"	1002·6	986·3	..	29·4	26·4	25·0	31·9	78	..	6·5	..	7·8	0	0	24	0	0	2	0	1	13	6	2	7	0
	1730		1000·3	984·1	..	28·5	26·4	25·3	32·8	84	..	6·3	..	2·2	0	0	12	0	1	1	0	1	5	4	0	19	0
Angbung . .	0830	..	..	..	..	22·6	21·5	20·9	24·8	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung . .	0830	..	..	..	..	20·2	18·7	17·9	20·6	87	..	6·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	22·9	20·3	19·1	22·2	80	..	6·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·1	19·1	18·1	20·8	83	..	6·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok . .	0830	..	..	..	..	21·1	19·7	18·9	22·0	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhojpur . . .	0830	..	..	..	..	21·1	19·7 (b)	18·9 (b)	22·1	86 (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·3	19·5 (e)	19·2 (e)	22·2	93 (e)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur . .	0830	..	..	..	..	22·9	21·6	20·7	25·0	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1730																										
Tista Catchment																											
Gangtok . . .	0830	1812	1463·7	816·3	..	18·8	17·9	17·3	20·1	92	..	6·2	..	4·0	0	0	28	3	5	0	4	0	4	6	6	3	0
	1130	"	1459·1	816·0	..	20·7	19·1	18·2	20·9	87	..	6·3	..	4·3	0	0	29	1	0	0	4	7	12	4	1	2	0
	1730	"	1440 4	814·6	..	19·6	18·4	17·7	20·5	90	..	6·7	..	4·7	0	0	28	0	1	1	8	8	6	3	1	3	0
Geyzing . . .	0830	..	..	..	..	21·6	20·0	19·2	22·2	87	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·7	20·4	19·7	23·2	89	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R)—Register not received. (a)—Mean of 30 days. (c)—Mean of 28 days.

*—Data not reliable, (b)—Mean of 29 days (e)—Mean of 25 days.

MONTHLY MEANS OF UPPER WINDS

AUGUST 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

During the month, observations of velocity and direction of upper winds were made at 54 stations in India. Out of these, at 42 stations all the observations were taken by means of pilot balloons and at 12 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a.m.s.l. are given under Table IV and data above 9.0 km. a.m.s.l. under Table V.

In Tables IV and V :

n—represents the number of observations ;

V—represents the mean wind speed in knots irrespective of direction ;

v—represents the resultant mean velocity in knots ;

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0.15 km.a.g., 0.3, 0.6, 0.9, 1.5, 2.1, 3.0, 3.6, 4.5, 5.4, 6.0, 7.2, 9.0, 10.5, 12.0, 14.1, 16.2, 18.0, 21.0 24.0, 27.0, 30.0, 33.0 and 36.0 km. a.m.s.l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km, a.m.s.l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200 150 and 100 mb respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

	Station	Lat. N.	Long. E	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST).			
1.	Agartala	23°53′	91°15′	17	28th Nov. 1951	0530	1730	2330	
2.	Ahmedabad	23°04′	72°38′	60	19th May. 1928	0530	1730	2330	
3.	Amausi	26°45′	80°53′	132	20th Nov. 1950	0530	1730	2330	
4.	Ambala	30°23′	76°45′	283	1st Apr. 1941	0530	1730	2330	
5.	Amritsar	31°38′	74°52′	230	21st Jun. 1957	0530*	1730*		
6.	Anantapur	14°41′	77°37′	364	12th Feb. 1946	0530	1730	2330	
7.	Asansol	23°41′	86°59′	136	29th May 1942	0530	1730	2330	
8.	Baghdogra	26°38′	88°19′	140	7th Jun. 1953	0530	1730	2330	
9.	Bairagarh	23°17′	77°21′	532	26th Feb. 1943	0530	1730	2330	
10.	Bamrauli	25°27′	81°44′	103	20th Feb. 1930	0530*	1130	1730*	2330
11.	Bangalore	12°58′	77°35′	936	19th May 1915	0530	1730	2330	
12.	Bareilly	28°22′	79°24′	180	12th Jan. 1943	0530	1730		
13.	Begumpet	17°27′	78°28′	553	1st Sep. 1929	0530	1730	2330	
14.	Bhagalpur	25°14′	86°57′	61	19th May 1950	0530	1730		
15.	Bhubaneshwar	20°15′	85°50′	55	5th Dec. 1942	0530	1730	2330	
16.	Bhuj	23°15′	69°48′	111	14th Sep. 1937	0530	1730	2330	
17.	Bikaner	28°00′	73°18′	229	18th Oct. 1946	0530	1730	2330	
18.	Chikalthana	19°51′	75°24′	583	7th Oct. 1951	0530	1730	2330	
19.	Cochin †	09°56′	76°14′	3	16th Mar. 1942	0530	1730	2330	
20.	Darjeeling	27°03′	88°16′	2115	21st May 1956	0530	1730		
21.	Dum Dum	22°39′	88°27′	19	14th May 1921	0530*	1130	1730*	2330
22.	Gadag	15°25′	75°38′	650	3rd May 1943	0530	1730	2330	
23.	Gannavaram	16°32′	80°48′	24	8th Apr. 1942	0530	1730	2330	
24.	Gauhati	26°05′	91°43′	51	12th Mar. 1955	0530*	1130	1730*	2330
25.	Gaya	24°45′	84°57′	119	19th Mar. 1937	0530	1730	2330	
26.	Gopalpur	19°16′	84°53′	24	15th Feb. 1946	0530	1730	2330	
27.	Gorakhpur	26°45′	83°22′	83	5th Jan. 1943	0530	1730		
28.	Gwalior	26°14′	78°15′	219	7th May 1938	0530	1730	2330	
29.	Imphal	24°51′	93°58′	805	8th Mar. 1952	0530	1730	2333	
30.	Jabalpur	23°10′	79°57′	402	30th Jul. 1928	0530	1730	2330	
31.	Jagadalpur	19°05′	82°02′	562	25th Mar. 1948	0530	1730	2330	
32.	Jaipur	26°49′	75°48′	404	6th Jun. 1953	0530	1730		
33.	Jamshedpur	22°49′	86°11′	147	23rd Jul. 1942	0530	1730		
34.	Jharsuguda	21°55′	84°05′	234	1st May 1944	0530	1730	2330	
35.	Jodhpur	26°18′	73°01′	229	15th Oct. 1934	0530*	1130	1730*	2330
36.	Madras	13°00′	80°11′	29	8th Apr. 1926	0530*	1130	1730*	2330
37.	Mangalore	12°52′	74°51′	40	4th Jun. 1928	0530	1730	2330	
38.	Minicoy	08°18′	73°00′	16	14th Apr. 1941	0530	1730	2330	
39.	Mohanbari	27°29′	95°01′	110	1st Jun, 1948	0530	1730	2330	
40.	Mussoorie	30°27′	78°05′	2050	3rd Nov. 1955	0530	1730		
41.	Nagpur	21°06′	79°03′	316	23rd Apr. 1943	0530*	1130	1730*	2330
42.	Nanpara	27°50′	81°30′	141	23rd Apr. 1957	0530	1730		
43.	New Delhi	28°35′	77°12′	227	20th Oct. 1936	0530*	1130	1730*	2330
44.	Poona	18°32′	73°51′	593	5th Jan. 1925	0530	1730	2330	
45.	Port Blair	11°40′	92°43′	93	29th Oct. 1945	0530*	1130	1730*	2330
46.	Raipur	21°14′	81°39′	308	15th Jul. 1944	0530	1730	2330	
47.	Santa Cruz	19°07′	72°51′	12	14th May 1933	0530*	1130	1730*	2330
48.	Tezpur	26°37′	92°47′	79	12th Aug. 1932	0530	1730	2330	
49.	Tiruchirapalli	10°46′	78°43′	96	22nd Jun. 1936	0530	1730	2330	
50.	Trivandrum	08°29′	76°57′	73	8th Dec. 1928	0530*	1130	1730*	2330
51.	Udaipur	24°35′	73°42′	587	24th Jun. 1947	0530	1730	2330	
52.	Vengurla	15°52′	73°38′	8	22nd Nov. 1941	0530	1730	2330	
53.	Veraval	20°54′	70°22′	17	13th Oct. 1941	0530*	1130	1730*	2330
54.	Visakhapatnam	17°43′	83°14′	10	24th Sep. 1928	0530	1730	2330	

*Radiowind ascents.

†Naval Meteorological Office.

5—337 D.D.G. Obs. Poona/62.

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km, above mean sea level

August 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·2	3·5	138	31	4·3	3·0	168	31	4·6	3·8	155	31	4·8	3·9	235	31	6·1	4·3	238	31	7·1	5·9	222
0·15 a. g.	30	10·6	8·6	145	29	8·6	5·9	172	30	11·7	10·5	172	31	12·4	11·1	256	30	9·6	7·3	249	31	14·9	13·4	231
0·3 a. m. s. l	30	13·0	10·6	164	29	10·4	7·8	176	30	13·1	12·3	179	31	15·2	14·0	259	30	9·8	7·8	246	31	16·4	14·8	234
0·6 ,,	28	13·8	10·2	164	29	12·1	10·1	176	30	14·1	12·7	181	30	19·3	18·0	276	29	10·6	9·0	254	31	16·0	14·5	249
0·9 ,,	28	14·4	10·3	165	28	12·2	10·0	176	30	14·1	11·9	178	24	18·5	16·9	279	29	12·1	10·7	261	30	13·6	11·7	258
1·5 ,,	25	12·0	8·0	163	24	13·1	10·0	168	26	12·1	9·9	179	21	13·1	8·4	242	25	14·4	10·6	273	24	10·3	5·2	291
2·1 ,,	24	11·2	7·4	155	22	13·9	10·2	163	23	11·5	8·4	168	15	12·1	1·1	238	18	13·4	5·4	299	18	8·8	3·7	014
3·0 ,,	22	11·5	7·8	147	20	12·9	8·0	152	19	11·4	6·6	154	10	11·3	6·1	049	10	9·4	5·1	031	13	11·6	4·9	044
3·6 ,,	20	13·1	8·7	143	17	12·0	6·6	155	13	9·8	4·5	158	8	9·5	5·5	041	8	6·9	2·9	018	7	13·4	6·2	037
4·5 ,,	15	10·9	7·6	133	11	10·8	2·2	127	9	11·9	4·0	115	6	11·1	4·6	040	6	6·8	1·1	294	4	10·0	7·0	023
5·4 ,,	11	12·7	9·0	131	11	10·8	5·4	099	3	10·3	9·0	073	2	6·5	6·3	328	4	8·3	4·1	328	3	12·7	10·1	003
6·0 ,,	9	12·8	9·9	115	8	14·5	8·8	083	1	11·0	11·0	040	2	6·0	3·7	011	4	7·0	0·6	014	2	17·0	7·0	007
7·2 ,,	7	15·7	10·3	102	4	19·0	17·2	065					1	9·0	9·0	125	3	9·3	9·0	089				
9·0 ,,	5	21·2	21·0	083	4	15·7	12·0	061					1	4·0	4·0	070	2	10·0	9·9	077				

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·8	2·6	087	31	3·6	2·5	087	31	3·5	2·4	095	31	3·4	3·1	118	31	3·0	1·5	109	31	3·8	2·4	119
0·15 a. g.	29	11·6	8·8	099	30	8·2	4·6	100	27	10·6	6·9	100	30	10·0	8·4	116	31	8·5	3·2	113	31	11·0	4·8	117
0·3 a. m. s. l.	29	11·8	8·3	105	30	8·4	5·2	099	27	10·8	7·7	100	30	5·4	4·9	112	31	5·4	2·3	113	31	6·3	3·1	112
0·6 ,,	27	13·7	8·1	126	30	9·4	6·2	108	27	11·4	8·1	107	29	10·9	8·7	130	31	8·7	3·6	124	31	10·5	4·7	127
0·9 ,,	25	13·1	6·9	140	30	9·9	6·7	110	25	12·0	7·3	111	28	10·4	7·5	134	31	8·2	2·7	128	31	10·3	3·6	126
1·5 ,,	23	12·3	6·1	105	27	11·2	6·2	125	25	11·7	6·3	130	26	11·5	2·7	107	30	9·7	1·5	109	30	10·2	0·4	276
2·1 ,,	21	14·3	6·9	109	23	12·4	6·9	108	19	11·7	3·2	122	24	11·3	1·8	357	27	10·4	0·9	059	29	11·0	0·9	147
3·0 ,,	11	11·7	5·2	102	18	11·8	5·8	110	12	9·6	3·4	133	20	12·1	2·6	051	24	10·7	1·1	120	27	9·4	0·5	348
3·6 ,,	6	10·5	3·9	141	16	10·9	4·6	103	2	5·0	3·9	105	17	12·4	2·2	121	22	10·1	1·5	356	14	9·4	2·6	126
4·5 ,,	3	9·3	6·0	287	9	10·5	6·5	105					15	12·5	1·7	131	18	12·4	2·3	226	8	11·5	5·1	135
5·4 ,,					5	6·0	0·8	145					10	12·1	7·6	202	14	13·1	5·0	257	4	8·5	7·1	188
6·0 ,,					4	5·8	2·1	125					9	17·4	14·6	226	14	13·0	6·3	259	4	11·7	9·8	219
7·2 ,,					3	5·0	4·6	027					6	22·7	20·0	220	9	17·6	14·0	263				
9·0 ,,					1	23·0	23·0	090					5	25·0	19·0	234	5	21·0	17·0	269				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km above mean sea level

August 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	AMRITSAR								ANANTAPUR												ASANSOL			
Time in I. S. T.	0530*				1730*				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·6	2·3	132	30	5·0	2·0	120	31	8·1	7·9	258	31	12·9	12·3	267	31	12·8	12·6	268	31	2·7	1·8	122
0·15 a. g.	28	6·4	4·2	140	30	5·8	2·7	118	31	15·2	14·8	259	29	19·5	18·7	266	29	19·2	18·9	261	25	8·6	5·2	129
0·3 a. m. s. l	28	6·9	4·1	128	30	6·0	3·2	116													25	8·9	5·2	136
0·6 ,,	28	9·2	5·3	148	30	6·6	2·9	121	31	17·5	17·2	259	29	19·8	19·1	266	29	20·2	19·9	262	24	12·4	5·2	147
0·9 ,,	28	7·6	3·9	165	30	7·0	1·8	162	31	24·0	23·5	275	29	20·2	19·8	269	29	24·6	24·3	268	18	11·1	2·7	186
1·5 ,,	28	7·1	2·0	195	30	7·7	1·6	165	30	27·4	26·5	283	29	21·3	21·0	273	29	25·8	25·1	277	17	10·3	2·7	121
2·1 ,,	28	7·3	0·3	217	30	7·5	0·6	306	30	24·4	23·7	285	26	21·8	21·0	276	28	21·3	20·3	279	17	10·5	3·6	123
3·0 ,,	28	9·2	0·7	009	30	9·9	1·4	348	26	19·2	18·4	285	21	21·2	20·6	278	21	17·9	16·9	277	8	7·3	2·0	279
3·6 ,,	27	9·2	0·9	095	29	10·7	0·8	327	20	16·8	14·9	284	11	20·5	19·7	281	13	16·5	15·8	269	6	5·5	2·6	124
4·5 ,,	27	9·2	1·4	138	29	10·4	1·7	296	16	11·5	9·0	272	6	12·3	9·9	284	3	14·0	11·0	270	5	8·6	4·9	129
5·4 ,,	27	10·2	6·1	216	29	11·3	3·6	254	11	7·0	5·0	247	4	9·5	7·2	289	1	9·0	9·0	215	1	1·0	1·0	110
6·0 ,,	27	11·2	7·8	220	30	12·9	6·8	250	9	7·3	4·0	225	4	8·0	7·2	247	1	7·0	7·0	160				
7·2 ,,	28	16·5	13·1	243	29	16·0	11·9	262	4	8·7	5·7	105	3	6·3	5·3	086								
9·0 ,,	23	19·4	15·3	255	27	22·0	17·0	243	2	15·0	14·8	087	3	13·7	13·5	102								

Station	ASANSOL								BAGHDOGRA												BAIRAGARH			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4·0	3·1	124	31	3·0	2·3	124	31	2·3	2·0	039	31	1·8	1·7	060	31	2·8	1·5	062	31	6·2	4·0	267
0·15 a. g.	29	10·7	7·7	135	30	9·3	7·1	144	23	6·8	6·4	062	29	6·9	4·0	071	22	6·7	4·9	083	26	15·9	14·1	273
0·3 a. m. s. l	29	10·8	7·9	137	30	9·9	7·6	147	23	6·7	5·8	071	29	6·9	4·6	073	22	6·9	4·9	096				
0·6 ,,	29	11·7	8·5	137	30	11·3	9·0	153	23	6·1	4·5	099	29	6·5	4·6	101	22	7·1	4·8	098	26	14·2	12·6	267
0·9 ,,	28	11·7	8·1	137	28	11·2	8·1	156	23	5·7	4·5	102	28	7·8	5·6	113	21	6·9	4·4	096	19	18·6	16·1	289
1·5 ,,	25	10·1	6·1	143	22	10·9	6·0	157	21	6·2	5·3	086	25	10·2	8·0	115	17	7·3	4·8	094	9	13·0	8·7	318
2·1 ,,	18	11·5	8·2	123	16	8·2	4·6	133	19	8·6	6·9	091	21	9·5	7·1	108	17	9·7	7·1	106	5	9·2	5·9	025
3·0 ,,	12	10·5	7·9	119	9	10·0	8·0	129	16	13·5	10·7	103	17	13·1	10·7	103	14	10·7	8·6	096	5	11·2	8·8	013
3·6 ,,	10	12·3	10·0	114	3	11·3	8·3	145	11	14·0	12·6	097	15	12·5	9·5	105	9	10·4	8·3	108	3	10·0	9·2	060
4·5 ,,	5	19·6	19·3	092					10	14·6	12·9	090	12	13·6	10·8	090	3	13·3	12·3	109	2	19·5	18·3	078
5·4 ,,	3	25·7	24·6	092					7	15·0	11·7	107	8	14·5	10·3	105	1	15·0	15·0	120	1	28·0	28·0	065
6·0 ,,									4	8·7	6·8	138	5	12·0	5·5	117					1	37·0	37·0	060
7·2 ,,									3	14·0	12·9	116	4	15·3	12·1	118								
9·0 ,,									2	9·0	8·9	060	3	22·3	21·8	088								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km above mean sea level

AUGUST 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	BAIRAGARH								BAMRAULI											
Time in I. S. T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·7	4·6	272	31	5·0	3·7	259	31	2·3	0·8	104	31	4·5	1·2	109	31	3·2	0·9	061	31	3·2	1·2	096
0·15 a. g.	28	12·9	8·5	274	28	15·8	12·5	269	28	4·3	1·7	080	30	8·2	1·3	076	28	4·8	2·0	045	30	11·3	4·8	098
0·3 a. m. s. l.									28	4·9	1·7	085	30	7·9	1·5	107	28	5·3	2·4	043	30	11·5	5·1	098
0·6 „	28	11·8	7·8	272	28	14·0	11·7	263	28	7·5	2·1	110	30	6·5	0·7	110	28	7·5	3·0	074	30	11·7	5·7	108
0·9 „	23	14·0	9·3	277	28	15.7	12·2	274	28	9·2	2·9	131	26	7·9	0·7	077	28	8·2	2·4	110	29	11·4	6·0	117
1·5 „	24	14·7	10·4	295	23	12·9	7·9	299	28	9·5	2·3	104	17	8·9	2·0	119	28	8.5	3·3	125	23	10·9	4·5	149
2·1 „	17	12·5	6·9	311	19	9·1	2·0	323	28	10·3	3·1	107	10	9·2	2·4	158	28	9·0	3·1	133	19	10·6	5·3	163
3·0 „	7	12·6	8·4	340	14	10·8	2·3	030	28	11·0	4·1	085	5	8·2	1·9	132	28	9·2	3·4	116	12	8·8	6·3	142
3·6 „	3	10·7	5·5	032	3	7·0	2·3	265	28	11·3	5·6	102	3	7·7	2·7	225	27	10·2	4·7	109	10	7·6	5·6	137
4·5 „	3	9·0	8·1	073					26	9·9	5·3	102	1	10·0	10·0	245	27	10·7	6·5	096	6	9·7	6·1	122
5·4 „	1	12·0	12·0	090					25	10·3	6·5	100					26	15·3	8·0	102	3	10·0	8·7	092
6·0 „	1	18·0	18·0	100					25	10·3	7·3	096					23	10·0	6·6	097	2	11·5	11·5	100
7·2 „									22	11·3	8·4	088					23	11·3	7·7	097				
9·0 „									18	13·5	9·5	094					19	15·3	13·0	090				

Station	BANGALORE												BAREILLY								BEGUMPET			
Time in I. S. T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	8·6	8·2	260	31	10·5	9·8	273	31	9·5	9·0	265	31	3·2	2·8	089	31	3·1	1·5	069	31	7·4	6·7	283
0·15 a. g.	19	14·6	14 4	263	31	16·8	15·7	264	30	16·6	15·8	259	30	9·1	7·4	106	30	7·4	3·0	081	27	16·7	16·2	273
0·3 a. m. s. l.													30	8·4	6·7	100	30	6·9	2·9	079				
0·6 „													29	9·8	7·3	127	30	8·3	4·1	097	27	11·4	11·1	270
0·9 „													27	9·3	6·8	124	28	8·1	3·6	111	25	22·1	21·0	287
1·5 „	14	25·3	24·9	286	30	21.4	20·2	267	29	25·6	25·1	275	25	9·0	5·0	111	27	10·0	3·4	054	20	21·7	20·3	291
2·1 „	9	23·2	22·4	287	26	21·3	20·7	277	24	21·9	21·4	283	19	11·6	3·3	105	24	11·0	4·2	125	18	19·2	18·3	288
3·0 „	6	18·7	18·0	295	14	17·0	16·7	283	15	14·7	13·1	283	13	11·3	1·0	076	21	12·0	7·6	116	15	15·5	14·0	284
3·6 „	6	17·3	16·2	201	11	15·4	14·4	278	13	14·9	13·8	283	13	9·7	1·4	129	19	11·5	7·0	113	6	11·7	11·3	276
4·5 „	5	14·6	12·6	287	9	14 9	13·7	277	7	9·6	6·7	275	9	6·8	1·5	047	15	9·7	2·7	142	4	6·5	4.9	285
5·4 „	2	9·0	3·7	255	6	12·3	9·1	248	5	7·0	6·4	300	7	6·4	1·4	005	13	10·3	2·6	175	2	9·5	3·3	318
6·0 „	2	9·5	2·1	357	6	9·7	5·6	246	1	6·0	6·0	125	7	5·1	0·2	117	11	8·9	2·4	238	1	11·0	11·0	110
7·2 „	1	13·0	13·0	090	3	8·7	0·9	265	1	15·0	15·0	085	6	5·0	1.6	120	9	8·7	1·9	240				
9·0 „					1	4·0	4·0	300					4	5·7	4·5	167	3	17·0	3·6	098				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	BEGUMPET								BHAGALPUR								BHUBANESHWAR							
Time in I. S. T.	1730				2330				0530				1730				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	7·1	6·5	279	31	8·9	8·2	262	31	3·1	2·6	107	31	4·0	3·2	093	31	4.7	0·7	334	31	9·2	5·9	197
0·15 a. g.	28	13·4	12·3	272	25	15·0	14·1	263	27	10·5	7·6	135	29	10·6	8·2	097	28	10·7	4·7	247	28	12·5	6·1	190
0·3 a. m. s. l.									27	11·7	8·4	135	29	11·2	9·7	100	28	12.6	6·0	260	28	13·9	5·9	191
0·6 „	28	11·0	10·2	272	26	9·5	9·0	258	25	11·5	7·1	136	29	11·2	9·9	110	28	14·3	6·9	266	28	15·1	5·0	185
0·9 „	28	15.6	14·7	275	25	19.4	18·1	273	25	10·8	7·1	123	28	11·2	9.2	119	26	14.1	6·4	270	25	13·5	4·5	195
1·5 „	27	19·7	18·5	281	24	21·7	20·0	279	22	10·9	8·6	109	23	11·1	8·9	127	22	13·4	4·8	269	19	13·2	2·5	213
2·1 „	24	19·7	18·8	288	21	19·3	17·6	286	19	9·3	6·7	104	20	11·5	8 9	125	21	12.3	4·1	265	13	14·5	2·4	310
3·0 „	17	13·9	12·6	295	10	14·5	12·2	250	17	10·4	8·0	122	16	12·1	10·3	117	16	11·0	1·0	187	8	12·0	6·2	243
3·6 „	12	11·3	8·9	299	5	12·4	11·1	298	12	7·5	5·3	143	14	9·9	7·4	110	14	11·5	2·1	146	4	11·3	6·9	221
4·5 „ „	8	9·9	7·3	296	1	11·0	11·0	320	10	7·0	5·1	113	12	9·5	4·2	110	8	7·9	2·2	291	1	17·0	17·0	130
5·4 „	7	9.9	6·2	324					9	5·7	4·4	090	8	10·4	7 7	090	6	8·8	1·8	162	1	15.0	15·0	135
6·0 „	5	11·0	5·1	297					5	5·2	3·9	095	6	12·8	11·6	088	4	6·7	4·1	081				
7·2 „	3	12·0	4·9	236					3	14·3	14·0	085	3	11·7	10·0	095								
9·0 „	1	4·0	4·0	055					1	22·0	22·0	095	2	18·5	17·7	075								

Station	BHUBANESHWAR				BHUJ								BIKANER							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·1	1.3	233	31	6.4	5·8	237	31	9·4	8·9	236	31	8·1	7·7	233	31	4·9	3·7	228	31	5·0	2·4	235
0·15 a. g.	28	12·2	7·6	227	31	15·9	15·4	253	31	16·8	16·0	247	31	16·9	16·6	246	31	14·6	10·7	236	31	10·5	4·2	230
0·3 a. m. s. l.	28	13·7	7·9	227	31	17.0	16·4	253	31	17·2	16·3	247	31	18·0	17·4	247	31	11·5	7·7	229	31	9·4	4·8	235
0·6 „	28	15·9	9·2	233	31	22·2	20·6	259	31	18·2	16·8	251	31	20·6	19·7	252	30	18·2	13·2	249	31	10·7	3·8	234
0·9 „	26	16·7	8·7	235	31	19·6	17·8	256	31	16·0	14·2	260	31	17·3	16·2	249	29	16·8	12.1	257	31	10·1	3·0	240
1·5 „	21	14·7	5·7	238	29	14.4	9·2	245	28	10·5	6·3	279	30	11·3	4·6	232	28	10·5	4·6	280	31	10·9	3·9	278
2·1 „	19	12·3	5·9	242	23	9.8	1·2	332	22	8·9	3·3	343	25	10·3	5·3	056	27	9·3	1·2	026	27	10·3	3·1	279
3·0 „	15	13·1	5.5	218	19	12.3	6·6	035	19	11·4	6·1	031	21	13·7	10 9	056	26	10·0	4·2	032	20	12·2	8·2	344
3·6 „	3	9·0	5·6	149	10	12.0	8·4	042	18	12·4	7·6	035	18	13.9	10·6	022	20	10·0	5·4	021	20	13·7	8·0	341
4·5 „	1	10·0	10.0	140	6	12.3	4·8	075	17	12.8	4·7	033	11	10·4	7·1	035	15	10·8	4·3	014	18	11·4	6·7	335
5·4 „					2	5.5	1·6	001	15	11·7	3·0	345	8	12·1	5·7	014	14	10·4	3·3	040	14	13·9	7·7	296
6·0 „									14	12·4	2·3	293	4	19·5	8·3	066	10	11·2	1·5	044	12	13·7	8·2	305
7·2 „									11	12·1	6·7	074					6	13·3	5·2	178	10	12·0	6·8	289
9·0 „									8	13·0	10·0	066					4	14·0	4·6	186	4	13·3	10·9	198

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km above mean sea level

August 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	BIKANER				CHIKALTHANA												COCHIN							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·2	3·4	202	31	8·2	8·1	266	31	9·5	8·8	271	31	9·6	9·6	270	31	2·1	1·1	283	31	4·8	3·9	294
0·15 a. g.	30	17·2	9·7	213	31	16·5	16·3	274	31	14·8	13·9	280	28	17·6	17·5	276	18	5·8	3·8	297	24	8·1	7·5	293
0·3 a. m. s. l.	30	13·4	6·8	199													18	11·0	9·9	296	24	11·6	11·1	293
0·6 ,,	30	17·2	9·8	227													18	15·9	14·8	302	24	16·7	16·2	301
0·9 ,,	30	13·6	7·4	238	31	20·6	20·3	280	31	17·2	16·4	284	28	20·4	20·1	283	18	18·3	17·4	299	24	19·0	18·3	302
1·5 ,,	28	10·3	3·9	286	22	21·8	20·7	291	29	18·0	17·4	284	23	21·6	21·2	286	17	21·8	21·3	300	24	20·0	19·5	304
2·1 ,,	25	10·3	4·4	019	16	13·6	11·0	294	18	14·3	13·7	288	16	12·5	11·8	284	17	23·0	22·5	295	19	18·5	18·0	303
3·0 ,,	21	9·9	5·6	021	10	9·4	7·2	293	6	16·2	15·9	285	11	9·4	7·7	298	10	18·1	17·5	289	8	15·7	15·0	295
3·6 ,,	19	11·3	6·7	020	4	5·7	5·1	308					7	9·1	6·3	336	7	10·9	10·6	284	5	9·8	8·7	289
4·5 ,,	9	10·9	4·2	031	1	9·0	9·0	350					3	9·0	8·1	335	5	9·8	9·4	281	4	8·5	6·1	280
5·4 ,,	4	12·2	8·5	064	1	12·0	12·0	340					2	8·0	7·9	307	1	6·0	6·0	260				
6·0 ,,	2	8·0	3·3	151									2	7·5	4·5	347								
7·2 ,,													1	7·0	7·0	095								
9·0 ,,																								

Station	COCHIN				DARJEELING								DUM DUM											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·8	3·2	285	31	1·7	1·0	050	30	1·3	0·7	157	31	3·0	2·0	129	31	5·5	3·4	139	30	4·4	3·3	155
0·15 a. g.	7	7·8	6·6	293	13	5·2	2·4	044	13	4·6	1·0	110	30	9·4	3·3	121	29	9·7	6·1	156	30	11·6	9·1	163
0·3 a. m. s. l.	7	11·1	10·4	300									30	10·9	6·5	162	29	10·4	6·5	159	30	11·9	9·6	163
0·6 ,,	7	16·0	15·9	302									29	11·1	6·3	170	28	11·3	6·6	158	30	12·6	9·6	166
0·9 ,,	7	20·0	19·7	302									29	12·5	6·6	167	25	12·8	6·7	154	30	13·3	10·0	160
1·5 ,,	7	23·3	23·1	300									29	12·3	6·2	164	17	10·8	5·4	165	30	14·0	9·6	154
2·1 ,,	3	31·3	31·3	298									29	20·9	5·7	150	15	11·1	5·7	169	30	14·0	9·1	150
3·0 ,,					13	8·6	8·0	100	12	6·8	6·0	096	29	10·2	6·4	141	9	10·5	6·5	157	29	14·5	10·4	144
3·6 ,,					13	10·6	9·5	094	10	9·3	8·2	106					5	8·2	3·4	174				
4·5 ,,					12	13·7	10·3	094	7	10·1	7·5	117	29	11·4	8·0	129	5	10·0	3·2	125	29	12·5	9·0	117
5·4 ,,					11	13·3	10·0	120	7	10·4	7·2	092	28	11·8	8·5	126					29	12·7	10·6	102
6·0 ,,					8	11·3	9·4	114	5	7·6	7·2	082	28	12·0	9·4	123					29	13·1	10·8	102
7·2 ,,					5	10·8	10·0	106	4	10·7	10·2	110	28	14·2	10·9	102					29	14·8	11·5	099
9·0 ,,					2	15·0	14·7	092	2	15·0	14·5	085	27	19·5	17·6	098					25	18·5	16·3	085

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	DUM DUM				GADAG												GANNAVARAM							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·5	2·3	144	31	9·3	8·8	262	31	10·5	9·7	264	31	8·9	8·5	262	31	8·2	7·1	267	31	7·8	6·0	274
0·15 a. g.	31	10·8	8·1	160	29	20·4	20·1	290	30	20·8	20·2	258	27	20·0	19·5	258	26	13·5	11·8	270	26	11·3	8·6	271
0·3 a. m. s. l.	30	12·9	10·1	170													26	17·1	15·5	276	26	12·2	10·2	274
0·6 „	30	14·0	10·9	176													26	22·2	20·1	284	26	15·6	13·6	284
0·9 „	30	12·9	10·0	177	29	22·9	22·3	270	30	22·3	21·8	263	27	22·5	22·0	268	26	21·1	19·8	287	26	17·7	16·6	286
1·5 „	25	11·2	7·6	168	21	24·7	24·0	282	23	21·7	21·0	274	22	26·6	26·0	281	25	19·1	18·2	293	25	21·2	19·9	288
2·1 „	23	11·1	7·1	153	13	17·8	16·6	288	10	17·4	16·2	272	18	19·0	18·4	288	23	17·4	16·3	292	24	20·4	18·9	288
3·0 „	19	12·8	8·8	131	9	13·9	13·2	279	4	11·5	9·5	297	12	10·2	9·8	280	16	15·6	14·3	283	20	18·2	17·0	283
3·6 „	8	11·4	8·6	139	2	13·0	13·0	290	1	17·0	17·0	280	4	13·5	12·9	280	10	13·5	11·4	279	19	17·3	15·6	282
4·5 „													2	5·5	5·1	273	7	11·6	8·7	263	15	13·2	11·2	268
5·4 „													1	3·0	3·0	340	5	13·0	8·5	213	13	9·9	7·7	247
6·0 „																	3	5·3	4·0	241	11	10·4	7·2	241
7·2 „																	2	11·5	11·4	097	8	8·0	2·4	254
9·0 „																	1	12·0	12·0	310	6	15·0	13·3	099

Station	GANNAVARAM				GAUHATI												GAYA			
Time in I.S.T.	2330				0530 *				1130				1730 *				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·7	5·2	245	31	1·2	0·3	088	31	4·4	2·5	006	31	3·2	0·8	279	31	2·1	0·9	200	31	3·0	1·9	117
0·15 a. g.	26	12·2	8·8	244	31	4·8	0·2	104	29	6·5	3·7	020	31	7·1	0·9	323	26	4·5	1·0	196	29	9·7	4·4	132
0·3 a. m. s. l.	26	13·8	10·7	248	31	5·2	0·6	029	29	6·5	3·1	034	31	7·3	1·7	320	26	4·9	2·2	262	29	10·4	5·4	131
0·6 „	26	16·6	15·7	249	31	6·3	0·7	285	29	7·0	1·6	060	31	8·7	1·9	297	26	6·1	2·7	287	29	12·6	5·9	153
0·9 „	26	18·1	16·3	275	31	6·8	1·4	261	27	8·2	1·4	130	31	8·7	2·8	278	26	7·3	2·7	260	26	13·1	5·1	156
1·5 „	25	19·9	18·4	281	31	8·2	2·7	240	25	10·2	3·5	148	31	9·4	4·5	244	24	9·5	4·4	244	25	12·2	5·5	119
2·1 „	23	18·4	17·4	281	30	10·7	3·3	219	22	11·0	4·1	143	31	10·3	4·6	211	20	9·9	4·7	182	18	9·1	4·8	113
3·0 „	15	14·7	13·4	282	29	12·7	4·7	198	17	11·4	6·2	121	30	11·8	3·0	167	15	13·1	5·2	166	17	10·2	4·7	119
3·6 „	6	12·2	10·3	273	29	12·3	5·1	199	15	12·2	4·7	134	30	13·5	2·5	161	10	14·2	6·3	170	11	8·7	2·5	128
4·5 „	5	11·8	8·9	286	29	11·7	4·5	190	7	14·4	7·9	090	31	12·5	1·1	158	2	3·5	3·5	105	8	8·6	6·4	117
5·4 „	1	8·0	8·0	295	29	11·0	4·0	144	6	14·2	9·4	100	30	12·0	2·2	126	1	7·0	7·0	095	6	6·7	4·0	113
6·0 „	1	8·0	8·0	305	29	10·2	4·2	123	5	16·0	12·2	105	29	11·0	2·7	110	1	13·0	13·0	110	5	9·2	8·1	097
7·2 „					28	11·0	7·0	089	3	15·0	9·5	078	29	11·3	5·0	096	1	6·0	6·0	075	1	18·0	18·0	125
9·0 „					17	11·7	6·2	089	1	31·0	31·0	085	13	13·8	7·8	075								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (SRAVANA 10—BHADRA 9, 1879 SAKA)

Station	GAYA								GOPALPUR								GORAKHPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·3	2·4	082	31	3·5	2·1	106	31	4·9	3·2	240	31	8.8	6·0	207	31	7·4	5·2	219	31	2·6	2·0	067
0·15 a. g.	31	8·5	4·8	080	31	9·8	6·6	243	30	13·1	7·1	255	28	14·5	10·3	199	31	13·2	8·7	234	27	10·4	8·4	085
0·3 a.m.s.l.	31	8·8	4·9	084	31	10·0	6·2	077	30	13·3	6·7	257	28	13·4	8·4	208	31	12·5	7·9	242	27	12·5	8·9	095
0·6 „	31	9·1	5·1	090	31	12·3	8·5	125	30	14·3	6·9	270	28	13·8	7·1	214	31	12·2	6·8	247	25	13·1	10·5	117
0·9 „	30	9·5	5·2	102	30	12·3	8·4	138	30	14·0	7·8	288	27	11·9	3·7	244	30	11·4	6·7	252	25	12·4	9·4	113
1·5 „	27	11·1	7·3	134	27	10·1	6·2	139	27	13·5	7·5	288	26	11·8	3·7	289	25	12·5	7·3	285	22	11·9	6·8	104
2·1 „	25	12·0	7·6	130	25	10·7	6·6	132	22	11·3	6·2	270	22	12·0	4·6	299	22	12·1	7·0	290	22	12·8	6·3	108
3·0 „	17	10·7	7·0	108	11	11·2	8·9	223	16	11·5	8·2	260	19	12·5	3·4	263	14	12·1	6·9	247	16	12·8	6·4	105
3·6 „	13	10·9	5·6	119	1	8·0	8·0	105	14	10·3	5·8	259	18	12·5	2·6	254	9	10·9	4·2	271	10	11·6	7·7	103
4·5 „	7	13·4	12·5	110	1	15·0	15·0	130	12	8·2	3·2	249	16	12·1	1·6	192	5	6·4	1·3	087	8	10·5	6·2	092
5·4 „	2	8·0	8·0	105					8	7·6	2·5	161	11	9·0	3·8	203	3	3·3	2·4	199	6	12·8	0·6	295
6·0 „	1	9·0	9·0	090					6	9·0	4·0	164	8	10·5	6·8	113	1	7·0	7·0	110	2	33·5	29 6	301
7·2 „	1	10·0	10·0	090					5	17·8	13·1	083	4	18·3	14·9	093	1	13·0	13·0	085	1	10·0	10·0	040
9·0 „	1	20·0	20·0	095					2	32·5	32·1	092	3	22·7	22·5	076					1	15·0	15·0	055

Station	GORAKHPUR				GWALIOR												IMPHAL							
Time in I.S.T.	1730				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·3	1·1	103	31	3·6	1·2	265	31	4·6	0·8	033	31	3·0	1·0	217	31	1·4	0·4	233	31	3·8	1·9	214
0·15 a. g.	30	7·1	4·6	102	28	11·3	5·0	249	30	11·1	2·5	302	29	11·8	3·6	206	29	3·7	0·9	227	30	6·3	3·5	215
0·3 a. m. s. l	30	7·8	5·6	102	28	8·9	3·3	248	30	9·0	1·7	307	29	9·1	3·6	197								
0·6 „	30	9·0	7·1	104	26	14·2	5·8	267	29	12·9	3·8	306	29	13·9	1·5	210								
0·9 „	28	9·9	7·7	106	21	14·8	7·1	276	29	14·0	3·9	327	29	13 6	1·0	208	29	2·9	0·6	211	30	6·1	3 3	213
1·5 „	27	11·9	8·6	116	18	12·2	3·1	298	27	14·0	2·7	335	26	13·9	1·0	095	26	6·9	1·7	253	30	7·3	3·9	196
2·1 „	25	13·2	8·6	121	14	13·0	3·1	264	19	13·6	2·0	334	21	12·2	2·6	323	19	10·2	1·9	159	26	9·6	3.9	145
3·0 „	23	13·7	8·5	116	12	12·8	0·5	125	15	13·4	4·0	292	16	9.8	2·3	061	11	13·5	7·0	134	17	11·3	6.5	115
3·6 „	20	14·3	11·1	109	11	10·6	4·8	041	14	11·9	3·9	315	12	9·5	4·1	074	10	13·0	4·0	121	16	12·1	7.4	107
4·5 „	15	13·1	9·9	109	9	9·2	4·6	071	10	8·2	3·4	049	5	10·6	5·2	023	6	11·7	1·9	063	13	12·4	7·3	109
5·4 „	13	12·4	8·2	108	8	9·4	4·9	070	7	10·7	2.7	015	1	10·0	10·0	350	4	6·5	1·0	189	7	14·3	5·5	115
6·0 „	11	10·6	8·4	104	7	10·6	4·5	130	5	13·8	1·7	360					3	8·0	6·5	167	5	16·2	5·0	092
7·2 „	10	8·9	6·8	097	7	13.7	8·1	122	4	15·5	0·9	055					2	5·5	4·3	188	1	5·0	5 0	310
9·0 „	8	15·5	9·1	090	6	19·2	14·0	133	3	23·0	13·1	153					1	10·0	10·0	120	1	16·0	16·0	085

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km above mean sea level

August 1957 (Sravana 10–Bhadra 9, 1879 Saka)

Station	IMPHAL				JABALPUR												JAGDALPUR							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	2·0	0.3	256	31	3·8	2.2	223	31	5·0	2·3	253	31	3·2	1·5	221	31	2·5	1·9	232	31	3·7	2·3	250
0·15 a. g. .	30	3·8	0·5	207	30	10·2	6·1	247	29	11·4	4·9	260	27	12·0	6·7	227	26	12·3	9·7	236	23	11·3	8·9	240
0·3 a.m.s.l. .																								
0·6 ,, .					30	11·7	7·0	255	29	12·1	5·2	260	26	13·1	7·3	329	26	7·6	5·9	234	23	8·2	6·2	236
0·9 ,, .	30	3·5	0·4	220	21	15·3	8.8	287	27	14·3	7·5	271	24	15·0	6·9	232	25	15·0	12·1	257	23	12·7	10·0	254
1·5 ,, .	30	6·6	2·3	213	14	14·7	5·5	298	21	12·0	3·7	277	20	12·4	4·2	250	13	17·6	15·4	265	18	13·8	10·8	278
2·1 ,, .	27	11·1	5·0	188	11	10.7	2·8	009	18	11·7	2·4	287	19	9·9	0·5	210	4	18·0	16·7	255	14	12·8	8·7	285
3·0 ,, .	18	11·4	5·6	144	10	11·2	5·1	032	14	12·1	2·1	277	17	9·6	2·3	080	1	7·0	7·0	225	9	13·3	8·6	257
3·6 ,, .	9	12·2	7·8	137	6	8·0	1·5	079	9	10·4	2·6	145	7	7·6	2·4	093	1	3·0	3·0	300	5	13·0	9·3	255
4·5 ,, .	5	11·4	5·5	111	4	11·7	3·4	068	6	11·8	10·3	136	2	8·0	6·7	055	1	4·0	4·0	345	2	20·5	14·5	244
5·4 ,, .	1	5·0	5·0	145	3	8·3	3·9	041	1	15·0	15·0	125	1	9·0	9·0	095	1	3·0	3·0	320				
6·0 ,, .					3	8·3	3·7	086	1	18·0	18·0	120	1	10·0	10·0	070	1	1·0	1·0	225				
7·2 ,, .					2	16·0	15·3	093																
9·0 ,, .					1	19·0	19·0	070																

Station	JAGDALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I.S.T.	2330				0530				1730				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	3·0	2·8	235	31	3·2	0·8	324	31	5 0	2·0	253	31	2·3	0·5	115	31	3·9	1·7	127	31	4·6	1·5	171
0·15 a. g. .	27	12·6	10·3	237	28	11·2	5·6	294	27	10·1	2·9	265	30	6·0	1·7	148	24	8·1	4·1	120	29	9·8	2·4	182
0·3 a. m. s.l. .													30	6·1	1·6	150	24	8·2	4·5	125	29	8·1	1·9	172
0·6 ,, .	27	8·5	6·7	234	28	13·3	6·4	293	27	10·1	3·7	303	29	9·8	1·7	180	24	10·0	5·5	130	29	11·5	2·7	251
0·9 ,, .	26	15·9	12·8	255	27	16·6	10·8	296	27	11·8	3·5	287	28	11·5	1·4	197	24	10·4	5·3	134	26	12·7	2·6	268
1·5 ,, .	19	15·7	13·7	287	25	15·6	8·7	307	23	11·2	2·9	313	18	10·5	3·7	218	21	10·1	3·9	128	19	13·2	3·0	276
2·1 ,, .	13	14·5	10.9	275	19	10·2	3·9	008	14	13·6	7·0	331	16	10·5	2·6	201	18	11·1	3·5	127	16	12·7	0·7	339
3·0 ,, .	11	11·5	8·7	283	14	11·1	5·5	021	6	11·2	3·4	337	13	8·2	1·9	142	13	10·8	4·2	106	11	9·8	4·9	088
3·6 ,, .	3	7·7	3·4	314	11	7.7	5·3	042	4	11 5	5·7	021	10	7·9	3·2	143	11	9·6	3·9	120	8	9·9	3·0	103
4·5 ,, .	1	9·0	9·0	085	9	6·4	4·1	055	3	16·0	7·6	058	9	8·8	8·0	103	7	7·6	5·1	122	7	9·0	2·4	148
5·4 ,, .					7	5 7	1·5	246	2	13 0	11·9	059	6	9·2	8·4	093	6	8·0	7·3	093	5	12·6	9.1	116
6·0 ,, .					5	10·0	6·3	244	2	16·5	14·7	086	4	9·5	9·5	083	6	8·9	7·8	093	4	16·5	14·5	095
7·2 ,, .					3	7·3	4·7	311	1	27·0	27·0	090	1	11·0	11·0	085	3	10·0	9·7	061	1	10·0	10.9	040
9·0 ,, .					1	16·0	16·0	290									3	10·7	10·6	060				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (Sravana 10-Bhadra 9, 1879 Saka)

Station.	JHARSUGUDA								JODHPUR											
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	4·3	1·4	234	31	4·0	1·5	182	31	6·5	5·6	246	31	6·9	5·0	236	29	8·2	5·6	236	31	6·4	4·2	232
0·15 a. g.	25	8·8	2·1	205	26	9·3	4·2	202	31	8·9	7·3	243	29	10·3	7·8	237	29	8·5	6·2	238	29	17·9	12·6	219
0·3 a. m. s. l	25	7·7	1·9	201	26	8·1	4·2	189	31	8·9	7·4	245	29	9·4	7·0	239	29	8·8	6·5	235	29	15·2	10·2	220
0·6 ,,	25	10·4	1·6	196	25	11·4	4·6	219	31	12·8	10·9	250	29	11·2	8·4	238	29	10·2	7·4	243	29	18·0	13·8	228
0·9 ,,	24	11·3	1·9	191	24	11·5	3·3	217	30	15·9	12·7	247	29	13·0	7·9	238	29	11·2	7·2	248	28	16·6	13·2	235
1·5 ,,	22	13·8	2·8	195	23	11·3	1·2	185	28	13·5	5·5	242	21	11·2	4·5	237	29	10·5	5·8	266	24	10·2	6·0	254
2·1 ,,	20	13·2	0·7	119	19	9·8	0·8	223	27	12·0	3·2	029	15	11·8	3·8	052	28	9·7	4·2	305	21	9·1	4·7	331
3·0 ,,	17	10·8	1·7	175	17	7·8	2·5	136	27	12·3	7·2	030	11	12·4	8·3	033	28	11·6	4·6	358	15	9·6	3·1	357
3·6 ,,	15	11·2	3·7	135	13	8·1	4·0	105	25	12·4	7·0	034	11	13 5	10·8	034	28	11·6	5·0	002	7	11·0	3·8	001
4·5 ,,	12	9·8	2·1	127					25	12·1	6·2	032	8	10·2	7·7	054	28	11·3	4·9	352	4	17·5	13·8	360
5·4 ,,	7	10·8	4·9	127					24	11·5	4·1	064	8	12·9	1·8	328	26	10·5	2·9	310	1	8·0	8·0	355
6·0 ,,	5	9·8	6·7	122					22	11·5	4·3	091	8	10·7	1·4	136	26	10·3	2·5	302				
7·2 ,,	3	10·0	9·3	099					21	13·2	5·3	123	7	9·1	3·3	226	25	9·8	1·5	052				
9·0 ,,									20	14·7	6·3	120	2	10·0	9·9	201	21	11·0	4·4	099				

Station	MADRAS												MANGALORE							
Time in I.S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	6·8	5·8	250	31	8.6	7·8	266	31	6 6	1·0	188	31	4·9	3·5	196	31	5·5	2 1	288	31	7·3	6·0	283
0·15 a. g.	31	11·7	10·2	250	31	12·0	11·0	273	31	7·9	1·5	229	31	12·3	9·4	203	27	10·9	7·8	289	27	12·8	12·0	275
0·3 a. m. s. l	31	14·0	12·6	256	31	13·3	12·3	274	31	8·6	2·4	267	31	13·5	10·6	217	27	12·6	10·9	287	27	14·6	13·8	280
0·6 ,,	31	17·6	16·4	267	31	15·2	14·2	278	31	10·6	5·9	284	31	14·0	11·8	240	27	17·1	16·1	290	27	18·0	17·2	285
0·9 ,,	31	19·9	18·8	275	31	16·8	15·8	285	31	12·3	10·1	282	31	15·5	13·6	260	26	20·4	19·6	290	27	20·2	19·5	287
1·5 ,,	31	22·5	21·3	285	31	21·2	20·3	289	31	18·5	17·6	277	30	19·0	17·8	277	22	22·9	22·5	290	22	19·5	19·1	289
2·1 ,,	31	21·2	19·7	288	28	20·0	18·9	287	31	22·4	21·6	276	26	19·8	18·7	279	16	21·3	20·9	291	17	18·1	17·8	289
3·0 ,,	31	19·5	17·7	278	24	18·5	17·5	275	31	21·6	20·9	278	18	18·6	17·5	277	9	17·1	17·1	286	7	17·9	17·5	281
3·6 ,,	31	18·3	16·3	271	20	15·9	14·5	272	31	19·1	18·0	275	7	12·7	11·5	253	4	16·3	16·2	285	5	19·6	18·9	276
4·5 ,,	31	15·7	13·1	262	14	11·7	9·6	272	31	15·7	13·9	274	3	8·7	6·3	237	2	13·5	11·5	284	2	6·5	6·3	253
5·4 ,,	31	14·5	9·2	257	11	10·7	7·2	243	31	14·1	10·4	268									2	4·0	1·0	283
6·0 ,,	31	13·8	4·9	262	9	10·2	5·3	193	31	12·6	8·6	278									1	6·0	6·0	175
7·2 ,,	31	13·0	4·0	092	8	11·9	9·0	095	31	10·3	0·4	337									1	9·0	9·0	170
9·0 ,,	27	17·8	10·0	086	5	13·6	12·5	108	27	16·7	13·1	090									1	17·0	17·0	065

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (Sravana 10–Bhadra 9, 1879 Saka)

Station.	MANGALORE				MINICOY								MOHANBARI							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	6·7	4·9	287	31	9.6	9·2	284	31	9.5	9·0	285	31	9·7	9·2	284	31	0·8	0.5	109	31	1·2	0·3	072
0·15 a. g.	30	1·20	10·5	285	26	16·8	15·9	284	30	17·4	16·9	285	29	16·9	16·3	284	22	6·5	2·9	096	30	4·7	1·5	080
0·3 a. m. s. l.	30	13·9	12·6	286	26	18·3	17·6	284	30	18·2	17·7	285	29	17·3	16·7	286	22	6·5	2·7	100	30	5·0	1·5	088
0·6 ,,	30	17·6	16·6	288	26	20·4	19·2	288	30	20·0	19·6	289	29	20·8	20·1	289	21	6·9	1·6	132	29	4·9	1·1	150
0·9 ,,	30	19·9	19·1	289	26	22·3	21·6	291	30	22·2	21·7	292	29	23·1	22·6	291	21	7·7	1·7	202	29	4·4	1·1	219
1·5 ,,	25	19·8	19·5	294	26	23·1	22·6	295	30	23·6	23·1	292	29	23·7	23·2	294	16	3·7	0·6	210	28	4·8	2·9	217
2·1 ,,	20	19·8	19·4	294	26	21.4	21·0	292	28	22·1	21·7	290	29	23·6	23·2	290	15	4·4	1·0	196	25	6·5	4·9	204
3·0 ,,	13	19·2	18·6	288	23	17·8	17·1	286	24	18·1	17·0	285	25	19·5	18·9	284	13	6·2	1·4	185	22	7·8	5·7	195
3·6 ,,	8	16·0	15·2	276	20	15·0	14·3	287	22	16·9	16·7	281	23	15·7	14·7	282	11	6·5	2·4	197	19	8·7	3·5	184
4·5 ,,	4	13·3	12·9	269	13	12·7	10·5	287	17	13·2	12·0	277	17	13·6	12·3	282	10	8·9	3·1	207	16	9·3	1·7	190
5·4 ,,	1	4·0	4·0	290	7	5·6	3·9	317	12	10·9	9·1	276	9	8·3	6·4	284	6	11·1	5·7	241	15	10·1	2·2	171
6·0 ,,	1	7·0	7·0	260	4	7.7	1·9	273	11	8·5	6·5	286	3	7·0	4·3	262	6	13·0	4·4	244	11	8·9	3·7	150
7·2 ,,					2	11·0	4·1	071	10	7·9	1·0	112					3	13·0	2·0	060	5	12·2	4·5	070
9·0 ,,					2	18·5	17·1	096	5	19·4	19·2	087					1	23·0	23·0	040	4	13·5	8·7	084

Station	MOHANBARI				MUSSOORIE								NAGPUR											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	1·2	0·8	055	31	2·7	1·2	153	31	3 0	1·9	188	31	4·0	2·1	298	31	7·8	6·0	285	31	6·3	4·3	279
0·15 a. g.	28	6·3	3·6	053	8	7·1	1·3	038	6	5·3	3·0	199	31	6·9	4·7	278	28	13·1	10·1	282	31	7·9	5·5	280
0·3 a. m. s. l.	28	6·3	3·2	064																				
0·6 ,,	28	5·7	2·6	091									31	9·2	6·6	285	28	12·6	9·6	291	31	9·3	6·9	282
0·9 ,,	28	5·0	1·5	120									31	15·1	11·6	300	28	13·0	10 4	295	31	12·4	9·6	285
1·5 ,,	26	6·0	3·3	220									31	15·0	10·7	307	20	13·3	9·6	308	31	12·9	9·5	295
2·1 ,,	24	6·1	4·5	215	8	6·9	2·1	005	6	6 2	2·4	226	31	12·5	7·0	311	6	13·7	9·0	327	31	12·0	8·1	295
3·0 ,,	14	6·8	4·4	211	6	7·5	7·3	129	6	6·5	2·0	125	31	11·0	5·1	313	3	11·7	10·8	283	31	11·3	5·6	301
3·6 ,,	7	9·0	4·1	151	6	9·3	7·5	125	3	5·3	1·8	313	31	11·5	4·1	331					31	11·1	4·4	323
4·5 ,,	2	6·5	5·5	092	3	7·7	3·6	126	3	7 7	2·2	063	30	12·4	4·2	027					31	11·2	3·0	015
5·4 ,,	1	7.0	7·0	090	3	5 0	1·5	314	1	9·0	9·0	190	30	13·5	7.0	064					30	12·4	5·6	060
6·0 ,,	1	6·0	6·0	095	3	5·7	2·9	243	1	10·0	10·0	185	28	14·5	9·1	080					29	12·6	6·8	078
7·2 ,,					2	11·5	11·3	253	1	14·0	14·0	190	28	15·9	12·8	095					27	14·0	10·9	088
9·0 ,,					1	17·0	17·0	195					26	19·0	16·5	095					25	18·6	17·2	088

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (Sravana 10–Bhadra 9, 1879 Saka)

Station	NAGPUR				NANPARA								NEW DELHI											
Time in I. S. T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·9	3·2	253	31	3·3	2·5	090	31	3·3	1·6	100	31	5·1	2·2	130	31	5·0	1·2	104	31	4·5	1·9	070
0·15 a. g.	29	11·3	8·8	268	29	12·7	10·7	113	29	8·6	4·4	125	31	11·1	4·5	163	31	9·0	1·4	113	31	10·2	4·3	080
0·3 a. m. s. l					29	13·1	11·6	120	29	8·8	4·7	124	31	11·1	4·6	161	31	8·3	2·7	089	31	9·9	3·9	083
0·6 ,,	29	12·7	9·7	278	28	16·1	14·4	124	29	8·8	5·5	125	31	10·2	2·4	177	31	9·2	3·3	103	31	8·8	3·6	091
0·9 ,,	29	13·4	9·7	287	27	16·0	11·5	125	29	7·6	4·6	128	31	10·5	1·6	185	30	9·9	2·7	090	31	8·2	3·3	080
1·5 ,,	27	12·3	8·0	303	20	14·3	10·6	119	24	11·0	6.9	133	31	11·9	1·5	060	29	12·3	2.7	097	31	9·3	1·7	078
2·1 ,,	22	10·9	5·7	302	15	15·8	8·7	103	20	11·7	8·2	125	31	11·4	2·6	059	27	14·2	3·1	114	31	10·8	0·7	329
3·0 ,,	14	10·9	5·0	325	9	12·0	1·5	082	19	12·7	9·1	116	31	10·6	3·3	060	27	13·1	4·9	114	13	10·6	0·5	325
3·6 ,,	5	8·6	4·2	040	6	9·3	3·6	038	13	11·1	7·0	107	31	10·5	3·0	077	23	13·5	5·0	104	31	10·5	1·4	059
4·5 ,,	4	12·7	12·7	070	3	8·0	6·5	122	10	8·5	6·9	098	31	10·1	2·3	104	22	14·0	3·5	113	31	10·2	1·4	091
5·4 ,,					2	7·5	5·2	122	7	9.0	7·0	102	31	10·9	3·8	151	21	12·9	3·7	161	31	10·0	3·3	115
6·0 ,,									7	8·9	6·7	093	31	10·5	5·5	163	20	13·8	5·1	171	31	10·4	2·0	186
7·2 ,,									3	4·3	3·0	091	31	10·1	6·5	181	20	13·1	6·3	206	31	9·9	2·9	215
9·0 ,,									2	10·5	8·6	147	31	9·4	4·9	187	18	14·8	7·7	212	30	10·8	4·1	212

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I. S. T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·1	2·2	117	31	3·3	3·2	268	31	5·9	5·6	265	31	4·3	4·1	260	31	10·2	9·6	234	31	12·0	11·5	233
0·15 a. g.	31	10·8	8·0	129	31	11.3	11·1	261	31	15·4	15·0	262	31	12·5	12·2	260	31	16·8	16·1	237	29	16·1	15·7	237
0·3 a. m. s. l	31	9·1	6·9	121													31	19·3	18·6	240	29	17·2	16·9	238
0·6 ,,	31	11·9	7·0	139	31	5·6	5·5	264	31	8·7	8·4	264	31	6·3	6·2	247	30	22·8	22·1	242	29	20·7	20·2	240
0·9 ,,	31	11·7	3·9	142	31	15·2	14·8	264	31	16·9	16·8	265	31	15·5	15·2	265	30	23·5	22·6	244	24	20·3	19·9	240
1·5 ,,	30	11·8	0·6	135	16	21·1	20·7	269	23	21·9	21·6	270	18	22·3	22·1	270	27	19·2	18·4	248	14	19·8	19·1	247
2·1 ,,	29	11·7	2·1	003	10	15·5	14·1	277	11	21·5	21·4	268	13	16·4	16·1	276	24	17·0	15·8	248	11	17·8	16·7	243
3·0 ,,	28	10·6	3·6	040	6	7·8	6·6	270	6	9·8	8·9	268	11	9·1	7 0	281	21	13·3	11·4	259	8	14·7	13·1	248
3·6 ,,	20	10·0	2·9	037	6	5·5	3·2	231	1	5·0	5·0	190	8	6·1	5·1	268	18	13·8	9·9	253	6	13·3	11·6	246
4·5 ,,	13	6·8	3·6	063	3	6·3	5·0	049					5	6·8	6·4	320	17	11·8	6·1	226	4	16·5	14·7	255
5·4 ,,	8	10·0	6·4	145	1	10·0	10·0	355					2	8·5	7·9	359	16	13·2	2·2	222	3	26·3	26·0	245
6·0 ,,	8	9·2	4·8	160	1	9·0	9·0	345					2	6·5	4·0	354	16	12·8	1·1	182				
7·2 ,,	3	10·3	2·9	235	1	4·0	4.0	330					1	2·0	2·0	045	15	12·7	7·5	080				
9·0 ,,	2	9·5	6·6	090													11	18.5	15·2	078				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km above mean sea level

August 1957 (Sravana 10–Bhadra 9, 1879 Saka)

Station	PORT BLAIR								RAIPUR												SANTA CRUZ			
Time in I. S. T.	1730*				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	10·6	9·8	231	31	9·2	8·8	230	31	3·5	2·7	244	31	5·3	3·5	255	31	4·6	3·4	240	31	8·7	7·5	263
0·15 a. g.	30	17·2	16·5	238	28	15·6	15·3	233	26	11·8	8·7	239	25	11·9	8·0	255	23	12·8	8·9	237	30	14·4	12·4	270
0·3 a. m. s. l.	30	18·8	18·3	239	28	16·3	15·9	234													30	15·2	11·8	270
0·6 ,,	30	22·0	21·4	243	28	20·0	19·6	236	26	14·5	8·7	257	25	13·1	9·3	258	23	14·3	9·3	246	30	16·6	14·0	270
0·9 ,,	29	23·3	22·6	246	23	18·6	18·1	241	23	15·7	7·5	268	24	11·6	7·9	271	23	15·0	9·2	257	30	18·0	17·1	267
1·5 ,,	24	19·6	18·8	252	19	14·5	13·9	246	17	15·1	7·6	278	21	13·3	7·9	275	19	11·7	7·1	256	30	17·5	16·5	270
2·1 ,,	23	15·6	15·2	255	15	10·9	9·9	243	14	13·2	5·8	270	16	12·8	4·0	293	15	11·3	5·7	265	30	14·9	14·0	270
3·0 ,,	20	12·0	10·7	257	11	8·7	6·6	257	12	11·3	3·7	263	9	11·2	3·2	063	11	10·8	4·0	230	30	12·5	11·9	270
3·6 ,,	18	10·9	9·1	258	6	6·7	3·5	218	7	7·3	1·5	222	7	10·3	1·7	155	6	8·4	3·1	132	30	12·6	9·5	284
4·5 ,,	16	9·8	6·7	245	6	8·0	5·5	207	4	6·3	1·1	029	5	12·6	5·1	110	2	17·0	4·8	199	30	9·4	4·3	298
5·4 ,,	14	12·3	4·3	224	3	5·7	1·7	095	2	9·5	6·7	038	1	15·0	15·0	085					30	10·2	4·6	354
6.0 ,,	14	11·9	1·7	186	2	7·5	4·7	059	1	10·0	10·0	010	1	15·0	15·0	080					29	9·5	5·6	016
7·2 ,,	13	9·5	3·4	077									1	8·0	8·0	095					29	10·9	5·5	050
9·0 ,,	12	19·9	19·1	070																	28	16·2	11·6	085

Station	SANTA CRUZ												TEZPUR											
Time in I. S. T.	1130				1730*				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	9·0	7·4	265	31	10·5	9·8	260	31	7·2	5·9	254	31	0·8	0·2	180	31	0·7	0·1	103	31	0·4	0·0	180
0·15 a. g.	26	11·7	10·7	255	31	14·8	13·6	268	29	12·8	11·6	252	27	7·5	2·5	149	30	6·7	1·4	067	27	6·5	1·2	191
0·3 a. m. s. l.	24	13·2	12·3	255	31	15·9	14·8	267	29	13·6	12·7	259	27	7·8	2·4	162	30	6·6	1·2	087	27	6·4	1·4	224
0·6 ,,	24	15·4	15·0	261	31	17·4	16·6	268	26	15·0	14·5	264	26	8·5	2·9	221	29	7·3	1·3	186	27	7.1	3·2	239
0·9 ,,	14	17·6	17·3	271	31	18·9	18·3	270	20	16·0	15·7	266	23	9·3	4·3	254	28	8·1	2·2	218	26	7·5	3·5	251
1·5 ,,	3	18·0	17·6	266	31	19·9	19·0	270	14	14·6	14·4	264	17	7·6	3·9	257	26	10·1	5·0	213	24	9·4	5·7	243
2·1 ,,	2	16·0	15·7	256	31	17·2	16·1	266	5	16·8	16·4	268	15	7·4	1·4	250	26	12·0	6·1	211	19	8·3	5·2	225
3·0 ,,	1	15·0	15·0	265	31	13·4	11·7	265	1	6·0	6·0	235	10	11·7	4·2	131	23	11·9	2·8	168	10	10·7	3·7	151
3·6 ,,	1	15·0	15·0	270	31	11·7	9·3	268	1	3·0	3·0	305	8	8·7	3·7	125	18	10·7	2·1	134	6	11·7	5·9	120
4·5 ,,					31	9·9	5·9	275					5	13·0	12·9	107	14	12·1	5·6	114	5	18·4	13·7	100
5·4 ,,					31	10·2	2·6	287					3	16·0	15·7	088	12	14·3	7·6	087	1	11·0	11·0	110
6·0 ,,					30	10·5	1·0	042					3	12·7	12·3	082	11	13·6	6·8	095				
7·2 ,,					30	11·0	6·9	076					1	27·0	27·0	070	10	16·6	8·5	080				
9·0 ,,					30	17·0	14·8	080					1	24·0	24·0	060	4	23·0	22·1	073				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km above mean sea level

August 1957 (Sravana 10-Bhadra 9, 1879 Saka)

Station	TIRUCHIRAPALLI												TRIVANDRUM											
Time in I.S.T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	11·5	11·1	270	31	15·9	13·7	276	31	13·1	12·7	268	31	6·0	5·7	321	31	9·1	8·5	317	31	12·4	11·7	300
0·15 a. g.	31	18·4	18·0	277	30	19·8	17·5	274	27	16·6	15·8	266	31	10.2	9·8	321	30	13·6	12·9	306	31	14·8	14·2	302
0·3 a. m. s. l	31	21·8	21·5	276	30	20·3	18·1	273	27	17·4	16·7	257	31	12·7	12·4	318	30	14·6	14·0	305	31	16·3	15·7	302
0·6 „	31	27·3	27·0	277	30	19·6	18·2	271	27	24·1	23·4	267	31	17·9	17·4	310	27	18·0	17·8	308	31	19.5	19·2	303
0.9 „	31	24·8	24·1	280	30	19·6	18·7	268	27	24·3	23·5	276	31	22·7	21·9	303	22	19·7	19·3	308	31	22·8	22·5	305
1·5 „	31	20·4	19·6	278	30	18·9	17·8	268	27	20·7	19·9	276	29	25·4	24·3	299	9	23·3	22·3	305	31	24·9	24·5	304
2·1 „	31	16·5	15·5	279	27	18·9	17·5	267	26	15.8	14·9	281	29	25·7	24·7	294	4	17·0	16·5	307	31	23·1	22·6	300
3·0 „	26	16·1	15·0	282	23	19·2	18·0	280	21	14·1	13·1	292	29	21·7	21·3	289	2	12·5	12·5	278	31	19·8	19·4	289
3·6 „	21	14·0	13·2	277	18	17·8	16·8	288	15	11·6	9·7	287	29	18·4	17·7	287	1	15·0	15·0	275	31	17·2	16·1	285
4·5 „	15	12·5	11·1	279	17	15·4	13·7	268	9	13·7	11·9	270	29	13·7	12·4	285	1	6·0	6·0	255	31	13·2	12·0	284
5·4 „	11	12·0	7·8	278	14	12·4	11·1	286	2	4·0	1·1	236	29	12·2	9·1	290					31	11·0	8·3	289
6·0 „	7	10·3	6·3	271	13	8·2	5·2	285	2	7·5	6·5	182	29	11·8	6·0	294					31	10·3	6·4	295
7·2 „	3	11·0	10·1	105	10	9·3	2·8	292	1	7·0	7·0	010	29	10·2	3·4	081					31	9·9	2·1	074
9·0 „	2	17·0	16·9	065	7	20·7	18·1	111					26	18·5	16·3	089					26	19·9	17·1	090

Station	TRIVANDRUM				UDAIPUR												VENGURLA							
Time in I. S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6·7	6.2	329	31	2·4	1·9	244	31	3.5	2·8	259	31	2·2	1·8	230	31	2·9	2·8	268	31	6·1	5·8	271
0·15 a. g.	29	14·6	13·9	321	29	8·1	6·7	262	29	9·2	6·9	254	28	8·2	6·7	242	26	12·3	10·4	270	24	13·5	12·9	278
0·3 a. m. s. l.	29	17·9	17·3	319													26	14·5	13·0	270	24	16·4	15·8	282
0·6 „	29	23·5	23·0	311													22	17·3	16·7	279	22	21·2	20·5	283
0·9 „ „	29	25·3	24·8	311	29	11·0	9·1	270	29	9·7	7·2	261	28	10·4	8·3	252	15	20·2	19·9	284	14	21·4	20·4	284
1.5 „	25	26·3	26·0	302	20	10·7	5·9	309	25	10·6	6·8	302	23	12·5	7·0	277	6	18·7	18·7	285	6	18·3	17·4	287
2·1 „	16	26·9	26·5	298	16	8·4	6·4	035	20	10·3	6·1	334	21	8·3	5·0	009	3	22·7	22·7	273	3	16·0	16·0	289
3·0 „	3	13·0	12·2	279	10	13·0	10·2	055	13	12·4	9·2	010	18	11·3	8·3	032	1	27·0	27·0	275				
3·6 „	3	8·7	8·5	282	6	8·5	3·7	079	13	9·7	6·2	003	16	9·8	6·7	043								
4·5 „	1	8·0	8·0	275	3	5·3	5·2	286	8	7·4	5·7	293	11	10·3	6·0	049								
5·4 „									4	7·5	7·3	303	5	7·4	7·0	338								
6·0 „									4	7·3	4·1	318	1	5·0	5·0	335								
7·2 „									3	6·7	6·2	046												
9·0 „									1	15·0	15·0	060												

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

August 1957 (Sravana 10–Bhadra 9, 1879 Saka)

Station	VENGURLA				VERAVAL												VISAKHAPATNAM			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·0	2·0	270	31	13·2	12·7	268	31	10·8	10·5	270	30	14·3	13·7	270	31	10·8	10·2	270	31	3·1	2·8	234
0·15 a. g.	27	11·4	10·2	283	31	16·9	16·2	268	27	15·6	15·1	265	30	17·2	16·6	270	30	15·7	14·6	265	30	8·2	7·5	242
0·3 a. m. s. l	27	13·6	12·9	279	31	17·6	16·7	268	27	17.1	16·2	270	30	18·3	17·6	273	30	17·0	15·8	269	30	10·8	10·1	248
0·6 ,,	24	17·9	17·4	282	31	18·4	17·3	270	26	19·5	18·2	270	30	19·9	18·8	273	29	17·8	16·6	275	29	11·9	10·6	257
0.9 ,,	14	21·5	21·0	282	31	19·4	17·9	270	20	18·5	16·9	275	30	21·5	19·9	274	21	15·7	15·0	267	28	12·7	10·6	274
1·5 ,,	9	18·3	18·0	283	31	18·1	14·7	270	10	15·9	14·6	265	30	19·9	16·2	274	14	12·9	9·8	260	24	13·4	10·3	291
2·1 ,,	7	17·7	16·9	278	31	15·3	9·0	275	2	9·0	7·2	202	30	17·7	11·2	282	5	11·2	1·9	352	22	13·0	9·6	297
3·0 ,,	3	13·3	12·9	295	31	12·5	3·9	330					30	13·7	6·3	298	3	8·3	4·6	026	14	11·1	6·8	283
3.6 ,,	1	5·0	5·0	345	31	12·2	4·6	360					30	12·4	4·7	327	1	8·0	8·0	285	9	10·2	5·2	303
4·5 ,,	1	2·0	2·0	230	31	11·7	5·4	025					30	11·5	2·5	017					6	9·3	4·8	066
5·4 ,,					31	12·8	7·3	038					30	13·2	5·7	025					4	9·5	9·2	110
6·0 ,,					31	13·3	8·3	052					30	13·3	4·3	060					2	7·5	7·4	107
7·2 ,,					31	15·7	12·0	085					30	16·1	11·7	082								
9·0 ,,					24	20·2	18·1	092					29	24·1	20·2	090								

Station	VISAKHAPATNAM							
Time in I.S.T.	1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D
Surface	31	8·3	7·5	234	31	3·9	3·6	239
0·15 a. g.	30	11·3	9·5	231	29	9.1	8·3	241
0·3 a. m. s. l	30	12·9	11·1	237	29	10·8	9·8	252
0·6 ,,	29	12·9	11·3	252	28	11·3	10·1	268
0·9 ,,	28	12·5	10·8	263	28	10·6	9.2	277
1·5 ,,	28	13·1	10·6	278	25	11·4	9·6	287
2·1 ,,	27	13·1	10·2	280	23	9·1	7·5	294
3·0 ,,	23	12·4	8·6	264	17	12·4	9·0	291
3·6 ,,	21	13·3	8·5	273	12	12·4	7·3	298
4·5 ,,	16	14·7	8·4	257	6	10·3	4·3	073
5·4 ,,	10	13·6	9·0	262				
6·0 ,,	5	13·0	6·1	230				
7·2 ,,	1	18·0	18·0	115				
9·0 ,,	1	21·0	21·0	085				

Table V—Monthly Mean Directions and Velocities of Upper Winds

Winds above 9.0 km. above mean sea level

August 1957 (Sravana 10–Bhadra 9, 1879 Saka)

AGARTALA

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	3	32·7	32·5	071
12·0	2	42·5	42·2	054
14·1	1	55·0	55·0	065
16·2	1	37·0	37·0	055

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	12·0	12·0	355
12·0	1	17·0	17·0	040

AHMEDABAD

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	2	23·0	22·9	086
12·0	1	40·0	40·0	105

AMBALA

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	5	19·2	14·2	238
12·0	3	18·0	17·6	246
14·1	3	24·3	21·3	268
16·2	2	24·5	22·3	325
18·0	2	8·5	4·8	011
21·0	2	28·5	28·5	078
24·0	1	35·0	35·0	100
27·0	1	40·0	40·0	136
30·0	1	47·0	47·0	105

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	5	21·4	18·0	269
12·0	5	27·0	18·8	267
14·1	3	32·3	25·7	288
16·2	1	35·0	35·0	265
18·0	1	35·0	35·0	260

AMRITSAR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	19	21·0	17·0	257
12·0	17	25·9	21·0	255
14·1	14	23·4	19·3	273
16·2	9	17·2	12·9	275
18·0	6	16·7	5·7	104
21·0	2	18·5	15·5	097
24·0	1	35·0	35·0	120

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	21	25·0	22·0	243
12·0	18	28·2	20·8	247
14·1	12	36·5	30·9	239
16·2	11	28·8	24·4	240
18·0	5	19·2	12·0	101
21·0	3	26·0	25·0	096
24·0	1	36·0	36·0	090

ANANTAPUR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	31·0	30·9	090
12·0	1	57·0	57·0	000

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	3	34·3	34·2	089
12·0	2	53·0	52·3	093
14·1	2	59·0	52·4	067

BAGHDOGRA

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	13·5	12·0	056
12·0	2	18·5	18·1	095
14·1	1	21·0	21·0	085

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	2	19·0	17·6	095
12·0	2	25·5	24·9	090
14·1	2	27·0	26·7	072

BAMRAULI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	16	16·3	12·3	091
12·0	15	20·6	13·9	098
14·1	8	25·2	20·8	084
16·2	3	29·3	25·8	068
18·0	2	41·0	39·0	088

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	17	19·4	18·3	095
12·0	14	22·0	21·0	097
14·1	8	22·3	20·0	095
16·2	4	25·5	18·0	095
18·0	2	28·0	27·5	076
21·0	1	36·0	36·0	070

BAREILLY

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	6·0	2·5	129
12·0	1	16·0	16·0	160

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	19·0	19·0	120
12·0	1	11·0	11·0	200

BHAGALPUR

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	27·0	27·0	080

BHUJ

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	6	16·8	12·8	111
12·0	5	24·2	23·5	093
14·1	5	32·0	30·7	117
16·2	3	4·7	37·3	103
18·0	1	28·0	28·0	090
21·0	1	62·0	62·0	090
24·0	1	78·0	78·0	120

BIKANER

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	11·0	4·4	054

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	4	14·0	9·5	182
12·0	2	16·5	11·3	183

DARJEELING

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	25·0	25·0	075
12·0	1	29·0	29·0	035

DUM DUM

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	27	24·0	23·0	087
12·0	26	29·2	28·1	085
14·1	20	37·5	33·5	081
16·2	13	43·0	42·7	086
18·0	7	68·0	67·0	084
21·0	1	103·0	103·0	270
24·0	1	111·0	111·0	270

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	25	22·3	20·4	084
12·0	24	26·9	26·4	087
14·1	19	31·5	30·3	079
16·2	17	46·3	45·8	081
18·0	7	50·7	48·7	087
21·0	1	78·0	78·0	080

GANNAVARAM

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	3	20·0	19·9	101
12·0	1	45·0	45·0	090

GAUHATI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	13	19·6	14·8	099
12·0	11	23·5	18·2	084
14·1	3	24·0	21·8	072
16·2	2	27·5	24·1	090

1730 hrs*

Ht. in Km.	n	V	v	D
10·5	9	21·4	18·2	062
12·0	6	22·2	15·7	050
14·1	1	21·0	21·0	050

GAYA

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	27·0	27·0	080
12·0	1	30·0	30·0	090

GOPALPUR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	36·5	27·1	158

1730 hrs

Ht. in Km.	n	V	v	D
10·5	3	32·0	31·9	083
10·2	2	33·5	33·3	075

GORAKHPUR

1730 hrs

Ht. in Km.	n	V	v	D
10·5	6	17·0	9·4	104
12·0	6	21·2	19·5	108
14·1	5	24·4	21·6	099
16·2	4	19·0	14·1	076
18·0	3	27·3	27·0	107
21·0	2	47·0	46·5	094

GWALIOR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	6	23·0	17·7	128
12·0	6	22·9	16·4	124
14·1	5	22·8	14·6	100
16·2	4	28·5	20·0	103
18·0	4	28·0	23·6	087
21·0	2	38·5	38·3	096

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	20·0	20·0	250
12·0	1	15·0	15·0	235
14·1	1	18·0	18·0	190

IMPHAL

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	43·0	43·0	080
12·0	1	41·0	41·0	050

JABALPUR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	19·0	19·0	105
12·0	1	32·0	32·0	105

JAMSHEDPUR

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	8·0	8·0	005
12·0	1	22·0	22·0	010

JODHPUR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	18	16·3	8·1	108
12·0	13	20·1	12·7	116
14·1	11	26·8	22·6	111
16·2	5	31·6	19·9	100
18·0	1	48·0	48·0	060

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	1	11·0	11·0	125
12·0	1	21·0	21·0	105
14·1	1	28·0	28·0	090
16·2	1	25·0	25·0	120
18·0	1	42·0	42·0	120
21·0	1	47·0	47·0	130
24·0	1	83·0	83·0	115

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	19	15·1	7·9	111
12·0	18	22·3	17·2	120
14·1	12	28·1	22·6	115
16·2	5	27·8	21·3	122
18·0	1	21·0	21·0	120

MADRAS

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	25	29·3	27·7	087
12·0	21	48·9	47·1	083
14·1	15	72·1	70·3	087
16·2	9	71·0	42·0	083
18·0	1	90·0	90·0	080
21·0	1	22·0	22·0	150

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km. above mean sea level

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

MADRAS

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	5	23·8	22·8	113
12·0	4	44·5	41·5	094
14·1	2	54·5	54·1	083
16·2	1	58·0	58·0	100

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	22	26·4	24·8	083
12·0	21	42·5	41·7	077
14·1	16	67·6	66·3	080
16·2	10	70·8	69·2	083
18·0	4	81·0	79.0	074

MANGALORE

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	17·0	17·0	125
12·0	1	41·0	41·0	120
14·1	1	68·8	68·0	095
16 2	1	91·0	91·0	100

MINICOY

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	55·0	55·0	090

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	3	31·0	30·5	094
12·0	1	55·0	55·0	090

MOHANBARI

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	39·0	39·0	030
12·0	1	32·0	32·0	055

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	14·0	14·0	110

MUSSOORIE

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	29·0	29·0	210

NAGPUR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	18	24·4	22·2	093
12·0	12	33·0	32·6	087
14·1	7	43·7	42·6	086
16·2	4	44·3	43·3	088

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	19	24·8	23·9	088
12·0	17	30·1	29·2	089
14·1	12	38·5	37·2	085
16·2	2	51·5	51·0	079
18·0	1	76·0	76·0	090

NEW DELHI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	31	11.2	5.8	194
12·0	31	14·3	5·7	200
14·1	26	16·5	3·8	178
16·2	24	17·3	12·9	079
18·0	16	21·7	19·8	090
21·1	11	32·5	32·0	090
24·0	2	37·0	35·7	109
27·0	1	67·0	67·0	110

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	18	14·2	9·9	210
12·0	17	14·9	9·4	222
14·1	15	17·3	6·1	221
16·2	14	18·3	2·8	069
18·0	14	21·9	18·0	085
21·0	4	33·0	32·3	092

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	29	10·8	4·5	201
12·0	28	12·8	7·0	179
14·1	25	15·9	10·5	140
16·2	24	17·7	14·7	106
18·0	18	22·6	20·3	106
21·0	14	34·4	32·5	093
24·0	3	36·7	35·1	094
27·0	1	57·0	57·0	110

PORT BLAIR

0530 hrs *

Ht. in Km.	n	V	v	D
10.5	9	29.2	26.6	065
12·0	7	39.7	35·1	073
14·1	4	61·8	61·6	088
16·2	1	31.0	31·0	100

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	7	32·9	31·2	066
12·0	4	40·3	37·2	063
14·1	1	55·0	55·0	070

SANTA CRUZ

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	27	22·7	21·9	090
12·0	21	30·1	29·5	095
14·1	18	48·8	47·2	090
16·2	12	67.9	66·7	090
18·0	2	57·0	57·0	090

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	23	25·6	24·3	085
12·0	20	36·7	35·8	090
14·1	18	55·8	54·8	090
16·2	18	67·9	66·8	090
18·0	15	71·6	70·6	088
21·0	2	89·5	86·5	088

TEZPUR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	27·0	27·0	035
12·0	1	38·0	38·0	065
14·1	1	38·0	38·0	055
16·2	1	44·0	44·0	045
18·0	1	44·0	44·0	065
21·0	1	63·0	63·0	055
24.0	1	71·0	71·0	060

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	2	37·0	36·3	072
12·0	1	20·0	20·0	085

TIRUCHIRAPALLI

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	28·0	28·0	090
12·0	1	49·0	49·0	100
14·1	1	31·0	31·0	100

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	4	24·5	23·7	089
12·0	4	38·3	38·2	093
14·1	2	71·0	69·6	083
16·2	1	73·0	73·0	090

TRIVANDRUM

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	19	32·8	30·9	087
12·0	16	50·5	49·6	080
14·1	13	73·2	72·5	083
16·2	9	52·1	50·8	087
18·0	2	43·0	42·7	093

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	23	34·2	32·4	092
12·0	17	46·9	45·2	082
14·1	14	68·8	58·6	083
16·2	10	68·4	67·9	090
18·0	6	70·3	70·0	089

VERAVAL

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	20	28·1	27·3	095
12·0	20	41·4	39·7	097
14·1	17	57·2	56·4	103
16·2	11	47.1	46·2	090
18·0	5	54·8	52·4	082
21·0	2	49·5	49·3	095

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	26	32·2	29·8	099
12·0	23	42·9	39·8	098
14·1	21	60·7	59·0	102
16·2	18	63·1	61·7	094
18·0	10	71·4	70.7	090
21.0	7	75·1	74.4	090
24·0	1	73·0	73·0	100

RADIOSONDE DATA

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

During the month, observations of upper air temperature, pressure and humidity were made at 13 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I.M.D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

S. No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in G.M.T. during the month	Remarks
1	Allahabad	Clock type	1st October 1944	00 and 12	
2	Amritsar	Clock type	21st June 1957	00 and 12	
3	Bombay	Clock type	7th September 1954	00 and 12	
4	Calcutta	Clock type	13th December 1946	00 and 12	Fan type used from 13-12-46 to 30-11-47.
5	Gauhati	Clock type	22nd July 1955	00 and 12	
6	Jodhpur	Clock type	17th April 1946	00 and 12	
7	Madras	Fan type	29th June 1946	00 and 12	
8	Nagpur	Fan type	1st October 1946	00 and 12	
9	New Delhi	Clock type	3rd December 1943	00 and 12	
10	Port Blair	Fan type	4th December 1949	00 and 12	
11	Trivandrum	Fan type	1st July 1947	00 and 12	
12	Veraval	Fan type	3rd October 1944	00 and 12	
13	Visakhapatnam	Fan type	8th December 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (989 mb.)						AMRITSAR (974 mb.)						BOMBAY (1003 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	300·1	303	298	298·4	31	230	300·1	303	297	298·1	31	13	299·0	300	297	297·0
1000	28	—2	..	..	..	..	29	—1	..	..	..	..	31	38	..	..	..	..
900	28	928	296·8	299	294	293·2	29	930	297·6	301	293	292·6	31	963	294·3	297	291	292·2
850	28	1427	294·3	298	290	290·5	29	1429	294·6	299	287	286·3	31	1457	291·7	295	289	289·7
800	28	1951	291·6	296	288	287·9	29	1953	291·6	295	287	287·2	31	1978	289·4	294	286	287·1
700	28	3087	286·2	291	282	281·5	29	3087	285·8	295	279	279·5	31	3109	284·6	291	281	281·1
600	27	4373	280·0	286	277	273·3	29	4364	278·0	283	267	271·2	31	4388	278·8	286	273	274·4
500	25	5849	272·1	278	268	270·0	29	5831	270·7	276	264	262·4	31	5863	271·7	279	267	270·2
400	23	7598	261·9	269	256	..	29	7577	263·3	273	255	..	30	7616	263·0	273	253	..
300	19	9749	247·9	258	240	..	22	9723	248·3	258	235	..	30	9786	250·5	263	243	..
250	16	11052	238·4	248	229	..	18	11023	238·9	250	224	..	23	11064	239·5	252	225	..
200	14	12570	226·1	241	215	..	17	12577	229·1	243	218	..	22	12584	228·1	238	212	..
175	11	13486	222·4	236	213	..	17	13457	223·1	237	212	..	20	13472	222·0	233	207	..
150	8	14510	217·0	232	209	..	15	14467	217·5	232	205	..	18	14478	215·7	227	201	..
125	..	..	..	..	..	..	12	15623	210·8	231	197	..	15	15579	207·4	221	193	..
100	..	..	..	..	..	..	12	16980	206·6	230	190	..	12	16886	200·5	216	180	..
80	..	..	..	..	..	..	10	18351	203·6	229	183	..	..	..	..	..	..	..

	CALCUTTA (1000 mb.)						GAUHATI (998 mb.)						JODHPUR (976 mb.)					
Surface	30	6	300·0	301	298	299·0	31	49	299·9	301	299	299·6	29	218	300·3	304	297	295·3
1000	30	10	..	..	..	..	31	32	..	..	..	..	29	3	..	..	..	..
900	30	934	295·2	298	293	292·7	31	959	294·3	298	288	293·3	29	934	296·6	301	292	290·6
850	30	1430	292·6	296	289	290·6	31	1453	291·9	296	286	290·5	29	1432	294·9	299	291	287·2
800	30	1951	290·2	294	287	287·7	31	1973	289·7	295	285	288·1	29	1957	292·6	297	289	283·3
700	30	3081	285·2	291	281	281·5	31	3106	283·7	289	276	281·8	29	3094	286·3	290	282	276·7
600	30	4362	279·1	286	274	274·5	31	4372	277·3	283	270	275·5	28	4375	278·4	283	274	267·4
500	30	5839	271·6	280	266	270·7	31	5837	270·0	277	262	270·3	28	5845	270·8	275	265	264·0
400	29	7587	261·7	271	255	..	30	7585	261·1	270	252	..	27	7590	261·9	271	259	..
300	23	9740	247·9	256	242	..	19	9731	248·7	260	241	..	25	9745	248·6	258	240	..
250	21	11037	238·4	249	233	..	16	11021	239·5	251	231	..	25	11053	239·0	251	230	..
200	18	12563	227·4	238	219	..	14	12547	228·5	239	220	..	24	12583	228·2	241	218	..
175	13	13414	221·3	233	214	..	9	13377	219·0	229	210	..	23	13459	221·8	234	212	..
150	13	14399	214·8	229	206	..	8	14361	211·4	221	201	..	22	14450	214·9	233	205	..
125	11	15476	205·2	220	199	..	6	15438	206·2	225	195	..	18	15595	208·3	229	199	..
100	8	16815	201·7	221	191	..	5	16794	197·2	210	186	..	15	16952	202·9	224	191	..
80	8	18099	200·4	220	192	..	..	..	..	..	..	..	10	18353	203·1	219	193	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1003 mb.)						NAGPUR (967 mb.)						NEW DELHI (977 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	15	299·4	301	297	295·6	31	311	298·3	301	297	296·5	31	210	299·9	303	299	298·3
1000	31	45	..	..	..	..	31	11	..	..	..	..	31	1	..	..	..	..
900	31	972	295·4	298	293	289·5	31	936	295·5	299	293	292·4	31	930	297·3	303	295	293·6
850	31	1467	292·3	295	289	287·4	31	1432	293·1	296	291	289·6	31	1429	294·2	299	291	290·5
800	31	1988	289·3	293	285	285·0	31	1953	290·0	293	287	287·3	31	1953	291·2	294	289	287·2
700	31	3114	283·0	287	279	278·9	31	3083	284·5	287	280	280·3	31	3084	285·0	289	281	278·9
600	31	4381	276·0	280	271	271·6	31	4359	278·3	282	275	272·2	31	4361	278·3	284	274	271·3
500	31	5838	268·2	272	264	..	30	5834	270·3	275	267	..	31	5831	270·8	277	264	265·1
400	31	7562	257·9	266	252	..	29	7570	260·6	273	255	..	31	7576	261·5	267	258	..
300	26	9674	243·9	253	237	..	24	9720	247·0	256	241	..	31	9721	247·1	252	242	..
250	23	10954	234·4	247	226	..	18	11013	238·0	251	232	..	30	11009	236·7	243	230	..
200	18	12448	221·4	230	214	..	13	12528	223·8	240	217	..	28	12519	224·7	231	218	..
175	17	13398	214·6	225	208	..	10	13332	215·3	223	211	..	26	13345	217·3	224	210	..
150	15	14287	209·3	221	200	..	9	14301	209·4	217	206	..	25	14349	209·1	217	201	..
125	10	15417	202·9	221	196	..	7	15401	205·0	211	201	..	25	15444	201·4	210	192	..
100	8	16765	199·7	209	193	..							22	16746	197·0	209	187	..
80													18	18048	199·4	209	191	..

	PORT BLAIR (999 mb.)						TRIVANDRUM (1002 mb.)						VERAVAL (1002 mb.)					
Surface	16	79	297·6	299	295	296·6	30	64	297·3	299	297	295·8	31	8	300·0	301	299	297·3
1000	16	67	..	..	..	..	30	79	..	..	..	..	31	26	..	..	..	..
900	16	993	294·4	297	293	291·6	30	995	292.1	296	289	289·7	31	949	293·9	299	291	291·1
850	16	1484	292·1	294	290	288·6	30	1486	289·4	293	285	286·1	31	1442	291·2	295	288	287·4
800	16	2004	289·1	291	287	285.1	30	2001	287·1	291	281	282·5	31	1960	289·0	294	284	283·4
700	16	3129	283·6	287	279	279·1	30	3119	282·0	285	275	215·3	31	3088	284·6	287	281	275·9
600	16	4395	275·7	279	270	273.0	30	4379	274·8	279	271	269·4	31	4362	277·8	281	273	268·8
500	15	5850	267·5	272	261	..	30	5825	266·6	270	263	..	31	5828	269·1	273	258	..
400	14	7567	257·8	266	251	..	30	7536	256·1	261	251	..	31	7553	258·4	264	244	..
300	13	9689	244·2	257	239	..	27	9630	241·1	246	237	..	27	9671	243·5	249	229	..
250	11	10944	233·5	251	225	..	21	10890	231.1	239	226	..	24	10947	233·3	242	220	..
200	8	12382	219·7	225	212	..	19	12370	219·9	229	209	..	20	12430	221·6	231	209	..
175	6	13225	212·3	217	206	..	18	13221	214·4	220	210	..	19	13276	214·7	224	204	..
150	6	14188	205·7	209	200	..	17	14181	207·2	214	202	..	19	14225	206·1	216	197	..
125							14	15265	202·9	213	198	..	17	15292	198·5	208	189	..
100							14	16581	197·5	215	189	..	14	16610	196·5	205	188	..
80							7	17758	196·6	201	192	..	7	18079	203·3	223	195	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (996 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	27	48	300·1	302	298	297·0
1000	27	11				
900	27	940	296·3	302	294	291·6
850	27	1437	293·1	297	291	289·4
800	27	1958	290·3	293	288	287·3
700	27	3085	284·0	288	281	280·3
600	27	4354	277·8	282	273	273·2
500	27	5820	269·6	277	265	..
400	26	7549	258·8	267	252	..
300	20	9679	243·8	256	237	..
250	18	10951	233·3	246	228	..
200	14	12446	220·6	234	216	..
175	12	13281	214·2	228	210	..
150	10	14238	206·2	219	202	..
125	9	15328	198·6	208	192	..
100	6	16675	191·7	199	183	..
80						

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (987 mb.)						AMRITSAR (973 mb.)						BOMBAY (1003 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	303·5	308	299	299·6	31	230	304·8	309	299	298·2	31	13	300·5	303	298	297·7
1000	28	-17	..	..	..	..	31	17	..	..	..	..	31	36	..	..	..	..
900	28	920	298·0	303	295	293·4	31	926	300·5	304	296	293·2	31	964	294·8	298	292	292·5
850	28	1420	294·8	299	292	289·7	31	1429	297·3	300	293	289·1	31	1460	292·2	296	288	289·9
800	28	1946	292·0	296	288	286·6	31	1957	294·1	298	289	285·6	31	1981	289·7	294	284	287·3
700	28	3082	286·0	291	281	280·1	31	3099	288·2	299	283	277·6	31	3112	284·9	290	279	280·7
600	27	4366	280·0	284	275	272·4	31	4387	280·4	287	274	269·3	31	4393	279·3	285	272	274·5
500	25	5851	272·6	279	267	268·2	31	5866	272·2	280	265	255·8	31	5873	272·4	279	264	270·0
400	25	7604	263·0	269	258	..	30	7615	262·9	270	254	..	30	7629	263·4	273	252	..
300	23	9770	249·4	260	240	..	23	9798	250·3	260	241	..	28	9798	251·3	263	235	..
250	21	11075	238·6	247	220	..	22	11098	241·7	250	230	..	22	11096	240·7	255	225	..
200	19	12616	229·5	241	222	..	16	12637	230·1	238	216	..	20	12658	231·3	247	217	..
175	19	13501	224·0	235	213	..	16	13523	223·7	231	210	..	19	13545	224·3	240	210	..
150	16	14507	217·4	228	206	..	15	14527	217·4	226	203	..	18	14565	217·8	233	203	..
125	12	15592	210·2	225	198	..	15	15672	210·5	221	193	..	18	15717	210·0	227	195	..
100	10	16987	205·7	223	195	..	13	17047	204·0	219	184	..	18	17061	202·7	219	185	..
80	6	18343	205·5	223	189	..	11	18509	203·7	218	181	..	13	18381	198·4	213	176	..

	CALCUTTA (999 mb.)						GAUHATI (995 mb.)						JODHPUR (974 mb.)					
Surface	31	6	302·4	306	300	299·4	31	49	303·3	309	299	302·4	28	218	306·3	314	300	294·6
1000	31	-5	..	..	..	..	31	3	..	..	..	..	28	-17	..	..	..	..
900	31	926	296·8	301	293	293·9	31	939	297·2	302	292	295·4	28	930	301·0	307	295	290·5
850	31	1426	294·1	298	291	291·0	31	1439	294·1	301	288	292·2	28	1435	297·2	307	291	287·3
800	31	1949	291·5	296	288	288·7	31	1962	291·3	295	287	289·5	28	1963	293·7	302	287	283·9
700	31	3087	286·5	292	282	282·0	31	3096	287·0	291	277	282·9	28	3104	287·0	292	279	275·0
600	31	4373	280·4	286	274	274·8	31	4374	278·6	283	268	276·8	27	4389	279·9	286	272	264·7
500	31	5855	272·3	279	267	268·8	31	5846	270·9	276	260	270·2	27	5869	272·5	277	265	257·5
400	31	7610	262·6	272	254	..	30	7585	261·7	267	250	..	26	7631	263·7	270	257	..
300	28	9784	249·0	257	243	..	16	9727	248·3	261	233	..	25	9799	250·0	263	239	..
250	25	11095	240·2	249	232	..	11	10998	236·9	247	222	..	24	11096	240·1	250	227	..
200	23	12624	228·1	237	215	..	11	12515	226·5	241	205	..	20	12620	228·1	244	211	..
175	21	13511	221·9	231	208	..	7	13370	220·9	239	195	..	18	13503	221·9	240	209	..
150	20	14507	214·5	227	201	..	6	14351	215·0	235	186	..	17	14498	215·1	235	201	..
125	17	15621	206·4	217	193	..							14	15641	207·4	233	193	..
100	14	16985	200·0	209	187	..							10	16987	200·6	227	187	..
80	6	18323	199·3	204	192	..												

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1002 mb.)						NAGPUR (965 mb.)						NEW DELHI (975 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	15	303·1	305	299	296·4	31	311	301·4	305	298	297·3	31	210	304·8	309	298	298·1
1000	31	29	..	..	..	..	31	—4	..	..	..	..	31	—19	..	..	..	..
900	31	966	297·3	300	295	290·8	31	932	297·5	300	295	292·7	31	925	299·8	304	296	293·9
850	31	1464	293·7	296	291	288·4	31	1431	294·4	297	292	290·2	31	1427	296·5	301	293	290·5
800	31	1986	289·8	293	288	285·0	31	1956	291·4	294	288	287·0	31	1957	293·0	297	289	287·1
700	31	3118	283·4	286	279	279·2	31	3092	285·7	289	281	280·8	31	3093	286·7	291	283	279·5
600	31	4384	276·8	280	273	272·3	31	4371	278·9	284	274	273·2	31	4377	279·8	285	276	272·1
500	31	5839	269·2	273	261	..	29	5846	271·4	276	269	265·7	31	5855	272·2	276	266	264·9
400	31	7563	258·4	264	253	..	27	7591	262·3	268	258	..	31	7608	263·0	266	258	..
300	26	9699	244·3	253	235	..	23	9745	247·9	254	242	..	30	9768	248·4	252	243	..
250	21	10969	233·3	242	225	..	19	11039	238·1	247	228	..	29	11067	238·8	242	231	..
200	19	12457	220·9	235	213	..	18	12558	227·3	237	216	..	28	12584	226·3	231	218	..
175	16	13290	214·0	230	207	..	15	13447	222·5	233	215	..	26	13453	218·7	224	209	..
150	15	14266	206·9	226	199	..	12	14385	214·3	229	204	..	26	14416	211·1	217	201	..
125	12	15348	201·6	221	194	..	8	15507	205·5	211	200	..	25	15528	202·9	210	195	..
100	10	16692	200·0	216	191	..							23	16824	198·1	206	187	..
80													18	18120	198·3	209	187	..

Standard Pressure Surface mbs.	PORT BLAIR (998 mb.)						TRIVANDRUM (1001 mb.)						VERAVAL (1002 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	15	79	299·1	300	296	296·9	31	64	300·5	303	298	296·3	31	8	301·6	303	299	298·2
1000	15	60	..	..	..	..	31	70	..	..	..	..	30	25	..	..	..	..
900	15	986	294·5	297	292	291·9	31	993	293·0	295	291	289·1	30	949	294·0	302	291	290·7
850	15	1481	292·2	297	289	288·3	31	1485	290·5	293	287	286·0	30	1443	291·1	293	288	287·7
800	15	2002	289·6	295	287	285·4	31	2001	287·6	290	283	282·5	30	1963	289·8	295	216	284·3
700	15	3129	283·9	289	280	277·8	31	3121	282·6	285	278	275·7	30	3093	285·4	289	281	276·5
600	14	4398	276·7	281	273	273·4	31	4386	275·9	280	269	269·4	30	4372	278·7	282	273	270·3
500	14	5858	269·1	273	265	..	31	5840	267·8	273	260	..	30	5843	271·0	277	264	..
400	13	7591	258·8	263	255	..	30	7558	256·9	265	249	..	30	7581	259·9	267	253	..
300	11	9714	245·0	254	240	..	26	9665	242·4	255	233	..	28	9716	245·6	250	238	..
250	7	11041	238·4	248	232	..	23	10948	234·7	246	220	..	25	11003	235·1	245	225	..
200							18	12435	222·7	236	213	..	24	12507	222·9	233	213	..
175							16	13306	216·8	229	206	..	22	13353	215·4	229	205	..
150							15	14284	209·9	223	199	..	21	14307	206·8	216	193	..
125							14	15388	203·6	216	193	..	18	15427	201·2	211	192	..
100							13	16707	200·9	210	193	..	18	16726	197·7	206	189	..
80							11	18055	201·5	207	192	..	12	18031	198·3	207	190	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

August 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (994 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A			
			Mean.	Max.	Min.	Dew point
Surface	28	48	302·2	305	299	298·1
1000	28	—4	..	..	..	..
900	28	929	296·4	299	293	291·7
850	28	1426	293·3	296	290	289·1
800	28	1947	290·2	293	285	286·3
700	28	3073	284·6	289	279	279·2
600	28	4346	277·6	283	274	271·7
500	28	5812	269·0	277	265	..
400	26	7539	258·5	267	255	..
300	21	9658	243·2	256	231	..
250	19	10939	234·7	250	221	..
200	16	12437	222·6	236	208	..
175	11	13325	216·8	231	207	..
150	11	14295	209·1	222	200	..
125	10	15371	202·9	211	196	..
100	8	16701	197·3	206	190	..
80						

NOTE :—Number of observations refer to those of dynamic height.

Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273°A.

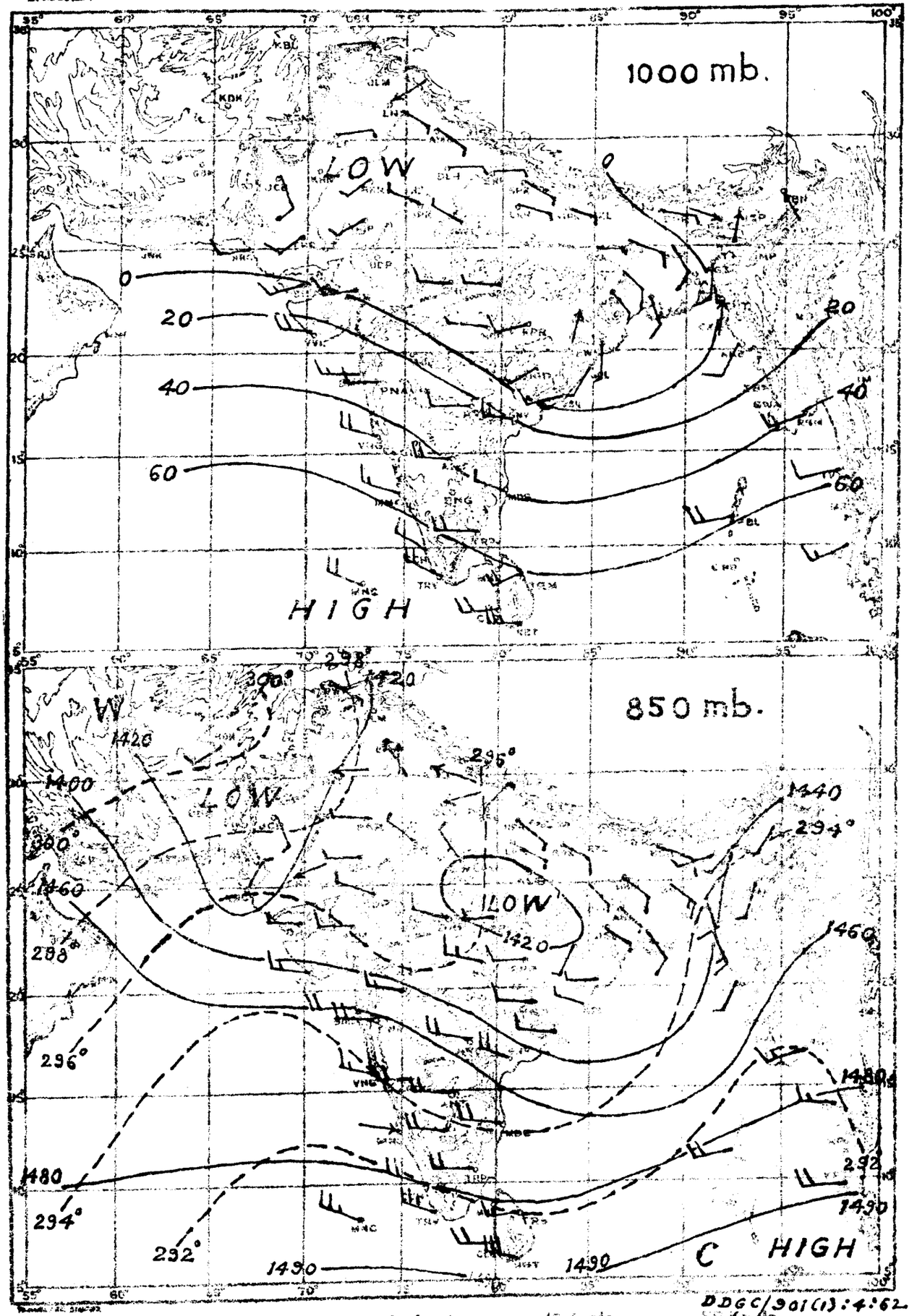
Means are not worked out for less than five observations at standard pressure surfaces.

MGIPN—S1—337 D. D. G. Obs. Poona/62—13-5-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

AUGUST 1957

I. Met. D. Plate I



DDGC/901(1):4:62

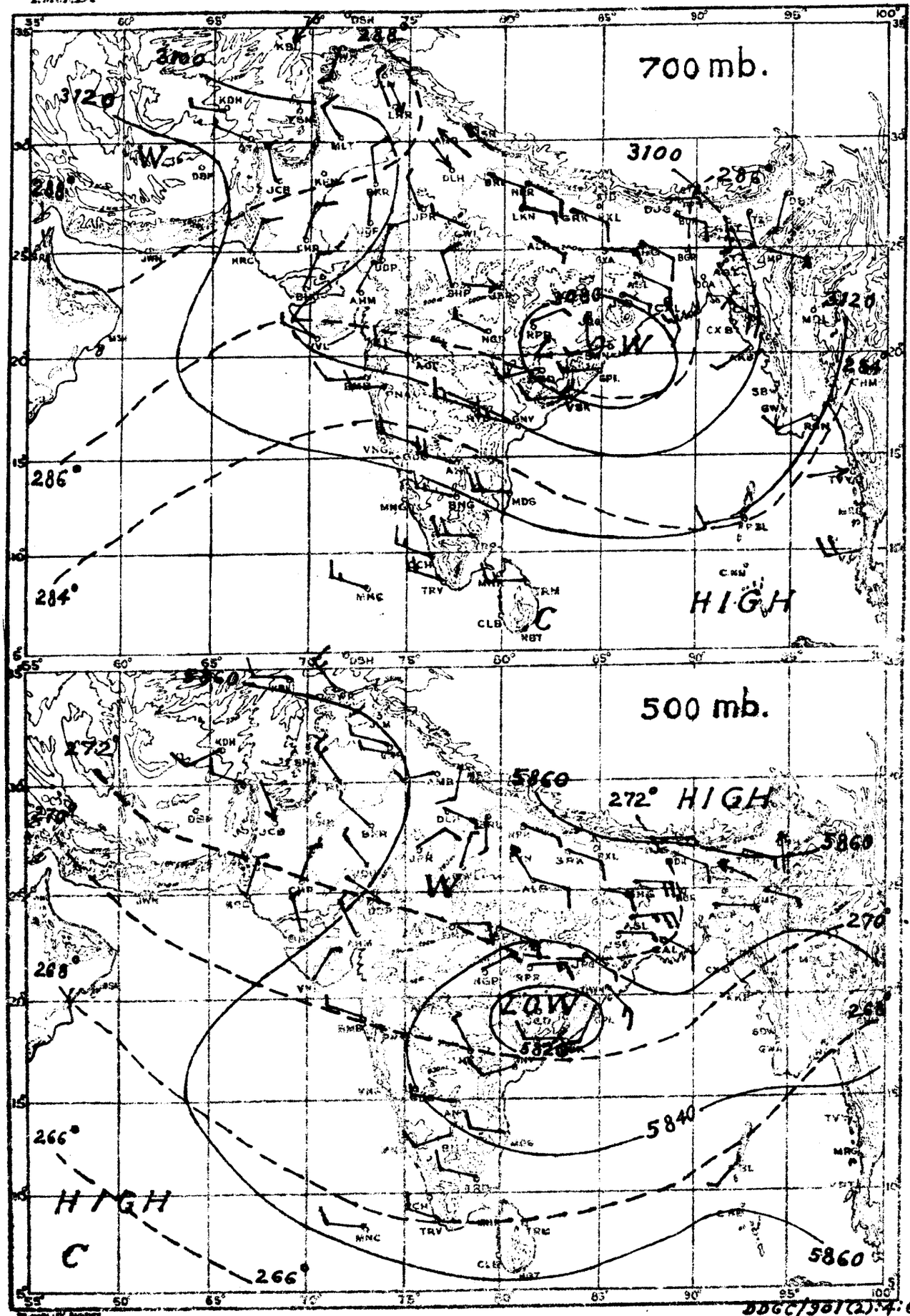
RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

—— Isotherms in degrees absolute. —— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

AUGUST 1957

I.Met.D. Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

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INDIA WEATHER REVIEW, 1957.

Monthly Weather Report

SEPTEMBER

APR 16 1964

Published by authority of the Government of India

Chief features:

(1) Active monsoon conditions over many parts of the country during the first half of the month in association with a low pressure area and a depression from the Bay of Bengal (2) withdrawal of the monsoon from most parts of the country during the third week of the month, one to two weeks earlier than the normal time and (3) deficient rainfall over the country during the latter half of the month as a result of early withdrawal of the monsoon.

In association with the movement of an easterly wave into the head Bay of Bengal on the last day of August, a low pressure area formed over the Gangetic West Bengal and adjoining areas of East Pakistan on the morning of 1st September. The low pressure area moved westnorthwestwards and lay over southeast Uttar Pradesh and the adjoining areas on the next day. Moving slowly in a northwesterly direction and intensifying at the same time, it became a land depression which was centred near Fatehpur (Uttar Pradesh) on the third morning and between Delhi and Aligarh on the 4th. Thereafter, it weakened and moving northwards broke up over the Punjab-Kumaon hills on the 5th. Under the influence of this disturbance, there was a spell of widespread and locally heavy to very heavy rain over the region extending from the Punjab (I) to Gangetic West Bengal and Chota Nagpur during the first four days of the month. The rainfall was particularly heavy in Himachal Pradesh and the Punjab hills between the 2nd and 4th on account of the additional influence of westerly wave which moved across Kashmir during the same period. Some significant amounts of rainfall were : Rajkhar-sawan (Chota Nagpur) 29 cms on the 1st; Berhampur 16 cms on the 2nd, Dharamsala 17 cms on the 3rd, Hardoi 17 cms and Pilibhit (west Uttar Pradesh) 21 cms on the 4th. According to press reports, several persons were killed or injured seriously in house collapses resulting from heavy rains in various parts of west Uttar Pradesh. With the dissipation of the low pressure area, the monsoon withdrew from the western districts of the Punjab (I) and from Rajasthan on the 5th. Relatively drier continental air also prevailed over west Madhya Pradesh and the northern parts of Bombay State subsequently.

With the arrival of an easterly wave, a trough of low pressure formed over the west central and the adjoining north Bay on the 8th, and concentrated into a depression on the 10th with its centre at 0830 hrs. IST near Lat. 16°N and Long. 86°E. Moving northnorthwestwards, the depression passed inland between Gopalpur and Calingapatam during the early hours of 11th and lay over south Orissa with its centre at 0830 hrs. IST of the same day about 50 kms. to the north of Koraput. As the depression moved westnorthwestwards, its centre was about 75 kms to the southeast of Nagpur on 12th morning and close to Betul in southwest Madhya Pradesh on the 13th. Thereafter, it travelled in a northerly direction and broke up over the Punjab-Kumaon hills on the 15th. The depression was responsible for a temporary revival of active monsoon conditions in Madhya Pradesh and adjoining southeast Rajasthan, in west Uttar Pradesh and the eastern districts of the Punjab (I) between the 10th and 15th. Widespread and locally very heavy rain occurred in west Uttar Pradesh, Himachal Pradesh and the Punjab (I) on the 14th and 15th. Some noteworthy amounts of rainfall were : Dharampore 15 cms and Aligarh 13 cms on the 14th, Amroha (west Uttar Pradesh) 36 cms, Roorkee 26 cms, Saharanpur 23 cms and Naraingarh (Punjab-I) 17 cms on the 15th. According to newspaper reports, twenty persons lost their lives in floods caused by excessive rains in various parts of west Uttar Pradesh. Considerable damage to houses in Moradabad district and dislocation of railway communications in some parts of west Uttar Pradesh were also reported. The river Jamuna was in spate with its level near Delhi rising above the danger mark and submerging several villages. With the filling up of the depression, dry continental air rapidly swept over the northern and central parts of the country. The monsoon withdrew from the remaining parts of northwest India and from Uttar Pradesh, west Madhya Pradesh, Gujarat, Saurashtra and Kutch, the north Konkan and north Maharashtra on the 16th and from east Madhya Pradesh and the remaining parts of the Bombay State on the 17th.

Simultaneously with this withdrawal of the monsoon, which was one to two weeks earlier than the normal time, the pressure system over the country changed from the monsoon type to the retreating monsoon type. A shallow low pressure area formed over the west central Bay and neighbourhood on the 17th. It extended gradually over the whole of the central and adjoining north Bay

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1—340 D. D. G. Obs. Poona/62

during the course of the next three days, causing light to moderate rainfall along the east coast. Under the influence of a low pressure wave which moved westwards across Deltaic Burma, the northern portion of the trough became well marked on 22nd. It concentrated into a depression on the morning of 23rd with its centre near Lat. 19°N and Long. 89·5°E. Moving northwestwards, it was centred on the next morning near Lat. 20°N and Long. 88°E. Thereafter, it recurved to the northeast and lay on the 25th morning over the West Bengal coast with its centre about 100 kms to the southeast of Calcutta. Moving further northeastwards, the depression weakened into a trough of low pressure on the 26th when it was situated over East Pakistan and the adjoining parts of Assam on the 26th and became unimportant by the next day. It was responsible for a spell of wet weather over Gangetic West Bengal, Orissa and Chota Nagpur between the 22nd and 26th. Assam experienced fairly widespread rain between the 24th and 27th with a few heavy to very heavy falls on the 26th and 27th. Golaghat recorded 26 cms and Cherrapunji 18 cms on the 26th. The monsoon withdrew from Bihar and Chota Nagpur on the 26th and from Orissa on the 30th.

In association with an easterly wave which moved into southeast and the adjoining east central Bay on the 28th, an upper air trough formed over the south and central Bay on the same day. The trough persisted there till the end of the month causing scattered or local rain in Madras and coastal Andhra Pradesh from the 27th to 30th.

The total rainfall of the month was in large excess in west Uttar Pradesh, in moderate excess in Chota Nagpur and the Punjab (I) and in slight excess in Gangetic West Bengal. It was normal in east Uttar Pradesh and coastal Andhra Pradesh, in slight defect in the Bay Islands, Assam, Orissa, east Rajasthan, the Madras State and north Mysore and in moderate defect in Bihar, Madhya Pradesh, Maharashtra and Vidarbha. Over the rest of the country it was in large defect. Averaged over the plains of India, the rainfall for the month was 29 percent in defect.

Both mean maximum and mean minimum temperatures were normal over the country.

Mean relative humidity was normal over the country, except in Jammu and Kashmir and the Madras State where it was in defect.

Mean cloud amount was in defect in Bihar, Jammu and Kashmir, Rajasthan, Gujarat, Saurashtra and Kutch and Vidarbha and normal over the rest of the country.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 15 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
The 19th December 1958.

S. S. LAL,
for *Director General of Observatories.*

Errata to M.W.R. for September 1957 (Bhadra 10-Asvina 8,1879 Saka)

Page No.	Station	Hour	Column	For	Read
Text portion					
432	Last but one paragraph, 2nd line 5th word is 14 instead of 15.				
Table I - Sub-Division					
433	5 - Orissa		2	-11.9	-41.9
Table II					
434	Dhubri (Rupsi Aerodrome)		1	Dhubri(Rupsri Aerodrome)	Dhubri (Rupsi Aerodrome)
434	Calcutta		27	0	5
434	Purulia		14	Blank	2
435	Cuttack		1	ttack	Cuttack
435	Angul		14	5	15
436	Amritsar		27	Blank	0
436	Gulmarg		5	16	1, 6
436	Panamik		14	4 7	4, 27
436	Khalatse		14	Blank	6
436	Mulbik		14	1.	1.3
436	Jhalawar		3	-0.4	+0.4
436	Foot note		-	(R) Register not receiv d	(R) Register not received
437	Surendranagar		5	Blank	14
438	Dahanu		17	19.2	19.5
438	Mahbubnagar		25	Blank	0
438	Anantapur		10	7.4	6.4
439	Belgaum		17	6.0(b)	6.0 (b)
439	Belgaum (C.T.O)		17	10.2	10.2
439	Punalur		2	31.8	30.8
440	Ootacamund		5	2630	26, 30
Table III					
442	Tezpur (P.B.O.)	0530	17	1	0
442	Sandheads	2330	20	Blank	3
444	Foot notes			(b) Mean of 29 days (l) Mean of 19 days (*) Data not available	Delete
448	Srinagar	1130	27	Blank	6
448	Churu	0830	7	26.8	25.8
448	Churu	1730	20	1	6
449	Kotah	1130	26	0	10
449	Guna	1130	15	Blank	7.6
450	Bhopal (Bairagarh)	0830	4	1008.7	1007.8
450	Chhindwara	1730	10	23.3	22.3

P.T.O.

Page No.	Station	Hour	Column	For	Read
Table III (contd).					
450	Sagar	1730	7	37.9	27.9
450	Sutna	0530	1	Sutna*	Sutna
451	Ahmedabad	1730	4	1015.3	1005.3
452	Aurangabad (Chikalthana Aerodrome)	0230	3	519	579
453	Baramati	0830	13	4.3	4.2
453	Baramati	1730	7	23.9	29.3
453	Sholapur	0530	1	holapur	Sholapur
454	Kakinada	0830	1	Kakinda	Kakinada
454	Visakhapatnam	0830	28	1	0
455	Coimbatore (Peelamedu Aerodrome)	2330	2	2330	*2330
455	Salem	0530	1	Salem*	Salem
455	Foot note			(b) Mean of 29 days	delete
456	Bidar	0830	12	Blank	-6
457	Badrinath	0830	1	Badrinath	Badrinath (R)
458	Mannar	1730	18	8	18
458	Mukhim	0830	1	Mukhim*	Mukhim+
458	Foot note			* Observations for 28 days	+ Observations for 28 days
459	Munsiyari	1730	1	1730	(R) 1730
459	Sallyana	0830	1	(R) 0830	0830
459	Katmandu	0830	5	886.2	866.2
459	Chainpur	1730	1	*1730	+1730
459	Foot note			* Data not reliable	+ Data not reliable

Page No.	Station	Time in I.S.T.	Ht. in Km.	Entry under Column	Existing entry	Correct entry
462	Agartala	0530	9.0	n	17	7
462	Ambala	0530	0.3	n	38	28
463	Anantapur	2330	3.0	D	33	330
463	Bairagarh	0530	6.0	D	3 5	305
464	Bairagarh	1730	2.1	V	12.3	11.3
465	Bhuj	1730	2.1	D	234	334
466	Cochin	0530	1.5	v	4.5	14.5
466	Darjeeling	0530	3.6	D	2 9	209
467	Gadag	2330	1.5	v	1 .9	10.9
467	Gauhati	2330	0.6	n	3	30
469	Imphal	2330	Surface	D	2 6	246

contd.... 3.

Page No.	Station	Time in I.S.T.	Ht. in Km.	Entry under Column	Existing entry	Correct Entry
469	Jagdalpur	2330		'Ht. in Km.'	0.9	9.0
469	Jaipur	0530	7.2	D	310	316
470	Jodhpur	0530*	9.0	D	204	240
470	Madras	1130	4.5	D	3 8	308
470	Mangalore	1730	0.15 a.g	D	3 2	302
		1730	0.3	D	3 2	302
			0.6	D	3 6	306
471	Mohanbari	1730	7.2	D	209	210
471	Mussoorie	0530	Surface	V	3.3	3.0
471	Nagpur	0530*	Surface	D	360	306
471	Nagpur	1730*	9.0	n V v D	Data shifted down	Read against 9.0 Km. level
472	Nanpara	1730	4.5	D	2 8	208
472	New Delhi	2330	0.6	D	3 9	309
		2330	0.9	D	3 6	306
		2330	6.0	D	2 1	201
472	Poona	2330	2.1	v	11.2	1.1
473	Raipur	0530	1.5	D	3 8	348
474	Trivandrum	1730*	7.2	D	08	083
474	Trivandrum			Against Time in I.S.T.	2030	2330
474	Udaipur	0530	1.5	D	3 3	303
476	Ahmedabad	0530	10.5	D	2 2	202
476	Ahmedabad	1730	16.2	D	17.5	175
476	Anantapur	1730		'Ht. in Km.'	10.8	18.0
476	Bairagarh	1730	12.0	V	1.44	14.4
476	Begumpet	1730	14.1	V	25.0	25.3
477	Madras	1130	14.1	D	1 2	102
477	Tiruchirapalli	0530		'Ht. in Km.'	14.0	14.1
478				Column 1 - Heading	'Ht. in'	'Ht. in Km.'

Page No.	Station	Standard Pressure Surface mb.	No. of obs	Ht. g.p.m. Mean	Max.	Min.	Dew point	No. of obs	Ht. g.p.m.	Mean	Max.	Min.	Dew point
480	Allahabad	250			2 8						248		
480	Bombay	250		11 22					11022				
481	New Delhi	900			3 2						302		
481	Veraval	Surface			3 1						301		
		300			2 8						248		
482	Visakhapatnam	150		29.3						299.3			
483	Allahabad	850			3 3						303		
483	Amritsar	Surface		36 .5						306.5			
483	Calcutta	700					28.1						28
483	Jodhpur	Surface		3 6.2						306.2			
		900		3 0.2						300.2			
		600		44 5					4405				
484	New Delhi	850			3 1						301		
		250			2 2						242		
484	Trivandrum	125		2 3.7						203.7			
484	Trivandrum	100			298						208		
484	Veraval	400				2 8						248	
		300			2 9						249		
		250			2 2						242		
485	Visakhapatnam	200				2 5						205	
		175				2 2						202	

Note :- At some places on pp.463, 465 and 474 under Col. V and v decimal points have not come clear. All values of V and v have been given upto first place of decimal.

TABLE I.—DIVISIONAL AND SUB-DIVISIONAL MEANS—SEPTEMBER, 1957 (BHADRA 10—ASVINA 8, 1879 SAKA)

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity % 0830 hrs. I.S.T.	Relative humidity % 1730 hrs. I.S.T.	Cloud 0830 hrs. I.S.T.	Cloud 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur, Tripura).	228.5	82	32.2	24.9	84	81	5.3	4.2
	—51.8	..	+1.0	+0.4	—1	..	—0.5	..
2. West Bengal .	223.6	76	32.4	25.8	81	77	4.4	5.0
	—69.8	..	+0.5	+0.2	—2	..	—0.8	..
3. Orissa . .	185.5	82	32.0	25.9	82	78	5.4	6.3
	—41.9	..	+0.4	+0.4	0	..	+0.4	..
4. Bihar . .	193.6	90	32.5	24.6	79	75	4.1	5.1
	—21.5	..	+1.0	0	—1	..	—0.8	..
5. Uttar Pradesh .	218.1	123	32.1	23.6	78	66	3.1	3.3
	+40.9	..	—0.7	—0.6	0	..	—0.3	..
6. Punjab (I) (Including Himachal Pradesh and Delhi).*	201.1	145	33.3	22.5	72	56	2.5	2.3
	+62.0	..	—1.5	—1.5	+3	..	+0.1	..
7. Jammu & Kashmir	9.3	15	26.5	12.9	70	54	1.4	3.8
	—51.1	..	0	—1.1	—8	..	—0.7	..
Sub-division								
1. Bay Islands. .	369.0	83	29.5	24.0	84	88	6.4	6.1
	—73.0	..	+1.1	+0.8	0	..	+0.2	..
2. Assam (Including Manipur, Tripura)	228.5	82	32.2	21.9	84	81	5.3	4.2
	—51.8	..	+1.0	+0.4	—1	..	—0.5	..
3. Sub-Himalayan West Bengal	105.5	22	31.9	25.1	81	72	4.4	4.1
	—370.8	..	+0.5	+0.1	—3	..	+0.1	..
4. Gangetic West Bengal	267.9	119	32.5	26.0	80	79	4.3	5.3
	+43.0	..	+0.5	+0.3	—2	..	—1.0	..
5. Orissa . .	185.5	82	32.0	25.9	82	78	5.4	6.3
	—41.9	..	+0.4	+0.4	0	..	+0.4	..
6. Chota Nagpur .	276.6	135	31.3	23.5	80	74	4.5	6.0
	+71.4	..	+0.4	—0.1	—1	..	—0.5	..
7. Bihar . .	152.0	69	33.4	25.6	79	75	3.7	4.1
	—67.9	..	+1.5	+0.1	—1	..	—1.1	..
8. Uttar Pradesh, (East.) . .	180.9	94	32.6	24.2	79	67	3.3	3.4
	—10.7	..	—0.3	—0.5	—1	..	—0.4	..
9. Uttar Pradesh, (West) . .	255.2	157	31.6	23.0	77	64	2.9	3.2
	+92.6	..	—1.1	—0.6	+1	..	—0.1	..
10. Punjab (India) (Including Delhi)	201.1	145	33.3	22.5	72	56	2.5	2.3
	+62.0	..	—1.5	—1.5	+3	..	+0.1	..
11. Himachal Pradesh	232.9	..	29.6	18.5	85	66	3.2	3.4
	..	..	..	..	..	..	..	..
12. Jammu & Kashmir	9.3	15	26.5	12.9	70	54	1.4	3.8
	—51.1	..	0	—1.1	—8	..	—0.7	..
13. Rajasthan, (West)	2.6	9	36.4	23.8	67	35	1.6	1.8
	—25.4	..	+0.4	—0.3	—1	..	—0.4	..
14. Rajasthan, (East)	85.0	81	32.6	22.1	68	49	2.1	2.9
	—20.2	..	+0.1	—1.1	—5	..	—0.9	..

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity % 0830 hrs. I.S.T.	Relative humidity % 1730 hrs. I.S.T.	Cloud 0830 hrs. I.S.T.	Cloud 1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division—*contd.*								
8. Rajasthan . .	43.8	66	34.3	22.8	67	43	1.9	2.4
	—22.8	..	+0.2	—0.7	—3	..	—0.7	..
9. Madhya Pradesh	128.2	63	31.1	22.0	77	62	3.8	4.7
	—74.0	..	+0.6	—0.5	—1	..	—0.7	
10. Bombay . .	81.8	40	31.7	22.9	81	61	3.9	4.2
	—124.1	..	+0.9	—0.1	0	..	—1.1	..
11. Andhra Pradesh .	115.6	72	33.2	24.7	75	64	4.8	5.6
	—45.7	..	+0.7	+0.3	—2	..	—0.5	..
12. Madras . .	78.1	78	33.6	24.5	68	58	4.3	5.4
	—22.3	..	+0.2	+0.2	—6	..	0	..
13. Mysore . .	79.9	45	29.1	20.5	82	63	5.1	6.0
	—99.0	..	+0.2	0	—1	..	—0.4	..
14. Kerala . .	15.6	9	29.4	24.2	81	77	4.4	4.6
	—154.7	..	+0.4	+0.5	—4	..	—0.9	..
Mean of India (Excluding Jammu & Kashmir and Himachal Pradesh)	127.4	71	32.0	23.2	77	63	3.9	4.4
	—52.2	..	+0.4	—0.2	—2	..	—0.6	..
Sub-division—*contd.*								
15. Madhya Pradesh, (West) . .	135.3	71	31.2	21.5	77	59	3.5	4.3
	—54.3	..	+0.5	—0.8	—4	..	—0.7	..
16. Madhya Pradesh, (East) . .	118.0	54	30.9	22.7	77	66	4.2	5.2
	—102.1	..	+0.7	0	—4	..	—0.6	..
17. Gujarat . .	7.5	5	33.5	23.8	78	59	3.3	2.9
	—129.3	..	+1.5	+0.1	—3	..	—1.5	..
18. Saurashtra and Kutch.	13.6	21	32.8	23.2	83	65	2.8	2.9
	—50.8	..	+0.4	—0.6	+3	..	—1.4	..
19. Konkan . .	98.6	27	29.8	24.3	85	73	4.9	4.3
	—266.3	..	+0.7	+0.1	—2	..	—1.1	..
20. Maharashtra .	124.6	57	31.1	20.7	81	57	4.7	5.2
	—93.3	..	+0.9	0	+2	..	—0.4	..
21. Vidarbha . .	133.1	73	32.6	22.7	76	56	3.6	5.6
	—49.5	..	+1.1	—0.3	—4	..	—1.1	..
22. Coastal Andhra Pradesh. . .	151.2	101	33.7	25.8	75	69	5.0	6.2
	+2.0	..	+0.7	+0.3	—2	..	—0.4	..
23. Telangana . .	86.9	45	31.8	23.0	76	59	4.4	4.6
	—105.3	..	+1.1	+0.5	—3	..	—0.5	..
24. Rayalaseema .	73.0	47	33.7	24.1	72	53	4.7	5.5
	—81.7	..	+0.5	+0.1	—1	..	—0.7	..
25. Madras . .	78.1	78	33.6	24.5	68	58	4.3	5.4
	—22.3	..	+0.2	+0.2	—6	..	0	..
26. Coastal Mysore	86.8	27	28.9	23.1	87	79	5.1	5.5
	—234.0	..	—0.1	—0.3	—2	..	—0.9	..
27. Mysore, (North) .	114.3	75	29.7	20.8	80	61	5.3	6.5
	—37.8	..	+0.2	+0.2	—2	..	+0.4	..
28. Mysore (South) .	36.3	26	28.5	19.3	83	59	4.9	5.5
	—102.8	..	+0.2	—0.2	+1	..	—1.0	..
29. Kerala (Including Laccadives). .	15.6	9	29.4	24.2	81	77	4.4	4.6
	—154.7	..	+0.4	+0.5	—4	..	—0.9	..

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	23·0	..	31·5	12	24·4	..	22·1	6	170·2	312·5	..	56·1	19	20	..	14·2	10·0	..	23	0	0	0	0	0	0	0	0	0
Long Island	30·0	..	32·7	3	23·7	..	21·4	29	237·8	474·8	..	124·7	20	20	..	3·7	2·0	..	22	0	0	1	0	..	0	0	0	0
Port Blair	29·5	+1·1	30·6	3	24·0	+0·8	21·9	20	140·4	369·0	−73·0	98·9	20	18	−3·9	16·1	12·7	−4·0	23	0	0	5	1	0	0	0	0	0
Car Nicobar	30·7	..	31·1	3	24·0	..	21·8	15	116·6	215·9	..	41·2	5	14	..	7·7	4·9	..	22	0	0	3	0	0	0	0	0	0
Nancowry	29·5	..	30·4	3,26,28	24·6	..	22·2	20	171·7	256·8	..	66·8	4	18	..	12·0	9·6	..	24	0	0	0	0	0	0	0	0	0
Kondul	29·0	..	31·1	18	24·9	..	23·6	11,21, 28	210·4	309·9	..	90·4	3	18	..	10·0	7·9	..	21	0	0	1	0	0	0	0	0	0
Assam (Including Manipur, Tripura)																												
Pasighat	31·1	..	34·9	23	23·4	..	21·1	29	70·5	205·8	..	113·8	26	14	..	3·3	4·1	..	16	0	0	2	0	0	0	0	0	0
Digboi	31·6	..	34·3	23	23·8	..	22·2	29,30	29·1	172·9	..	55·9	26	13	..	5·9	4·4	..	17	0	0	0	0	0	0	0	0	0
Dibrugarh	31·6	+1·4	35·4	9	24·2	+0·6	22·1	27	37·3	322·0	−29·8	83·1	18	13	−2·4	3·0	2·4	+1·0	17	0	1	8	0	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	31·2	..	34·2	5	23·9	..	21·9	27	27·5	257·5	..	76·5	18	14	..	5·8	4·2	..	17	0	1	16	2	0	0	0	0	0
North Lakhimpur	30·7	..	34·6	9	23·6	..	22·1	23	98·3	704·2	..	114·5	17	16	..	..	..	..	22	0	0	12	0	0	0	0	0	0
Sibsagar	31·9	+1·0	35·0	9	24·7	+0·1	22·3	21,22	80·4	299·2	−1·3	68·3	21	17	+2·2	3·3	2·8	−0·1	21	0	0	17	0	0	0	0	0	0
Jorhat	32·5	..	35·8	12	24·3	..	22·2	29	22·9	183·6	..	51·3	5	12	..	..	..	..	17	0	0	14	1	0	0	0	0	0
Golaghat	32·3	..	35·0	9	..	..	..	..	66·9	118·7	..	51·8	16	11	..	..	..	..	11	0	0	0	0	0	0	0	0	0
Gohpur (R) Tezpur	32·1	+0·5	34·8	9	25·3	+0·6	23·9	24	78·7	139·7	−70·6	27·9	19	12	−0·7	..	..	..	13	0	5	3	0	0	0	0	0	0
Tezpur (P.B.O.)	31·7	..	34·0	1,5,9	24·8	..	22·8	30	59·3	120·2	..	20·3	5	12	..	4·3	2·6	..	15	0	0	14	1	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	25·5	90·8	..	39·6	7	8	..	6·3	4·4	..	16	0	0	8	0	0	0	0	0	0
Chapamukh (R) Tangla	32·5	..	35·3	8,9	24·7	..	22·7	30	64·5	194·5	..	62·7	7	9	..	6·7	4·2	..	10	0	0	0	0	0	0	0	0	0
Gauhati	32·3	+0·4	34·9	17	25·4	+0·8	22·4	29	46·7	122·6	−44·8	44·7	26	7	−2·3	4·3	2·4	+0·3	13	0	0	1	0	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	32·4	..	35·9	5	24·9	..	23·2	29	40·9	169·8	..	70·9	6	8	..	6·8	4·4	..	16	0	0	14	0	0	0	0	0	0
Rangiya (R) Goalpara	33·6	..	35·7	10	24·9	..	23·3	2,30	73·5	105·0	..	37·9	24	8	..	..	..	..	8	0	0	0	0	0	0	0	0	0
Dhubri	32·7	+2·9	34·1	5	26·3	+1·1	25·1	30	3·1	83·3	−272·7	40·6	7	4	−8·5	5·2	4·8	−0·5	9	0	0	2	0	0	0	0	0	0
Dhubri (Rupsri Aerodrome)	32·6	..	34·1	9	24·8	..	21·7	19	44·5	90·5	..	28·0	2	7	..	6·8	4·3	..	7	0	0	3	1	0	0	0	0	0
Tura	29·5	..	31·7	10,22	23·7	..	21·7	20	158·5	303·9	..	54·6	24	16	..	4·7	3·9	..	21	0	0	0	0	0	0	0	0	0
Agartala	31·9	..	33·6	10	24·7	..	22·3	30	30·3	192·8	..	77·0	5	8	..	8·1	6·0	..	14	0	0	16	1	0	0	0	0	0
Silchar	31·8	−0·3	35·2	10	24·2	−0·4	21·8	30	102·4	433·9	+44·8	93·0	11	17	+0·8	2·4	1·4	−0·7	18	0	0	13	1	0	0	0	0	0
Silchar (Kumbhigram Aerodrome)	32·1	..	36·6	10	23·4	..	18·9	30	111·3	315·3	..	38·6	18	17	..	5·7	5·8	..	21	0	0	23	0	0	0	0	0	0
Imphal	28·7	..	31·1	21	20·6	..	17·1	30	72·7	140·9	..	18·3	27	13	..	6·3	3·8	..	16	0	1	6	6	0	0	0	0	0
Haflong	28·5	..	32·1	10	20·8	..	18·8	30	149·3	236·2	..	85·3	3	12	..	..	..	..	18	0	0	10	1	0	0	0	0	0
Lumding	32·8	+1·4	36·1	17	24·1	+0·1	20·6	29	146·3	199·1	+11·6	52·1	23	10	−0·8	3·1	1·6	..	15	0	0	5	0	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar (C.W.O)	33·1	..	34·4	16	24·7	..	23·2	30	44·4	146·5	−450·9	61·7	7	8	−9·1	5·2	2·9	..	12	0	0	12	3	0	0	0	0	0
Jalpaiguri	30·8	−0·4	33·3	22	24·5	+0·1	23·0	7	16·5	106·8	−432·2	36·6	7	9	−7·4	7·8	5·4	+3·0	14	0	0	12	0	0	0	0	0	0
Bagdogra	32·6	..	34·7	22	23·9	..	22·4	17	14·5	118·0	..	17·3	2	11	..	2·7	1·6	..	19	0	0	19	2	0	0	0	0	0
Malda	33·1	+1·4	35·0	17,29,30	25·8	+0·1	23·3	28,29	18·3	63·2	−229·4	39·4	2	4	−7·6	7·9	5·9	−0·4	8	0	0	10	0	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	32·7	..	35·6	28	25·6	..	23·4	22	110·8	228·1	..	62·0	2	12	..	7·8	5·8	..	16	0	0	16	0	0	0	0	0	0
Calcutta	32·8	+0·6	35·2	28	26·1	+0·5	24·4	2	71·5	237·1	−15·6	122·0	2	10	−3·2	6·1	4·3	−0·2	15	0	0	19	0	0	0	0	0	0
Barrackpore	32·4	..	35·4	30	25·9	..	24·1	2	152·7	317·0	..	118·6	2	12	..	..	..	..	14	0	0	19	0	0	0	0	0	0
Saugor Island	30·9	0	33·0	9	26·8	+0·4	24·4	3	158·0	392·0	+129·1	73·9	1	13	+0·1	..	..	..	17	0	0	6	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	102·2	308·4	+186·7	123·9	24	11	+2·6	..	..	..	15	0	0	4	0	0	0	0	0	0
Contai	31·3	..	33·8	28	26·0	..	23·9	2	215·0	466·4	..	100·3	12	11	..	8·4	6·5	..	12	0	0	0	0	0	0	0	0	0
Midnapore	32·3	+0·2	36·1	30	25·5	−0·1	23·3	12	138·1	312·3	+96·2	116·8	1	8	−3·9	4·6	3·5	+0·4	10	0	0	1	0	0	0	0	0	0
Purulia	31·7	..	34·4	16,17	24·5	..	22·7	2	81·3	218·5	..	85·8		11	..	5·7	4·6	..	12	0	0	3	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	239·9	+40·0	79·0	2	9	−2·0	..	..	..	9	..	..	..	..	..	..	..	..	..
Burdwan	31·9	−0·3	33·8	5days	26·5	+0·6	23·9	12	50·1	95·1	−128·4	29·2	20	6	−5·3	6·5	3·3	+0·4	7	0	0	1	0	0	0	0	0	0
Krishnagar	33·8	+1·5	36·4	29	25·9	+0·3	24·4	2,5,12	154·6	318·5	+116·3	137·6	2	8	−3·2	7·4	5·5	+1·0	14	0	0	9	0	0	0	0	0	0
Asansol	32·6	+0·4	34·9	29	25·3	+0·3	23·5	28,30	86·0	180·9	−28·6	50·5	2	7	−3·7	8·2	5·6	−0·8	10	0	0	13	0	0	0	0	0	0
Suri	32·4	..	34·9	29	25·3	..	23·2	28	136·7	309·4	..	91·7	2	12	..	7·6	6·0	..	13	0	0	3	0	0	0	0	0	0
Berhampore	33·3	+1·3	35·8	17	25·7	−0·2	23·1	6	168·7	367·4	+135·2	131·1	2	14	+2·5	2·3	1·6	−2·4	15	0	0	6	0	0	0	0	0	0
Orissa																												
Baripada	32·6	..	36·1	30	..	..	..	..	188·9	361·8	..	97·5	12	15	..	2·5	1·4	..	20	0	0	16	0	0	0	0	0	0
Balasore	31·2	−0·4	34·8	28	25·8	+0·2	24·0	10	101·3	280·7	−0·2	92·8	11	10	−2·9	9·2	5·1	+1·1	16	0	0	15	0	0	0	0	0	0

(R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm or more)		Wind speed km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orissa (*Contd.*)																												
Chandbali	30·4	−1·2	33·1	3	25·8	+0·1	23·3	1	78·4	251·2	+24·6	69·8	1	11	−3·1	8·5	7·2	−1·0	12	0	0	7	0	0	0	0	0	0
Cuttack	33·0	+0·8	35·7	29	25·1	−0·3	23·6	11	65·8	146·4	−101·5	41·7	11	14	+1·4	6·5	4·9	+2·0	14	0	0	6	0	0	0	0	0	0
Bhubaneswar	32·4	..	35·0	29	25·1	..	22·8	30	23·0	108·9	..	29·7	5	8	..	12·3	9·1	..	13	0	0	10	0	0	0	0	0	0
Puri	32·3	+0·9	35·2	26	26·8	+0·3	23·0	20	24·7	143·4	−86·5	41·4	19	8	−4·1	15·4	13·8	+0·8	13	0	0	7	0	0	0	0	0	0
Gopalpur	32·7	+1·3	36·3	26	25·6	−0·2	23·2	30	80·6	200·8	+10·8	60·5	11	9	−0·5	..	..	..	11	0	0	10	0	0	0	0	0	0
Koraput	27·1	..	28·9	28	19·3	..	16·7	1,2	46·8	185·9	..	43·2	11	12	..	..	..	..	15	0	0	0	0	0	0	0	0	0
Titilagarh	30·1	..	33·4	25	24·0	..	21·8	6	41·9	166·0	..	39·4	16	11	..	4·1	2·7	..	13	0	0	9	0	0	0	0	0	0
Bolangir (R)																												
Angul	32·1	+0·5	34·1	28	24·9	+0·2	22·3	11	114·0	191·8	+5·1	53·6	5	9	−2·1	8·7	5·6	−0·5	15	0	0	10	0	0	0	0	0	0
Keonjhar	30·5	..	32·7	28	22·9	..	20·9	9	105·2	219·5	..	38·6	12	14	..	7·7	5·8	..	18	0	0	13	0	0	0	0	0	0
Sambalpur	32·1	+0·6	34·6	27	24·9	0	22·3	30	36·2	84·5	−145.4	28·4	11	8	−3·4	5·2	3·6	−0·9	12	0	0	6	0	0	0	0	0	0
Jharsuguda	32·1	..	34·8	30	24·4	..	22·7	30	49·2	96·6	..	27.7	18	10	..	8·9	7·0	..	10	0	0	11	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	32·2	0	34·6	16	25·3	0	21·6	24	160·5	404·2	+229·6	120·9	1	12	+0·8	7·5	5·4	+0·4	15	0	0	14	0	0	0	0	1	0
Jamshedpur (P.B.O.)	31·9	..	34·2	17	24·7	..	22·7	12	152.3	409·2	..	129·1	1	14	..	6·7	4·5	..	18	0	0	19	0	0	0	0	0	0
Chaibasa	31·4	−0.4	34·1	28	24·5	+0·1	22·2	28	85·0	264·7	+63·8	104·4	1	10	−1·6	3·4	2·1	−0·5	12	0	0	6	0	0	0	0	0	0
Ranchi	30·1	+1·2	32·6	30	21·8	−0·4	19·8	28	104·2	304·3	+63·1	91·4	1	9	−3·3	8·4 (n)	7·2	+0·8	9	0	0	0	0	0	0	0	0	0
Ranchi (G.W.O.)	29·0	..	32·0	29	22.0	..	19·4	10	61.9	274·4	..	113·6	2	9	..	11·1	8·3	..	12	0	0	8	1	0	0	0	0	0
Daltonganj	32·7	+0·6	35·4	29	23·9	−0·2	21·1	30	85·0	164·7	−16·7	47·7	5	10	+0·7	6·8	4·7	+0·2	11	0	0	0	0	0	0	0	0	0
Hazaribagh	30·1	+0·8	32·2	30	22·2	−0·2	19.7	30	108·6	245·2	+18·1	64·5	2	9	−2·5	11·0 (k)	7·8 (k)	−0·7	13	0	0	9	0	0	0	0	0	0
Dhanbad	32·0	..	34·5	29	24·3	..	22.2	28	59.3	197·2	..	59·6	2	9	..	6·7	4·9	..	13	0	0	13	1	0	0	0	0	0
Bihar.																												
Purnea	33·8	+2·1	35·7	22	25·2	0	23·2	10,30	7·1	68·9	−225·7	36·3	10	4	−7·5	6·7	4·0	+0·9	9	0	0	8	0	0	0	0	0	0
Forbesganj	34·4	..	36·8	21	23·9	..	21·3	28	18·8	48·5	..	14·8	1	4	..	7·7	5·1	..	7	0	0	9	2	0	0	0	0	0
Darbhanga	33·7	+1·9	35·3	22,24	25·9	+0·1	23·0	15	48·0	127·6	−107·1	38·6	15	7	−2·4	1·9	1·0	−3·2	7	0	0	1	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	51·4	−168·3	19·3	3	4	−5·5	..	..	..	4	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	158·0	−32·0	42·2	3	7	−1·7	..	..	..	9	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	139·7	−68·3	55·9	10	9	−0·5	..	..	..	11	..	..	..	..	..	..	..	..	..
Patna	33·7	+1·6	35·4	28	26·9	+0·8	23·7	8	26.6	206·9	−11·5	133·9	8	7	−2·2	7·5	6·9	+1·6	9	0	0	4	0	0	0	0	0	0
Patna (Aerodrome)	32·8	..	34·4	28	25·3	..	22·2	30	24·4	149·3	..	48·0	8	8	..	8·7	5·3	..	9	0	0	8	0	0	0	0	0	0
Dehri	32·6	..	35·2	29	25·3	..	22·9	30	57.1	129·5	−58·2	61·2	3	6	−2·9	6·7	4·7	..	6	0	0	0	0	0	0	0	0	0
Gaya	32·9	+0·4	35·4	29	25·2	+0·1	22·3	30	136.4	183·1	−7·4	54·6	2	7	−2·3	6·5	5·3	−1·9	9	0	0	6	0	0	0	0	0	0
Jamui	32·6	..	34·7	20	25·3	..	22·9	28	111·2	181·9	..	57·7	26	8	..	6·3	3·9	..	12	0	0	2	0	0	0	0	0	0
Dumka	32·8	+1·1	36·4	29	24·4	−0·4	21·4	3	80·5	297·4	+53·8	147·1	2	8	−4·5	..	..	..	9	0	0	8	0	0	0	0	0	0
Bhagalpur	34·0	..	36·7	23	26·2	..	24·4	2,3,28	45·6	136·9	..	77·0	2	5	..	7·5	5·4	..	9	0	0	9	0	0	0	0	0	0
Sabour	33·6	+1·8	35·8	23	25·8	+0·1	22·8	28	43·2	157·8	−54·5	90·4	2	7	−2·8	8·9	6·8	−0·4	8	0	0	10	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	32·3	−0·5	34·4	26	23·6	−1·5	19·4	30	135·9	186·7	−45·5	63·5	4	6	−4.2	4·6	3·6	−1·4	6	0	0	0	0	0	0	0	0	0
Nautanwa	34·1	..	36·5	29	24·8	..	22·3	15	2·5	62·2	..	43.7	15	4	..	7·2	4·8	..	4	0	0	0	0	0	0	0	0	0
Gorakhpur	33·4	+1·0	36·0	22,29,30	25·0	−0·1	22·0	15,29	36·5	159·7	−56.7	47.0	8	7	−2·3	7·8	3·1	+0·4	7	0	0	2	0	0	0	0	0	0
Azamgarh	33·1	..	35·6	29,30	24·9	..	21·0	30	32·8	205.1	..	37·6	3	8	..	..	..	..	9	0	0	0	0	0	0	0	0	0
Ballia	34·2	..	36·1	29	22·1	..	19·6	10,28, 30	15·6	121·2	..	65·3	10	5	..	7·7	5·0	..	6	0	0	0	0	0	0	0	0	0
Varanasi (Banaras)	32·9	+0·1	35·4	29	24·7	−0·5	21·7	2	4·4	152·0	−31·4	50.3	4	7	−1·7	10·1	6·8	+2·3	10	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur) Aerodrome).	32·5	..	34·6	29	24·9	..	22·2	30	27·4	184·2	..	70·6	3	8	..	13·1	9·6	..	8	0	0	6	0	0	0	0	0	0
Allahabad (Bamrauli).	33·3	+0·2	36·2	29	24·4	−0·4	21·9	28	30·7	119·7	−92·6	48·4	4	9	−0·5	9·0	5·9	−0·1	13	0	0	5	0	0	0	0	1	0
Banda	33·4	..	36·9	18	23·7	..	20·9	30	73·0	170·7	..	49·3	1	10	..	2·0	1·1	..	11	0	0	0	0	0	0	0	0	0
Fatehpur	31·1	−1·7	33·9	5 days	24·0	−0·8	20·3	30	62·5	113·4	−26·5	34·8	4	7	−1·6	10·6	5·0	+0·7	9	0	0	3	0	0	0	0	0	0
Kanpur	32·8	+0·1	35·9	30	23·9	−0·7	21·9	27	19·0	105·8	−66·7	20·3	15	7	−0·3	15·8	11·0	+2·8	8	0	0	0	0	0	0	0	0	0
Lucknow	32·7	−0·6	35·0	26	24·2	−0·5	20·9	3	163·4	290·2	+102·2	122·1	4	11	+3·1	..	..	..	12	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	32·6	−0·7	34·7	30	23·8	+0·1	19·7	30	167·3	319·6	+131·6	148·6	4	11	+3·1	13·1	8·3	..	11	0	0	4	0	0	0	0	0	0
Hardoi	32·8	..	35·1	24,25	24·2	..	20·6	30	114·1	258·2	..	172·7	4	8	..	10·5	6·4	..	10	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri (R)																												
Bahraich (R)																												
Uttar Pradesh (West)																												
Orai	32·9	..	36·1	27,29	21·6	..	18·2	30	50·9	239.0	..	76·2	14	9	..	12·2	9·0	..	12	0	0	0	0	0	0	0	0	0
Jhansi	32·1	−1·1	34·8	26	23·4	−0·7	20·0	30	70·1	152·3	+2·4	46·7	3	6	−1·0	8·2	5·6	+0·8	6	0	0	0	0	0	0	0	0	0
Agra	32·3	−1·5	35·0	28	23·6	−1·0	20·9	7	112·8	192·0	+75·7	53.3	3	7	+1·4	5·0	4·1	−1·4	7	0	0	0	0	0	0	0	0	0
Agra (Aerodrome) R																												
Mainpuri	33·6	−0·2	36·1	25	23·7	−0·5	21·8	29	111·3	174·4	+45·1	76·2	15	6	−0·4	7·2	4·2	+1·5	6	0	0	0	0	0	0	0	0	0
Aligarh	32·3	−1·2	35·3	10	23·4	−1·0	20·9	30	106.4	282·0	+147·4	130·3	13	6	−0·1	11·7	7·5	+1·2	7	0	0	0	0	0	0	0	0	0

(k) Mean of 20 days. (n) Mean of 17 days. (R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with										
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	In the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West) *Contd.*																												
Bareilly	32·2	−0·5	35·0	24	24·2	−0·1	21·7	30	24·8	204·2	+13·7	105·7	4	9	+2·2	8·1	4·6	+2·0	12	0	0	1	0	0	0	0	0	0
Meerut	31·3	−1·9	34·7	25,29	22·6	−1·1	20·4	26	..	330·0	+181·2	114·8	14	9	+3·9	..	5·3	..	11	0	0	0	0	0	0	0	0	0
Najibabad	31·0	..	33·8	27	21·9	..	18·3	27	215·4	448·9	..	175·3	15	7	..	2·2	1·6	..	10	0	0	0	0	0	0	0	0	0
Roorkee	30·9	−1·6	33·3	7days	22·6	−0·2	19·7	30	261·4	436·8	+275·0	258·1	15	8	+2·0	5·6	3·4	+0·7	8	0	0	0	0	0	0	0	0	0
Dehra Dun	28·4	−0·9	31·1	10,25	20·7	−0·1	18·8	16	143·9	270·0	+0·3	65·3	15	11	+0·1	3·7	2·8	+0·2	13	0	0	6	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
New Delhi	32·3	−1·4	35·5	26	23·3	−1·0	21·8	15,25, 30	144·9	223·2	+100·3	91·2	14	8	+3·4	17·0	12·7	+3·7	10	0	0	3	0	0	0	0	0	0
Hissar	34·2	−1·7	37·6	1,25,28	21·7	−1·9	19·1	30	83·8	164·1	+92·7	68·1	6	8	+4·9	8·6	3·9	−2·7	8	0	0	0	0	0	0	0	0	0
Karnal	31·6	..	34·3	26	21·9	..	17·3	26	76·7	146·4	..	52·1	15	9	..	..	..	..	9	0	0	0	0	0	0	0	0	0
Patiala	32·8	..	36·7	26,29	22·0	..	19·5	30	98·2	215·9	−6·9	82·0	15	9	+3·0	10·4	6·8	..	9	0	0	0	0	0	0	0	0	0
Ambala (R)																												
Ambala (Aerodrome) (R)																												
Chandigarh	30·9	..	34·4	11	21·9	..	19·2	28	178·9	327·1	..	140·9	15	9	..	..	..	..	10	0	0	0	0	0	0	0	0	0
Ludhiana (R)																												
Ferozepur	35·3	..	37·5	1	21·4	..	18·4	29	0	0	..	0	..	0	..	3·2	2·0	..	0	0	0	0	0	1	0	0	0	0
Amritsar	34·7	..	37·1	24	21·5	..	18·4	25	0	0	..	0	..	0	..	7·5	5·0	..	0	0	0	0	0	0	0	0	0	0
Pathankot	32·8	..	35·6	28	21·1	..	19·1	26	56·5	160·4	..	94·2	3	3	..	3·4	2·5	..	6	0	0	0	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur	30·6	..	35·4	9	20·0	..	16·1	23	138·4	258·2	..	103·4	15	8	..	4·4	3·0	..	8	0	0	1	1	0	0	0	0	0
Mandi	28·6	..	31·7	8	17·1	..	14·9	28	92·4	207·4	..	44·7	15	10	..	2·4	1·8	..	12	0	0	1	4	0	0	0	0	0
Jammu & Kashmir																												
Srinagar	27·5	−1·1	30·0	16,18	12·1	+0·2	8·3	25	0	0·5	−38·4	0·5	21	0	−3·5	5·1	5·9	+2·4	1	0	0	4	0	0	0	0	0	0
Gulmarg	17·3	−0·2	20·4	16	3·4	−2·8	1·2	25	11·1	22·6	−43·9	7·9	9	4	−1·3	7·2	3·9	−0·8	10	0	0	15	0	0	0	0	0	0
Sonamarg *																												
Dras (R)																												
Kargil (R)																												
Leh (R)																												
Skardu (R)																												
Gurez	..	..	..	..	..	..	..	..	..	12·7	−34·5	12·7	23	1	−4·1	..	..	..	1	..	..	..	..	..	..	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	34·7	+1·4	37·1	24	23·1	−0·8	21·7	27,30	..	1·3	−87·8	1·3	6	0	−4·1	..	..	..	1	0	0	0	0	0	0	0	0	0
Gund	..	..	..	..	..	..	..	..	..	42·9	..	19·0	9	4	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	15·4	..	6·3	9	3	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	6·7	..	1·8	4	0	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Khangral	..	..	..	..	..	..	..	..	..	71·1	..	25·4	6	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	24·4	..	7·6	4	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	1·8	..	1·8		0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	1·8	..	1*	4	0	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	37·6	−0·2	39·5	1	23·2	−0·2	20·5	28	0	0	−3·1	0	..	0	−0·5	6·1	4·9	−4·1	0	0	0	0	0	0	0	0	0	0
Churu	35·2	..	37·7	28	22·3	..	18·9	29	6·8	7·3	..	5·8	4	1	..	14·4	9·5	..	3	0	0	0	0	0	0	0	0	0
Bikaner	37·0	+0·7	39·2	18	24·4	−0·7	21·6	14	0	6·9	−26·4	3·8	25	2	−0·1	9·9	8·9	+0·2	2	0	0	1	1	0	0	0	0	0
Jaisalmer	36·2	..	40·3	15	23·1	..	21·0	28	0	0	..	0	..	0	..	16·6	16·2	..	0	0	0	0	0	0	0	0	0	0
Phalodi	35·1	..	37·8	15,18	23·2	..	20·1	19	0	6·3	−17·8	6·3	4	1	−0·7	12·7	10·7	..	1	0	0	0	0	0	0	0	0	0
Jodhpur	35·0	+0·4	37·7	18	23·3	−0·5	19·3	18	0	0	−61·0	0	..	0	−2·8	14·4	10·0	−1·7	0	0	0	0	0	0	0	0	0	0
Barmer	35·9	+0·8	39·6	15	24·4	+0·1	22·1	29	0	0	−18·5	0	..	0	−1·4	13·6	12·2	+3·0	0	0	0	0	0	0	0	0	0	0
Rajasthan, (East)																												
Alwar	34·4	..	37·8	11	..	..	..	..	72·2	218·5	..	78·0	14	7	..	..	..	..	9	0	0	1	0	0	0	0	0	0
Sikar	33·4	..	36·1	18	21·9	..	16·7	30	1·3	9·9	..	8·6	13	1	..	9·8	6·6	..	2	0	0	0	0	0	0	0	0	0
Jaipur	32·8	−1·1	35·2	10	21·8	−0·9	17·0	30	77.4	151·9	+70·1	66·0	4	6	+1·3	10·8	5·8	−0·6	8	0	0	2	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	32·9	..	35·0	22,26	21·9	..	17·1	30	36·8	51·3	..	23·4	3	3	..	..	..	..	6	0	0	1	0	0	0	0	0	0
Dholpur (R)																												
Ajmer	32·0	−0·2	34·2	25	22·9	−0·7	18·3	30	6·9	8·7	−59·9	6·9	14	1	−3·0	13·3	10·7	+4·1	3	0	0	0	0	0	0	0	0	0
Kotah	33·9	+0·4	37·2	25	23·9	−0·8	20·9	30	34·3	107·2	−12·4	31·7	13	5	−0·7	11·0	7·6	+3·4	5	0	0	2	0	0	0	0	0	0
Chambal	32·6	..	35·2	24	20·5	..	14·4	30	13·5	66·6	..	26·2	13	4	..	8·5	4·7	..	7	0	0	0	0	0	0	0	0	0
Jhalawar	32·3	−0·4	35·0	23,25	21·7	−1·2	17·0	19,29	35·6	154·9	−3·3	97·3	1	5	−1·9	9·3	6·8	+1·8	6	0	0	0	0	0	0	0	0	0
Udaipur	31·8	+0·9	34·4	18	20·0	−1·8	15·7	30	0	2·5	−95·3	2·5	13	1	−4·4	5·6	3·6	..	1	0	0	0	0	0	0	0	0	0

(R) Register not received

*Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (East)																												
Contd.																												
Erinpura (Jawai Dam)	31·8	..	35·5	12	23·1	..	21·6	29	0	12·7	..	8·1	13	2	..	9·2	8·4	..	2	0	0	0	0	0	0	0	0	0
Madhya Pradesh, (West)																												
Gwalior (P.B.O.)	31·9	−0·4	33·9	26,27,29	24·3	−0·1	20·7	30	88·9	257.5	+70.3	88·9	2	8	+0·6	11·1	8·7	..	10	0	0	4	0	0	0	0	0	0
Sheopur Kalan	32·0	..	34·1	22	22·1	..	17·4	30	38·9	132·9	..	64·3	1	5	..	11·3	7·7	..	5	0	0	0	0	0	0	0	0	0
Guna	30·9	+0·3	33·7	24	21·2	−0.7	17·9	30	37·6	272·8	+33·8	77·0	1	7	−1·6	13·4	8·0	+1·7	8	0	0	2	0	0	0	0	0	0
Rajgarh	31·8	..	35·1	24	21·4	..	15·6	30	45.5	129·0	..	45·2	14	6	..	12·5	9·1	..	6	0	0	0	0	0	0	0	0	0
Neemuch	32·1	+1·0	34·9	19	21·5	−0·3	17·9	30	7·9	10·4	−115·8	7·1	22	1	−5·3	12·7	10·6	+0·9	4	0	0	0	0	0	0	0	0	0
Ratlam	31·1	..	33·6	30	21·4	..	19·3	30	12·2	28·9	..	12·9	14	3	..	11·5	7·6	..	5	0	0	1	0	0	0	0	0	0
Alirajpur	32·0	..	33·9	12	22·9	..	21·1	30	30·7	37·1	..	30·7	13	2	..	12·3	9·7	..	5	0	0	0	0	0	0	0	0	0
Indore	30·2	+0·5	32·2	18,20,30	20·1	−0·7	17·2	30	36·6	67·2	−96·9	35·3	14	6	−2·4	19·0	16·9	..	8	0	0	0	1	0	0	0	1	0
Bhopal (Bairagarh)	30·4	+0·5	33·1	24	20·7	−1·2	18·1	30	38·6	86·6	−178·1	21·8	14	7	−3·2	14·4	10·3	−0·2	7	0	0	1	0	0	0	0	0	0
Khandwa	32·3	+1·0	34·9	26	22·6	−0·2	20·6	28	40·2	70·1	−74·4	28·2	14	4	−3·1	12·1	9·1	+1·1	5	0	0	0	0	0	0	0	0	0
Hoshangabad	31·6	+1·2	34·3	26	22·0	−0·9	20·1	20	35·5	110·2	−102·1	48·0	14	5	−4·5	4·7	2·8	−0·6	7	0	0	1	0	0	0	0	0	0
Betul	29·0	..	31·2	27	20·0	..	17·4	30	53·1	138·3	..	77·0	14	6	..	9·9	6·0	..	8	0	0	0	0	0	0	0	0	0
Chhindwara	30·0	..	34·9	23,24	20·1	..	16·3	11	20·6	83·1	..	42·7	13	4	..	9·7	8·1	..	4	0	0	0	0	0	0	0	0	0
Seoni	30·1	+0·7	33·6	26	21·0	−0·3	19·0	20	97·1	149·9	−68·3	41·1	12	6	−4·9	9·8	7·2	+2·4	8	0	0	2	0	0	0	0	0	0
Sagar	29·6	−0·4	32·5	30	20·4	−1·2	18·0	19	62·6	178·9	−14·1	58·9	14	7	−2·6	11·2	9·4	..	10	0	0	2	0	0	0	0	0	0
Nowgong	32·7	+0·3	35·6	25	21·1	−2·7	18·4	19,21, 30	85·7	149·7	+2·1	75·9	3	8	+0·8	8·4	5·8	+2·9	9	0	0	0	0	0	0	0	0	0
Madhya Pradesh, (East)																												
Sutna	31·6	+0·4	34·4	27	22·7	−1·1	20·4	28,29	35·1	152·5	−22·5	43·9	11	7	−1·9	9·6	6·1	+0·8	12	0	0	4	0	0	0	0	0	0
Umaria	30·7	+0·5	33·5	30	22·1	−0·7	18·4	30	34·5	76·4	−155·5	30·7	10	7	−3·4	7·3	5·3	+0·2	10	0	0	0	0	0	0	0	0	0
Jabalpur	31·4	+0·8	34·5	26	22·2	−0·2	19·6	30	32·6	97·2	−116·4	23·6	11	10	+0·3	8·6	5·7	+2·2	14	0	0	2	0	0	0	0	0	0
Mandla	30·4	..	33·1	30	21·3	..	17·4	30	71·8	111·4	..	23·9	11	10	..	8·1	4·0	..	11	0	0	1	4	0	0	0	0	0
Pendra	29·0	+0.3	31·4	27,30	21·6	+0·2	20·2	30	43·8	144·7	−56·0	62·7	10	8	−3·3	10·2	7·0	.	11	0	0	7	0	0	0	0	0	0
Ambikapur	29·8	..	31·7	19.27,30	21·4	..	19·6	23,24, 30	15·5	37·1	..	14.2	2	5	..	12·1	7·9	..	10	0	0	2	0	0	0	0	0	0
Champa	32·2	..	34·4	30	24·8	..	23·3	28,30	44·2	93·7	..	20·8	14	8	..	5·9	4·2	..	14	0	0	7	0	0	0	0	0	0
Raigarh	32·8	..	35·7	1	24·7	..	22·3	7	43·4	111·4	..	25·1	17	10	..	5·7	4·7	..	16	0	0	6	0	0	0	0	0	0
Raipur	32·3	+1·1	35·1	26	24·2	+0·3	22·6	3,8,30	50·2	99·2	−96·1	31·3	12	8	−2·3	9·7	7·2	−0·4	12	0	0	2	0	0	0	0	0	0
Kanker	30·8	+0·9	33·2	27	23·5	+0·8	21·1	30	143.2	181·4	−78·7	67·1	11	6	−6·3	4·5	3·0	−2·8	7	0	0	2	0	0	0	0	0	0
Jagdalpur (P.B.O.)	30·8	+1·2	33·2	27	22·3	+0·4	21·1	25,26	62·0	74·3	−189·4	22·9	18	5	−8·6	7·3	4·6	..	12	0	0	9	1	0	0	0	1	0
Gujarat																												
Deesa	34·5	..	37·2	12,13	22·7	..	19·9	28,29	0	0	..	0	..	0	..	9·6	6·7	..	0	0	0	0	0	0	0	0	0	0
Idar	33·4	..	35·8	12	21·6	..	18·6	29	0·8	1·6	..	0·8	2.7	0	..	9·4	5·9	..	2	0	0	0	0	0	0	0	0	0
Ahmedabad	35·2	+1·5	38·5	14	23·9	−0·2	22·0	29	0	3·6	−102·1	3·6	24	1	−4·2	9·1	7·2	0	1	0	0	0	0	0	0	0	0	0
Dohad	31·7	+1·6	33·9	12	22·7	0	21·3	28	0	0	−143·0	0	..	0	−7·2	20·2	17·4	+6·9	0	0	0	0	0	0	0	0	0	0
Baroda	34·1	+1·5	36·7	14	23·6	−0·1	20·4	30	0	0	−151·4	0	..	0	−6·7	6·5	3·9	−1·6	0	0	0	0	0	0	0	0	0	0
Baroda (Aerodrome)	34·2	..	37·3	12	28·9	..	21·1	30	0	0·3	..	0·3	22	0	..	8·6	7·1	..	1	0	0	0	0	0	0	0	0	0
Broach	34·1	..	38·3	12	24·3	..	21·1	17	13·5	14·8	..	12·7	18	1	..	9·2	8·2	..	3	0	0	0	0	0	0	0	0	0
Surat	33·0	+1·5	35·4	13	25·1	+0·7	23·1	21	10·7	26·4	−129·9	12·9	1	3	−4·4	10·3	8·5	+2·4	3	0	0	0	0	0	0	0	0	0
Saurashtra & Kutch																												
Bhuj (P.B.O.)	34·3	+1·1	39·1	14	23·1	−0·6	20·8	30	2·5	5·3	−40·7	2·8	22	2	−0·2	13·7	10·5	−1·7	2	0	0	0	0	0	0	0	0	0
Bhuj (Aerodrome)	34·2	..	39.1	13	23·2	..	21·1	30	8·1	25·9	..	25·9	22	1	..	15·8 (b)	13·5 (b)	..	1	0	0	0	0	0	0	0	0	0
Kandla	32·9	..	38.3	13	24·9	..	22·6	29	0	1·0	..	1·0	13	0	..	25·4	22·4	..	1	0	0	0	0	0	1	0	0	0
Mandvi	30·6	..	33.7	13	25·4	..	23·0	17	0	4·3	..	4·3	20	1	..	31·1	27·9	..	1	0	0	0	0	0	1	0	0	0
Dwarka	29·9	+0·3	30·8	23	25·1	−0·3	24·0	17	0	0	−37·3	0	..	0	−2·0	15·6	14·4	+0·7	0	0	0	0	0	0	0	0	0	0
Porbander	30·2	..	32·3	30	24·9	..	23·4	30	0	0·5	..	0·5	3	0	..	14·4	11·0	..	1	0	0	0	0	0	0	0	0	0
Porbander (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	0	0
Jamnagar	..	..	..	..	23·2	−0·4	21·1	28	5·1	5·6	−51·0	5·6	20	1	−1·7	..	..	..	1	0	0	1	0	0	0	1	0	0
Rajkot (Aerodrome)	32·4	−0·8	36·8	13	21·2	−1·4	18·4	29	1·5	29·9	−54·9	27·9	1	1	−3·9	21·2	17·9	+6·6	2	0	0	0	0	0	0	0	0	0
Surendranagar	35·4	..	38·9	1	24·0	..	21·9	21,29	0	10·2	..	8·4	12	1	..	14·0	13·6	..	2	0	0	0	0	1	0	0	0	0
Bhavnagar	34·6	+1·0	39·2	14	23·4	−0·4	21·8	20	3·8	8·4	−89·6	4.6	3	1	−4·7	10·8	10·4	+2·2	3	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome.)	34·2	..	40·2	14	23·8	..	21·8	20	..	17·3	..	6·9	3	3	..	..	17·1	..	4	0	0	0	0	0	0	0	0	0
Mahuva	32·0	..	36·7	14	22·2	..	19·9	20	8·3	16·4	..	8·1	1	3	..	15·6	10·8	..	4	0	0	0	0	0	0	0	0	0
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19·0	14·4	..	..	0	0	0	0	0	0	0	0	0
Veraval	29·8	..	31·2	12,30	23·8	...	21·1	20	2·5	32·2	−31·1	19.8	23	3	−0·9	19·5	15·8	..	3	0	0	0	0	0	0	0	0	0

(b) Mean of 29 days

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean Maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan																												
Dahanu	30·0	+0·8	31·9	22	24·1	−0·3	22·1	20	33·9	66·3	−270·0	20·8	29	8	−6·0	19·2	15·1	−1·6	9	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	30·7	+1·0	31·7	13	24·9	+0·6	23·3	28	12·8	65·7	−198·2	15·2	3	7	−5·7	12·0	10·0	−1·3	11	0	0	1	0	0	0	0	1	0
Bombay (Santacruz Aerodrome)	30·5	+1·0	31·5	18	23·8	+0·4	21·8	20	10·4	80·6	−183·3	17·0	23	10	−2·7	15·3	9·5	..	13	0	0	0	0	0	0	0	0	0
Alibag	29·9	+0·7	31·7	18	24·1	−0·3	22·7	20	..	45·8	−220·1	19·3	12	5	−9·5	..	12·7	−1·5	10	0	0	1	0	0	0	0	0	0
Harnai	28·6	−0·1	29·6	22	24·7	+0·6	22·3	28	14·8	77·4	−515·2	20·1	28	9	−9·8	16·4	14·2	−0·1	11	0	0	0	0	0	0	0	0	0
Ratnagiri	29·3	..	31·1	27	23·8	..	22·3	21	34·5	98·5	−201·7	21·1	2	11	−4·0	..	..	..	14	0	0	1	0	0	0	0	0	0
Devgad	29·3	+0·6	30·8	8	23·9	−0·3	22·3	11	125·4	255·8	−275·8	88·1	12	12	−6·8	16·4	14·1	−2·0	14	0	0	1	0	0	0	0	0	0
Vengurla	29·0	..	30·4	19	23·0	..	21·3	4	91·6	233·1	..	53·3	15	12	..	..	..	..	15	0	0	1	0	0	0	0	0	0
Maharashtra	32·0	..	33·9	18	..	..	..	..	77·7	141·4	..	59·2	23	4	..	11·5	9·3	..	7	0	0	1	0	0	0	0	0	0
Nandurbar	32·8	..	34·9	20	23·0	..	19·8	2	24·4	73·4	−79·3	47·7	13	2	−5·7	17 9	13·8	..	5	0	0	0	0	0	0	0	0	0
Jalgaon	32·5	+1·0	34·7	18	21·3	+0·1	18·8	8	40·7	104·7	−42·4	25·1	12	8	+0·3	11·6	9·5	0	8	0	0	1	0	0	0	0	0	0
Malegaon	29·2	..	32·3	18	20·2	..	18·1	21	44·0	73·9	..	24·9	11	7	..	13·4	10·7	..	10	0	0	1	0	0	0	0	0	0
Deolali	30·9	+0·8	33·0	22	20·9	+0·2	18·9	4,7	11·8	88·5	−81·4	29·0	25	8	−1·0	13·7	12·0	+0·9	11	0	0	1	0	0	0	0	0	0
Aurangabad	30·9	..	33·8	19	20·4	..	18·4	3,17	4·3	36·6	..	20·1	13	3	..	7·1	13·6	..	9	0	0	2	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	..	..	..	..	..	..	..	..	..	298·3	−396·4	72·4	13	14	−7·7	..	..	..	18	..	..	..	..	..	..	..	..	..	..
Khandala	30·7	+0·6	33·3	22	19·8	−0·1	16·2	4	60·1	144.5	−21·6	56·4	26	8	−0·6	9·2	7·1	−2·9	11	0	0	0	0	0	0	0	0	0
Ahmednagar	32·5	..	35·0	19	21·9	..	20·6	24	33·3	104·8	−99·7	29·2	12	6	−3·6	13·7	10·2	..	7	0	0	2	0	0	0	0	0	0
Parbhani	30·3	+1·1	33·4	18	20·2	−0·3	17·6	21	8·1	30·8	−103·6	12·9	11	3	−4·6	6·6	4·4	−6·4	11	0	0	2	0	0	0	0	1	0
Poona	30·1	..	32·6	17	19·2	..	16·4	21	6·0	35·0	..	23·1	11	3	..	..	..	..	7	0	0	2	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	31·6	..	33·9	9	20·4	..	17·8	4	58·8	155·2	..	105·4	11	6	..	14·4	12·8	..	10	0	0	1	0	0	0	0	0	0
Baramati	32·3	..	34·9	9	20·6	..	17·4	1	42·7	80·9	..	26·2	11	5	..	12·9	11·7	..	5	0	0	1	0	0	0	0	0	0
Jeur	32·3	+0·8	34·4	9	21·9	+0·2	19·3	3	28·7	154·0	−38·8	87·9	12	5	−4·1	13·0	10·1	−0·2	8	0	0	3	0	0	0	0	0	0
Sholapur	30·1	+1·0	33·3	30	20·0	+0·1	18·3	6,7	71·9	122·0	+23·5	61·0	12	6	+0·3	13·9	12·0	−0·1	8	0	0	2	0	0	0	0	0	0
Miraj	29·0	..	32·1	18	19·8	..	17·8	21	10·8	71·1	..	27·9	10	4	..	14·0	10·9	..	8	0	0	4	0	0	0	0	0	0
Kolhapur	28·5	..	31·4	10	21·1	..	18·8	2	90·4	195·3	..	113·0	13	4	..	12·8	11·0	..	6	0	0	0	0	0	0	0	0	0
Vidarbha	33·1	+1·2	35·4	11	23·0	+0·2	20·9	2	35·2	108·2	−39·1	79·8	13	3	−4·6	13·2	9·5	+1·6	4	0	0	1	0	0	0	0	0	0
Buldhana	32·0	+0·8	34·8	11	22·0	−0·5	20·4	21	72·9	201·9	+48·5	124·9	13	5	−3·3	10·7	8·0	+1·1	5	0	0	1	0	0	0	0	0	0
Akola	31·4	..	33·8	9,26	21·6	..	20·0	1	117·3	184·1	..	73·9	9	7	..	13·3	10·8	..	7	0	0	2	0	0	0	0	0	0
Amravati	32·8	+1·5	35·1	25,28	22·7	−0·6	20·0	1	15·2	86·2	−117·3	32·5	13	5	−5·6	16·6	12·0	..	7	0	0	2	0	0	0	0	1	0
Yeotmal	31·7	..	34·2	26	23·6	..	22·0	30	40·9	67·6	..	28·5	12	6	..	7·2	4·3	..	11	0	0	3	0	0	0	0	0	0
Nagpur	32·1	..	34·6	26	21·5	..	19·4	22	31·0	91·0	..	31·3	12	7	..	7·9	5·2	..	10	0	0	1	0	0	0	0	0	0
Gondia	32·4	+0·8	34·3	26	23·4	−0·2	20·9	22	37·1	136·0	−90·3	65·5	12	6	−4·7	10·7	6·3	+1·3	7	0	0	5	0	0	0	0	0	0
Brahmapuri	33·5	..	35·2	6,26	24·8	..	22·7	23	58·5	132·3	..	99·8	12	6	..	8·5	4·8	..	8	0	0	6	0	0	0	0	0	0
Chanda	33·5	..	35·2	6,26	24·8	..	22·7	23	58·5	132·3	..	99·8	12	6	..	8·5	4·8	..	8	0	0	6	0	0	0	0	0	0
Sironcha	33·5	..	35·2	6,26	24·8	..	22·7	23	58·5	132·3	..	99·8	12	6	..	8·5	4·8	..	8	0	0	6	0	0	0	0	0	0
Coastal Andhra Pradesh	35·3	+0·5	37·7	5	26·6	+0·9	22·9	8	16·0	80·5	−32·8	46·2	8	5	−0·9	10·9	7·4	+0·5	6	0	0	3	0	0	0	0	0	0
Nellore	32·8	..	36·7	23	25·9	..	23·7	11	72·5	142·3	..	37·1	11	9	..	10·3	7·0	..	14	0	0	3	0	0	0	0	0	0
Ongole	34·7	+0·4	37·2	7,8	24·7	−0·5	22·4	17	32·3	93·2	−27·7	35·1	11	8	+0·2	9·3	5·2	−4·3	11	0	0	4	0	0	0	0	0	0
Rentachintala	33·8	..	36·7	26	25·5	..	18·2	6	57·2	107·8	..	20·1	17	10	..	10·4	10·3	..	10	0	0	12	0	0	0	0	0	0
Gannavaram	32·8	+0·3	35·0	26	26·2	+0·9	23·1	27	61·8	145·1	−16·7	57·9	8	7	−2·9	11·7	8·4	+1·2	9	0	0	9	0	0	0	0	0	0
Masulipatam	33·2	..	34·9	25	25·0	..	22·9	17	19·9	132·9	..	35·8	17	7	..	10·9	7·2	..	9	0	0	11	0	0	0	0	0	0
Nidadavolu	34·0	+1·9	36·7	25	26·3	+0·7	23·2	29,30	60·2	120·7	−35·8	49·3	11	8	−0·8	10·4	7·9	+1·1	10	0	0	2	0	0	0	0	0	0
Kakinada	33·3	+0·8	35·6	3,4	25·5	−0·1	23·8	4.11,23	95·8	251·7	+85·3	57·2	21	11	+1·9	11·4	7·8	−0·9	15	0	0	18	0	0	0	0	0	0
Visakhapatnam	32·1	0	34·8	26	25·7	−0·1	24·4	11	36·8	215·9	+39·9	61.0	14	10	+0·9	12·5	9·4	+2·2	10	0	0	0	0	0	0	0	0	0
Calingapatam	33·4	..	35·6	26	25·3	..	23·9	12,23	54·8	70·6	..	28·5	12	6	..	9·0	5·0	..	6	0	0	2	0	1	0	0	0	0
Telangana	32·3	+1·4	33·9	30	23·3	+0·6	21·4	20	12·2	73·0	−153·3	47·5	12	4	−6·0	6·9	5·4	+0·4	5	0	0	0	0	0	0	0	0	0
Ramagundam	31·3	..	33·5	7,21	22·6	..	21·1	10,11, 12	35·8	140·7	..	57·4	11	5	..	12·8	10·3	..	6	0	0	3	0	0	0	0	0	0
Nizamabad	30·4	+0·6	32·2	26,29	21·5	+0·2	19·1	9	61·0	88·6	−75·2	48·8	12	5	−4 5	17·8	12·5	+1·7	7	0	0	4	0	0	0	0	2	0
Mahbubnagar	..	..	..	..	22·8	..	20·0	2,3	89·2	133·3	..	57·9	30	5	..	..	..	..	6	0	0	5	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome). Hakimpet	32·6	+1·4	34·7	26	24·2	+0·6	21·8	11	55·3	99·1	−87·3	42·7	11	4	−5·1	15·0	8·9	+2·0	6	0	0	3	0	0	0	0	0	0
Hanamkonda	34·2	..	36·3	26	24·1	..	22·1	23	30·5	45·6	..	18·8	12	5	..	8·2	5·3	..	6	0	0	1	0	0	0	0	0	0
Bhadrachallam	34·0	..	37·2	26	23·7	..	21·2	22	107.8	149·0	..	41·7	9	6	..	9·6	5·5	..	7	0	0	1	0	0	0	0	0	0
Khammameth	29·7	..	32·2	27	21·2	..	19·4	30	16·8	54·9	..	14·5	7	5	..	14·4	10·5	..	8	0	0	2	0	0	0	0	0	0
Rayalaseema	34·0	−0·2	36·6	28,29	25·0	+0·3	22·3	8	1·5	55·9	−97·3	25·4	8	4	−4·3	9·2	6·2	−1·7	7	0	0	0	0	0	0	0	0	0
Arogyavaram	33·2	..	36·1	6	22·9	..	21·2	3	7·4	97·7	−61·8	34·0	10	5	−1·9	15·0	12·4	..	10	0	0	5	0	0	0	0	0	0
Cuddapah	33·3	+1·1	35·6	20	23·2	−0·1	21·1	13	40·5	65·4	−86·0	23·9	25	6	−3·2	17·1	13·3	+3·5	6	0	0	0	0	0	0	0	0	0
Anantapur	36·5	..	38·6	27	26·2	..	25·1	30	32·3	7·9	−23·3	7·9	30	1	−1·2	16·6	15·1	..	1	0	0	1	0	0	0	0	0	0
Kurnool																												
Madras																												
Palayamcottai																												

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras—*Contd.*																												
Tuticorin	33·9	..	36·8	3,4	26·1	..	24·3	17	6·9	13·8	..	6·9	30	2	..	21·8	16·9	..	3	0	0	0	0	0	0	0	0	0
Pamban	29·6	−2·2	90·8	24	25·7	−0·2	23·0	20	0	34·1	+5·1	22·1	19	3	+1·1	13·0	11·8	−0·8	4	0	0	0	0	0	0	0	0	0
Mathurai	36·1	+1·8	38·3	6	24·1	−0·3	21·8	30	33·0	197·6	+78·2	71·1	30	9	+2·5	6·9	6·1	+1·0	9	0	0	0	0	0	0	0	0	0
Nagapattinam	33·7	0	36·2	2	25·0	−0·2	21·7	20	15·5	106·9	+23·1	47.7	10	6	+0·9	11·2	10·2	+2·5	8	0	0	2	0	0	0	0	0	0
Tiruchirapalli	35·5	+1·0	37·8	6	24·8	+0·2	22·7	21	5·8	91·5	−28·4	43·4	7	6	0	23·8	21·0	+3·9	8	0	0	9	0	0	0	0	0	0
Coimbatore	29·8	−1·7	32·8	30	21·7	+0·1	20·1	23	2·0	2·0	−38·4	1·5	8	0	−3·3	17·0	13·4	+5·8	2	0	0	2	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	32·5	..	33·7	27,28	21·5	..	20·4	4 days	20·9	20·9	..	14·5	19	2	..	29·3	26·7	..	3	0	0	3	0	0	0	0	0	0
Salem	34·5	+1·3	37·6	29	23·4	+0·6	22·1	7	23·7	67·0	−87·2	22·6	7	5	−3·5	9·0	7·9	+2·9	9	0	0	4	0	0	0	0	0	0
Kallakurichi	36·0	..	38·4	4	24·6	..	21·7	29	24.0	64·7	..	26·2	29	3	..	7·3	6·3	..	11	0	0	4	0	0	0	0	0	0
Cuddalore	34·9	+1·3	38·2	4	25·3	+0·4	23·6	6	3·8	79·4	−52·9	20·6	9	6	−0·2	8·4	8·1	+1·8	8	0	0	1	0	0	0	0	0	0
Vellore	34·3	+0·9	36·6	5	24·7	+0·6	22·1	30	30·0	86·2	−88·5	33·0	7	5	−3·1	10·9	7·8	+2·8	9	0	0	6	0	0	0	0	0	0
Madras	34·1	−0·3	36·8	27	25·4	+0·3	22·4	7	45·7	108·6	−10·3	23·6	18	8	−1·0	15·3	11·0	−1·9	10	0	0	6	0	0	0	0	2	0
Madras (Nungambakkam)	34·0	..	36·8	27	25·3	..	22·4	7	..	91·1	..	25·4	7	9	..	..	5·9	..	12	0	0	4	0	0	0	0	0	0
Coastal Mysore																												
Karwar	28·3	..	29·4	25,27	23·7	..	22·2	22	22·9	89·5	−216·1	29·0	2	6	−9·5	12·6	8·6	..	7	0	0	0	0	0	0	0	0	0
Honavar	28·9	0	30·4	23	22·7	−0·5	21·7	22	43·8	107·1	−283·6	32·5	12	8	−10·2	8·5	6·7	+3·9	10	0	0	0	0	0	0	0	0	0
Mangalore	29·0	−0·1	30·3	29	23·5	0	22·3	14,24	32·3	63·8	−202·4	20·9	13	5	−10·5	9·9	7·5	+1·2	11	0	0	1	10	0	0	0	1	0
Mangalore (Bajpe Aerodrome)	29·0	..	30·3	29	22·3	..	21·3	15	33·3	93·5	..	18·0	12	9	..	..	..	..	11	0	0	0	3	0	0	0	0	0
Mysore (North)																												
Bidar	30·1	+1·2	31·9	20,21	21·4	+0·2	18·6	2	14·4	91·9	−125·0	26·4	12	7	−4·0	14·4	12·1	−0·3	7	0	0	0	0	0	0	0	0	0
Gulbarga	32·1	+0·7	34.4	21	22·4	+0·5	19·7	3	36·7	144·9	−44·6	52·1	12	8	−2·1	13·8	12·6	+1·7	10	0	0	1	0	0	0	0	0	0
Bijapur	31·1	+0·3	33·4	8,9	21·7	+0·7	18·8	3	7·1	146·0	+5·3	59·9	10	6	−2·0	11·1	10·5	+0·8	6	0	0	1	0	0	0	0	0	0
Belgaum	26·8	+0·5	29·4	18	18·6	−0·1	15·5	7	77·5	204·7	+82·8	40·2	11	11	+1·9	6·0 (b)	5·6	−0·5	16	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	24·3	−2·9	26·2	9,26,29	18·3	−0·3	16·3	21	68·6	67·5	−51·1	19·0	11	8	−1·1	10·2	8·1	−1·2	13	0	0	3	0	0	0	0	0	0
Belgaum (Sambre Aerodrome)	27·7	..	30·4	18	17·8	..	16·0	21	51·9	32·9	..	9·9	11	4	..	20·4	17·1	..	9	0	0	1	6	0	0	0	0	0
Gadag	30·7	+1·1	33·9	30	20·3	−0·1	19·0	22	63·8	59·0	−59·9	30·7	17	5	−1·4	12·2	12·5	−0·7	9	0	0	6	0	0	0	0	0	0
Raichur	32·6	+0·8	34·6	7,20	22·9	+0·3	21·1	1	34·8	85·9	−72·3	34·8	12	6	−3·4	13·6	12·1	+0·2	8	0	0	1	0	0	0	0	0	0
Mysore (South)																												
Bellary	32·4	−0·1	34·1	30	23·0	+0·2	20·4	22	5·6	35·5	−88·2	15·5	10	4	−3·1	12·7	11·6	+1·5	6	0	0	1	0	0	0	0	0	0
Chitaldrug	29·1	0	31·2	17	19·9	−0·1	18·8	4	3·7	26·5	−84·5	8·6	17	4	−3·1	10·4	10·8	+1·3	7	0	0	0	0	0	0	0	0	0
Shimoga	28·8	..	30·6	18	19·8	..	17·3	22	21.9	28·8	..	9·9	6	4	..	7·4	4·4	..	6	0	0	1	0	0	0	0	0	0
Balehonnur	25·1	+0·4	27·5	30	17·2	−0·9	15·0	15	..	61·9	−133·2	17·3	2	9	−7·0	.	..	..	15	0	0	0	0	0	0	0	0	0
Hassan	26·9	−0·3	29·6	29	17·6	−0·6	15·5	14	23·7	22·7	−87·3	12·0	18	4	−4·1	12·5	10·9	+2·7	5	0	0	4	3	0	0	0	0	0
Mysore	29·6	+0·6	31·7	28	18·7	−0·5	17·4	24,25	0·9	16·2	−109·5	7·4	17	3	−5·2	12·1	10·5	+0·8	5	0	0	0	0	0	0	0	0	0
Bangalore (Central Observatory)	28·2	+0·4	31·2	29	19·1	+0·6	16·9	14	18·4	55·2	−114·0	21·6	11	11	+2·1	14·3	11·6	+2·3	11	0	0	2	0	0	0	0	1	0
Bangalore (Aerodrome)	28·7	..	31·1	29	19·3	..	17·2	14	6·6	26·8	..	14·7	11	3	..	..	..	..	8	0	0	1	0	0	0	0	0	0
Kerala (Including Laccadives)																												
Kozhikode	29·3	+0·2	30·6	20	23·5	−0·2	22·4	15	1·3	11·9	−189·8	4·8	12	1	−10·7	9·2	9·1	+2·0	6	0	0	1	0	0	0	0	0	0
Palghat	31·6	..	32·8	29	23·3	..	21·8	12	3·1	4·2	..	2·1	2	0	..	17·9	13·0	..	3	0	0	0	0	0	0	0	0	0
Fort Cochin	28·3	0	29.4	27	25·5	+1·4	23·8	30	6·1	21·4	−173·4	6·3	13	4	−9·7	12·9	7·2	+0·1	7	0	0	0	0	0	0	0	0	0
Cochin (Naval Air Station)	29·8	..	30·7	28	23·8	..	22·5	25	3·6	24·4	..	6·1	5	5	..	10·7	6·0	..	8	0	0	0	0	0	0	0	2	0
Alleppey	29·6	..	30·4	27	23·7	..	23·1	10,12,25	10·7	43·2	..	13·5	13	7	..	15·2	9·4	..	10	0	0	1	0	0	0	0	0	0
Punalur	31·8	..	34·3	26	21·9	..	19·4	24	10·2	56·2	..	21·1	6	5	..	9·4	4·7	..	6	0	0	0	0	0	0	0	0	0
Trivandrum	30·6	+0·9	32·8	29,30	23·5	+0·2	22·7	15	1·0	13·5	−101·0	5·3	8	2	−6·1	17·9	11·8	+2·5	7	0	0	0	0	0	0	0	0	0
Trivandrum (Aerodrome)	29·9	..	31·8	29	23·8	..	23·1	15	..	9·6	..	3·3	13	2	..	..	9·2	..	5	0	0	0	0	0	0	0	0	0
Hill Stations excluding Kashmir																												
Walong (R)																												
Kohima	24·0	..	25·6	10,11,23	18·5	..	15·9	30	50·6	254·3	..	51·6	13	19	..	..	..	..	26	0	0	0	7	0	0	0	0	0
Aijal*																												
Shillong	23·6	+0·1	25·3	17	16·3	−0·1	12·2	30	117·5	283·7	−15·8	84·3	26	16	−1·3	2·3	1·5	−0·9	20	0	0	10	0	0	0	0	0	0
Cherrapunji	23·5	+0·6	25·9	9	17·9	−0·2	15·8	29,30	236·2	679·2	−421·9	182·9	26	18	−1·2	10·8	7·7	+1·4	20	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	1036·6	..	367·0	26	11	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan)	20·0	+0·8	22·8	16	14·3	−0·1	13·3	3,21,29	70·8	304·9	−175·2	90·4	2	16	−1·0	0·6	0·3	−2·0	19	0	0	0	29	0	0	0	0	0
Kalimpong	25·4	+1·7	29·1	27	17·5	−1·3	15·2	13	38·1	251·5	−36·0	76·2	1	5	−7·7	6·6	4·9	−4·1	5	0	0	0	1	0	0	0	0	0
Katmandu	29·0	+0·9	31·1	24	17·4	−1·3	15·4	28,29	1·5	30·9	−151·0	13·9	11	3	−10·3	2·6	1·5	+0·2	7	0	0	7	6	0	0	0	0	0
Mukteswar (Kumaon)	19·4	−0·4	22·0	1,30	12·7	−0·1	11·1	11	145·8	370·8	+169·4	207·0	15	8	−2·1	11·2	12·0	+4·0	13	0	0	3	15	0	0	0	0	0
Nainital	20·5	..	22·8	23	13·7	..	11·1	30	263·5	641·5	..	313·7	15	12	..	11·2	8·1	..	15	0	0	0	0	0	0	0	0	0

*Temporarily closed.

(b) Mean of 29 days

(R) Register not received.

Division and station	Air temperature in °C.								Rainfall in millimetres					No. of rainy days (2.5mm. or more).		Wind speed, km. per hour.			Weather phenomena—No. of days with.									
	Mean maximum.	Departure from normal.	Highest.	Date.	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830-1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830-1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0.3mm. or more)	Snow or sleet.	Hail.	Thunder heard.	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations excluding Kashmir—*(Contd.)*																												
Tapoban	22·4	..	26·1	9,10	13·5	..	11·1	16	..	158·9	..	35·6	15	9	..	..	..	..	11	0	0	0	0	0	0	0	0	0
Badrinath (R)																												
Lokpal (R)																												
Jamuna Chetty	..	..	..	..	..	..	..	..	..	241·5	..	51·1	14	10	..		..	..	10	..	..	..	..	..	..	..	..	..
Mussooree	19·8	+0·1	22·3	22,23	14.1	0	12·4	5	155·7	307·4	+54·7	69·4	15	11	−1·8	8·0	6·4	+0·3	13	0	1	5	3	0	0	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	435·8	..	79·5	3	12	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	260·1	..	50·8	14	11	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Simla	19·3	−0·9	22·4	18	13·0	−0·5	11·4	15	72·2	214·9	+45·2	51·3	15	9	−0·3	3·8	3·3	−0·7	13	0	0	3	0	0	0	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	327·4	+146·8	113·8	16	10	+2·5	..	..	..	12	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	215·3	+174·4	67·8	14	10	+7·4	..	..	..	10	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	313·2	..	122·2	14	8	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	501·2	..	99·6	14	15	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Koksar (R)																												
Dalhousie	23 2	..	25·7	25	14·8	..	12·2	3,4,15	39·3	146·1	−27·9	71·1	3	7	−1·3	2.6	3·3	..	7	0	0	0	0	0	0	0	0	0
Dharamshala	26·9	..	28·4	10	18.0	..	16·1	20	144·6	437·4	..	168·9	3	8	..	6·7	5·0	..	9	0	0	6	0	0	0	0	0	0
Abu	24·9	+0·9	27·9	11	18·2	0	16·7	19,21	2·3	4·6	−233·4	2·3	24	0	−7·6	15·7	9·4	+0·7	3	0	0	0	1	0	0	0	0	0
Pachmarhi	25·9	+0·6	28·9	26	18·5	−0·4	15·1	30	121·1	334·9	−25·5	138·4	14	9	−4·1	10·5	9·4	+2·3	9	0	0	2	7	0	0	0	0	0
Mahabaleshwar	24·3	+4.4	27·3	18,19	14·5	−1·5	12·8	21	170·9	323·1	−406·9	100·3	13	14	−8.6	11·0	11·0	−1·6	22	0	0	2	21	0	0	0	0	0
Nandi Hills	23·9	..	25·3	29	15·3	..	14·5	7 days	..	43·4	..	21·1	7	5	..	..	..	..	5	0	0	0	9	0	0	0	0	0
Mercara	23·4	+1·3	25·7	18,19, 29	16·8	+0·2	14·5	30	17·7	58·8	−222·6	15·2	13	8	−10·2	13·2	12.5	+4·1	11	0	0	1	0	0	0	0	0	0
Kodaikanal	17·8	+0·7	19·6	5	11·0	−0·1	9·6	2	57·0	112·1	−72·8	31·2	29	6	−5·9	11·2	12·3	+0·6	10	0	0	7	1	0	0	0	0	0
Ootacamund	18·9	+0·8	21·1	26 3 0	8·9	−1·7	6·7	15	44·9	26·6	−121·5	12·2	22	3	−9·0	6·6	4·9	−0·7	6	0	0	0	0	0	0	0	0	0
Coonoor	22·2	+0·5	23·4	4	13·0	−0·5	10·0	23	..	68·2	−22·2	18·8	29	5	−2·0	..	6·1	+0·5	9	0	0	0	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	53·1	..	5·1	12,17, 26	10	..	..	..	..	20	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	147·7	..	35·3	14	14	..	..	..	..	18	..	..	..	..	..	..	..	..	..
Lachen	18·7	..	20·0	2,4,30	4·2	..	−1·1	22,30	..	144·3	..	15·2	12,17	20	..	..	..		26	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung (Chumbi)	19·3	+2·2	20·7	15	7·9	−0·5	5·1	3	..	51·0	−59·5	10·2	1	10	−1·0	..	..	..	11	0	0	0	0	0	0	0	0	0
Lhasa (R)																												
Ceylon																												
Colombo	30·4	+0·4	31·0	12days	24·5	−0·3	22·0	21,25, 28	0·8	9·3	−134·7	5·1	7	1	−7·8	..	..	..	6	0	0	0	0	0	0	0	0	0
Trincomalee	35·3	+2·0	37·0	25	25·5	+0·7	24·0	4 days	39·9	63·0	−35·8	26·7	10	3	−2·4	..	..	..	6	0	0	5	0	0	0	0	0	0
Batticoloa	32·9	..	36·0	1,12	24·6	..	23·0	29	3·1	14·0	..	8·1	21	3	..	..	..	..	3	0	0	4	0	0	0	0	0	0
Hambantota	30·5	+0.2	34·0	12	25·0	+0·6	24·0	13,24, 25	0	2·3	−65·3	2·3	30	0	−4·8	.	..	..	1	0	0	1	0	0	0	0	0	0
Mannar	30·4	..	32·0	5	26·0	..	23·0	19	0	6·6	..	6·6	19	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Hydrometeorological Observatories—																												
Damodar Catchment																												
Bokaro	32·1	..	34·6	17,21, 29	23·6	..	19·2	29,30	71·6	149·1	..	39·6	1	10	..	8·1	5·5	..	12	0	0	14	1	0	0	0	0	0
Hazaribagh	30·4	..	32·0	18,21	21·9	.	20·4	3	105·7	220·4	..	53·3	16	7	..	7·9	4·5	..	13	0	0	0	0	0	0	0	0	0
Tilaiya	31·1	..	32·9	20,21, 29	24·6	..	23·1	2	109·5	194·2	..	53·1	2	8	..	11·5	8·5	..	11	0	0	10	1	0	0	0	0	0
Ramgarh	32·1	..	35·1	20	23·1	..	18·9	30	127·4	303·5	..	78·0	1	7	..	4·0	2·4	..	9	0	0	14	2	0	0	0	0	0
Panchet Hills	32.8	..	35·2	16	25·4	..	23·4	3	41.4	168·1	..	54·9	2	7	..	9·4	7·2	..	12	0	0	14	0	0	0	0	0	0
Durgapur	31·9	..	35·3	18,29	24·7	..	24·3	2	..	206·6	..	64·0	2	10	..	..	..	..	18	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	180·9	..	50·5	2	7	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	279·5	..	66·5	26	9	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	249.9	..	60·5	2	12	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	140·8	..	77·5	2	5	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	231·4	..	44·7	2	12	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	155·6	..	57·4	1	7	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	234·5	..	67·3	2	8	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Baramul	32·2	..	34·4	30	24·1	..	21·5	24	94·0	167·1	..	49·3	11	11	..	3·0	2·1	..	13	0	0	9	0	0	0	0	0	0
Hirakud	32·6	..	34·4	17,30	24·5	..	23·3	30	28·3	68·8	..	30·5	7	5	..	6·4 (g)	4·6 (h)	..	15	0	0	13	0	0	0	0	0	0
Khijrawan	30·5	..	32·4	27	..	..	..	..	70·6	86·8	..	40·6	9	6	..	8·4	4·4	..	8	0	0	4	0	0	0	0	0	0
Sonepur	31·4	..	34·2	28	19·8	..	14·7	7	..	137·0	..	57·1	13	9	..	..	5·5	..	11	..	..	..	..	..	..	..	..	..
Ginabahar	32·1	..	34·5	19	22·8	..	20·8	27	..	134·2	..	41·7	3	8	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Bhimkund	31·1	..	33·7	28	23·6	..	22.1	3	100·0	238·6	..	44·0	11	11	..	4·2	2·5	..	16	9	0	19	9	0	0	0	0	0
Narbada Catchment																												
Punasa (R)																												

(g) Mean of 24 days. (h) Mean of 23 days. (R) Register not received.

Division and station.	Air temperature in °C.								Rainfall in millimetres.					No. of rainy days (2·5 mm. or more).		Wind speed km. per hour.			Weather phenomena—No. of days with.									
	Mean maximum.	Departure from normal.	Highest.	Date.	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830–1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830–1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0·3mm. or more).	Snow or sleet.	Hail.	Thunder heard	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hydrometeorological Observatories —(Contd.)																												
Narbada Catchment —(Contd.)																												
Bagra Tawa	31·7	..	34·6	30	22·0	..	19·6	19	162·1	206·0	..	96·8	12	4	..	8·8	6·4	..	7	0	0	3	0	0	0	0	0	0
Thikri	32·8	..	31·5	11	22·4	..	20·1	28	..	54·2	..	23·4	12	4	..	..	..	..	4	0	0	3	0	0	0	0	0	0
Sabarmati Catchment																												
Jhadol	29·7	..	33·1	12	18·2	..	14·7	21	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Sainwara (Surajgarh) (R)																												
Bikrani	..	..	..	..	..	..	..	..	..	26·1	..	21·3	12	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	7.7	..	5·1	20	1	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	8·1	..	8·1	10	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Dharoi	34·1	..	36·4	12	22·0	..	..	..	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Ganga Catchment																												
Mukhim	23·0	..	24·7	8,24,25	(d) 14·9	..	13·2	28	103·3	222·7	..	40·4	15	10	..	..	..	..	10	0	0	1	5	0	0	0	0	0
Tehri	30·6	..	33·9	10	20·0	..	17·4	29	116·4	238·2	..	70·6	15	9	..	..	..	..	9	0	0	3	0	0	0	0	0	0
Gandak Catchment																												
Gorkha	27·5	..	28·9	23,25	20·2	..	18·5	15	10·8	122·8	..	43·7	1	8	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Pokhara	29·4	..	30·4	1	20·2	..	18·7	28	12·6	449·3	..	95·5	10	14	..	..	..	..	18	..	..	..	..	..	..	..	..	..
Nawakot	29·7	..	30·7	18,22,24	(b) 20·4	..	16·8	11	45·5	159·9	..	48·3	15	8	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Jomosom	(b) 22·4	..	24·1	26	10.3	..	7·4	29	1·8	29·5	..	11·4	15	3	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Timure	(c) 25.5	..	26·2	4 days	(b) 15·0	..	12·8	27	0	78·2	..	20·8	11	7	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh	25·3	..	30·7	13	..	..	..	..	14·6	120·8	..	41·1	12	5	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	(b) 22·7	..	24·9	22,27	15·2	..	11·9	30	37·8	171·4	..	78·5	15	10	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Munsiyari	..	..	..	..	..	..	..	..	40·6	161·7	..	45·7	15	12	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Sallyana	(d) 25·5	..	27·3	15,27	..	..	..	..	8·0	70·3	..	48·8	15	6	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Butwal	32·4	..	37·8	17	24·9	..	22·3	15	23·3	102·7	..	45·7	15	6	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	28·1	..	29·3	1,23	17.4	..	15·2	28,29	1·5	30·8	..	14·0	11	3	..	2·6	1·4	..	7	0	0	9	7	0	0	0	0	0
Kosi Catchment																												
Chautara	(g) 26·7	..	27·9	19,26,28	18·3	..	16·6	11	11·9	99·2	..	31·7	2	9	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Okhaldunga	24·1	..	26·8	1	15·9	..	14·4	29	32·8	74·1	..	17·5	12	9	..	2·2	1·6	..	11	0	0	2	0	0	0	0	0	0
Barahkshetra	32·0	..	33·7	22,23	23·8	..	21·7	29	115·8	356·5	..	59·9	8	14	..	6·9	4·4	..	21	0	0	12	0	0	0	0	0	0
Angbung	28·9	..	30·4	16	19·9	..	18·5	29	..	136·3	..	63·3	9	6	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Taplejung	24·3	..	26·7	1	16·7	..	14·2	29	20·1	169·0	..	30·7	9	12	..	..	..	..	20	0	0	0	12	0	0	0	0	0
Taplethok	28·3	..	29·9	13	17·7	..	16·7	11	..	252·2	..	25·4	1,7,9	19	..	..	..	..	23	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)																												
Bhojpur	(d) 24.1	..	25·3	4 days	16·9	..	15·4	30	9·7	58·9	..	22·1	6	6	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Chainpur	27·7	..	29·4	23	19·4	..	18·2	30	..	41·4	..	16·5	10	4	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	22·6	..	25·1	10,11,24	15·3	..	13·6	29	53·9	546·7	..	79·0	18	21	..	4.1	3·6	..	24	..	..	..	..	..	..	..	..	..
Geyzing	26·9	..	29·8	10	17·5	..	16·1	3	23·1	662·2	..	115·3	2	21	..	..	..	..	22	..	..	..	..	..	..	..	..	..

(d) Mean of 27 days. (b) Mean of 29 days. (c) Mean of 28 days. (g) Mean of 25 days. (R) Register not received

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity%.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km.p.h.)			No. of observations.										
			At mean sea level or height in g.p.m. of nearest isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		•N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1009·1	1006·5	..	27·1	25·3	24·6	30·7	86	..	5·7	..	10·3	0	3	24	0	0	0	0	1	16	10	0	3	0
	1730	„	1007·1	1004·5	..	27·0	25·0	24·0	29·9	84	..	5·6	..	9·2	0	2	24	0	0	0	0	0	15	11	0	4	0
Long Island	0830	33	1010·0	1006·4	..	27·3	25·3	25·1	30·7	88	..	5·7	..	2·5	0	0	16	0	0	0	0	4	5	6	1	14	0
	1730	„	1007·8	1004·1	..	27·0	25·4	24·4	31·3	86	..	6·4	..	1·6	0	0	12	0	0	0	0	3	7	2	0	18	0
Port Blair	0530	79	1008·0	999·1	..	24·7	24·1	23·7	29·6	94	..	6·3	..	9·8	0	3	23	0	0	0	0	1	17	8	0	4	0
	0830	„	1009·6	1000·8	+0·2	27·3	25·2	24·2	30·0	84	0	6·4	+0·2	12·7	0	3	27	0	0	0	0	0	15	13	2	0	0
	1130	„	1008·4	999·6	..	28·1	25·2	24·0	30·1	79	..	6·7	..	17·0	0	10	19	0	0	0	0	0	13	15	1	1	0
	1730	„	1007·2	998·3	..	26·4	24·8	24·1	29·8	88	..	6·1	..	11·8	0	3	25	0	0	0	0	0	17	10	1	2	0
	2330	„	1008·3	999·9	..	25·0	24·3	24·0	29·4	94	..	5·6	..	11·7	0	5	24	0	1	0	0	0	21	7	0	1	0
Car Nicobar	0830	10	1010·1	1008·9	..	28·0	25·7	24·7	31·3	82	..	5·2	..	6·0	0	0	28	0	0	0	0	1	11	15	1	2	0
	1730	„	1007·8	1006·6	..	26·7	25·0	24·4	30·3	88	..	5·1	..	2·3	0	0	17	0	0	0	0	0	10	7	0	13	0
Nancowry	0830	26	1010·8	1007·9	..	27·5	25·2	24·2	30·4	82	..	5·5	..	7·3	0	1	26	0	0	0	0	0	14	12	1	3	0
	1730	„	1008·5	1005·6	..	26·2	24·5	23·7	29·4	86	..	6·0	..	5·3	0	0	26	0	0	0	0	0	14	11	1	4	0
Kondul	0830	8	1011·2	1010·3	..	27·6	25·3	24·4	30·5	83	..	5·8	..	7·9	0	1	24	1	3	12	7	0	0	0	0	5	2
	1730	„	1008·4	1007·5	..	26·6	24·9	24·1	30·1	86	..	5·3	..	8·8	0	4	19	0	2	10	9	0	0	0	0	7	2
Assam (Including Manipur, Tripura)																											
Pasighat	0830	..	..	..	..	26·7	24·2	23·2	28·1	81	..	6·1	..	3·9	0	0	20	4	1	5	2	0	0	1	7	10	0
	1730	..	..	..	..	27·3	25·5	24·7	31·2	86	..	4·9	..	1·5	0	0	10	1	0	0	1	1	1	1	5	20	0
Digboi	0830	..	..	..	..	26·6	24·8	24·2	29·8	86	..	6·5	..	3·5	0	0	30	2	6	8	1	5	0	7	1	0	0
	1730	..	..	..	..	29·4	25·9	24·5	30·7	74	..	6·0	..	3·0	0	0	30	11	2	6	1	3	0	6	1	0	0
Dibrugarh	0830	106	1007.7	995·8	−0.1	27·2	25·3	24·3	30·6	85	−1	6·0	+0·2	2·4	0	0	20	5	3	9	0	1	1	1	0	10	0
	1730	„	1003·6	991·7	..	28·4	26·0	25·0	31·9	82	..	3·7	..	0·8	0	0	8	0	2	3	0	0	2	0	1	22	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1005·6	993.1	..	24·7	24.0	23.7	29.3	95	..	6.4	..	2.4	0	0	11	1	8	0	1	0	0	1	0	19	0
	0530	„	1006·5	994·0	..	24·5	24·0	23·7	29·7	96	..	6·7	..	1·9	0	0	12	0	5	4	1	0	1	1	0	18	0
	0830	„	1008·0	995·5	..	27·1	25·1	24·3	30·3	85	..	6·5	..	3·6	0	0	21	1	9	4	2	1	2	0	2	9	0
	1130	„	1006·4	994·0	..	29·2	25·8	24·3	30·5	76	..	6·0	..	4·9	0	0	24	2	10	4	3	1	1	2	1	6	0
	1730	„	1003·7	991·3	..	28·1	25·9	24·9	31·5	83	..	4·8	..	1·5	0	0	11	0	5	1	0	0	4	1	0	19	0
	2330	„	1006·3	993·7	..	25·3	24·3	23·9	29·7	92	..	5·9	..	2·8	0	0	9	1	6	0	0	2	0	0	0	21	0
North Lakhimpur	0330	102	1007·6	996·1	..	26·4	24·8	24·0	29·7	88	..	6·7	..	..	0	0	21	14	5	0	1	0	0	1	0	9	0
	1130	„	1003·3	994·9	.	28·8	25·8	24·7	30·7	79	..	6·4	..	..	0	0	24	6	7	4	1	5	0	1	0	6	0
	1730	„	1003·5	992·0	.	28·1	26·2	25·4	32·1	86	..	5·8	..	..	0	0	14	7	4	0	0	2	0	0	1	16	0
Sibsagar	0830	97	1008·0	997·1	+0.3	27·5	25·6	24·8	31·2	85	−2	6·9	+0·2	2·8	0	0	19	5	4	1	0	2	5	0	2	11	0
	1730	„	1003·9	993·1	..	28·6	26·4	25·5	32·6	83	..	5·4	..	1·9	0	0	14	4	3	0	1	3	2	0	1	16	0
Jorhat	0530	90	1005·7	995·6	..	24·8	24·7	24·5	30·9	98	..	6·6	..	3·2	0	0	12	3	2	0	1	2	1	2	1	18	0
	0830	„	1007·3	997·3	..	28·1	26·1	25·3	32·2	85	..	6·3	..	6·8	0	0	21	6	3	1	0	8	1	1	1	9	0
	1130	„	1005·9	995.9	..	30·7	27·5	26·1	34·1	77	..	5·8	..	9·2	0	0	26	9	4	1	1	4	2	2	3	4	0
	1730	„	1003·1	993.1	..	28·3	26·3	25·6	32·6	85	..	4·6	..	4·1	0	1	10	4	2	0	0	3	0	2	0	19	0
Golaghat	0830	..	..	..	..	27·6	25·5	24·7	31·2	84	..	7·2	..	..	0	0	2	0	0	0	0	2	0	0	0	28	0
	1730	..	..	..	..	29·4	26·5	25·2	32·2	78	..	7·1	..	..	0	0	2	0	0	0	0	2	0	0	0	28	0
Gohpur (R)	0330	..																									
(R)	1730	..																									
Tezpur	0830	79	1007·9	999·0	−0·2	26·9	25·6	25·0	31·6	89	+3	4·6	−1·2	..	0	0	18	0	6	7	0	0	1	3	1	12	0
	1730	„	1003·6	994·8	..	29·2	26·6	25·4	32·6	81	..	3·9	..	..	0	0	6	0	1	3	1	0	0	1	0	24	0
Tezpur (P.B.O.)	0230	78	1005·6	996·7	..	25·6	24·9	24·7	31·1	94	..	5·1	..	0·6	0	0	4	0	0	1	1	1	0	0	1	26	0
	0530	„	1006·4	997·4	..	25·5	24·9	24·6	31·1	95	..	6·3	..	1·3	0	1	5	0	2	3	0	0	0	0	0	25	0
	0830	„	1007·9	999·0	..	27·9	25·7	24·8	31·2	84	..	6·0	..	4·1	0	0	25	1	6	8	3	3	1	1	2	5	0
	1130	„	1006·6	997·8	..	29·9	26·3	24·8	31·4	75	..	5·7	..	5·0	0	0	26	0	4	8	5	2	3	1	3	4	0
	1730	„	1003·8	995.0	..	28·6	26·2	25·1	32·0	82	..	5·1	..	1·4	0	0	9	0	1	2	1	5	0	0	0	21	0
	2330	„	1006·4	997.5	..	26·1	25·2	25·0	31·2	93	..	4·6	..	1·3	0	0	7	0	1	1	1	2	1	0	1	23	0
Majbat	0830	..	..	..	..	..	..	..	..	..	..	7·2	..	5·2	0	0	25	0	3	7	3	3	7	2	0	5	0
	1730	..	..	..	..	..	..	..	..	..	..	6·3	..	2·7	0	0	15	1	1	5	0	2	2	4	0	15	0
Chapamukh (R)	0830	66																									
(R)	1730	„																									
Tangla	0830	78	1006·2	998·2	..	28·3	25·9	24·8	31·7	82	..	4·3	..	6·2	0	0	29	1	4	8	4	2	6	3	1	1	0
	1730	„	1003·0	994·3	..	29·2	27·2	26·4	34·5	85	..	2·6	..	3·6	0	0	17	1	2	2	1	1	3	6	1	13	0
Gauhati	0830	55	1007·4	1001·1	0	28·1	25·8	24·7	31·4	83	+1	5·0	−0·4	2·2	0	0	22	6	5	1	2	2	5	0	1	8	0
	1730	„	1003·4	997·2	..	29·3	26·0	24·6	30·9	76	..	4·7	..	2·1	0	0	21	0	2	3	5	2	7	2	0	9	0
Gauhati (Kaikuchi Aerodrome)	0230	49	1005·0	999·5	..	25·5	24·9	24·5	31·2	94	..	5·3	..	2·4	0	0	15	2	0	0	1	7	5	0	0	15	0
	0530	„	1005·8	1000·2	..	25·3	24·6	24·4	30·3	95	..	5·8	..	1·2	0	0	10	0	1	1	1	5	1	1	0	20	0

(R) Register not received.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity%.		Cloud amount (Oktas).		Wind speed (km. p. h.)				No. of observations.										
			At mean sea level or height in g. p. m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.	Mean wind speed, km. per hour.	62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur, Tripura) —(Contd.)																											
Gauhati (Kaikuchi Aerodrome)—(*contd.*)	0830	49	1007·3	1001·9	..	28·4	25·8	24·6	31·3	80	..	6·2	..	4·6	0	0	27	1	8	3	1	1	3	8	2	3	0
	1130	,,	1006·1	1000·6	..	30·7	26·5	24·7	31·2	71	..	5·8	..	7·2	0	0	30	4	14	2	1	0	0	5	4	0	0
	1730	,,	1003·6	998·7	..	28·8	26·0	24·8	31·4	81	..	6·4	..	3·2	0	0	22	1	7	2	2	1	3	5	1	8	0
	2330	,,	1006·1	1000·5	..	26·3	25·3	24·9	31·4	92	..	5·1	..	2·8	0	0	19	1	2	0	1	9	2	3	1	11	0
Rangiya (R)	0830	..																									
(R)	1730	..																									
Goalpara	0830	38	1007·2	1002·9	..	28·0	26·1	24·8	32·1	83	..	6·6	..	2·9	0	0	29	2	8	3	3	3	5	3	2	1	0
	1730	,,	1003·3	999·1	..	30·1	26·8	25·3	32·5	76	..	6·6	..	2·9	0	0	27	1	4	0	7	2	10	3	0	3	0
Dhubri	0830	35	1007·4	1003·5	+0·2	29·5	27·2	26·4	34·3	83	—2	3·7	—1·5	4·9	0	0	26	1	10	3	4	4	4	0	0	4	0
	1730	,,	1004·0	1000·2	..	28·9	26·8	26·0	33·7	84	..	3·5	..	4·0	0	0	24	0	4	1	1	5	12	1	0	6	0
Dhubri (Rupsi Aerodrome)	0830	..	..	..	..	29·2	26·8	25·9	33·3	83	..	5·4	..	6·3	0	0	28	1	1	6	8	3	8	1	0	2	0
	1130	..	..	..	..	30·8	28·0	26·8	35·5	80	..	5·7	..	5·4	0	0	26	0	2	3	7	3	7	4	0	4	0
	1730	..	..	..	..	29·2	27·3	26·5	34·1	86	..	2·8	..	2·2	0	0	14	0	1	2	5	3	3	0	0	16	0
Tura	0830	370	1008·6	967·4	..	25·8	24·4	23·4	29·4	87	..	6·2	..	2·4	0	0	16	0	2	1	4	2	6	1	0	14	0
	1730	,,	1005·7	965·2	..	27·0	25·2	24·3	30·7	85	..	6·7	..	2·8	0	0	22	1	4	3	2	4	6	0	2	8	0
Agartala	0230	16	1005·0	1003·2	..	25·5	25·0	24·9	31·1	96	..	5·4	..	2·9	0	0	13	0	0	3	6	4	0	0	0	17	0
	0530	,,	1005·6	1003·8	..	25·1	24·7	24·5	30·9	97	..	6·5	..	4·2	0	0	19	0	2	3	11	3	0	0	0	11	0
	0830	,,	1007·0	1005·2	..	28·1	26·0	25·2	31·9	84	..	6·4	..	7·9	0	0	26	3	2	4	7	6	3	0	1	4	0
	1130	,,	1006·2	1004·4	..	30·8	27·0	25·5	32·9	74	..	6·5	..	8·2	0	0	27	4	4	1	4	7	3	3	1	3	0
	1730	,,	1003·7	1001·9	..	28·5	26·3	25·1	32·4	83	..	6·2	..	3·1	0	0	22	5	1	0	5	6	2	3	0	8	0
	2330	,,	1006·1	1004·3	..	25·9	25·2	24·9	31·4	95	..	5·5	..	4·3	0	0	16	0	0	2	8	6	0	0	0	14	0
Silchar	0830	29	1008·2	1004·8	+0·1	27·7	25·6	24·6	30·9	84	0	5·8	0	0·7	0	0	7	0	4	1	1	0	0	0	1	23	0
	1730	,,	1004·2	1000·9	..	28·9	26·7	25·8	33·2	84	..	4·2	..	0·9	0	0	9	0	2	1	0	1	2	3	0	21	0
Silchar (Kumbhigram Aerodrome)	0530	97	1005·4	994·4	..	23·9	23·7	23·6	29·1	99	..	6·0	..	4·2	0	0	27	1	6	13	4	1	1	1	0	3	0
	0830	,,	1006·7	995·8	..	27·1	25·3	24·4	30·9	86	..	5·5	..	5·0	0	0	27	0	2	11	5	4	2	1	2	3	0
	1130	,,	1005·2	994·4	..	29·8	26·3	24·9	31·3	76	..	5·0	..	5·8	0	0	26	1	4	3	3	1	6	7	1	4	0
	1730	,,	1003·0	992·1	..	27·7	25·9	25·0	32·1	86	..	4·8	..	3·7	0	0	21	1	0	6	2	2	3	6	1	9	0
Imphal	0530	801	1008·4	920·4	..	21·2	20·8	20·6	24·3	96	..	6·3	..	0·9	0	0	8	3	0	1	0	3	1	0	0	22	0
	0830	,,	1008·8	921·7	..	24·6	22·2	21·1	24·9	81	..	5·8	..	2·2	0	0	17	2	0	3	7	4	1	0	0	13	0
	1130	,,	1006·6	920·3	..	27·0	23·0	21·2	25·2	71	..	5·7	..	4·5	0	0	28	0	1	3	6	8	7	2	1	2	0
	1730	,,	1004·7	918·1	..	25·0	22·6	21·5	25·3	81	..	5·1	..	4·9	0	0	22	2	1	1	3	2	10	3	0	8	0
	2330	,,	1008·0	920·4	..	22·2	21·4	21·1	24·9	94	..	5·1	..	2·0	0	0	11	0	1	4	0	1	4	0	1	19	0
Haflong	0830	682	1007·6	932·8	..	24·1	22·3	21·5	25·8	85	..	5·6	..	..	0	0	30	1	2	0	0	13	13	0	1	0	0
	1730	,,	1003·7	929·5	..	25·6	22·9	21·7	26·0	79	..	5·2	..	..	0	0	30	2	1	0	3	11	12	0	1	0	0
Lumding	0830	149	1007·9	991·2	..	28·2	25·6	24·4	30·5	80	—5	6·2	..	1·3	0	0	10	0	0	4	2	0	1	1	2	20	0
	1730	,,	1003·9	987·3	..	28·6	25·9	24·7	31·4	80	..	6·1	..	0·7	0	0	5	0	0	0	2	1	1	1	0	25	0
Sub-Himalayan West Bengal																											
Cooch Behar (C.W.O.)	0830	43	1006·0	1001·1	..	29·1	26·4	25·3	32·3	80	..	5·7	..	7·8	0	0	26	0	5	10	2	3	5	1	0	4	0
	1130	,,	1007·3	1001·4	..	31·3	27·1	25·3	32·6	71	..	5·8	..	8·8	0	0	30	1	3	9	2	1	4	5	0	0	5
	1730	,,	1002·2	997·4	..	29·6	26·8	25·7	33·1	79	..	5·1	..	2·9	0	1	10	1	0	3	1	1	4	1	0	19	0
Jalpaiguri	0830	83	1007·6	998·2	+0·6	27·0	25·2	24·2	30·2	85	—2	3·9	—0·5	4·2	0	0	25	7	9	6	0	1	1	0	1	5	0
	1730	,,	1003·5	994·3	..	30·5	26·1	23·9	30·1	69	..	2·9	..	5·9	0	0	24	2	5	3	3	2	6	3	0	6	0
Jagdogra	0230	131	1004·8	990·0	..	25·2	24·4	24·1	29 8	93	..	5·9	..	3·2	0	1	13	2	8	2	0	1	1	0	0	16	0
	0530	,,	1005·2	990·4	..	24·7	24·0	23·8	29·6	95	..	6·1	..	1·0	0	0	8	1	4	2	0	0	0	0	1	22	0
	0830	,,	1006·9	992·2	..	28·0	26·5	24·3	30·6	81	..	6·2	..	3·1	0	1	16	0	4	10	1	1	0	0	1	13	0
	1130	,,	1005·7	991·1	..	30·8	26·6	24·8	31·4	71	..	6·1	..	5·2	0	1	23	0	1	8	7	2	5	1	0	6	0
	1730	,,	1003·1	988·5	..	28·7	26·4	25·5	32·7	83	..	6·2	..	2·3	0	0	12	1	2	1	1	1	1	0	5	18	0
	2330	,,	1005·8	991·2	..	26·5	25·1	24·9	30·8	93	..	6·0	..	4·3	0	0	18	3	11	3	0	0	1	0	0	12	0
Malda	0830	31	1006·7	1003·2	+0·7	29·4	26·4	25·2	31·8	78	—3	4·9	+0·7	8·0	0	0	29	3	3	7	3	7	3	3	0	1	0
	1730	,,	1003·5	1000·0	..	30·1	26·6	25·0	31·6	75	..	5·4	..	5·4	0	1	24	2	0	4	4	7	7	0	1	5	0
Gangetic West Bengal																											
Dum Dum	0230	6	1004·4	1003·7	..	26·9	26·1	25·8	34·6	94	..	4·0	..	3·6	0	0	23	4	3	2	2	1	9	1	1	7	0
	0530	,,	1004·8	1004·1	..	26·5	25·9	25·7	33·0	95	..	5·2	..	3·6	0	0	21	4	5	2	2	3	3	2	0	9	0
	0830	,,	1006·5	1005·8	..	29·1	26·7	25·7	32·7	83	..	5·5	..	5·1	0	0	26	5	2	4	3	3	6	3	0	4	0
	1130	,,	1005·8	1003·1	..	31·2	27·2	25·6	33·1	73	..	5·8	..	7·2	0	0	29	4	4	3	9	3	3	2	1	1	0
	1730	,,	1008·5	1002·8	..	29·4	26·6	25·5	32·6	79	..	6·3	..	4·8	0	0	27	2	5	2	6	6	3	3	0	3	0
	2330	,,	1005·8	1005·1	..	27·5	26·5	26·1	33·5	92	..	3·9	..	4·2	0	0	24	1	2	2	6	3	7	2	1	6	0
Calcutta	0830	6	1006·8	1006·1	+0·8	29·6	26·6	25·4	32·1	79	—4	5·7	0	4·5	0	0	26	1	5	1	1	5	6	4	3	4	0
	1130	,,	1005·9	1005·2	..	31·7	27·0	25·1	31·7	69	..	5·8	..	6·4	0	0	29	0	3	3	3	6	6	4	4	1	0
	1730	,,	1003·7	1003·6	..	29·6	26·5	25·2	32·1	78	..	6·4	..	3·9	0	0	28	1	6	3	5	2	3	0	3	7	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in met.rs.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed km. per hour.	Wind speed (km. p.h.)			No. of observations.										
			At mean sea level or height in g. p. m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.					Wind direction.										
															62 or more	20 to 61	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal—(*Contd.*)																											
Barrackpore . .	0530	7	1004·9	1004·1	..	26·3	25·9	25·7	33·4	97	..	5·1	..	2·9	0	0	12	1	2	2	0	1	4	1	1	18	0
	0830	,,	1006·6	1005·9	..	29·2	26·9	26·1	33·7	84	..	5·6	..	8·8	0	0	26	3	3	5	1	0	7	6	1	4	0
	1130	,,	1005·9	1005·2	..	31·0	27·5	26·1	33·6	76	..	5·8	..	1·0	0	2	26	1	1	6	3	0	4	8	5	2	0
	1730	,,	1003·5	1002·8	..	29·1	27·0	26·2	34·3	85	..	6·1	..	4·9	0	0	21	0	1	6	4	2	6	1	1	9	0
	2330	,,	1006·0	1005·2	..	27·1	26·6	26·4	34·2	96	..	4·1	..	4·1	0	0	15	0	1	2	2	4	6	0	0	15	0
Saugor Island .	0830	3	1006·0	1005·7	+0·4	28·9	26·5	25·6	32·7	82	+1	5·4	−0·7	13·6	0	3	26	3	2	3	4	6	7	4	0	1	0
	1730	,,	1003·4	1003·1	..	29·3	26·6	25·6	32·5	80	..	5·5	..	14·1	0	2	26	2	2	0	3	12	8	0	1	2	0
Sandheads . .	0530	10	1004·5	1003·4	..	28·6	26·4	25·4	32·7	83	..	5·6	..	..	0	10	18	1	4	1	2	6	10	3	1	2	0
	0830	,,	1006·2	1005·1	+0·3	29·8	26·9	25·7	33·2	79	0	5·3	+0·3	..	0	5	24	1	4	3	4	3	7	4	3	1	0
	1130	,,	1005·9	1004·8	..	30·4	27·0	25·4	32·9	75	..	5·7	..	..	0	7	20	2	3	3	3	5	6	2	3	3	0
	1730	,,	1003·6	1002·5	..	29·8	26·8	25·6	32·7	78	..	5·6	..	..	0	8	20	0	2	3	4	12	5	1	1	2	0
	2330	,,	1005·7	1004·6	..	29·1	26·6	25·6	32·7	81	..	1·9	..	..	0	5	24	1		1	1	9	11	2	1	1	0
Contai . .	0830	11	1006·5	1005·3	..	29·1	26·7	25·7	32·9	82	.	4·5	..	2·8	0	1	17	3	0	1	3	3	6	1	1	12	0
	1730	,,	1003·7	1002·5	..	29·1	26·7	25·5	32·9	81	..	4·4	..	2·4	0	0	18	1	0	0	7	6	4	0	0	12	0
Midnapore . .	0830	45	1006·4	1001·3	+0·6	29·5	26·5	25·3	32·2	79	−3	3·5	−1·0	3·0	0	0	20	3	3	3	1	3	6	1	0	10	0
	1730	,,	1003·4	998·3	..	29·5	26·4	25·2	31·8	78	..	4·2	..	2·3	0	0	14	1	2	0	2	3	6	0	0	16	0
Purulia .	0830	255	1006·3	978·1	..	27·9	25·2	23·9	29·7	79	..	5·4	..	2·8	0	0	26	2	3	1	9	2	0	3	6	4	0
	1730	,,	1003·3	975·3	..	28·4	25·0	23·7	28·9	74	..	6·3	..	2·6	0	0	25	2	5	0	7	3	0	1	7	5	0
Burdwan . .	0830	32	1006·5	1002·9	+0·6	30·0	26·6	25·2	32·1	77	−6	3·5	−1·9	1·3	0	0	12	1	2	2	0	5	2	0	0	18	0
	1730	,,	1003·6	1000·0	..	29·6	26·7	25·3	32·6	78	..	5·2	..	2·3	0	0	11	0	1	7	0	3	0	0	0	19	0
Krishnagar . .	0830	15	1006·8	1005·2	+1·0	29·7	27·1	26·3	34·0	82	+1	2·9	−2·5	2·7	0	0	26	1	5	6	2	8	2	1	1	4	0
	1730	,,	1003·7	1002·1	..	29·3	26·4	25·5	32·4	81	..	3·8	..	1·7	0	0	17	0	0	2	2	13	0	0	0	13	0
Asansol . .	0230	126	1004·3	990·2	..	26·1	25·1	24·6	30·7	91	..	4·2	..	2·6	0	0	11	1	0	4	3	1	0	2	0	19	0
	0530	,,	1004·8	990·6	..	25·5	24·6	24·3	31·4	93	..	5·5	..	2·8	0	0	11	2	0	2	2	1	0	3	1	19	0
	0830	,,	1006·3	992·3	+0·9	28·5	26·0	24·9	31·6	81	−2	4·7	−0·5	5·1	0	1	18	2	0	4	5	0	1	4	3	11	0
	1130	,,	1005·6	991·7	..	31·1	26·6	24·7	31·2	70	..	5·6	..	6·9	0	0	25	2	3	5	6	0	2	3	4	5	0
	1730	,,	1003·0	989·1	..	29·4	26·0	24·5	31·0	76	..	6·4	..	5·3	0	1	17	2	0	8	5	0	0	1	2	12	0
	2330	,,	1005·7	991·5	..	26·8	25·3	24·7	31·3	88	..	4·6	..	2·8	0	0	10	0	0	1	3	3	0	1	2	20	0
Suri . . .	0830	77	1006·7	998·1	..	28·5	26·4	25·0	32·4	82	..	4·8	..	8·0	0	0	29	2	4	5	4	4	4	3	3	1	0
	1730	,,	1003·9	995·3	..	29·3	26·1	24·8	30·8	77	..	5·9	..	5·1	0	0	26	1	1	7	10	4	1	1	1	4	0
Berhampore . .	0830	19	1006·4	1004·3	+0·2	29·0	26·5	25·5	32·6	82	0	4·7	−0·7	1·6	0	0	11	0	0	3	1	5	1	0	1	19	0
	1730	,,	1003·2	1001·1	..	29·3	26·6	25·4	32·5	81	..	5·8	..	1·3	0	0	8	0	0	2	3	2	1	0	0	22	0
Orissa—																											
Baripada .	0830	54	1006·6	1000·6	..	28·4	25·8	24·7	31·4	80	..	4·7	..	1·6	0	0	14	2	1	1	1	0	1	0	8	16	0
	1730	,,	1003·6	997·5	..	28·1	25·7	24·6	30·7	82	.	5·6	..	1·5	0	0	11	1	0	2	4	0	1	0	1	19	2
Balasore . .	0830	20	1006·3	1004·1	+0·7	28·6	26·4	25·4	32·5	83	0	6·3	+1·1	4·8	0	1	24	6	5	0	2	3	7	0	2	5	0
	1730	,,	1003·6	1001·4	..	29·1	26·5	25·4	32·7	81	..	6·9	..	4·7	0	0	18	3	1	1	6	4	3	0	0	12	0
Chandbali . .	0830	6	1006·4	1005·7	+1·0	29·1	27·2	26·6	34·3	85	+2	4·9	−0·5	3·8	0	0	30	3	2	0	3	0	6	1	15	0	0
	1730	,,	1003·5	1002·8	..	29·2	26·7	25·8	32·9	82	...	6·3	..	5·0	0	0	30	0	3	1	14	0	1	1	10	0	0
Cuttack . .	0830	27	1006.4	1003·4	+0·4	28·2	26·1	25·3	31·7	83	+3	4·7	−0·3	0·7	0	0	4	0	1	0	0	0	0	0	3	26	0
	1730	,,	1003·3	1000·3	..	31·5	27·0	25·6	32·5	75	..	6·0	..	0·1	0	0	1	0	0	1	0	0	0	0	0	29	0
Bhubaneswar . .	0230	46	1004·2	998·9	..	26·0	25·2	25·0	31·3	94	..	5·0	..	3·8	0	0	22	5	2	1	1	3	5	5	0	8	0
	0530	,,	1004·7	999·5	..	25·6	24·9	24·7	31·1	94	..	5·9	..	3·3	0	0	14	4	1	2	1	0	1	5	0	16	0
	0830	,,	1006·3	1001·1	..	28·5	26·0	25·3	31·6	81	..	5·8	..	7·4	0	0	28	9	3	1	0	1	3	10	1	2	0
	1130	,,	1005·6	1000·4	..	31·2	26·5	24·5	30·7	69	..	6·0	..	10·4	0	1	28	6	3	3	0	4	5	3	5	1	0
	1730	,,	1003·5	998·3	..	29·4	26·1	25·4	31·1	79	..	6·8	..	8·4	0	0	28	2	3	2	4	7	5	5	0	2	0
	2330	,,	1005·6	1000·4	..	26·5	25·4	25·0	31·6	91	..	5·0	..	3·9	0	0	22	3	2	2	3	2	5	4	1	8	0
Puri . .	0830	6	1006·5	1005·8	+0·8	29·2	26·6	25·6	32·6	81	+1	5·8	+1·1	11·5	0	5	24	7	5	1	1	0	6	4	5	1	0
	1730	,,	1003·9	1003·2	..	29·9	26·8	25·6	32·9	78	..	5·9	..	14·8	0	5	25	1	2	2	6	8	8	1	2	0	0
Gopalpur . .	0530	17	1004·9	1003·0	..	26·2	25·0	24·5	30·7	91	..	5·3	..	4·1	0	1	18	7	0	0	1	0	2	1	8	11	0
	0830	,,	1006·6	1004·7	+0·8	28·8	26·1	24·8	31·5	80	−1	5·5	+1·3	5·6	0	1	25	12	0	0	0	2	3	1	8	4	0
	1130	,,	1006·1	1004·1	..	31·3	26·8	24·9	31·7	70	..	5·6	..	7·5	0	1	27	5	2	4	5	4	3	0	5	2	0
	1730	,,	1004·0	1002·1	..	29·6	26·5	25·2	31·1	78	..	6·0	..	7·2	0	1	26	2	1	2	4	11	3	1	3	3	0
	2330	,,	1006·2	1004·3	..	27·4	25·8	25·1	31·8	88	..	4·1	..	5·0	0	2	17	4	1	0	1	3	4	1	5	11	0
Koraput .	0830	913	1488·7	908·6	..	22·4	21·0	19·8	23·9	87	..	5·7	..	...	0	0	30	8	1	3	1	4	6	5	2	0	0
	1730	,,	1470·7	906·3	..	23·6	20·9	19·6	22·5	78	..	6·5	..	...	0	0	30	12	2	2	3	3	1	5	2	0	0
Titilagarh . .	0830	211	1006·5	982·9	..	27·0	24·5	23·3	28·7	81	...	4·6	..	2·7	0	0	22	2	2	0	4	5	4	2	3	8	0
	1730	,,	1003·1	979·8	..	29·9	25·1	23·0	27·8	68	...	4·8	..	2·3	0	0	22	6	4	1	2	4	1	0	4	8	0

(b) Mean of 29 days. (l) Mean of 19 days. (*) Data not available.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean tem perature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Wind speed (km. p. h			No. of observations.									
			At mean sea level or height in g. p. m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed, kms. per hour.	62 or more	20 to 61.	1 to 19.	Wind direction.									
																		N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—(*Contd.*)																											
Bolangir (R)	0830																										
(R)	1730																										
Angul . . .	0830	139	1006·9	991·3	+1·2	27·3	25·1	24·1	30·0	83	+1	6·1	+0·7	4·6	0	0	23	1	2	2	1	1	4	10	2	7	0
	1730	,,	1003·8	988·3	..	28·1	24·8	23·2	28·4	76	..	7·2	..	5·8	0	0	26	1	4	2	2	0	9	4	4	4	0
Keonjhar . .	0830	463	1005·6	954·7	..	26·1	23·5	22·1	27·0	79	..	5·0	..	5·5	0	0	30	5	5	3	0	2	2	2	11	0	0
	1730	,,	1002·6	952·2	..	26·8	23·7	22·2	27·1	78	..	6·9	..	6·6	0	0	29	2	3	5	5	0	5	3	5	1	1
Sambalpur . .	0830	148	1006·8	990·2	+0·9	27·7	25·3	24·1	29·9	79	—3	4·3	—0·7	3·4	0	0	23	1	4	3	1	6	6	1	1	7	0
	1730	,,	1003·5	987·9	..	29·1	25·9	24·4	31·1	77	..	6·1	..	2·1	0	0	16	1	1	2	4	2	0	3	3	14	0
Jharsuguda . .	0230	230	1004·6	978·8	..	25·1	24·2	23·7	29·6	93	..	4·4	..	3·9	0	0	18	0	5	0	3	2	2	1	5	12	0
	0530	,,	1005·0	979·1	..	24·5	23·9	23·5	29·3	94	..	5·0	..	3·8	0	0	17	1	8	0	2	2	2	1	1	13	0
	0830	,,	1006·5	980·9	..	27·2	24·8	23·8	29·0	81	..	5·7	..	5·4	0	0	23	1	8	1	2	1	2	5	3	7	0
	1130	,,	1005·7	980·3	..	29·9	25·6	23·5	28·9	68	..	5·4	..	6·3	0	0	25	0	6	0	4	1	0	7	7	5	0
	1730	,,	1003·4	977·9	..	28·1	25·1	23·7	29·2	77	..	6·6	..	4·7	0	0	23	1	2	0	5	3	5	6	1	7	0
	2330	,,	1005·9	980·1	..	25·7	24·6	24·1	29·9	91	..	4·5	..	3·7	0	0	20	0	6	2	5	1	1	1	4	10	0
Chota Nagpur— Jamshedpur . .	0830	129	1006·4	992·0	+1·1	27·6	25 4	24·5	30·5	83	+2	4·6	—1·1	4·6	0	0	23	0	0	5	1	0	2	11	4	7	0
	1730	,,	1003·4	989·0	..	28·8	25·6	24·1	29·8	77	..	6·5	..	5 6	0	0	26	1	1	9	2	2	3	4	4	4	0
Jamshedpur (P.B.O.)	0530	145	1004·9	988·5	..	25.2	24.5	24·1	30·5	94	..	5·9	..	2.9	0	0	15	1	1	1	1	0	0	7	4	15	0
	0830	,,	1006·3	990·1	..	27·7	25·3	24·2	30·3	81	..	5·8	..	4·6	0	0	25	0	1	3	1	0	5	5	10	5	0
	1130	,,	1005·7	989·6	..	30·6	26·1	23·8	31·3	68	..	6·0	..	5·6	0	0	29	0	6	2	1	1	6	3	10	1	0
	1730	,,	1003·3	987·2	..	28·5	25·2	23·7	29·3	76	..	7·1	..	5·1	0	0	22	2	3	6	4	1	0	1	5	8	0
	2330	,,	1005·7	989·4	..	26·3	25·1	24·5	31·1	90	..	4·6	..	2·8	0	0	18	1	2	4	0	0	3	3	5	12	0
Chaibasa . .	0830	226	1006·3	981·0	+0·9	27·9	25·3	23·9	30·4	80	—1	5·2	+0·1	1·1	0	0	10	0	4	0	0	0	5	0	1	20	0
	1730	,,	1003·3	978·1	..	28·1	25·1	23·5	29·2	78	..	6·7	..	1·3	0	0	12	0	6	0	2	0	4	0	0	18	0
Ranchi . . .	0830	655	1005·2	933·6	0	25·2	23·0	21·9	26·5	83	+2	3·7	—1·4	0·9	0	0	8	3	0	4	0	1	0	0	0	22	0
	1730	,,	1003·4	932·3	..	25·8	22·8	21·3	25.5	77	..	4·9	..	0·4	0	0	3	1	0	0	0	1	0	0	1	27	0
Ranchi (C.W.O.)	0530	652	1005.2	933·4	..	22·6	21·7	21·0	25·4	91	..	4·4	..	4·8	0	1	21	3	0	2	2	1	2	6	6	8	0
	0830	,,	1006·1	934·9	..	25·5	22·5	22·0	24·9	77	..	4·4	..	7.8	0	2	26	9	2	2	1	3	1	6	4	2	0
	1130	,,	1005·3	934·7	..	27·5	22·7	20·3	24·3	67	..	5·6 (n)	..	9·0 (n)	0	2	27	6	3	4	2	2	2	4	6	1	0
	1730	,,	1003·1	932·2	..	26·3	22·8	20·9	24·9	75	..	5·5	..	8·1	0	2	15	2	5	3	1	1	1	1	3	0	0
Daltonganj . .	0830	221	1006·4	981·8	+0·9	28·3	24·5	22·7	27·6	73	—6	4·6	+1·1	3·5	0	0	21	1	1	3	2	0	2	10	2	9	0
	1730	,,	1003·1	978·6	..	29·5	24 6	22·0	27·0	66	..	6·1	..	2·9	0	0	18	2	0	3	1	0	1	9	2	12	0
Hazaribagh . .	0830	611	1006·3	939·4	+1·1	25·8	23·0	21·6	26·1	79	—2	4·6	—1·0	7·7	0	1	24	4	0	3	2	3	2	2	9	5	0
	1730	,,	1003.4	936·8	..	26·5	22.9	21·2	25·2	74	..	5·9	..	5·2	0	0	23	1	2	1	3	2	1	0	13	7	0
Dhanbad . .	0830	257	..	..	..	28.0	25·0	23·7	29.1	78	..	5·4	..	..	0	0	25	4	1	6	2	2	1	7	2	5	0
	1730	,,	..	..	..	28·5	24·9	23·3	28·5	77	..	6·5	..	..	0	0	24	1	1	2	6	1	0	6	6	6	1
Bihar— Purnea . . .	0830	38	1006·9	1002·7	+0·7	29·6	26·6	25·3	32·1	78	—7	3·6	—1·1	3·0	0	0	23	1	2	7	3	2	4	3	1	7	0
	1730	,,	1003·1	998·9	..	30·2	26·6	25·2	31·8	75	..	3·7	..	1·0	0	0	9	0	0	3	0	1	1	4	0	21	0
Forbesganj . .	0830	61	1006·6	999·8	..	29·2	26·3	25·1	32·1	79	..	5·1	..	6·8	0	0	27	0	3	15	1	1	1	6	0	3	0
	1730	,,	1002·9	996·2	..	31·3	27·0	25·2	32·5	71	..	4·7	..	4·9	0	0	26	1	2	6	3	4	0	10	0	4	0
Darbhanga . .	0830	49	1006·6	1001·1	+0·8	28·6	26·4	25·4	32·5	83	+6	3·5	—1·2	2·5	0	0	22	0	3	5	2	1	2	9	0	8	0
	1730	,,	1003·2	997·7	..	31·5	27·4	25·4	32·9	72	..	3·6	..	1·2	0	0	12	0	0	2	3	0	3	4	0	18	0
Motihari (R) .	0830	66																									
(R)	1730	,,																									
Patna . . .	0830	53	1006·1	1000·2	+0·5	29·5	25·9	24·1	30·4	74	—5	3·8	—1·1	10·3	0	3	26	1	1	8	6	0	1	8	4	1	0
	1730	,,	1003·0	997·1	..	30·8	26·1	23·9	29·8	68	..	4·4	..	6·1	0	0	25	0	1	6	2	0	8	8	0	5	0
Patna (Aerodrome)	0530	60	1004 2	997·4	..	25·8	24·8	24·2	30·4	92	..	4·3	..	9·6	0	2	19	1	2	7	2	1	2	6	0	9	0
	0830	,,	1005·6	998·9	..	28·9	25·9	24·6	31·0	77	..	3·7	..	4·3	0	2	27	0	2	5	7	1	2	10	2	1	0
	1130	,,	1004·8	995·3	..	31·6	26·6	24·5	30·7	67	..	4·0	..	11·1	0	1	28	1	2	1	7	4	3	9	2	1	0
	1730	,,	1002·3	995·7	..	31·0	26·5	24·5	31·2	69	..	4·2	..	9·0	0	1	25	0	1	5	5	0	5	9	1	4	0
	2330	52	1005·0	999·2	..	28·9	27·2	26·5	34·8	87	..	2·7	..	4·2	0	2	9	0	0	6	4	1	0	0	0	19	0
Dehri . . .	0830	107	1005·9	993·9	..	29·1	25·5	23·8	29·7	75	..	3·2	..	3·1	0	0	30	0	1	4	5	2	8	7	3	0	0
	1730	,,	1002·4	990·5	..	30·5	26·2	24·2	30·6	71	..	4·6	..	2·8	0	0	27	1	1	1	5	0	2	7	10	3	0
Gaya . . .	0230	116	1004·7	991·6	..	26·3	25·6	25·3	31·8	94	..	3·6	..	2·3	0	0	12	0	0	3	3	0	5	1	0	18	0
	0530	,,	1004·9	991·3	..	25·6	25·0	24·7	31·3	95	..	4·0	..	2·5	0	0	11	0	0	3	4	0	3	1	0	19	0
	0830	,,	1006·5	993·4	+1·2	28·6	25·7	24·5	31·2	79	+4	3·7	0	7·7	0	0	21	0	1	3	4	1	2	8	2	9	0
	1130	,,	1006·0	993·1	..	31·6	26·7	24·4	30·7	68	..	3·8	..	7·7	0	1	18	1	1	4	3	1	1	0	8	11	0
	1730	,,	1003·2	990·3	..	30·8	26·3	24·3	31·4	73	..	4·9	..	5·1	0	1	19	2	0	3	4	1	0	0	10	10	0
	2330	,,	1005·7	992·6	..	26·9	25·9	25·4	32·3	92	..	3·5	..	2·2	0	0	7	0	1	2	3	0	1	0	0	23	0

(R) Register not received.

(n) Mean of 17 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km. p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*(Contd.)*																											
Jamui	0830	82	1006·3	996·9	..	28·9	26·2	24·8	31·6	80	..	4·2	..	4·6	0	0	22	0	0	7	3	1	1	0	10	8	0
	1730	,,	1003·0	993·6	..	29·9	26·9	25·5	32·9	79	..	5·4	..	3·2	0	0	18	0	0	6	3	0	0	2	7	12	0
Dumka	0830	149	1006·6	990·0	+0·8	29·1	26·2	24·7	31·7	77	−4	2·6	−2·1	..	0	0	27	2	6	4	6	0	3	4	2	3	0
	1730	,,	1003·7	987·1	..	29·4	26·8	25·6	33·0	81	..	4·5	..	..	0	0	24	1	1	5	9	1	3	3	1	6	0
Bhagalpur	0530	49	1005.0	999.5	..	26·5	25·4	25·0	32·6	91	..	3·8	..	4·8	0	0	21	0	1	4	5	3	6	1	1	9	0
	0830	,,	1006 3	1000.9	..	29·5	26·4	25·1	32·0	78	..	3·7	..	5·4	0	0	29	1	0	6	6	4	5	6	1	1	0
	1130	,,	1006·2	1000·7	..	32·2	26·9	24·5	31·1	65	..	4·3	..	6·7	0	0	27	0	2	9	2	3	1	8	2	3	0
	1730	,,	1003·4	997·9	..	30·7	26·7	25·0	32·0	73	..	4·9	..	5·0	0	0	20	0	0	6	2	1	1	8	2	10	0
	2330	,,	1005·7	1000·3	..	27·9	26·1	25·3	33·5	86	..	2·7	..	2·9	0	0	12	0	0	2	1	3	4	1	1	18	0
Sabour	0830	37	1006·5	1002·3	+1·3	29·5	27·1	26·1	33·6	83	0	4·7	−1.0	7·3	0	0	30	2	2	5	3	2	12	2	2	0	0
	1730	,,	1003·1	999·0	..	30·5	27·8	26·6	35·0	80	..	5·3	..	5·5	0	0	24	2	3	3	1	1	8	3	3	6	0
Uttar Pradesh (East)																											
Gonda	0830	110	1005·7	993·4	..	27·4	25·4	24·6	30·6	83	+2	3·3	−0·9	2·0	0	0	11	0	0	8	0	0	0	0	3	19	0
	1730	,,	1002·3	990·2	..	29·6	25·9	24·4	30·3	73	..	3·1	..	0·3	0	0	2	0	0	1	0	0	0	1	0	28	0
Nautanwa	0830	..	..	..	..	28·6	25·5	24·3	29·7	77	..	3·0	..	4·8	0	1	23	0	2	7	10	1	2	1	1	6	0
	1730	..	..	..	..	30·8	26·5	24·1	29·6	69	..	2·0	..	2·9	0	0	18	1	1	4	4	2	0	3	3	12	0
Gorakhpur	0830	77	1005·6	996·9	+0·1	28·4	25·4	24·1	29·7	79	−2	3.8	+0.4	2·4	0	0	20	1	0	9	1	0	0	9	0	10	0
	1730	,,	1002·5	993·8	..	30·9	26·4	23·6	31·8	67	..	3·6	..	2·5	0	0	23	0	0	8	0	2	1	12	0	7	0
Gorakhpur (P.B.O.)	0230	78	1004·1	995·2	..	26·4	24·9	24·3	31·1	89	..	2·9	..	0·5	0	1	18	0	5	3	3	1	2	5	0	11	0
	0530	,,	1004·3	995·4	.	25·7	24·5	24·1	29·7	90	..	3·8	..	4·4	0	1	20	0	8	4	1	0	6	1	1	9	0
	1130	,,	1005·7	996·9	..	31·8	26·3	23·8	29·3	64	..	4·4	..	6·5	0	1	28	0	3	6	6	3	3	7	1	1	0
	2330	,,	1005·1	996·2	..	27·3	25·3	24·3	30·6	84	..	2·6	..	2·9	0	0	18	0	5	3	0	1	3	6	0	12	0
Azamgarh	0830	78	1005·7	996·9	..	28·0	26·1	25·2	31·1	84	..	3·3	..	..	0	0	28	0	0	12	0	0	0	16	0	2	0
	1730	,,	1002·5	993·9	..	30·5	26·9	25·3	32·6	76	..	1·8	..	..	0	0	2	0	0	1	0	0	0	1	0	28	0
Ballia	0830	64	1005·1	998·1	..	28·4	25·1	24·0	29·0	78	..	4·1	..	4·6	0	0	27	1	3	2	5	1	8	6	1	3	0
	1730	,,	1001·8	994·8	..	31·9	25·8	22·8	27·7	60	..	3·9	..	3·6	0	0	24	0	4	2	4	0	3	10	1	6	0
Varanasi (Banaras)	0830	76	1006·1	997·3	+0·6	28·6	25·4	23·8	30·0	76	−4	2·8	−1·4	8·2	0	0	28	0	3	4	3	0	14	4	0	2	0
	1730	,,	1002·5	994·1	..	30·7	25·9	23·7	29·8	68	..	3·6	..	6·5	0	0	26	2	3	2	1	0	7	5	6	4	0
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	1004·9	995·1	..	25·2	24·3	23·9	29·5	91	..	3·5	..	6·2	0	0	26	0	2	5	0	1	14	4	0	4	0
	0830	,,	1006·6	997·0	..	27·9	25·4	24·1	30·2	79	..	3·6	..	12·9	0	2	28	0	1	6	3	2	9	8	1	0	0
	1130	,,	1006·6	997·1	..	31·0	25·9	23·9	29·8	67	..	3·9	..	15·2	0	5	25	0	3	4	2	1	6	12	2	0	0
	1730	,,	1003·5	994·0	..	30·9	25·8	23·6	29 8	67	..	3·7	..	9·4	0	2	28	1	2	4	3	0	4	15	1	0	0
	2330	,,	1005·8	996·2	..	26·7	25·1	24·3	30·3	87	..	2·6	..	7·3	0	0	25	0	1	4	3	1	13	3	0	5	0
Allahabad (Bamrauli)	0230	98	1004·0	992·9	..	25·7	24·2	23·5	29·0	87	..	3·3	..	3·5	0	0	22	0	2	4	0	2	6	8	0	8	0
	0530	,,	1004·3	993·1	..	24·8	23·4	22·6	28·0	88	..	3·8	..	4·7	0	0	22	0	1	5	2	1	6	6	1	8	0
	0830	,,	1006·0	994·9	+0·6	27·7	24·4	23·1	27·9	75	−4	3·9	−0·6	8·1	0	1	28	2	1	3	2	2	4	15	0	1	0
	1130	,,	1005·8	994·8	..	31·6	25·8	23·2	28·5	63	..	3·9	..	10·2	0	2	26	0	3	2	1	1	1	16	4	2	0
	1730	,,	1003·0	992·1	..	31·0	25·8	23·4	30·5	66	..	3·6	..	6·0	0	0	27	1	1	5	0	2	1	13	4	3	0
	2330	,,	1005·1	994·1	..	26·6	24·5	23·5	29·6	83	..	3·1	..	3·8	0	0	20	0	1	3	0	2	5	9	0	10	0
Banda	0830	121	1005·9	992·5	..	27·8	24·6	23·2	27·9	75	..	1·7	..	1·0	0	0	7	0	2	1	2	0	1	0	1	23	0
	1730	,,	1002·8	989·4	.	30·6	26·0	24·2	30·2	69	..	2·6	..	0·3	0	0	2	0	1	0	0	0	0	0	1	28	0
Fatehpur	0830	114	1005·5	992·6	..	27·1	24·6	23·5	29·1	80	−1	3·2	−0·5	2·1	0	0	12	0	0	4	1	0	2	4	1	18	0
	1730	,,	1002·7	990·0	..	30·6	25·6	23·2	28·7	67	..	3·2	..	0·7	0	0	3	1	0	2	0	0	0	0	0	27	0
Kanpur	0830	126	1006·3	992·1	+1·1	27·4	24·2	22·6	27·7	76	−6	3·6	+1·0	12·6	0	5	25	0	2	7	1	1	4	14	1	0	0
	1730	,,	1003·1	989·1	..	31·0	24·9	21·8	26·7	61	..	3·1	..	11·6	0	3	26	1	2	7	1	1	2	13	2	1	0
Lucknow	0830	113	1005·8	993·1	+0·7	26·5	24·2	22·8	28·8	81	+2	2·6	−1·0	..	0	0	28	0	1	11	1	1	1	6	7	2	0
	1730	,,	1003·0	990·5	..	30·1	25·1	22·8	27·6	68	..	3·2	..	..	0	0	29	0	1	13	1	0	1	10	3	1	0
Lucknow (Amausi Aerodrome)	0230	128	1003·9	989·4	..	24·9	23·9	23·4	28·7	92	..	3·1	..	5·5	0	1	18	0	2	4	2	2	1	7	1	11	0
	0530	,,	1004·1	989·6	..	24·3	23·3	22·7	27·8	92	..	3·2	..	6·0	0	0	23	0	3	4	1	2	3	9	1	7	0
	0830	,,	1005·6	991·3	+0·5	27·3	24·5	23·4	28·4	79	+4	3·3	−0·3	11·3	0	4	25	4	0	7	2	1	1	9	5	1	0
	1130	,,	1005·5	991·3	..	30·7	25·0	22·3	27·1	63	..	3·6	..	11·8	0	4	25	3	2	5	4	0	2	5	8	1	0
	1730	,,	1002·7	988·5	..	29·8	25·1	23·0	28·3	67	..	3·8	..	10·0	0	3	24	1	2	6	1	1	3	9	4	3	0
	2330	,,	1004·8	990·4	..	25·8	24·3	24·1	29·3	88	..	3·2	..	6·0	0	1	16	0	2	3	1	1	3	5	2	13	0
Hardoi	0830	142	1005·6	989·3	..	26·8	24·3	23·2	28·1	81	..	2·9	..	4·2	0	0	23	1	0	6	3	0	1	11	1	7	0
	1730	,,	1002·8	987·0	..	30·3	25·7	23·7	29·6	71	..	2·8	..	3·5	0	0	25	3	1	6	2	0	1	6	6	5	0
Lakhimpur Kheri	(R) 0830	147																									
	(R) 1730	,,																									
Bahraich	(R) 0830	124																									
	(R) 1730	,,																									

(R)—Register not received.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—SEPTEMBER, 1957 (BHADRA 10—ASVINA 8, 1879 SAKA)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas).		Wind speed (km. p.h.)				No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.			Departure from normal.	Mean amount.	Departure from normal.	Mean wind speed, km. per hour.	62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh(West)																											
Orai	0830	141	1006·6	990·8	..	27·8	24·2	22·4	27·2	72	..	2·3	..	5·4	0	0	29	2	0	4	2	1	7	3	10	1	0
	1730	,,	1003·0	987·4	..	31·2	24·9	21·5	26·7	60	..	0·8	..	3·4	0	0	29	5	4	2	1	1	1	5	10	1	0
Jhansi	0830	251	1006·0	977·9	+0·2	26·7	23·0	20·9	25·3	73	−1	2·7	−0·2	3·0	0	0	27	0	1	3	0	0	3	13	7	3	0
	1730	,,	1003·2	975·5	..	30·8	24·4	20·7	25·1	58	..	2·6	..	3·7	0	0	29	2	1	3	1	0	0	2	20	1	0
Agra	0830	169	1006·1	987·0	+0·7	27·7	23·9	22·0	26·5	72	−3	2·1	−1·0	2·3	0	0	16	0	0	3	1	0	3	7	2	14	0
	1730	,,	1003·2	984·5	..	31·4	24·5	21·0	25·0	58	..	3·0	..	3·1	0	0	20	2	4	0	0	1	0	3	10	10	0
Agra (R)	0530	169																									
(Aerodrome) (R)	0830	,,																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									
Mainpuri	0830	157	1005·7	988·0	+0·5	26·7	24·1	22·9	27·8	79	+3	2·7	−0·7	2·7	0	0	27	0	0	7	2	0	4	12	2	3	0
	1730	,,	1003·0	985·3	..	30·3	25·2	23·3	27·6	66	..	2·2	..	2·7	0	0	27	1	1	4	0	1	1	16	3	3	0
Aligarh	0830	187	1005·0	984·0	..	26·4	23·3	21·7	25·2	76	+5	2·6	0	4·1	0	0	26	0	0	7	0	1	1	15	2	4	0
	1730	,,	1003·5	982·7	..	30·6	24·7	21·7	26·4	60	..	3·2	..	4·3	0	0	25	3	0	6	0	1	0	13	2	5	0
Bareilly	0830	173	1005·2	985·8	−0·1	26·4	24·1	22·6	28·1	77	−3	3·3	0	4·9	0	0	23	1	0	7	1	1	2	10	1	7	0
	1730	,,	1002·2	983·0	..	30·1	24·8	22·1	26·9	66	..	3·3	..	2·4	0	0	20	2	0	4	0	0	0	10	4	10	0
Bareilly (P.B.O.)	0230	172	1003·7	984·3	..	25·9	24·0	23·3	28·6	86	..	3·0	..	5·6	0	1	16	0	3	4	3	0	0	5	2	13	0
	0530	,,	1003·8	984·5	..	25·1	23·5	22·8	27·3	87	..	3·4	..	5·4	0	1	18	0	3	7	1	1	0	6	1	11	0
	1130	,,	1005·5	986·3	..	29·7	25·0	23·0	23·6	70	..	3·9	..	9·7	0	0	28	1	4	3	6	0	1	6	7	2	0
	2330	,,	1004·3	985·0	..	26·7	24·5	23·7	28·8	84	..	2·5	..	5·1	0	2	13	0	0	7	2	0	1	5	0	15	0
Meerut	0830	222	1005·8	980·9	+0·5	25·8	22·6	20·9	25·0	76	0	2·5	+0·1	3·3	0	0	18	0	2	5	0	0	0	9	2	12	0
Najibabad	0830	270	1005·9	975·7	..	25·3	23·2	22·1	26·9	83	..	2·9	..	2·6	0	0	12	1	2	0	5	2	0	0	2	18	0
	1730	,,	1004·0	974·2	..	29·6	24·3	21·6	25·1	65	..	2·9	..	3·7	0	0	18	4	1	2	2	1	0	0	8	12	0
Roorkee	0830	274	1005·7	975·0	+0·3	25·2	23·2	22·4	26·6	85	+6	4·1	+1·2	0·4	0	0	5	0	0	0	5	0	0	0	0	25	0
	1730	,,	1002·9	972·6	..	29·3	24·4	22·0	26·7	67	..	4·4	..	0·7	0	0	7	0	0	0	3	0	0	0	4	23	0
Dehra Dun	0530	682	1004·8	929·3	..	21·2	19·9	19·1	22·5	88	..	3·0	..	2·0	0	0	18	7	7	0	0	0	1	2	1	12	0
	0830	,,	1005·7	930·8	+0·3	23·9	21·3	20·0	23·5	80	0	3·2	−0·6	0·6	0	0	8	2	2	1	0	0	1	2	0	22	0
	1130	,,	1005·5	931·3	..	27·2	22·7	20·6	24·1	70	..	4·2	..	2·3	0	0	22	0	0	0	1	5	5	7	4	8	0
	1730	,,	1003·0	929·0	..	26·9	23·0	21·2	24·6	73	..	3·7	..	1·1	0	0	14	1	1	0	0	3	2	3	2	16	2
	2330	,,	1005·3	930·1	..	22·7	21·0	20·0	23·7	86	..	3·0	..	1·9	0	0	16	2	14	0	0	0	0	0	0	14	0
Punjab (India) (Including Delhi																											
New Delhi	0230	216	1004·2	979·8	..	24·9	22·0	20·3	24·5	78	..	2·6	..	8·7	0	1	24	0	4	2	1	0	5	12	1	5	0
	0530	,,	1004·3	979·9	..	24·1	21·4	19·8	22·8	79	.	3·0	..	10·1	0	2	22	1	3	1	0	0	8	10	1	6	0
	0830	,,	1005·8	981·4	+0·4	25·8	21·9	19·7	22·9	71	−3	2·8	−0·5	14·3	0	4	26	1	4	4	1	0	1	14	5	0	0
	1130	,,	1005·9	981·9	..	30·1	23·6	20·0	23·9	58	..	3·0	..	18·1	0	13	16	1	3	1	1	1	1	8	13	1	0
	1730	,,	1003·1	979·2	..	30·3	23·8	20·2	24·1	59	..	2·7	..	8·9	0	1	29	3	2	4	1	0	0	2	18	0	0
	2330	,,	1005·0	980·7	..	25·8	22·7	20·8	25·0	76	..	2·4	..	5·6	0	0	17	0	3	3	0	0	3	6	2	13	0
Hissar	0530	221	1005·0	979·8	..	22·7	20·5	19·1	22·4	82	..	2·3	..	5·4	0	0	22	1	2	3	1	1	6	6	2	8	0
	0830	,,	1006·3	981·4	+1·1	25·2	21·6	19·6	22·5	73	+8	2·2	+0·6	5·1	0	0	26	5	3	0	1	0	5	8	4	4	0
	1130	,,	1006·4	982·0	..	31·3	24·0	20·0	23·7	56	..	2·5	..	5·9	0	0	25	2	0	0	3	0	2	9	9	5	0
	1730	,,	1003·1	979·0	..	32·0	24·1	19·8	23·1	53	..	2·0	..	6·5	0	1	25	5	9	2	0	0	1	2	7	4	0
	2330	,,	1005·3	980·6	..	24·9	21·9	20·3	23·9	78	..	2·0	..	3·2	0	0	17	2	2	2	1	4	2	2	2	15	0
Karnal	0830	249	1005·3	977·2	..	24·7	22·3	20·7	25·2	76	..	3·1	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1003·8	976·4	..	30·5	24·4	20·9	25·7	60	..	3·0	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Patiala	0830	251	1005·8	977·7	..	26·2	22·8	21·0	25·0	75	..	2·7	..	4·5	0	0	22	6	1	0	2	0	0	2	11	8	0
	1730	,,	1003·6	976·0	..	30·0	24·5	21·9	26·1	63	..	2·6	..	6·8	0	0	24	5	0	1	2	0	0	2	14	6	0
Ambala (R)	0830	272																									
(R)	1730	,,																									
Ambala (P.B.O.)	0230	278	1003·7	972·5	..	24·8	22·4	21·2	24·9	81	..	2·3	..	5·6	0	0	23	4	3	2	2	1	2	6	3	7	0
	0530	,,	1004·0	972·7	..	23·9	21·9	21·0	24·8	84	..	2·8	..	5·4	0	0	23	8	3	1	2	1	2	4	2	7	0
	1130	,,	1005·7	974·9	..	28·7	23·5	21·4	24·7	66	..	3·1	..	7·4	0	0	27	2	2	1	2	1	1	7	11	3	0
	2330	,,	1004·3	973·3	..	25·9	22·7	21·4	24·6	77	..	2·0	..	8·2	0	0	26	5	3	2	1	1	1	5	8	4	0
Ambala (Aerodrome) (R)	0530	273																									
(R)	0830	,,																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mls.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km. p.h.)			No. of observations.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction.								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) (including Delhi) (*Contd.*)																											
Chandigarh	0830	347	1005·6	967·0	..	26·1	22·7	..	20·9	25·0	74	2·2	..	..	0	0	10	1	0	1	2	0	0	0	6	20	0
	1730	„	1003·1	964·8	..	29·2	23·6	..	20·4	24.6	61	2·1	..	..	0	0	21	0	3	0	3	0	4	0	11	9	0
Ludhiana	R0830	247																									
	R1730	„																									
Ferozepur	0830	200	1005.7	983·3	..	26·5	23·5	21·5	26·7	76	..	1·1	..	0·6	0	0	6	0	2	0	2	0	0	0	2	24	0
	1730	„	1002·8	980·8	..	33·6	27·1	24·6	30·3	62	..	1·2	..	0·8	0	0	7	1	1	1	3	0	1	0	0	23	0
Amritsar	0530	234	1004·9	978·3	..	21·9	21·1	20·8	23·9	93	..	0·6	..	4·2	0	0	21	3	4	6	2	2	2	2	0	9	0
	0830	„	1006·1	979·8	..	26·6	22·9	21·2	25·3	73	..	1·0	..	5·0	0	0	26	0	1	8	7	3	3	4	0	4	0
	1130	„	1006·1	980·3	..	31·9	24·0	19·9	22·6	51	..	1·1	..	7·0	0	0	27	3	1	5	3	1	4	5	3	3	0
	1730	„	1002·9	977·3	..	33·1	23·9	18·9	22·7	47	..	1·2	..	8·3	0	0	27	2	0	5	1	0	0	12	7	3	0
Pathankot	0830	344	1006·2	967·8	..	25·0	21·9	20·2	23·9	75	..	2·5	..	0·9	0	0	9	0	4	2	1	2	0	0	0	21	0
	1730	„	1004·2	966·5	..	30·7	24·7	21·9	25·7	61	..	2·5	..	2·1	0	0	18	0	1	1	0	5	2	8	1	12	0
Himachal Pradesh Bilaspur	0830	493	1007·3	952·2	..	22·8	21·0	20·1	22·4	85	..	3·5	..	2·3	0	0	19	4	2	0	0	4	4	0	5	11	0
	1730	„	1004·2	950·1	..	28·4	22·8	19·9	23·2	63	..	4·1	..	3·2	0	0	24	3	0	1	1	2	3	3	11	6	0
Mandi	0830	761	1006·6	922·9	..	20·9	19·1	18·0	20·8	85	..	2·9	..	0·4	0	0	5	1	1	0	0	1	0	1	1	25	0
	1730	„	1003 0	920 8	..	26·4	21·7	19·7	22·0	69	..	2·7	..	2·0	0		20	0	1	2	1	1	2	7	6	10	0
Jammu & Kashmir Srinagar	0830	1587	1493·9	840·9	+1·0	15·7	13·3	11·3	13·9	76	−9	1·0	−1.3	2·8	0	0	25	0	0	3	16	0	2	4	0	5	0
	1130	„	1491·4	840·6	..	23·5	16·1	11.7	13·1	49	..	1·2	..	2·9	0	0	24	4	0	1	4	3	4	5	3		0
	1730	„	1461·1	837·9	..	23·2	16·2	11.1	14·0	46	..	3·6	..	3·5	0	0	22	4	4	0	3	0	2	5	4	8	0
Gulmarg	0830	2655	3119·1	740·3	+0·4	11·2	8·1	5·3	8·8	67	−13	1·5	−0·7	0·6	0	0	5	1	3	1	0	0	0	0	0	25	0
	1730	„	3113·2	739·4	..	13·7	9·8	6·5	9·6	62	..	4·0	..	4·3	0	0	15	1	2	0	1	0	8	2	1	15	0
Leh (R)	0530	3514																									
(R)	0830	„																									
(R)	1730	„																									
Skardu (R)	0830	2298																									
(R)	1730	„																									
Gilgit (R)	0830	1491																									
(R)	1730	„																									
Misgar (R)	0830	3106																									
(R)	1730	„																									
Jammu	0830	..	..	..	..	25·5	21·2	18·7	21·4	67	−1	1·8	0	..	0	0	30	0	25	0	0	0	5	0	0	0	0
Rajasthan (West) Sri Ganganagar	0530	177	1004·8	984·4	..	23·9	20·4	18·2	20·9	72	..	0·5	..	1·8	0	0	14	1	1	3	2	2	4	1	0	16	0
	0830	.	1005·8	985·9	..	26·6	21·6	18·5	21·8	63	+3	0·7	0	3·3	0	0	26	0	1	3	3	3	15	0	1	4	0
	1130	.	1005·5	986·1	..	33·8	23·6	17·7	20 8	39	..	1·0	..	8·0	0	0	29	0	2	1	1	2	9	8	3	1	0
	1730	„	1002·1	982·8	..	35·8	23·6	16·6	19·7	33		0·7	..	4·0	0	0	27	2	1	4	0	0	3	11	6	3	0
	2330	„	1004·7	984·8	..	26·7	21·7	18·8	21·8	63	..	0·6	..	2·3	0	0	14	1	0	6	4	0	3	0	0	16	0
Churu	0830	291	1006·7	974·1	..	26·8	21·6	19·0	23·0	67	..	0·5	..	9·0	0	0	27	3	1	3	1	0	4	13	2	3	0
	1730	„	1003·2	971·5	..	33·7	23·8	18·1	21·5	43	..	2·5	..	13·0	0	3	27	4	1	2	1	0	5	9	3	0	0
Bikaner	0330	224	1006·6	981·6	+1·4	26·8	22·4	20·2	21·2	66	−2	0·5	−1·0	8·2	0	0	28	0	1	0	3	0	20	2	2	2	0
	1730	„	1003·0	978·6	..	36·1	23·5	16·4	18·9	32	..	1·1	..	9·1	0	0	29	1	5	1	0	0	14	3	5	1	0
Bikaner (P.B.O.)	0530	224	1004·7	979·7	..	25·5	22·9	21·5	26·2	79	..	1·0	..	7·8	0	0	23	1	1	0	0	1	17	3	0	7	0
	1130	„	1006·2	981·6	..	33·4	26·9	23·9	30·3	59	..	1·0	..	10·0	0	0	30	2	2	1	0	1	12	8	4	0	0
	2330	„	1005.0	980·1	..	29·2	24·6	22·4	26·3	68	..	1·2	..	7·6	0	0	25	0	0	1	1	8	13	2	0	5	0
Jaisalmer	0830	242	1006·6	979·2	..	25·9	21·6	19·7	22·3	68	..	0·2	..	9·8	0	9	20	0	1	0	0	12	15	0	1	1	0
	1730	„	1002·8	976·9	..	35·6	23·8	16·9	20·1	35	..	1·5	..	14·3	0	5	25	0	3	0	2	11	13	0	1	0	0
Phalodi	0830	234	1007·3	980·9	..	25·5	21·9	19·9	23·4	72	..	0·8	..	12·6	0	3	25	1	0	0	0	0	22	5	0	2	0
	1730	„	1004·2	978.8	..	34·9	22·9	15·6	18·4	33	..	2·5	..	11·7	0	4	25	0	4	0	5	0	16	0	4	1	0
Jodhpur	0230	224	1005·8	980 6	..	25·8	21·2	18·4	21·6	64	..	1·2	..	7·5	0	0	28	2	2	0	0	2	16	6	0	2	0
	0530	„	1006·8	980·8	..	24·2	20·7	18·6	21·7	71	..	1·5	..	6·7	0	0	25	1	1	0	0	0	15	6	2	5	0
	0830	„	1008·1	982·8	+3·1	26·1	21·8	19·5	22·3	68	−5	2·8	−0·4	11·6	0	1	29	0	2	1	0	0	15	12	0	0	0
	1130	„	1008.0	983·1	..	30·9	23·2	19·1	22·3	51	..	2·4	..	13·1	0	2	27	1	2	1	0	1	15	8	1	1	0
	1730	„	1004·4	979·8	..	33·7	23·0	16·6	19·7	38	..	2·4	..	11·6	0	2	25	1	1	2	1	0	15	7	0	3	0
	2330	„	1006·6	981·5	..	26·8	21·6	18·2	21·2	57	..	1·3	..	7·5	0	0	28	0	3	0	0	0	16	9	0	2	0
Barmer	0530	194	1005·8	983·8	..	25·2	22·1	20·4	23·9	76	..	1·4	..	16·1	0	7	22	0	1	0	0	0	13	12	3	1	0
	0830	„	1007·6	985·7	+2·1	26·5	22·7	20·6	24·6	70	−1	2·3	−0·3	10·8	0	2	28	2	0	0	1	3	15	6	3	0	0
	1130	„	1007·4	986·0	..	32·2	23·8	19·3	22·8	48	..	2·1	..	13·1	0	2	28	1	1	0	2	10	13	2	1	0	0
	1730	„	1003·9	982·7	..	34·5	23·8	17·6	21.0	37	..	2·9	..	9·7	0	0	29	0	1	0	1	7	16	3	1	1	0
	2330	„	1006·2	984·6	..	29·4	22·8	19·1	22·3	54	..	0·9	..	11·6	0	1	28	1	0	0	1	2	19	5	1	1	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas.)		Wind speed (km. p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed, kms. per hour.	62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East)																											
Alwar	0830	271	1005·9	976·0	..	27·2	22·1	18·8	22·7	65	..	2·4	..	..	0	0	10	1	0	0	0	1	2	3	0	20	3
	1730	,,	1003·6	973·8	..	30·9	23·4	19·3	23·0	54	..	3·4	..	..	0	0	12	4	0	0	0	1	0	5	2	18	0
Sikar	0830	433	1006·0	958·1	..	25·2	22·1	20·3	23·9	75	..	2·1	..	2·7	0	0	27	0	0	2	0	2	12	8	3	3	0
	1730	,,	1003·3	956·3	..	32·2	24·9	22·2	26·2	59	..	2·5	..	3·0	0	0	30	1	5	1	0	1	3	14	5	0	0
Jaipur	0830	436	1007·0	958·6	+0·5	26·0	21·7	19·3	23·0	68	−2	2·0	−0·8	8·5	0	0	29	5	0	1	0	0	0	6	17	1	0
	1130	,,	1006·6	958·9	..	30·6	23·1	18·8	22·1	52	..	2·1	..	13·9	0	2	28	2	3	0	0	1	1	8	15	0	0
	1730	,,	1003·5	956·1	..	31·1	23·1	18·6	21·6	51	..	2·5	..	9·4	0	1	28	4	2	1	1	0	2	14	5	1	0
Jaipur (Sanganer Aerodrome)	0230	390	1005·1	961·3	..	23·5	21·2	19·7	23·2	77	..	1·7	..	..	0	0	20	5	3	0	0	0	0	2	10	10	0
	0530	,,	1005·3	961·4	..	22·6	20·5	19·1	23·1	82	..	2·2	..	..	0	0	27	8	2	1	0	0	0	1	15	3	0
	0830	,,	1006·4	963·0	..	26·4	22·8	20·7	25·3	72	..	2·3	..	..	0	1	29	6	3	0	0	0	0	3	18	0	0
	1130	,,	1006·2	963·3	..	30·2	24·3	21·2	25·4	61	..	2·3	..	..	0	5	25	4	1	2	0	0	1	3	19	0	0
	1730	,,	1003·0	960·6	..	30·9	24·1	20·3	24·5	56	..	3·2	..	..	0	1	29	1	4	1	1	1	1	8	13	0	0
	2330	,,	1005·9	962·3	..	24·6	21·9	20·3	23·7	77	..	1·5	..	..	0	0	25	5	3	1	0	0	0	7	9	5	0
Dholpur (R)	0830	176																									
(R)	1730	,,																									
Ajmer	0830	486	1007·3	953·5	+0·8	25·9	20·7	17·8	20·8	62	−5	2·4	−0·4	12·3	0	0	29	6	2	0	0	0	13	12	2	1	0
	1730	,,	1003·8	951·0	..	31·0	21·4	15·8	19·0	42	..	2·9	..	9·5	0	0	30	3	2	0	0	0	9	11	5	0	0
Kotah	0530	257	1005·6	976·6	..	24·5	21·4	19·6	23·0	75	..	2·3	..	5·1	0	0	25	2	0	0	0	0	5	10	3	7	0
	0830	,,	1006·7	978·2	+0·9	27·4	22·6	19·8	23·4	65	−4	1·8	−1·2	7·6	0	0	28	0	2	0	0	0	3	21	2	2	0
	1130	,,	1006·8	978·4	..	31·1	23·8	19·8	23·0	52	..	1·8	..	8·9	0	1	27	3	1	0	0	0	2	12	6	2	0
	1730	,,	1003·7	975·5	..	32·2	23·6	18·8	22·1	48	..	2·6	..	5·5	0	0	26	0	2	0	0	0	1	8	15	4	0
	2330	,,	1006·2	977·4	..	26·6	22·3	19·9	23·9	68	..	2·1	..	4·8	0	0	24	1	0	0	0	0	6	15	2	6	0
Chambal	0830	351	1007·6	968·4	..	25·2	22·4	20·8	24·5	76	..	2·5	..	2·2	0	0	15	1	0	1	1	1	5	2	4	15	0
	1730	,,	1004·0	965·4	..	30·6	23·8	20·3	24·2	56	..	3·6	..	3·8	0	0	25	4	1	0	0	0	6	10	4	5	0
Jhalawar	0830	321	1007·3	971·3	+1·4	24·5	21·7	20·1	23·7	77	−4	2·3	−1·5	4·0	0	0	25	3	1	0	0	0	4	18	4	5	0
	1730	,,	1003·7	968·8	..	31·3	24·1	20·3	23·7	54	..	2·8	..	5·3	0	0	25	2	1	1	1	0	1	8	11	5	0
Udaipur	0230	582	1007·4	942·4	..	21·6	19·5	18·3	21·0	83	..	1·4	..	0·2	0	0	1	0	0	0	0	0	0	1	0	29	0
	0530	,,	1007·6	942·4	..	20·6	18·8	17·9	20·6	84	..	1·7	..	1·1	0	0	7	0	0	0	0	0	3	3	1	23	0
	0830	,,	1008·1	944·1	+1·2	26·0	21·4	19·0	22·7	67	−8	2·2	0·7	1·8	0	0	10	0	1	0	0	1	2	4	2	20	0
	1130	,,	1007·4	944·3	..	30·1	21·7	17·5	19·8	49	..	3·3	..	4·9	0	0	21	1	6	2	0	0	6	7	5	9	0
	1730	,,	1004·8	941·9	..	29·2	21·6	17·4	20·9	51	..	3·9	..	4·8	0	0	26	1	6	1	0	1	8	9	6	4	0
	2330	,,	1008·5	945·7	..	22·7	19·9	18·3	21·4	77	..	2·3	..	1·4	0	0	8	0	1	0	0	0	1	4	2	22	0
Erinpura (Jawai Dam)	0830	295	1008·4	975·2	..	25·9	22·6	20·9	25·0	75	..	2·5	..	7·2	0	0	27	0	0	0	1	13	8	5	0	3	0
	1730	,,	1004·9	972·5	..	31·4	23·7	19·9	23·3	51	..	3·9	..	8·8	0	0	26	0	1	1	0	5	5	15	1	4	0
Madhya Pradesh (West)																											
Gwalior (P.B.O.)	0230	210	1004·1	980·5	..	25·4	22·5	20·8	25·0	77	..	2·7	..	6·4	0	0	25	1	3	0	0	0	16	4	1	5	0
	0530	,,	1004·3	980·7	..	25·0	22·1	20·3	24·1	77	..	2·7	..	6·8	0	0	27	4	3	0	0	1	10	7	2	3	0
	0830	,,	1005·8	982·4	+1·0	27·3	23·3	21·0	25·5	70	−6	2·7	−1·1	9·1	0	0	30	0	4	3	0	1	6	10	6	0	0
	1130	,,	1005·8	982·6	..	30·1	24·1	20·8	25·2	60	..	2·6	..	7·8	0	0	29	1	3	1	1	0	3	6	12	1	0
	1730	,,	1003·2	980·0	..	30·3	24·3	21·1	25·5	61	..	3·1	..	5·4	0	0	27	2	3	1	0	0	2	7	12	3	0
	2330	,,	1005·3	981·8	..	25·9	22·9	21·2	25·4	77	..	2·3	..	3·1	0	0	21	0	3	0	0	1	13	2	2	9	0
Sheopur Kalan	0830	235	1007·0	980·6	..	25·9	23·1	21·6	26·0	77	..	3·0	..	7·2	0	2	28	0	2	1	6	10	5	3	3	0	0
	1730	,,	1003·2	977·3	..	30·6	25·0	22·6	27·1	63	..	3·6	..	10·3	0	1	29	6	4	1	0	1	2	6	10	0	0
Guna	0530	479	1006·3	952·3	..	21·9	20·5	19·6	23·1	87	..	2·8	..	3·4	0	0	14	2	1	0	1	3	3	3	1	16	0
	0830	,,	1007·1	953·9	+1·3	24·6	21·6	20·0	23·5	77	−6	2·7	−1·0	4·0	0	0	27	3	1	1	0	0	2	20	0	3	0
	1130	,,	1007·0	954·6	..	28·8	23·0	20·1	23·8	61	..	2·7	..	.	0	0	28	1	1	0	0	0	2	11	13	2	0
	1730	,,	1004·1	951·9	..	29·5	22·9	19·5	23·0	58	..	3·7	..	4·7	0	0	26	4	0	0	1	1	5	3	12	4	0
	2330	,,	1007·0	953·7	..	23·8	21·7	20·6	24·5	83	..	2·8	..	2·9	0	0	12	2	1	1	1	1	2	3	1	18	0
Rajgarh	0830	382	1007·3	964·6	..	24·5	21·9	20·5	24·3	79	..	3·0	..	8·1	0	1	25	3	1	0	0	1	1	16	4	4	0
	1730	,,	1003·9	962·1	..	29·8	23·3	19·6	22·9	57	..	4·0	..	6·2	0	0	26	9	1	0	0	0	1	10	5	4	0
Neemuch	0830	496	1008·7	953·7	+1·7	24·7	21·3	19·4	23·0	74	−5	3·2	−0·4	11·3	0	2	28	1	4	0	0	0	4	20	1	0	0
	1730	,,	1005·0	951·1	..	30·1	21·6	16·8	19·5	47	..	4·3	..	11·9	0	0	29	1	8	1	0	0	4	14	1	1	0
Ratlam	0830	486	1008·9	954·5	..	23·7	21·5	20·5	24·0	84	..	5·4	..	10·3	0	0	28	2	1	0	0	0	9	14	2	2	0
	1730	,,	1005·1	951·9	..	29·1	23·1	19·0	23·8	58	..	4·5	..	12·0	0	2	27	3	1	0	0	0	6	14	5	1	0
Alirajpur	0830	293	1009·7	976·7	..	25·0	23·0	22·0	26·5	83	..	5·0	..	13·1	0	1	28	1	0	0	0	0	7	20	1	1	0
	1730	,,	1005·6	973·4	..	30·4	23·6	19·9	23·6	54	..	4·8	..	10·1	0	2	28	1	0	0	0	0	4	19	6	0	0
Indore	0530	567	1007·3	943·9	..	20·7	19·6	18·9	22·0	90	..	3·4	..	17·3	0	6	23	2	1	0	0	0	7	16	3	1	0
	0830	,,	1008·7	945·6	+1·1	23·0	21·2	20·4	24·0	85	+2	4·7	−0·7	22·6	0	15	15	3	1	0	0	0	3	18	5	0	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas).		Mean wind speed, kms. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm.	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (West) (*Contd.*)																											
Indore (*Contd.*)	1130	567	1007·7	945·6	..	27·5	22·2	19·5	22·9	63	..	4·7	..	20·5	0	13	17	3	3	1	0	0	2	12	9	0	0
	1730	,,	1004·7	942·8	..	28·0	21·5	17·8	20·9	56	..	5·5	..	17·3	0	11	18	2	2	1	0	1	6	12	5	1	0
	2330	,,	1008·0	944·9	..	22·7	20·2	18·8	22·0	80	..	3·3	..	12·7	0	5	22	1	2	1	0	1	9	11	2	3	0
Bhopal (Bairagarh)	0230	523	1006·1	947·8	..	22·2	20·5	19·5	22·9	85	..	2·9	..	5·8	0	0	19	1	2	0	0	0	6	6	4	11	0
	0530	,,	1006·6	948·1	..	21·2	19·9	19·2	22·3	88	..	3·1	..	6·7	0	1	21	0	3	0	0	0	6	7	6	8	0
	0830	,,	1008·7	949·9	+1·6	24·3	21·3	19·7	23·0	76	−7	3·1	−1·5	15·8	0	7	23	1	3	0	0	0	1	14	11	0	0
	1130	,,	1006·9	949·8	..	28·5	22·6	19·8	23·1	61	..	2·9	..	14·9	0	6	24	4	3	0	0	0	2	8	13	0	0
	1730	,,	1003·9	947·0	..	28·7	21·9	17·9	21·5	55	..	4·2	..	11·9	0	4	21	7	1	1	0	0	0	7	9	5	0
	2330	,,	1007·2	949·1	..	23·3	21·0	20·0	23·2	82	..	3·0	..	6·3	0	0	17	1	1	0	0	0	3	11	1	13	0
Khandwa	0830	318	1008·7	973·1	+1·5	25·6	22·6	21·1	24·9	76	−5	4·8	+0·4	14·2	0	3	27	0	0	0	0	0	1	23	6	0	0
	1730	,,	1004·7	969·7	..	30·3	23·7	20·3	23·8	57	..	5·2	..	9·0	0	0	29	3	1	0	0	0	3	5	17	1	0
Hoshangabad	0830	302	1008·0	974·1	+1·0	25·2	22·7	21·5	25·5	80	−5	3·5	−1·5	3·0	0	0	18	2	0	1	0	2	5	7	1	12	0
	1730	,,	1004·2	970·9	..	29·7	23·9	21·0	24·9	61	..	4·4	..	2·2	0	0	11	1	0	1	0	1	2	2	4	19	0
Betul	0830	655	1008·3	936·2	..	23·3	21·1	20·0	23·4	81	..	3·8	..	6·8	0	0	29	4	0	0	0	0	0	19	6	1	0
	1730	,,	1004·5	933·5	..	27·0	21·7	19·3	22·1	64	..	4·8	..	7·7	0	0	30	8	5	0	0	0	1	8	8	0	0
Chhindwara	0830	685	1006·3	931·1	..	23·9	21·1	19·7	23·0	77	..	2·8	..	3·3	0	0	29	3	2	0	2	1	4	4	13	1	0
	1730	,,	1002·5	928·6	..	28·1	22·1	19·0	23·3	60	..	4·1	..	3·7	0	0	30	3	7	3	1	1	3	4	8	0	0
Seoni	0830	619	1006·4	938·5	+0·6	25·0	21·6	19·9	23·4	74	−5	4·9	+0·6	5·3	0	0	27	8	4	0	0	2	3	4	6	3	0
	1730	,,	1003·7	936·4	..	26·6	21·9	19·9	22·8	66	..	6·0	..	4·7	0	0	28	7	3	1	1	2	2	3	9	2	0
Sagar	0830	551	1006·9	945·7	+0·7	23·7	21·5	20·4	24·0	81	0	3·2	−1·0	8·8	0	0	30	0	1	2	0	0	3	15	9	0	0
	1730	,,	1003·4	943·3	..	37·9	22·3	19·5	22·9	63	..	3·4	..	6·8	0	1	28	0	5	3	0	0	2	9	10	1	0
Nowgong	0830	229	1006·4	980·8	+0·7	26·1	23·5	22·2	26·8	80	−1	2·7	−1·3	5·0	0	0	27	2	0	4	0	5	13	3	0	3	0
	1730	,,	1003·2	978·0	.	30·9	24·7	21·6	26·1	61	..	3·6	..	3·5	0	0	27	2	2	0	2	1	10	2	8	3	0
Madhya Pradesh (East)																											
Sutna *	0530	317	1004·9	969·2	..	23·0	22·0	21·4	25·6	90	..	3·6	..	2·7	0	0	15	0	0	2	1	1	2	9	0	15	0
	0830	,,	1006·0	970·6	+0·6	26·3	23·5	22·1	26·7	79	−1	4·1	0	3·8	0	0	29	1	1	2	1	1	6	15	2	1	0
	1130	,,	1005·6	970·6	..	30·1	24·7	21·8	26·8	64	..	3·8	..	7·4	0	0	28	0	2	2	1	1	7	10	5	2	0
	1730	,,	1002·9	968·0	..	29·4	24·5	22·0	26·8	67	..	4·3	..	4·8	0	0	28	1	2	1	0	1	3	13	7	2	0
	2330	,,	1005·7	970·1	..	24·8	23·3	22·0	27·5	85	..	2·9	..	2·5	0	0	15	0	0	2	1	2	1	9	0	15	0
Umaria	0830	459	1006·3	955·5	..	26·1	22·9	21·5	25·7	76	−4	3·1	−2·1	8·0	0	0	28	1	1	2	0	1	8	11	4	2	0
	1730	,,	1003·1	952·9	..	28·2	23·6	21·6	25·8	69	..	3·9	..	2·3	0	0	12	1	0	0	1	0	2	4	4	18	0
Jabalpur	0530	393	1005·6	961·5	..	22·6	21·6	21·0	24·9	91	..	4·7	..	3·2	0	0	17	0	2	1	3	1	6	4	0	13	0
	0830	,,	1007·0	963·3	+1·3	25·6	22·9	21·4	25·8	79	−2	3·8	−0·7	4·9	0	0	27	1	2	0	2	2	14	6	0	3	0
	1130	,,	1006·1	962·9	..	29·2	24·2	21·8	26·1	65	..	3·5	..	6·2	0	0	29	1	2	0	1	2	2	15	6	1	0
	1730	,,	1003·4	960·3	..	29·4	23·9	21·0	25·6	63	..	4·3	..	5·2	0	0	29	7	4	1	1	2	3	6	5	1	0
	2330	,,	1006·4	962·5	..	24·0	22·7	21·9	26·4	89	..	3·2	..	1·7	0	0	10	0	2	0	1	2	0	4	1	20	0
Mandla	0830	443	1007·1	957·9	..	24·6	22·7	21·8	26·0	84	..	3·8	..	3·5	0	0	19	3	1	0	1	2	0	0	4	11	8
	1730	,,	1003·4	955·0	..	28·4	23·2	20·7	24·0	65	..	4·3	..	3·7	0	0	24	9	0	0	2	1	0	2	8	6	2
Pendra	0530	625	1005·6	936·5	..	21·9	20·0	19·5	22·0	87	..	4·6	..	8·1	0	0	29	12	0	2	0	3	1	4	5	1	0
	0830	,,	1006·7	938·1	+0·8	24·7	21·9	20·4	24·3	77	−5	4·6	+0·3	7·7	0	0	27	8	3	0	1	2	3	2	8	3	0
	1130	,,	1005·9	938·0	..	27·4	22·6	20·6	23·9	65	..	4·5	..	9·9	0	1	28	11	6	2	1	3	2	1	3	1	0
	1730	,,	1003·5	935·6	..	26·8	22·2	19·9	23·5	67	..	5·1	..	7·7	0	1	28	10	1	2	0	3	1	2	10	1	0
	2330	,,	1006·6	937·6	..	22·9	21·0	20·0	23·5	84	..	4·7	..	6·1	0	1	25	3	0	1	1	3	2	10	6	4	0
Ambikapur	0830	611	1006·8	939·7	..	25·1	22·5	21·2	25·4	79	..	3·5	..	6·1	0	0	24	5	4	2	1	1	7	3	1	6	0
	1730	,,	1003·4	937·1	..	27·4	22·6	20·1	23·8	67	..	3·9	..	9·4	0	0	29	15	3	0	3	2	3	1	2	1	0
Champa	0830	245	1006·8	979·4	..	26·9	24·1	22·8	27·8	78	..	5·1	..	2·9	0	0	18	7	2	1	2	0	0	4	2	12	0
	1730	,,	1003·5	976·4	..	29·4	24·6	22·4	26·9	66	..	6·0	..	4·8	0	0	21	3	0	3	1	0	1	6	7	9	0
Raigarh	0830	220	1006·6	982·0	..	27·5	24·9	23·6	29·5	79	..	5·2	..	4·1	0	0	26	0	7	1	2	1	8	3	3	4	1
	1730	,,	1003·2	978·9	..	29·6	25·2	22·9	28·4	68	..	6·9	..	2·4	0	0	23	2	3	1	4	1	8	0	4	7	0
Raipur	0530	298	1005·1	971·7	..	24·6	23·0	22·2	27·9	87	..	5·1	..	4·5	0	0	23	3	0	3	1	2	2	6	6	7	0
	0830	,,	1006·6	973·4	+0·8	27·4	23·8	22·1	26·5	73	−8	4·0	−0·6	5·7	0	1	25	4	4	0	1	2	0	8	7	4	0
	1130	,,	1006·0	973·1	..	30·5	24·3	21·2	25·4	59	..	4·6	..	8·3	0	2	27	8	7	2	1	1	1	3	6	1	0
	1730	,,	1003·3	970·4	..	29·9	24·2	21·2	25·3	62	..	6·3	..	6·6	0	0	27	5	6	1	1	4	1	3	6	3	0
	2330	,,	1006·0	972·7	..	25·9	23·3	22·5	26·6	79	..	4·7	..	5·6	0	0	23	1	2	0	1	4	2	4	9	7	0
Kanker	0830	402	1007·0	962·4	+1·1	26·2	23·1	21·5	25·8	76	−6	4·2	−1·4	0·5	0	0	5	0	0	0	0	0	4	1	0	25	0
	1730	,,	1003·7	959·7	..	28·8	23·8	21·3	25·4	66	..	5·3	..	0·4	0	0	4	0	0	0	0	0	3	0	1	26	0
Jagdalpur (P.B.O.)	0530	553	1005·8	944·5	..	22·5	21·8	21·3	25·7	93	..	6·2	..	1·5	0	0	11	2	0	0	2	1	3	1	2	19	0
	0830	,,	1007·0	946·2	+0·7	25·4	22·9	21·7	26·1	81	−3	5·5	+0·5	3·5	0	0	20	4	1	2	0	2	0	4	7	10	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (kms.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (East) *(Contd.)*																											
Jagdalpur (P.B.O.) *(Contd.)*	1130	553	1005·6	945·5	..	28·9	23·4	20·9	24·7	63	..	6·1	..	6·3	0	0	28	8	3	2	0	1	3	3	8	2	0
	1730	,,	1003·7	943·6	..	27·5	23·1	21·2	24·9	69	..	7·1	..	4·4	0	0	26	5	5	1	2	2	2	5	4	4	0
	2330	,,	1006·7	945·6	..	23·7	22·4	21·8	26·1	89	..	5·7	..	1·5	0	0	9	1	0	1	0	5	1	0	1	21	0
Gujarat																											
Deesa	0830	136	1009·0	993·6	+1·9	26·4	23·5	22·1	26·6	78	..	3·3	...	6·2	0	0	30	2	1	0	2	0	6	11	8	0	0
	1730	,,	1005·0	990·0	..	33·3	24·5	19·6	23·5	45	..	3·5	..	6·2	0	0	29	1	0	0	1	3	10	10	3	1	1
Idar	0830	219	1009·0	984·2	..	25·3	22·7	21·4	25·4	80	..	3·4	..	6·2	0	0	28	1	2	0	0	0	7	11	7	2	0
	1730	,,	1005·2	981·0	..	31·9	23·5	18·9	22·1	48	..	3·8	..	4·9	0	0	30	0	1	0	0	0	5	19	5	0	0
Ahmedabad	0230	55	1007·1	1000·9	..	25·9	22·5	20·6	24·5	73	..	2·0	..	10·1	0	0	28	0	0	0	0	0	4	14	10	2	0
	0530	,,	1007·3	1001·0	..	24·6	22·2	20·8	24·9	80	..	2·3	..	10·2	0	0	29	2	0	0	0	0	4	10	13	1	0
	0830	,,	1009·1	1002·9	+1·4	26·5	23·1	21·5	25·4	74	−2	3·0	−1·1	14·2	0	5	24	2	1	0	0	0	1	11	14	1	0
	1130	,,	1009·1	1003·0	..	31·4	23·8	19·8	23·2	50	..	3·4	..	15·4	0	5	24	4	3	0	0	0	3	10	9	1	0
	1730	,,	1015·3	999·2	..	34·2	23·3	17·2	19·8	37	..	3·1	..	14·1	0	1	29	3	2	0	0	2	6	9	8	0	0
	2330	,,	1007·9	1001·7	..	27·5	23·4	21·4	25·4	70	..	2·6	..	11·6	0	1	26	0	1	0	1	1	10	11	3	3	0
Dohad	0830	333	1009·0	971·7	..	25·0	22·4	21·1	24·9	79	−7	3·7	−2·0	15·5	0	5	25	1	0	0	0	0	5	20	4	0	0
	1730	,,	1006·2	969·6	..	30·6	22·9	18·6	21·7	50	..	2·2	..	15·6	0	3	27	2	1	0	0	0	19	8	0	0	0
Baroda	0530	35	1007·7	1003·7	..	24·2	23·0	22·4	27·2	90	..	2·2	..	1·6	0	0	13	0	2	0	0	0	6	2	3	17	0
	0830	,,	1009·5	1005·5	..	26·6	23·9	22·6	27·4	79	−2	2·7	−1·7	4·4	0	9	26	1	0	0	0	1	12	6	6	4	0
	1130	,,	1009·4	1005·5	..	31·0	24·8	21·8	26·3	58	..	3·8	.	5·9	0	0	26	1	2	1	0	0	7	8	7	4	0
	1730	,,	1005·7	1001·8	..	32·8	24·8	20·8	24·7	50	..	2·9	..	6·6	0	0	27	3	0	0	0	0	8	5	11	3	0
	2330	,,	1008·3	1004·3	..	26·4	23·7	22·4	27·0	79	..	2·1	..	3·0	0	0	22	0	0	0	0	0	11	11	0	8	0
Baroda (Aerodrome)	0830	38	1009·8	1005·5	..	27·3	24·0	22·4	27·1	75	..	3·7	..	7·2	0	0	30	1	0	0	1	0	10	11	7	0	0
	1130	,,	1009·6	1005·4	..	31·1	24·6	21·4	25·6	57	..	4·7	..	9·5	0	0	30	3	1	0	0	1	14	8	3	0	0
	1730	,,	1005·8	1001·6	..	32·9	24·6	20·4	24·0	48	..	3·5	..	7·0	0	1	28	0	0	0	0	4	12	10	3	1	0
Broach	0830	17	1009·4	1007·4	..	26·4	23·8	22·5	27·5	79	..	2·8	..	5·4	0	0	30	0	1	0	0	2	19	4	4	0	0
	1730	,,	1005·8	1003·8	..	32·4	23·9	19·6	22·6	48	..	3·0	..	9·7	0	0	30	0	0	1	0	1	22	3	3	0	0
Surat	0530	12	1008·1	1006·8	..	25·4	23·7	22·9	28·0	86	..	3·7	..	2·2	0	0	15	0	1	0	1	0	2	6	5	15	0
	0830	,,	1010·0	1008·7	+2·0	27·2	24·6	23·4	28·7	80	−1	3·9	−1·3	6·2	0	0	25	2	2	0	1	0	0	7	13	5	0
	1130	,,	1009·9	1008·6	..	31·0	25·3	22·7	27·5	61	..	4·3	..	7·6	0	0	28	3	0	0	0	0	8	10	7	2	0
	1730	,,	1006·5	1005·2	..	31·3	25·8	22·3	28·6	61	..	3·3	..	11·2	1	1	29	0	0	0	0	4	20	5	1	0	0
	2330	,,	1008·8	1007·5	..	27·1	24·7	23·6	29·2	81	..	2·4	..	8·4	0	0	30	0	0	0	0	4	18	7	1	0	0
Saurashtra & Kutch																											
Bhuj (P.B.O.)	0230	106	1007·4	995·4	..	24·8	23·5	22·6	27·9	89	..	1·3	..	6·6	0	0	20	0	0	0	0	0	16	3	1	10	0
	0530	,,	1007·4	995·4	..	24·1	23·1	22·2	27·5	92	..	1·6	..	5·5	0	0	20	1	0	0	0	0	12	6	1	10	0
	0830	,,	1008·9	997·0	+1·9	26·1	23·9	23·0	27·8	83	+7	2·9	−0·9	7·7	0	1	24	0	0	0	0	1	9	11	3	5	1
	1130	,,	1009·0	997·2	..	31·3	25·2	21·9	27·0	58	..	3·4	..	13·0	0	5	23	0	0	0	0	0	17	5	6	2	0
	1730	,,	1006·6	994·4	..	32·0	25·7	22·8	27·8	59	..	3·3	..	17·3	0	6	24	1	0	0	0	1	15	13	0	0	0
	2330	,,	1008·4	996·5	..	25·9	24·0	23·0	28·3	85	..	1·1	..	9·7	0	1	29	0	0	0	0	0	18	12	0	0	0
Bhuj (Aerodrome)	0830	80	1008·9	999·8	..	26·3	23·4	22·1	26·4	78	..	3·5	..	11·5	0	4	24	0	0	0	0	0	13	12	3	2	0
	1130	,,	1008·8	999·8	..	31·1	23·6	19·6	22·9	51	..	4·0	..	19·0	0	13	17	0	0	0	0	0	9	17	4	0	0
	1730	,,	1005·7	996·8	..	32·1	23·6	18·9	22·1	47	..	4·2	..	22·2	0	21	9	2	0	0	0	1	10	14	3	0	0
Kandla	0830	5	1009·5	1008·9	..	26·4	23·8	22·6	27·5	79	..	3·3	..	14·1	0	2	28	0	0	0	0	0	19	10	1	0	0
	1730	,,	1006·4	1005·8	..	31·3	25·1	22·1	26·8	58	..	3·4	..	34·0	1	25	4	0	0	0	0	0	24	6	0	0	0
Mandvi	0830	9	1009·0	1008·0	..	27·2	25·0	24·2	29·9	83	..	3·2	..	24·8	0	19	9	1	0	0	0	0	5	14	5	2	3
	1730	,,	1006·8	1005·8	..	28·7	25·7	24·4	30·5	78	..	2·6	..	38·9	1	27	2	0	0	0	0	0	4	24	0	0	2
Dwarka	0830	11	1009·7	1008·4	+2·1	26·7	24·4	23·4	28·7	82	−3	3·5	−0·7	12·4	0	4	25	0	0	0	0	0	5	18	6	1	0
	1730	,,	1007·7	1006·4	..	28·2	25·0	23·4	29·1	75	..	2·8	..	17·8	0	5	25	0	0	0	0	0	5	22	3	0	0
Porbander	0830	7	1009·7	1008·9	..	26·3	24·5	23·9	29·3	86	..	2·9	..	7·3	0	0	22	0	0	0	0	0	2	12	8	8	0
	1730	,,	1007·3	1006·5	..	28·3	25·1	23·3	29·1	72	..	4·9	..	16·9	0	4	26	0	0	0	0	0	9	16	5	0	0
Porbander (Aerodrome)	0830	7	1009·6	1008·8	..	27·3	25·1	24·5	30·0	84	..	3·3	..	12·4	0	9	13	3	1	1	2	0	5	8	2	8	0
	1130	,,	1010·2	1009·4	..	30·2	26·1	24·6	30·5	70	..	4·0	..	22·6	0	20	10	1	0	0	0	0	7	18	4	0	0
Jamnagar	0530	23	1007·8	1005·2	..	23·7	22·7	22·3	26·5	92	..	2·5	..	12·7	0	5	24	0	0	0	0	5	18	5	1	1	0
	0830	,,	1009·4	1006·8	+2·0	27·2	24·4	23·1	28·4	78	0	3·2	−0·4	17·1	0	12	17	0	0	0	0	1	14	12	2	1	0
	1130	,,	1009·6	1007·1	..	31·0	24·9	22·0	26·5	59	..	4·3	..	22·7	0	20	10	0	0	0	0	0	2	24	4	0	0
	1730	,,	1006·7	1004·2	..	29·9	25·0	22·5	27·6	65	..	3·6	..	29·7	1	25	4	0	0	0	0	0	0	25	5	0	0
Rajkot (Aerodrome)	0830	134	1009·6	994·5	+2·1	25·4	23·4	22·5	27·3	84	+3	1·4	−2·9	18·7	0	9	21	0	0	0	0	3	13	10	4	0	0
	1130	,,	1009·4	994·5	..	30·2	23·6	20·1	23·6	55	..	2·1	..	18·9	0	12	17	1	0	0	1	1	10	10	6	1	0
	1730	,,	1005·9	991·1	..	31·2	23·6	19·7	23·0	52	..	2·3	..	26·3	0	23	7	0	0	0	0	2	2	18	8	0	0
Surendranagar	0830	74	1009·2	1000·8	..	26·3	23·4	22·1	26·6	77	..	2·5	..	15·2	0	2	28	0	1	0	0	0	11	4	14	0	0
	1730	,,	1005·1	996·9	..	34·4	23·2	17·5	19·3	37	..	4·7	..	14·1	0	3	27	0	2	0	2	1	11	2	12	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, km. per hour.	Wind speed (km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch (*contd.*)																											
Bhavnagar	0830	17	1010·3	1008·4	+2·6	25·4	23·2	22·1	26·6	82	+7	1·7	−2·9	7·2	0	0	30	0	0	0	0	0	10	15	5	0	0
	1730	,,	1006·3	1004·4	..	32·3	24·7	20·9	25·0	53	..	2·4	..	4·1	0	0	30	0	1	0	16	1	9	1	2	0	0
Bhavnagar (Aerodrome)	0830	11	1009·5	1008·3	..	26·7	23·5	22·0	26·4	76	..	2·2	..	15·7	0	4	26	1	0	0	0	0	0	21	8	0	0
	1130	,,	1009·6	1008·4	..	31·4	23·6	19·5	22·8	50	..	3·5	..	13·5	0	6	22	5	0	0	0	0	4	16	3	2	0
Mahuva	0830	16	1009·8	1008·0	..	25·8	24·8	24·4	30·4	92	..	2·8	..	6·9	0	1	20	0	0	0	0	1	5	10	5	9	0
	1730	,,	1006·8	1005·1	..	29·5	27·6	26·8	35·2	86	..	3·6	..	20·4	0	13	17	0	0	0	0	14	11	2	3	0	0
Keshod	0830	51	1010·1	1004·3	..	26·6	24·0	22·8	27·8	80	..	4·1	..	9·1	0	3	20	4	1	0	2	1	5	8	2	7	0
	1130	,,	1010·4	1004·7	..	30·6	24·6	22·0	26·0	61	..	5·6	..	20·8	0	15	14	1	0	0	0	2	9	13	4	1	0
	1730	,,	1007 6	1001·9	..	30·6	24·2	21·7	24·9	59	..	3·9	..	31·1	0	29	1	0	0	0	0	0	6	22	2	0	0
Veraval	0230	8	1008·2	1007·3	..	24·8	24 1	23·8	29·4	93	..	2·2	..	8·1	0	4	14	2	1	1	0	0	1	7	6	12	0
	0530	,,	1008·1	1007·2	..	24.2	23·5	23·2	28·4	95	..	2·1	..	9·7	0	5	17	4	2	1	0	0	1	7	7	8	0
	0830	,,	1010·1	1009·2	+1·9	26.3	24·8	24·2	30·2	88	+4	4·0	−0·5	12·1	0	5	20	4	1	0	3	0	0	9	8	5	0
	1130	,,	1010·6	1009·7	..	28·8	26·3	25·0	32·3	80	..	4·7	..	16·4	0	7	23	0	0	0	0	3	2	22	3	0	0
	1730	,,	1007·8	1006·9	..	28·2	26·2	25·1	32·7	84	..	3·0	..	21·6	0	14	16	0	0	0	0	1	3	24	2	0	0
	2330	,,	1009·6	1008·7	..	26·0	24·9	24·4	30·7	91	..	2·6	..	10·6	0	3	22	3	0	0	0	0	0	16	6	5	0
Konkan																											
Dahanu	0830	5	1009·8	1009.3	+2·7	26·3	24·1	23·1	28·1	83	−7	4·1	−2·5	13·3	0	5	25	1	0	10	10	1	0	7	1	0	0
	1730	,,	1007·6	1007.1	..	28·7	24·6	22·5	27·5	70	..	4·1	..	17·3	0	4	26	7	0	0	0	1	1	20	1	0	0
Bombay (Colaba)	0330	11	1010·5	1009·3	+1·6	26·8	24·7	23·8	29·3	84	−1	5·1	−0·6	9·6	0	0	29	2	3	3	9	2	0	7	3	1	0
	1130	,,	1010·7	1009·5	..	29·3	25.6	23·9	29.7	73	..	4.4	..	8 7	0	1	29	1	0	0	3	4	6	8	8	0	0
	1730	,,	1008·1	1006·9	..	28.7	25·1	23·4	28·9	73	..	3·6	..	13·4	0	5	24	2	0	0	0	0	1	14	12	1	0
Bombay (Santacruz Aerodrome)	0230	8	1008 8	1007·9	..	25·1	23·7	22·9	28·2	89	..	4·0	..	2·5	0	0	10	0	0	1	0	1	2	4	2	20	0
	0530	,,	1008.8	1007·9	..	24·5	23·5	22.8	28·1	91	..	4·3	..	3·3	0	0	11	1	0	3	1	0	2	2	2	19	0
	0830	,,	1010·6	1009·7	+1·7	26·9	24·6	23·3	29·1	82	−3	5·0	−0·7	6·0	0	1	20	2	0	3	5	4	2	3	2	9	0
	1130	,,	1010·8	1009·9	..	29·0	24·7	22·6	27·7	69	..	5·4	..	11·8	0	5	24	5	2	0	0	2	3	9	8	1	0
	1730	,,	1008·0	1007·1	..	29.1	24·5	22·4	27·0	67	..	4·3	..	15·8	0	5	25	2	0	0	0	0	2	10	16	0	0
	2330	,,	1010·2	1009·3	..	25·9	24·1	22·9	28·4	85	..	3·7	..	2 1	0	0	5	1	0	0	0	0	1	1	2	25	0
Alibag	0830	7	1010·6	1009·8	+1·6	26·5	24·7	24·0	29·7	87	+4	5·0	−0·8	7 5	0	0	29	2	1	5	11	2	3	4	1	1	0
Harnai	0830	20	1010·2	1007·9	+2·1	26·2	24·1	22·7	28·2	83	−2	5.2	..	10·8	0	2	27	6	5	9	1	1	0	3	4	1	0
	1730	,,	1007·9	1005·7	..	27·9	24·7	23·2	28·4	76	..	4·2	..	23·2	0	16	14	0	0	0	1	2	0	11	16	0	0
Ratnagiri	0830	35	1010·9	1006·9	+1·6	26·0	24·1	23·0	28·4	84	..	4·3	..	..	0	2	28	0	0	23	1	0	0	6	0	0	0
	1730	,,	1008 8	1004·8	..	28·2	25·1	23·6	29·4	77	..	4·3	..	..	0	17	13	0	0	0	0	0	1	29	0	0	0
Devgad	0830	36	1011·0	1007·0	+2·4	25·7	24·2	23·6	29·1	88	−2	5·5	−1.1	9 7	0	3	24	2	6	11	4	0	0	2	2	3	0
	1730	,,	1008·4	1004·3	..	28·3	25·3	24·0	29·7	78	..	5·1	..	21·7	0	13	17	0	0	0	0	0	1	16	13	0	0
Vengurla	0230	9	1009·5	1008·5	..	23·8	23·1	22·8	27·5	94	..	4·2	..	..	0	0	5	1	0	0	0	0	0	2	2	25	0
	0530	,,	1009.6	1008.6	..	23.4	22 9	22·6	27.5	95	..	4.0	..	..	0	0	5	5	0	0	0	0	0	0	0	25	0
	0830	,,	1011·4	1010·4	..	25·7	24·0	23.3	28·5	87	..	4·5	..	..	0	0	9	3	3	4	1	0	0	0	0	21	0
	1130	,,	1011·5	1010·5	..	28·1	24·8	23·4	28·6	76	..	5·4	..	..	0	0	23	1	0	0	0	0	6	11	5	7	0
	1730	,,	1008·9	1007·9	..	27·4	24·5	23·1	28·4	78	..	5·0	..	..	0	1	22	0	0	0	0	0	4	14	5	7	0
	2330	,,	1011·1	1010·1	..	24·4	23·5	23.1	28.3	93	..	4·5	..	..	0	0	3	2	0	0	0	0	0	1	0	27	0
Maharashtra																											
Nandurbar	0830	206	1009·6	986·4	..	26·1	23.5	22.1	26·9	79	..	6·0	..	13·0	0	1	29	0	0	0	0	0	20	8	2	0	0
	1730	,,	1006.0	983·1	..	29.5	23·7	20·5	24.5	61	..	6·3	..	10.3	0	0	30	1	0	0	0	3	17	7	2	0	0
Jalgaon	0830	201	1009·3	986·4	..	25·1	23·0	22·0	26·4	83	..	5·4	..	15·3	0	3	27	0	0	0	0	0	0	22	8	0	0
	1730	,,	1005·0	982·8	..	31·4	23·9	19·9	23·5	51	..	4·7	..	15·1	0	4	26	6	4	3	0	0	0	7	10	0	0
Malegaon	0830	437	1009.4	960.7	+1.4	25.1	21.9	20.2	23.9	74	−2	4.5	+0.2	7.5	0	0	26	3	0	0	0	0	1	12	10	4	0
	1730	,,	1005·7	957·7	..	28·1	22·6	19·6	22·8	62	..	6·1	..	12·6	0	3	25	7	3	0	0	0	3	4	11	2	0
Deolali	0830	571	1010·7	947·1	..	23·0	20·9	19·9	23·4	83	..	5·9	..	9·9	0	2	26	0	0	0	0	0	11	15	2	2	0
	1730	,,	1007·5	944·7	..	26·2	21·7	19·4	22·8	68	..	5·6	..	15·4	0	6	24	0	0	1	0	1	8	16	4	0	0
Aurangabad	0830	581	1010·0	945·5	+1·3	23·2	21·2	20·0	23·8	83	+5	4·9	−0·4	9·3	0	3	22	2	1	0	0	1	3	16	2	5	0
	1730	,,	1005.1	942·2	..	28·7	22·0	18·4	21·5	55	..	6·0	..	16·6	0	8	21	8	6	2	0	0	0	11	2	1	0
Aurangabad (Chikalthana Aerodrome)	0230	519	1007·7	943·2	..	21·6	19·9	19·0	22·0	85	..	4·6	..	9·4	0	1	24	0	0	0	0	0	0	15	10	5	0
	0530	,,	1008·1	943·4	..	20·9	19·6	18·8	21·8	88	..	4·8	..	9·9	0	1	28	1	0	0	0	0	0	19	9	1	0
	0830	,,	1009·1	945·0	..	23·9	20·8	19·1	22·4	75	..	4·8	..	11·9	0	3	26	2	1	0	0	0	0	15	11	1	0
	1130	,,	1008·0	944·8	..	28·2	21·6	18·3	20·8	56	..	4·7	..	10·9	0	4	24	5	2	0	0	0	0	11	10	2	0
	1730	,,	1004·7	941·9	..	28·6	21·3	17·2	20·1	51	..	5·5	..	14·8	0	3	27	11	5	1	0	0	2	6	5	0	0
	2330	,,	1008·7	944·4	..	23·1	20·4	19·0	22·2	78	..	4·2	..	8·2	0	1	23	3	0	0	0	0	0	11	10	6	0
Ahmednagar	0830	657	1009·6	936·9	+1·0	22·7	20·6	19·4	22·6	82	+4	4·3	−0·1	4·2	0	0	29	0	0	0	0	0	11	0	18	1	0
	1730	,,	1004·8	933·8	..	28·8	21·4	17·6	20·8	53	..	3·9	..	3·4	0	0	28	0	3	0	1	0	8	0	16	2	0

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas.)		Wind speed (km. p.h.)				No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal.	Mean wind speed, km. per hour.	62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra—*contd.*																											
Parbhani	0830	423	1009·4	962·2	..	24·9	21·9	20·3	23·8	76	..	4·4	..	12·3	0	0	30	0	0	0	0	0	1	13	16	0	0
	1730	,,	1004·7	958·5	..	30·1	22·3	17·9	20·6	51	..	5·8	..	12·5	0	0	30	10	2	0	0	1	0	8	9	0	0
Poona	0530	559	1009·1	946·4	..	20·7	19·6	19·1	22·0	90	..	3·2	..	1·0	0	0	6	0	0	0	0	0	1	4	1	24	0
	0830	,,	1010·2	948·1	+1·4	23·4	21·0	19·8	23·1	80	−1	4·5	−0·9	2·1	0	0	16	0	0	0	0	2	6	5	3	14	0
	1130	,,	1009·1	947·8	..	27·8	22·2	18·9	22·7	59	..	4·6	..	3·4	0	0	23	0	2	0	0	0	2	14	5	7	0
	1730	,,	1006·3	945·1	..	27·3	22·2	19·8	23·1	64	..	4·5	..	6·5	0	0	28	0	0	0	0	0	1	22	5	2	0
	2330	,,	1010·0	947·6	..	22·3	20·6	19·8	23·1	85	..	3·1	..	2·0	0	0	13	0	0	0	0	0	2	11	0	17	0
Poona (Lohagaon Aerodrome)	0230	593	1009·1	942·6	..	20·2	19·6	19·1	22·4	94	..	3·4	..	7·6	0	1	23	0	0	0	0	0	0	16	8	6	0
	0530	,,	1009·4	942·8	..	19·8	19·1	18·7	21·5	94	..	4·2	..	6·1	0	0	21	0	0	0	0	0	0	13	8	9	0
	0830	,,	1010·3	944·3	..	22·8	20·7	19·6	22·8	82	..	5·1	..	9·1	0	1	26	0	0	0	0	0	1	21	5	3	0
	1130	,,	1009·2	944·2	..	27·3	21·3	18·2	20·9	59	..	5·7	..	14·8	0	8	21	0	1	2	0	0	1	17	8	1	0
	1730	,,	1006·2	941·3	..	26·8	21·4	18·5	21·7	61	..	5·1	..	26·1	0	22	8	0	0	1	0	0	1	14	14	0	0
	2330	,,	1010·3	944·0	..	21·2	20·1	19·4	22·8	89	..	3·1	..	9·0	0	1	25	0	0	0	0	0	0	17	9	4	0
Baramati	0830	551	1010·2	948·9	..	23·6	21·1	19·8	23·3	80	..	4·3	..	12·6	0	3	25	2	0	0	0	0	3	13	10	2	0
	1730	,,	1004·9	945·1	..	23·9	22·1	18·4	21·2	54	..	5·0	..	18·8	0	12	18	4	1	0	0	0	5	14	6	0	0
Jeur	0830	521	1009·2	951·3	..	23·8	21·0	19·7	22·8	77	..	3·1	..	7·1	0	0	30	0	1	0	0	0	0	16	13	0	0
	1730	,,	1004·3	947·7	..	30·1	21·7	16·8	19·8	49	..	4·0	..	5·3	0	0	30	0	0	1	0	0	2	14	13	0	0
Ichalapur	0530	479	1008·5	954·9	..	22·4	20·5	19·5	22·7	84	..	4·7	..	9·4	0	0	29	1	1	0	0	0	6	9	12	1	0
	0830	,,	1009·8	956·5	+1·3	24·1	21·4	19·9	23·5	78	+1	5·3	+0·3	6·4	0	0	30	2	1	0	0	0	9	4	14	0	0
	1130	,,	1008·5	956·1	..	28·9	22·7	19·8	23·0	58	..	4·5	..	13·1	0	0	30	9	2	1	0	0	4	6	8	0	0
	1730	,,	1004·5	952·5	..	30·5	22·3	18·1	20·9	50	..	5·5	..	8·7	0	0	30	6	3	2	0	1	3	13	2	0	0
	2330	,,	1008·6	955·6	..	25·4	21·1	18·8	21·9	68	..	4·2	..	11·4	0	0	30	5	1	2	2	0	4	10	6	0	0
Miraj	0830	554	1010·7	949·0	+1·3	22·3	20·8	20·0	23·6	87	+4	5·0	−1·3	8·7	0	0	30	1	0	0	0	0	5	13	11	0	0
	1730	,,	1006·0	945·6	..	27·6	21·8	18·8	21·8	60	..	5·2	..	19·9	0	13	17	2	1	0	1	1	4	12	9	0	0
Kolhapur	0530	570	1009·1	945·3	..	20·6	20·0	19·5	23·0	94	..	3·4	..	6·8	0	0	25	0	0	0	0	0	2	21	2	5	0
	0830	,,	1010·6	947·2	..	22·7	21·0	20·3	23·6	86	..	4·9	..	7·7	0	1	26	1	0	0	0	0	0	18	8	3	0
	1130	,,	1009·6	947·0	..	26·9	22·0	19·5	22·8	65	..	5·3	..	12·4	0	2	28	0	3	0	0	0	1	13	13	0	0
	1730	,,	1006·6	944·1	..	26·4	22·1	19·9	23·3	69	..	4·6	..	18·7	0	11	19	0	1	0	0	0	1	23	5	0	0
Vidarbha																											
Buldhana	0830	650	1008·5	936·6	..	22·6	20·6	19·6	22·9	80	..	3·8	..	5·6	0	0	28	0	0	0	0	0	2	0	26	2	0
	1730	,,	1004·9	934·3	..	27·2	22·2	19·7	23·1	64	..	4·3	..	2·8	0	0	17	0	0	0	0	0	0	0	17	13	0
Akola	0830	282	1008·2	976·6	+1·0	25·8	22·6	21·2	24·7	75	−3	2·7	−2·1	7·4	0	0	30	0	0	0	0	0	0	13	17	0	0
	1130	,,	1007·1	976·0	..	30·2	23·7	20·4	24·1	57	..	3·8	..	9·6	0	0	30	1	1	0	0	0	3	13	12	0	0
	1730	,,	1003·8	972·9	..	31·0	23·4	19·3	22·7	51	..	4·9	..	6·6	0	0	30	0	0	0	0	0	0	14	16	0	0
Akola (Aerodrome)	0530	309	1006·6	971·7	..	22·5	21·2	20·4	24·1	87	..	3·6	..	7·4	0	0	30	0	0	0	0	0	5	20	5	0	0
	2330	,,	1007·3	972·6	..	24·9	22·1	20·7	24·3	78	..	3·0	..	5·5	0	0	23	0	0	0	1	2	2	12	6	7	0
Amravati	0830	370	1008·1	966·7	+1·1	24·9	22·3	20·8	24·8	79	−1	3·2	−1·7	6·6	0	1	27	3	0	0	0	0	10	10	5	2	0
	1730	,,	1003·6	963·1	..	29·9	22·9	19·1	22·3	55	..	6·3	..	8·1	0	1	29	2	8	0	0	0	6	0	14	0	0
Yeotmal	0830	451	1007·8	957·7	..	25·0	22·3	21·1	24·6	79	..	2·5	..	10·5	0	2	27	4	0	0	0	1	1	9	14	1	0
	1730	,,	1003·9	954·7	..	29·1	23·1	20·1	23·3	61	..	4·2	..	8·8	0	0	25	2	1	0	1	0	1	10	10	5	0
Nagpur	0230	310	1005·4	970·5	..	23·7	21·8	20·9	24·5	84	..	3·6	..	7·3	0	0	26	7	0	0	0	2	3	2	12	4	0
	0530	,,	1005·8	970·8	..	23·1	21·5	20·6	24·4	86	..	4·1	..	9·0	0	1	27	8	0	0	0	2	2	4	12	2	0
	0830	,,	1007·3	972·6	+0·9	26·6	23·1	21·2	25·3	73	−8	4·0	−0·7	14·5	0	5	25	10	1	0	0	1	2	3	13	0	0
	1130	,,	1006·4	972·3	..	30·9	24·1	20·7	24·5	54	..	4·7	..	16·4	0	5	25	13	4	2	0	1	1	1	8	0	0
	1730	,,	1003·5	969·4	..	30·7	23·3	19·3	22·7	53	..	5·5	..	12·5	0	3	26	7	4	2	0	1	3	6	6	1	0
	2330	,,	1006·8	971·9	..	24·8	22·3	21·0	24·8	80	..	4·1	..	5·8	0	0	22	5	1	0	0	2	1	3	10	8	0
Gondia	0830	313	1007·4	972·5	..	26·2	23·5	22·2	26·8	79	..	3·5	..	4·7	0	0	23	3	4	1	1	0	3	2	8	7	1
	1730	,,	1004·0	969·5	..	29·3	23·7	20·7	24·8	62	..	4·9	..	4·9	0	0	25	5	1	2	1	0	5	0	10	5	1
Brahmapuri	0830	229	1007·2	981·6	..	26·4	23·8	22·5	27·5	80	..	4·2	..	5·7	0	1	27	10	2	1	1	2	2	3	7	2	0
	1730	,,	1004·2	978·9	..	30·3	24·9	22·3	27·2	64	..	5·7	..	7·4	0	0	30	9	8	1	1	1	3	3	4	0	0
Chanda	0830	193	1007·5	985·8	+0·7	26·7	23·7	22·2	26·8	76	−4	4·5	−0·1	8·9	0	1	29	3	1	0	0	1	4	8	13	0	0
	1730	,,	1003·9	982·5	..	30·0	25·0	22·7	27·6	66	..	5·8	..	5·9	0	0	28	5	3	7	3	1	1	4	4	2	0
Sironcha	0830	123	1007·7	993·9	..	27·5	24·2	22·7	27·4	75	..	4·8	..	5·5	0	0	25	7	3	2	2	2	1	3	5	5	0
	1730	,,	1004·2	990·5	..	31·1	24·6	21·4	25·6	58	..	6·9	..	6·6	0	0	28	8	9	2	1	0	2	2	4	2	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1006·2	1003·9	..	27·0	24·1	22·7	27·8	78	..	5·6	..	5·0	0	0	27	0	0	0	0	0	1	10	13	3	3	0
	0830	,,	1008·1	1005·9	+0·4	29·0	24·3	22·1	26·1	67	−3	5·5	+0·1	5·5	0	0	30	0	0	0	0	0	1	7	18	4	0	0
	1130	,,	1007·2	1005·0	..	32·6	25·4	22·0	26·5	55	..	5·6	..	10·4	0	1	29	2	1	0	0	0	1	18	8	0	0
	1730	,,	1004·5	1002·3	..	32·3	25·9	22·9	28·1	59	..	6·4	..	4·8	0	0	30	1	3	0	2	2	10	9	3	0	0
	2330	,,	1007·2	1005·0	..	28·3	25·3	23·9	29·7	78	..	4·3	..	3·7	0	0	27	0	3	0	3	7	11	2	1	3	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas)		Mean wind speed km. per hour.	Wind speed (km. p.h.)			No. of observations										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																	N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh— *contd.*																											
Ongole	0830	12	1007·9	1006·6	..	29·0	24·7	22·7	27·7	70	..	4·4	..	7·2	0	0	25	0	0	0	0	1	6	5	13	5	0
	1730	„	1004·4	1003·1	..	31·0	25·2	22·3	27·2	63	..	6·2	..	5·4	0	0	26	1	0	0	2	0	3	5	15	4	0
Rentachintala	0830	106	1007·8	995·9	..	28·4	24·5	22·7	27·5	71	+1	5·2	−0·6	4·5	0	0	25	0	0	0	0	0	2	22	1	5	0
	1730	„	1004·2	992·5	..	31·0	24·1	21·0	24·9	58	..	6·8	..	4·8	0	0	27	9	2	1	0	3	1	8	3	3	0
Gannavaram	0230	23	1005·0	1002·4	..	26·3	24·8	24·1	29·6	84	..	5·1	..	2·9	0	0	13	1	1	0	0	0	3	5	3	17	0
	0530	„	1005·3	1002·7	..	25·8	24·4	23·8	29·5	89	..	4·6	..	3·4	0	1	13	2	0	0	0	0	1	7	4	16	0
	0830	„	1007·2	1004·6	..	28·2	25·2	23·8	29·8	77	..	4·8	..	8·3	0	1	24	2	0	0	0	1	2	14	6	5	0
	1130	„	1006·6	1004·0	..	31·7	26·1	23·5	29·3	63	..	4·8	..	13·1	0	2	25	4	0	0	1	2	1	11	8	3	0
	1730	„	1003·9	1001·3	..	30·1	25·3	23·3	28·7	68	..	6·4	..	8·2	0	1	25	8	2	3	1	0	1	5	6	4	0
	2330	„	1006·5	1003·9	..	27·1	25·3	24·6	30·4	83	..	5·2	..	3·5	0	0	15	3	1	0	0	0	2	4	5	15	0
Masulipatam	0530	3	1005·5	1005·2	..	26·6	25·2	24·6	31·0	89	..	6·0	..	8·1	0	0	23	3	0	0	0	0	2	2	10	6	7	0
	0830	„	1007·3	1007·0	+0·1	28·4	25·7	24·5	30·9	80	−1	5·4	0	9·0	0	1	29	5	0	0	0	0	2	11	12	0	0
	1130	„	1006·8	1006·5	..	30·7	26·4	24·7	31·0	71	..	6·5	..	13·8	0	1	29	4	0	0	0	3	2	6	15	0	0
	1730	„	1004·2	1003·9	..	30·1	26·2	24·6	30·9	73	..	6·7	..	9·1	0	1	28	7	0	0	3	3	3	4	9	1	0
	2330	„	1006·7	1006·4	..	27·6	26·3	25·8	33·3	90	..	3·8	..	4·7	0	0	15	2	0	0	0	3	3	4	3	15	0
Nidadavolu	0830	12	1007·1	1005·7	..	28·1	25·9	24·7	31·6	83	..	5·4	..	6·4	0	0	24	1	1	1	0	0	3	14	4	6	0
	1730	„	1003·8	1002·4	..	29·9	26·3	24·8	31·4	74	..	6·6	..	9·6	0	1	28	2	1	1	0	3	2	14	6	1	0
Kakinda	0830	8	1007·2	1006·3	+0·5	29·9	26·4	24·8	31·5	75	−5	4·4	−1·0	7·4	0	0	30	0	5	0	1	0	19	2	3	0	0
	1730	„	1004·3	1003·4	..	30·1	26·2	24·8	30·9	73	..	5·2	..	7·9	0	0	30	1	6	0	5	0	13	0	5	0	0
Visakhapatnam	0230	3	1004·8	1004·4	..	26·4	25·0	24·4	30·5	89	..	4·3	..	3·4	0	0	15	1	1	2	0	0	2	2	7	15	0
	0530	„	1005·2	1004·8	..	25·9	24·7	24·1	30·3	90	..	4·8	..	3·0	0	0	15	2	1	0	0	0	3	1	8	15	0
	0830	„	1006·7	1006·3	+0·4	29·2	25·7	24·1	30·1	75	−6	4·7	−1·1	4·7	0	0	24	3	2	1	0	0	6	1	11	6	1
	1130	„	1005·9	1005·5	..	31·9	26·3	23·8	29·7	64	..	5·7	..	9·3	0	1	28	3	3	8	3	0	8	2	2	1	0
	1730	„	1004·2	1003·8	..	29·1	25·8	24·3	30·4	77	..	6·4	..	8·2	0	1	27	2	0	6	1	0	13	1	5	2	0
	2330	„	1006·3	1005·9	..	27·1	25·4	24·6	30·1	87	..	4·8	..	4·7	0	0	17	2	3	0	0	0	4	1	7	13	0
Calingapatam	0830	6	1006·2	1005·5	+0·2	27·5	25·4	24·3	30·7	83	0	4·9	+0·4	6·2	0	0	30	0	0	0	0	0	3	15	12	0	0
	1730	„	1003·7	1003·0	..	29·6	26·6	25·3	32·3	77	..	5·6	..	7·3	0	0	30	1	1	7	7	5	4	3	2	0	0
Telangana— Ramagundam	0830	156	1007·3	989·8	..	27·9	24·4	22·7	27·7	73	..	3·8	..	6·1	0	0	30	4	0	0	0	0	2	5	19	0	0
	1730	„	1004·1	986·9	..	31·2	24·3	20·7	24·7	56	..	5·4	..	4·1	0	0	28	12	6	0	0	1	1	5	3	2	0
Nizamabad	0830	381	1008·4	966·1	+1·3	26·8	22·9	21·6	25·4	76	−4	4·4	−0·2	3·0	0	0	27	3	0	0	0	0	11	3	10	3	0
	1730	„	1004·3	962·7	..	30·3	24·2	20·5	24·5	59	..	6·1	..	6·1	0	0	20	4	7	0	0	0	6	1	2	10	0
Mahbubnagar	0830	505	1008·6	952·8	..	25·1	22·0	20·5	24·1	76	..	5·3	..	13·9	0	5	24	5	2	0	0	0	2	3	17	1	0
	1730	„	1004·3	949·5	..	29·2	22·9	19·9	23·3	59	..	6·2	..	6·9	0	0	29	7	2	0	0	0	3	5	12	1	0
Hyderabad (Begumpet Aerodrome)	0230	545	1006·5	946·2	..	23·4	21·7	20·9	24·7	86	..	5·4	..	6·9	0	5	7	0	0	0	0	0	0	8	4	18	0
	0530	„	1007·1	946·6	..	22·6	21·2	20·6	24·2	88	..	5·4	..	7·4	0	3	13	1	0	0	0	0	0	10	5	14	0
	0830	„	1008·4	948·3	+1·1	25·1	22·1	20·9	25·5	77	−3	5·1	−0·2	13·2	0	5	23	6	0	0	0	0	1	6	15	2	0
	1130	„	1007·3	947·9	..	28·5	23·1	20·5	24·3	62	..	5·8	..	16·4	0	8	22	12	1	1	0	0	1	4	11	0	0
	1730	„	1004·5	945·2	..	27·7	22·4	19·6	23·6	61	..	6·8	..	9·8	0	0	27	13	0	1	1	0	0	5	7	3	0
	2330	„	1007·8	947·5	..	23·9	22·2	21·4	25·6	86	..	5·4	..	5·8	0	2	6	1	0	0	0	0	1	4	2	22	0
Hakimpet	0830	613	1007·7	940·5	..	25·2	22·5	21·3	25·5	79	..	4·8	..	17·1	0	10	20	2	0	0	0	0	3	15	10	0	0
	1730	„	1004·4	938·0	..	28·1	23·1	20·9	24·9	66	..	5·9	..	13·9	0	6	23	3	1	0	0	0	3	14	8	1	0
Hanamkonda	0830	269	1007·9	977·9	+0·7	27·1	23·7	22·1	26·5	75	−2	3·8	−1·2	11·1	0	0	30	11	0	0	0	1	1	4	13	0	0
	1730	„	1004·6	975·1	..	30·6	24·0	20·6	24·5	56	..	5·0	..	6·8	0	0	30	10	3	1	1	2	0	2	11	0	0
Bhadrachallam	0830	111	1007·7	995·2	..	28·2	25·1	23·3	29·3	76	..	4·5	..	4·5	0	0	18	2	4	1	1	0	3	3	4	12	0
	1730	„	1004·0	991·7	..	30·7	25·3	23·0	27·9	65	..	5·6	..	6·2	0	0	26	0	4	2	2	0	5	2	11	4	0
Khammameth	0830	112	1007·7	995·1	..	27·7	25·1	23·7	29·8	79	..	4·9	..	4·8	0	1	22	7	1	0	0	2	0	9	4	7	0
	1730	„	1004·1	991·6	..	30·3	25·2	22·8	28·0	67	..	6·1	..	4·2	0	0	25	12	0	2	0	0	2	7	2	5	0
Rayalaseema— Arogyavaram	0830	701	1009·7	932·8	..	23·8	20·2	18·2	20·9	71	..	5·6	..	7·7	0	0	28	1	0	0	0	0	0	6	21	2	0
	1730	„	1004·9	929·4	..	28·1	21·0	17·1	18·5	53	..	6·4	..	7·6	0	0	29	2	2	1	0	1	0	3	20	1	0
Cuddapah	0830	130	1009·7	995·1	+1·0	28·8	23·6	21·0	24·8	63	−8	4·3	−1·1	6·3	0	0	27	2	0	0	0	0	0	19	6	3	0
	1730	„	1004·6	990·3	..	32·5	24·8	21·0	24·9	52	..	5·2	..	6·0	0	0	25	0	0	0	0	0	1	0	13	11	5	0
Anantapur	0530	350	1007·8	968·5	..	23·4	21·3	20·1	23·5	82	..	4·3	..	7·1	0	0	25	1	0	0	0	0	0	1	22	1	5	0
	0830	„	1009·5	970·4	..	25·5	22·1	20·2	23·9	73	..	4·5	..	9·4	0	0	29	0	0	0	0	0	0	1	20	8	1	0
	1130	„	1008·2	969·6	..	29·7	22·9	19·2	22·5	54	..	4·5	..	10·0	0	0	30	0	0	0	0	0	0	1	14	15	0	0
	1730	„	1004·3	966·0	..	30·5	22·9	18·7	21·9	52	..	6·1	..	11·3	0	2	26	4	0	0	1	0	0	16	7	2	0
	2330	„	1008·2	969·1	..	25·9	22·2	20·2	23·7	72	..	4·7	..	12·4	0	6	19	1	1	0	0	1	1	19	2	5	0
Kurnool	0830	281	1009·1	977·5	+0·7	24·9	22·6	21·5	25·4	81	+6	5·0	−0·4	18·4	0	15	14	0	0	0	0	0	3	26	0	1	0
	1730	„	1004·8	974·0	..	31·3	24·0	20·3	23·8	54	..	5·7	..	14·1	0	5	24	3	1	0	1	0	4	9	11	1	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (km.p.h.): Mean wind speed, kms. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras																											
Palayamcottai .	0830	51	1009·7	1004·0	..	30·4	22·4	17·8	20·6	47	..	4·0	..	9·4	0	2	27	1	0	0	0	1	0	26	1	1	0
	1730	,,	1005·7	1000·1	..	32·5	23·3	18·4	21·2	44	..	5·0	..	15·3	0	6	24	1	0	3	0	0	1	22	3	0	0
Tuticorin . .	0830	4	1010·1	1009·7	..	29·6	22·7	18·8	21·9	53	..	2·5	..	15·2	0	7	23	1	2	0	1	2	3	15	6	0	0
	1730	,,	1006·0	1005·6	..	31·1	24·5	21·0	25·2	57	..	2·5	..	20·0	0	17	13	0	0	2	7	7	1	12	1	0	0
Pamban . .	0830	11	1009·9	1008·6	+0·6	28·8	25·3	23·6	29·6	74	−3	2·8	−0·1	9·0	0	1	22	0	1	0	5	5	8	4	0	7	0
	1730	,,	1006·3	1005·1	..	27·9	25·2	24·1	29·7	79	..	4·4	..	12·1	0	2	28	0	0	0	6	21	3	0	0	0	0
Mathurai . .	0830	133	1009·5	994·6	+1·0	28·5	22·9	19·9	23·4	60	−6	4·3	−0·5	3·0	0	0	30	4	1	1	1	0	1	4	18	0	0
	1730	,,	1005·1	990·5	..	33·2	23·8	18·8	21·8	44	..	5·4	..	3·2	0	0	30	3	1	7	4	5	2	5	3	0	0
Nagapattinam .	0830	9	1009·7	1008·6	+0·6	27·7	24·0	22·2	26·8	73	+1	4·5	+0·3	7·3	0	0	29	0	0	0	0	0	9	17	3	1	0
	1730	,,	1005·7	1004·7	..	30·5	26·2	24·3	30·6	70	..	4·5	..	9·7	0	0	27	0	1	1	10	7	6	1	1	3	0
Tiruchirapalli. .	0230	88	1007·7	997·7	..	26·1	22·1	19·8	23·4	70	..	3·6	..	13·8	0	7	14	0	0	0	1	1	0	19	0	9	0
	0530	,,	1008·0	997·9	..	25·5	22·2	20·3	23·7	74	..	4·2	..	17·2	0	11	14	0	0	0	0	0	1	23	1	5	0
	0830	,,	1009·5	999·5	+0·2	27·7	22·8	20·3	23·8	64	−8	3·8	−0·4	25·7	0	22	7	0	0	0	0	0	0	28	1	1	0
	1130	,,	1008·4	998·5	..	32·0	24·0	19·9	23·3	50	..	3·8	..	28·2	0	24	6	0	0	0	0	0	0	28	2	0	0
	1730	,,	1004·8	995·1	..	33·0	23·8	18·7	22·0	45	..	5·5	..	15·1	0	5	20	0	2	3	1	2	1	9	7	5	0
	2330	,,	1009·3	999·3	..	27·1	22·9	20·7	24·6	69	..	4·4	..	14·2	0	7	17	0	0	0	0	1	3	18	2	6	0
Coimbatore . .	0830	409	1010·5	965·0	+1·0	25·2	21·6	19·6	22·9	71	−10	3·8	−0·1	17·2	0	7	23	0	0	0	0	9	15	6	0	0	0
	1730	,,	1006·0	961·2	..	28·8	22·5	19·5	22·3	56	..	5·3	..	17·2	0	7	23	0	0	0	0	11	15	4	0	0	0
Coimbatore (Peelamedu Aerodrome).	0530	398	1008·9	964·0	..	21·9	21·0	20·7	24·0	92	..	3·8	..	18·5	0	19	11	0	0	0	0	7	23	0	0	0	0
	0830	,,	1010·3	965·8	..	24·8	21·9	20·3	23·9	76	..	3·2	..	20·0	0	14	16	0	0	0	0	14	14	2	0	0	0
	1130	,,	1008·6	964·8	..	29·5	22·5	18·7	21·6	53	..	3·7	..	18·0	0	12	15	0	0	0	0	14	9	4	0	3	0
	1730	,,	1005·8	962·1	..	28·6	22·3	18·7	21·7	55	..	4·8	..	37·4	0	28	2	1	0	0	0	8	19	1	1	0	0
	2330	,,	1010·0	965·2	..	23·0	21·5	20·6	24·1	86	..	3·4	..	29·1	0	21	2	0	0	0	0	8	15	0	0	0	0
Salem* . .	0530	278	1008·5	977·1	..	23·9	21·9	20·7	24·7	83	..	4·6	..	3·7	0	0	21	0	0	0	0	1	7	11	2	9	0
	0830	,,	1009·8	978·7	+0·4	26·3	22·6	20·7	24·4	72	−6	4·2	−0.5	6·3	0	0	28	1	0	0	0	0	10	14	3	2	0
	1130	,,	1008·5	977·9	..	30·7	23·3	19·3	22·7	52	..	4·0	..	5·9	0	0	28	2	0	0	0	0	3	15	8	2	0
	1730	,,	1004·4	974·0	..	31·8	23·3	18·6	22·7	48	..	5·7	..	3·4	0	0	23	3	1	1	0	1	4	11	2	7	0
	2330	,,	1009·2	978·1	..	26·5	22·7	20·7	24·4	71	..	4·4	..	5.0	0	0	21	2	0	0	0	1	8	8	2	9	0
Kallakurichi. .	0830	127	1008·9	994·7	..	28·5	24·6	22·7	27·6	72	..	4·4	..	5·3	0	0	25	1	2	1	0	7	10	1	3	5	0
	1730	,,	1004·4	990·4	..	32·9	25·8	22·3	27·3	57	..	5·5	..	7·8	0	0	29	3	1	2	5	3	3	4	8	1	0
Cuddalore . .	0530	12	1007·1	1005·7	..	25·8	23·4	22·2	26·7	81	..	6·1	..	4·0	0	0	14	0	1	0	0	5	8	0	0	16	0
	0830	,,	1009·0	1007·7	+0·3	28·4	23·9	21·7	27·4	62	−13	4·6	0	3·0	0	0	18	0	1	0	0	0	12	4	1	12	0
	1130	,,	1007·9	1006·7	..	32·5	25·0	21·3	25·5	53	..	4·4	..	4·7	0	0	22	1	0	0	0	2	5	10	4	8	0
	1730	,,	1005·3	1004·0	..	30·2	25·8	23·8	29·4	69	..	6·3	..	5·5	0	0	26	1	0	2	18	2	1	1	1	4	0
	2330	,,	1008·4	1007·1	..	27·8	25·0	23·8	29·4	79	..	5·6	..	6·3	0	0	21	0	0	0	0	6	14	1	0	9	0
Vellore . .	0530	214	1007·6	983·4	..	24·9	22·0	20·4	24·7	77	..	6·1	..	3·7	0	0	17	2	2	0	0	0	2	7	4	13	0
	0830	,,	1009·2	985·2	+0·9	27·2	22·6	20·1	24·1	66	−7	5·1	+1·1	7·6	0	0	27	0	0	0	0	0	1	19	7	3	0
	1130	,,	1007·8	984·2	..	31·3	23·8	19·5	23·5	51	..	5·4	..	10·5	0	1	29	3	0	0	0	0	3	12	12	0	0
	1730	,,	1004·6	981·1	..	31·9	23·6	19·3	23·7	49	..	6·2	..	4·1	0	0	24	5	1	0	0	2	4	5	7	6	0
	2330	,,	1008·3	984·3	..	27·1	23·1	21·2	25·4	71	..	5·3	..	5·7	0	0	24	0	1	0	1	7	5	9	1	6	0
Madras . .	0230	16	1006·5	1004·8	..	26·9	24·8	23·9	29·9	84	..	4·2	..	9·6	0	1	26	0	0	0	0	6	11	9	1	3	0
	0530	,,	1007·0	1005·2	..	26·0	24·0	23·0	28·3	84	..	5·3	..	6·8	0	0	26	0	0	0	0	3	12	10	1	4	0
	0830	,,	1008·8	1007·1	+0·7	27·9	24·1	22·3	27·0	72	0	5·4	+0·4	14·4	0	6	23	0	0	1	0	0	9	17	2	1	0
	1130	,,	1007·7	1006·0	..	31·4	25·0	21·9	27·0	59	..	4·4	..	16·7	0	6	24	1	0	0	0	0	4	18	7	0	0
	1730	,,	1005·2	1003·5	..	30·6	25·6	23·3	28·7	66	..	5·3	..	10·4	0	0	28	2	1	9	4	1	3	4	3	2	1
	2330	,,	1008·0	1006·3	..	27·4	25·5	24·6	31·1	85	..	4·3	..	5·7	0	0	25	1	0	0	0	18	5	1	0	5	0
Madras (Nungambakkam).	0830	6	1008·3	1007·6	..	28·2	24·2	22·3	27·1	72	..	6·1	..	7·0	0	0	28	0	0	1	0	1	7	16	2	2	1
Coastal Mysore—																											
Karwar . .	0830	4	1011·4	1010·9	+1·5	25·3	23·9	23·3	28·6	88	..	5·1	..	4.1	0	0	22	0	8	6	1	0	1	2	3	8	1
	1730	,,	1008·7	1008·2	..	27·7	24·7	23·4	29·3	78	..	5·2	..	15·0	0	8	20	1	1	1	0	0	0	11	12	2	2
Honavar . .	0830	26	1011·4	1008·5	+1·1	24·8	23·7	23·2	28·6	91	0	6·2	0	4·3	0	0	24	0	0	21	0	0	2	1	0	6	0
	1730	,,	1009·1	1006·2	..	27·5	24·8	23·5	29·3	80	..	6·5	..	4·4	0	0	28	0	0	0	0	2	6	17	3	2	0
Mangalore . .	0230	22	1009·9	1007·4	..	24·5	23·7	23·3	28·5	93	..	3·2	..	5·4	0	0	21	3	3	10	0	0	0	0	5	9	0
	0530	,,	1010·0	1007·5	..	23·9	23·2	22·9	28·3	95	..	4·2	..	8·6	0	0	29	5	2	17	2	0	0	1	2	1	0
	0830	,,	1011·8	1009·3	+1·1	26·0	24·0	23·1	28·2	84	−4	4·0	−1·8	7·3	0	0	28	3	5	10	4	0	0	1	5	2	0
	1130	,,	1011·6	1009·1	..	27·8	24·4	22·9	27·9	74	..	4·0	..	10·7	0	0	30	0	0	0	0	0	8	11	11	0	0
	1730	,,	1008·9	1006·4	..	27·2	24·4	23·1	28·4	78	..	4·4	..	12·1	0	1	29	2	0	0	0	0	2	7	16	0	0
	2330	,,	1011·3	1008·8	..	25·1	24·0	23·5	28·8	91	..	3·8	..	6·9	0	0	29	12	2	12	0	0	0	0	3	1	0

*Observations for 23 days.

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Mysore (*contd*) Mangalore (Bajpe Aerodrome)	0530	103	1010·4	998·6	..	22·8	22·5	22·5	27·1	98	..	4·6	..	2·2	0	0	7	1	2	3	0	0	0	1	0	23	0
	0830	,,	1012·0	1000·3	..	24·8	23·6	23·0	28·1	90	..	5·0	..	8·5	0	0	27	3	2	16	3	0	1	1	1	3	0
	1730	,,	1009·2	997·5	..	26·1	23·9	22·9	27·9	83	..	4·8	..	13·8	0	1	29	1	0	0	0	0	0	19	10	0	0
Mysore (North) Bidar	0830	664	1008·6	935·6	..	23·9	21·1	19·6	23·1	77	..	5·6	+0·8	18·0	0	7	23	5	0	0	0	1	3	6	15	0	0
	1730	,,	1004·4	932·5	..	27·6	21·6	18·4	21·3	58	..	7·1	..	13·6	0	5	25	6	4	2	0	2	1	9	6	0	0
Gulbarga	0830	458	1009·2	958·3	+1·0	25·3	21·9	20·3	23·9	74	−4	6·4	+1·5	13·4	0	0	30	8	0	0	0	0	4	12	6	0	0
	1730	,,	1004·3	954·4	..	29·7	22·2	18·4	21·3	53	..	7·7	..	12·5	0	0	30	10	2	1	0	2	3	8	4	0	0
Bijapur	0830	594	1010·1	944·3	+1·3	24·1	21·2	19·8	22·9	77	−1	6·2	+1·4	12·2	0	0	30	2	0	0	0	0	4	13	11	0	0
	1730	,,	1004·5	940·3	..	29·3	21·8	17·8	20·0	52	..	6·3	..	10 4	0	0	29	3	3	0	0	1	4	12	6	1	0
Belgaum	0830	781	1011·3	925·1	+1·6	20·7	19·7	19·1	22·2	91	+2	..	..	1·4	0	0	13	1	0	0	0	5	5	1	1	17	0
	1730	,,	1008·6	923·5	..	23·7	21·1	19·9	23·2	79	..	..	..	4·5	0	0	27	0	0	0	0	0	6	16	5	3	0
Belgaum (C.T.O.)	0830	753	1011·0	927·8	+1·2	21·6	20·0	19·1	22·3	86	−1	4·1 (b)	−1·8	3·9 (b)	0	0	27	4	0	0	0	0	5	11	7	3	0
	1730	,,	1007·3	925·1	..	24·0	21·0	19·5	22·7	76	..	6·2	..	12·3	0	0	29	0	0	0	0	0	1	22	6	0	0
Belgaum (Sambre Aerodrome)	0530	761	1009·7	925·1	..	19·0	18·5	18·1	20·7	95	..	4·0	..	5·1	0	0	24	1	0	0	0	0	0	21	2	6	0
	0830	,,	1010·9	926·9	..	21.4	19·9	19·0	22·2	86	..	4·8	..	6·7	0	0	27	1	0	0	0	0	1	17	8	3	0
	1130	,,	1009·5	926·7	..	25·9	21·6	18·8	22·8	67	..	5·2	..	15·6	0	9	20	1	1	0	0	0	0	19	8	1	0
	1730	,,	1006·9	924·1	..	24·5	20·9	19·0	22·2	72	..	5·6	..	20·3	0	12	18	0	0	0	0	0	2	26	2	0	0
Gadag	0830	650	1010·6	938·7	+1·3	22·9	20·6	19·5	22·8	78	−4	5·0	−0·4	8·2	0	0	30	0	0	0	0	0	2	21	7	0	0
	1730	,,	1005·9	935·4	..	27·6	22·0	19·2	22·4	62	..	5·7	..	9·8	0	1	29	1	0	0	0	0	8	18	3	0	0
Gadag (P.B.O.)	0530	661	1009·3	935·9	..	21·0	19·8	19·3	22·3	90	..	4·5	..	12·2	0	0	30	0	0	0	0	0	3	27	0	0	0
	0830	,,	1010·5	937·6	..	23·3	21·0	20·0	23·2	82	..	4·5	..	10·0	0	0	29	0	0	0	0	0	5	24	0	1	0
	1130	,,	1009·3	937·2	..	26·6	21·7	19·4	22·3	66	..	5·1	..	9·4	0	0	26	1	1	0	0	0	1	20	3	4	0
	1730	,,	1005·8	934·0	..	27·1	21·5	18·9	21·5	63	..	5·5	..	11·1	0	0	26	0	0	0	0	0	8	18	0	4	0
	2330	,,	1010·2	937·1	..	22·4	20·7	19·9	23·2	86	..	4·0	..	14·5	0	1	28	0	0	0	0	0	2	26	1	1	0
Raichur	0830	400	1009·7	965·2	+1·2	25·4	22·8	22·3	26·1	74	−2	4·8	+0·7	10·3	0	0	30	2	1	0	0	0	2	13	12	0	0
	1730	,,	1004·5	961·0	..	30·7	22·7	18·2	21·0	49	..	5·9	..	10·4	0	1	29	2	1	0	1	1	1	11	13	0	0
Mysore (South) Bellary	0830	449	1009·6	959·7	+0·8	25·4	22·6	21·3	25·3	78	+8	4·2	−0·8	9·9	0	0	29	0	0	0	0	0	0	0	29	1	0
	1730	,,	1004·5	955·8	..	30·7	24·5	21·4	26·1	59	..	5·2	..	6·7	0	0	30	0	0	0	2	0	0	0	28	0	0
Chitaldrug	0830	733	1010·7	929·8	−1·2	21·8	19·5	18·3	21·0	80	0	6·2	0	10·6	0	0	30	0	0	0	0	0	10	20	0	0	0
	1730	,,	1005·3	926·3	..	27·6	20·9	17·8	19·9	56	..	5·8	..	9·1	0	1	29	0	1	0	0	0	11	18	0	0	0
Shimoga	0830	571	1011·3	947·8	..	22·5	20·4	19·3	22·5	82	..	5·7	..	0·7	0	0	6	0	0	0	0	0	2	2	2	24	0
	1730	,,	1006·8	944·3	..	26·4	21·8	19·5	22·8	67	..	4·8	..	7·0	0	0	30	1	0	0	0	2	6	17	4	0	0
Balehonnur	0830	..	..	..	..	19·2	18·5	18·0	20·8	93	0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1508·6	906·1	..	20·0	18·3	17·5	19·8	85	+3	4·4	−1·4	11·1	0	0	30	0	0	0	0	0	1	27	2	0	0
	1730	,,	1489·8	903·4	..	23·8	20·3	18·2	21·2	70	..	5·7	..	14·6	0	5	24	0	0	0	0	0	3	24	2	1	0
Mysore	0830	767	1011·4	926·7	+1·0	21·5	19·3	18·1	20·4	81	+2	3·3	−2·5	8·9	0	1	28	2	0	0	0	6	10	1	10	1	0
	1730	,,	1006·0	923·3	..	27·4	20·6	16·6	20·0	54	..	4·8	..	16·7	0	9	21	0	0	0	0	1	17	9	3	0	0
Bangalore (Central Observatory)	0230	921	1488·0	908·0	..	20·3	18·8	17·9	20·5	86	..	4·5	..	10·6	0	0	30	0	1	0	0	0	4	22	3	0	0
	0830	,,	1508·3	910·0	+0·9	21·3	19·0	17·7	20·5	80	−4	6·2	−0·4	13·5	0	1	29	0	0	0	0	0	2	16	12	0	0
	1130	,,	1512·4	909·5	..	25·8	20·2	17·4	19·7	59	..	6·2	..	13·3	0	2	28	3	0	0	0	0	0	11	16	0	0
	1730	,,	1485·6	906·7	..	26·1	20·1	16·7	18·9	58	..	6·2	..	11·9	0	4	26	1	1	0	0	3	3	10	12	0	0
Bangalore (Aerodrome)	0530	897	1489·2	910·8	..	19·8	18·7	18·1	20·7	90	..	4·6	..	14·1	0	4	24	0	0	0	0	0	2	25	1	2	0
	0830	,,	1509·6	912·6	..	21·8	19·1	17·7	20·0	78	..	5·6	..	19·4	0	8	22	0	0	0	0	0	0	27	3	0	0
	1130	,,	1513·8	912·0	..	26·2	20·1	16·8	19·1	57	..	5·8	..	18·2	0	8	21	1	0	0	0	0	0	17	11	1	0
	1730	,,	1488·1	909·2	..	26·8	20·1	16·2	18·7	55	..	6·1	..	18·3	0	7	22	0	0	1	0	0	3	16	9	1	0
	2330	,,	1505·1	912·0	..	22·3	19·5	18·1	20·7	77	..	4·6	..	13·1	0	7	20	0	0	0	0	0	3	22	2	3	0
Kerala (Including Laccadives) Kozhikode	0530	5	1010·3	1009·8	..	24·0	23·1	22·6	27·7	92	..	4·0	..	4·1	0	0	23	6	5	6	0	0	0	1	5	7	0
	0830	,,	1011·3	1010·8	+0·6	25·5	23·7	22·5	28·3	86	−2	3·5	−1·9	3·8	0	0	30	6	5	5	0	0	1	3	10	0	0
	1130	,,	1011·7	1011·2	..	28·9	25·0	23·3	28·5	72	..	4·1	..	11·2	0	0	30	0	0	0	0	0	1	20	9	0	0
	1730	,,	1009·2	1008·7	..	28·1	25·2	23·9	29·9	77	..	4·1	..	12·6	0	0	30	0	0	0	0	0	0	13	17	0	0
	2330	,,	1011·6	1011·1	..	25·3	24·1	23·5	29·4	90	..	3·8	..	6·8	0	0	25	6	3	0	0	0	0	2	14	5	0
Palghat	0830	97	1011·8	1000·7	..	25·4	23·6	22·4	25·6	85	..	5·3	..	14·6	0	1	29	0	0	0	0	0	8	22	0	0	0
	1730	,,	1008·1	997·2	..	28·6	23·5	21·2	26·7	64	..	5·3	..	16·1	0	1	29	0	0	0	0	0	7	22	1	0	0
Fort Cochin	0830	3	1012·0	1011·7	+0·8	26·9	24·3	23·0	28·2	79	−5	5·8	+0·7	5·0	0	1	18	5	4	1	0	0	0	2	7	11	0
	1730	,,	1009·0	1008·7	..	27·1	25·1	24·2	30·3	85	..	5·4	..	11·2	0	2	28	0	0	0	0	0	0	8	22	0	0
Cochin (Naval Air Station)	0230	3	1010·8	1010·5	..	24·7	23·8	23·6	29·1	94	..	5·0	..	2·4	0	0	18	5	3	7	1	0	0	0	2	12	0
	0530	,,	1010·4	1010·1	..	24·1	23·4	22·8	28·4	94	..	4·6	..	1·4	0	0	10	1	3	5	1	0	0	0	0	20	0
	0830	,,	1011·9	1011·6	..	26·8	24·3	23·2	28·4	80	..	4·6	..	5·7	0	0	23	8	8	3	2	0	0	0	2	7	0

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Wind speed (km. p.h.)			No. of observations										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal	Mean wind speed km. per hour	62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives) (*Contd.*)																											
Cochin (Naval Air Station (*contd.*)	1130	3	1011·8	1011·5	..	28·8	24·7	22·8	27·7	79	..	4·5	..	14·0	0	7	23	3	0	0	0	0	0	5	22	0	0
	1730	,,	1009·7	1009·4	..	27·5	24·4	23·1	28·0	76	..	5·5	..	12·7	0	4	26	2	0	0	0	0	1	3	24	0	0
	2330	,,	1012·0	1011·7	..	25·3	24·2	23·6	29·2	89	..	4·7	..	2·5	0	0	11	7	1	1	0	0	0	0	2	19	0
Alleppey . .	0830	4	1011·6	1011·2	..	27·0	24·9	23·8	29·7	82	..	5·0	..	6·5	0	0	30	5	6	3	0	0	0	4	12	0	0
	1730	,,	1009·0	1008·6	..	28·0	25·6	24·5	30·6	82	..	5·1	..	14·5	0	2	28	2	0	0	0	0	0	3	25	0	0
Punalur . .	0830	34	1011·6	1007·8	..	24·7	23·2	22·4	27·3	86	..	2·9	..	0·4	0	0	3	1	0	1	0	0	1	0	0	27	0
	1730	,,	1008·1	1004·3	..	29·7	24·2	21·6	25·7	62	..	4·5	..	7·6	0	0	29	2	0	0	0	0	4	10	13	1	0
Trivandrum .	0230	64	1009·8	1002·5	..	24·2	23·1	22·6	27·3	91	..	3·8	..	7·6	0	1	29	8	1	0	0	0	0	0	21	0	0
	0530	,,	1010·0	1002·7	..	23·7	22·7	22·2	27·6	91	..	3·6	..	7·3	0	0	30	12	0	0	0	0	0	0	18	0	0
	0830	,,	1011·6	1004·3	+0·7	26·4	23·6	22·3	26·9	78	−5	3·8	−1·6	10·6	0	0	30	6	0	0	0	0	0	0	24	0	0
	1130	,,	1010·8	1003·6	..	29·6	24·5	22·1	26·8	64	..	5·1	..	15·5	0	11	19	7	0	0	0	0	0	1	22	0	0
	1730	,,	1008·6	1001·3	..	28·0	23·9	22·2	26·3	70	..	4·2	..	17·9	0	14	16	0	0	0	0	0	0	3	27	0	0
	2330	,,	1011·5	1004·2	..	25·0	23·5	22·8	27·7	87	..	3·9	..	10·5	0	2	28	7	0	0	0	0	0	0	23	0	0
Trivandrum (Aerodrome) .	0830	8	1011·4	1010·5	..	26·9	23·6	22·1	26·5	75	..	4·3	..	8·9	0	0	30	15	0	0	0	0	0	0	15	0	0
Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0330	1406	1518·2	861·2	..	21·6	19·5	18·4	21·2	82	..	6·2	..	..	0	0	30	4	1	4	3	3	0	1	14	0	0
	1730	,,	1487·1	858·1	..	20·7	19·8	19·3	21·4	90	..	7·5	..	..	0	0	30	7	0	0	1	1	0	4	17	0	0
Aijal* . .	0830	1097																									
	1730	,,																									
Shillong . .	0830	1500	1495·1	849·7	+0·9	21·2	18·3	16·6	19·0	76	−3	5·2	−0·4	1·2	0	0	4	0	0	0	1	1	2	0	0	26	0
	1730	,,	1461·7	846·4	..	20·4	19·0	18·2	20·6	87	..	7·1	..	0·6	0	0	2	0	0	0	0	0	2	0	0	28	0
Cherrapunji . .	0830	1313	1486·8	867·3	−0·3	20·8	19·6	18·7	21·7	89	+5	4·2	−1·9	3·7	0	0	30	0	1	17	0	0	10	1	1	0	0
	1730	,,	1463·5	865·0	..	21·0	20·0	19·2	22·5	90	..	3·7	..	4·0	0	0	30	0	7	10	0	0	12	0	1	0	0
Darjiling (Raj-Bhawan)	0830	2127	1511·5	791·7	+2·9	17·7	16·4	15·5	17·8	88	+4	3·4	−3·0	0·1	0	0	1	1	0	0	0	0	0	0	0	29	0
	1730	,,	1485·8	789·1	..	16·9	16·0	15·5	17·6	93	..	7·6	..	0·3	0	0	3	1	0	0	1	0	0	1	0	27	0
Kalimpong . .	0830	1209	1428·9	877·1	−0·7	21·7	19·9	18·9	22·2	85	−4	2·0	−3·7	2·8	0	0	28	0	0	0	0	0	0	0	28	2	0
	1730	,,	1405·9	875·5	..	22·4	20·5	19·7	23·5	85	..	2·9	..	3·0	0	0	30	0	0	0	30	0	0	0	0	0	0
Katmandu . .	0830	1337	1498·8	866·0	..	22·5	19·7	18·3	21·0	77	−2	4·1	−1·9	0·8	0	0	8	2	1	1	2	1	0	0	1	22	0
	1730	,,	1467·8	863·1	..	24·3	20·8	19·3	21·7	72	..	4·5	..	1·6	0	0	11	3	1	2	1	0	0	0	4	19	0
Mukteswar (Kumaon)	0830	2311	3138·2	772·3	+0·2	15·9	13·7	12·1	14·4	80	−1	3·8	−0·5	7·9	0	2	20	0	8	8	1	0	0	3	2	8	0
	1730	,,	3125·7	771·0	..	16·5	15·0	14·1	16·5	86	..	4·7	..	15·4	0	7	23	0	3	5	1	1	9	10	1	0	0
Nainital . .	0830	1953	1471·2	804·0	..	17·1	14·7	12·9	15·1	74	..	3·7	..	5·2	0	2	13	0	0	8	6	0	0	1	0	15	0
	1730	,,	1452·3	802·2	..	17·8	15·9	14·7	16·7	83	..	4·7	..	9·1	0	3	23	1	0	6	6	6	3	4	0	4	0
Tapoban . .	0830	..	..	..	..	15·3	13·0	12·2	14·1	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath .	0830	..	..	..	..				Closed during winter months																		
Lokpal (R) . .	0830	..	..	..	..																						
Mussooree . .	0830	2042	1466·9	795·2	−1·1	17·2	15·1	13·8	15·6	80	−8	3·8	−1·0	1·9	0	0	12	3	1	0	2	3	2	0	1	18	0
	1730	,,	1456·9	794·3	..	16·8	16·1	15·8	17·5	95	..	6·6	..	3·3	0	0	24	3	2	0	4	9	5	0	1	6	0
Simla . . .	0830	2202	1474·0	781·2	+0·2	16·2	13·1	10·8	13·1	72	+1	3·2	−0·4	3·0	0	0	29	8	6	3	4	4	1	0	3	1	0
	1730	,,	1464·6	780·3	..	16·7	14·1	13·0	14·5	80	..	4·3	..	3·0	0	0	30	7	5	2	1	2	4	2	7	0	0
Dalhousie . .	0830	1959	1427·7	799·1	..	16·2	13·3	11·2	13·5	74	..	2·0	..	1·1	0	0	6	0	5	0	1	0	0	0	0	24	0
	1730	,,	1424·6	799·6	..	21·1	17·8	15·9	18·2	74	..	2·7	..	0·6	0	0	2	0	2	0	0	0	0	0	0	28	0
Dharamshala .	0830	1211	1517·4	880·5	..	22·1	17·9	15·2	17·7	67	..	3 0	..	1·2	0	0	12	4	1	0	2	0	0	2	3	18	0
	1730	,,	1511·5	879·5	..	24·2	19·8	17·0	19·7	67	..	4·3	..	3·3	0	0	27	1	0	1	2	1	18	2	2	3	0
Abu . . .	0830	1195	1490·2	879·9	+1·2	20·1	18·4	17·3	19·9	82	+2	2·7	−1·7	3·2	0	0	16	2	2	0	0	0	5	6	1	14	0
	1730	,,	1487·1	878·7	..	23·4	20·6	18·9	22·2	77	..	2·9	..	4·3	0	0	16	1	1	0	0	2	10	2	0	14	0
Pachmarhi . .	0830	1075	1489·2	891·8	+0·8	21·4	19·3	18·0	20·8	82	−1	4·1	−1·1	7·7	0	0	28	1	3	1	1	0	1	11	10	2	0
	1730	,,	1476·7	890·0	..	24·7	20·7	18·4	21·5	69	..	4·2	..	10·0	0	2	27	2	2	1	0	0	1	15	8	1	0
Mahabaleshwar .	0830	1382	1505·5	862·6	+1·2	17·6	16·8	16·3	18·5	93	−4	6·0	−1·0	10·4	0	1	29	4	4	1	0	0	3	6	12	0	0
	1730	,,	1485·7	860·6	..	18·7	18·2	17·9	20·5	95	..	7·3	..	10·0	0	0	30	0	0	0	0	0	10	6	14	0	0
Nandi Hills . .	0830	..	..	..	..	17·5	16·8	16·3	18·5	93	..	6·5	..	19·8	0	15	15	0	0	0	0	2	14	12	2	0	0
Mercara . .	0830	1152	1511·2	886·5	+1·5	18·5	17·4	16·7	18·9	89	−3	3·7	−2·7	7·3	0	0	30	0	0	0	0	0	0	14	15	0	1
	1730	,	1492·4	884·3	..	20·9	19·0	18·0	20·4	84	..	4·3	..	7·0	0	0	30	0	0	0	0	0	0	15	15	0	0
Kodaikanal . .	0530	2343	3130·5	770·0	..	11·5	10·4	9·3	11·9	87	..	4·6	..	9·5	0	4	21	1	1	1	2	0	1	3	16	5	0
	0830	,,	3154·8	771·6	+1·3	13·9	11·6	9·8	12·1	77	+1	2·9	−1·6	4·4	0	0	16	0	0	0	0	0	0	1	15	14	0
	1130	,,	3164·1	771·7	..	16·8	13·6	11·5	13·5	72	..	5·5	..	5·0	0	0	19	1	0	0	3	0	0	0	15	11	0

* Temporarily closed. (R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C.: Dry bulb	Mean temperature in °C.: Wet bulb	Mean temperature in °C.: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (km. p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations, excluding Kashmir *contd.*																											
	1730	2343	3138·2	769·9	..	14·8	13·1	11·9	13·9	84	..	6·0	..	3·9	0	0	18	2	1	1	4	0	0	0	10	12	0
Kodaikanal (*Contd.*)	2330	„	3148·3	771·5	..	12·0	10·7	9·7	12·0	87	..	4·9	...	11·6	0	5	22	7	1	0	0	0	1	5	13	3	0
Cotacamund	0830	2249	1511·2	779·8	+1·0	13·2	11·1	9·9	11·8	80	−3	2·9	−2·8	3·6	0	2	13	1	1	2	0	0	0	6	5	15	0
	1730	„	1488·7	778·1	..	15·4	13·2	12·1	13·9	79	..	5·9	..	4·7	0	1	17	1	1	2	1	0	2	8	3	12	0
Coonoor	0830	1747	1508·2	827·2	..	19·1	14·3	11·6	13·3	62	−4	3·6	−1·4	3·9	0	0	20	1	0	3	6	1	4	2	3	10	0
Sikkim																											
Lachen	0830	..	..	..	..	13·5	12·7	12·2	14·1	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (Chumbi)	0830	..	..	..	..	14·1	13·3	12·7	14·9	93	+8	0	−4·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa (R)	0830	3685																									
Ceylon—																											
Colombo	0830	7	1012·0	1011·2	+0·8	27·0	24·2	23·0	28·0	79	−4	6·1	+0·3	13·8	0	1	29	0	0	0	0	1	16	13	0	0	0
	1730	„	1009·3	1008·4	..	27·2	24·4	23·0	28·4	78	..	6·4	..	14·8	0	1	29	0	0	0	0	0	20	10	0	0	0
Trincomalee	0830	3	1009·5	1009·1	+0·8	28·3	23·9	21·7	26·0	68	−10	4·2	+0·6	23·4	0	28	2	0	0	0	0	0	30	0	0	0	0
	1730	„	1006·6	1006·2	..	29·6	25·2	22·7	28·4	69	..	6·4	..	15·3	0	10	20	8	5	2	1	1	11	0	2	0	0
Batticoloa	0830	3	1009·9	1009·6	..	28·3	23·6	21·0	25·3	64	..	4·3	..	9·7	0	2	27	0	0	0	4	10	6	4	5	1	0
	1730	„	1006·7	1006·4	..	29·2	25·6	24·2	29·9	74	..	5·0	..	19·6	0	15	15	1	1	4	19	5	0	0	0	0	0
Hambantota	0830	15	1011·0	1009·3	+1·1	27·2	24·7	23·5	29·1	80	−5	3·3	−0·5	23·9	0	24	6	0	0	0	0	0	15	15	0	0	0
	1730	„	1007·3	1005·9	..	27·5	24·7	23·0	28·4	78	..	5·4	..	34·9	0	30	0	0	0	0	0	0	19	11	0	0	0
Mannar	0830	4	1010·3	1009·9	..	27·9	25·4	24·0	30·5	80	..	5·6	..	18·0	0	7	23	0	0	0	0	5	25	0	0	0	0
	1730	„	1007·3	1006·8	..	28·0	25·2	23·8	29·8	78	..	5·5	..	19·4	0	12	8	0	0	0	0	6	24	0	0	0	0
Hydrometeorolgical Observataries																											
Damodar Catchment																											
Bokaro	0830	239	1006·3	979·7	..	27·8	24·7	23·3	28·5	77	..	4·6	..	4·8	0	2	21	2	0	3	5	1	6	3	3	7	0
	1730	„	1003·1	976·7	..	28 6	24·8	23·0	28·3	73	..	9·0	..	4·7	0	0	28	4	1	3	10	1	0	2	7	2	0
Hazaribagh	0830	615	999·9	933·0	..	26·1	22·4	20·6	24·4	72	..	2·7	..	3·2	0	0	15	0	4	3	4	1	3	0	0	15	0
	1730	„	996·3	929·8	..	26·3	22·1	19·8	23·6	68	..	2·8	..	14·0	0	0	30	0	4	4	5	4	11	1	1	0	0
Tilaiya	0830	..	..	..	..	27·2	24·0	22·5	27·2	76	..	3·7	..	10·2	0	0	26	1	0	5	1	0	0	13	4	4	2
	1730	..	..	..	..	28·3	24·1	22·2	26·4	71	..	5·2	..	8·3	0	0	28	2	0	7	1	0	0	9	9	2	0
Ramgarh	0830	..	..	..	..	27·5	24·8	23·4	29·2	79	..	5·1	..	4.0	0	0	28	0	0	6	4	0	2	15	1	2	0
	1730	..	..	..	..	27·4	24·6	23·3	29·1	79	..	6·6	..	2·7	0	0	17	0	0	5	4	0	0	2	6	13	0
Panchet Hills	0830	..	..	..	..	29·0	25·8	24·5	30·5	77	..	5·8	..	3·5	0	0	30	8	5	6	2	2	7	0	0	0	0
	1730	..	..	..	..	29·2	25·6	24·3	29·8	75	..	6·7	..	3·4	0	0	28	0	2	10	5	3	4	2	2	2	0
Durgapur	0830	..	..	..	..	28·4	25·4	24·0	30·0	75	..	3·9	..	15·0	0	7	20	0	0	10	5	0	1	8	3	3	0
	1730	..	..	..	..	28·4	25·3	23·8	29·8	75	..	3·7	..	12·5	0	3	26	1	0	15	3	0	1	8	1	1	0
Mahanadi Catchment																											
Baramul	0830	64	1005·9	998·7	..	28·6	26·2	25·3	32·0	83	..	4·4	..	2·7	0	0	13	5	4	0	0	0	2	2	0	17	0
	1730	„	1003·5	996·3	..	27·5	25·7	24·9	31·4	86	..	5·3	..	1·4	0	0	5	2	0	0	0	0	2	1	0	25	0
Hirakud	0830	159	1006·7	988·9	..	28·5	25·4	24·0	29·6	77	..	4·7	..	4·1	0	0	20	1	1	2	4	2	3	2	5	10	0
	1730	„	1003·7	986·1	..	29·2	25·7	24·2	30·1	75	..	6·4	..	4·1	0	0	19	0	0	4	2	1	3	8	1	11	0
Khijrawan*	0830	..	..	..	..	26·2	23 7	22·4	27·2	79	..	4·7	..	5·1 (g)	0	0	22	2	2	1	1	1	9	11	1	2	0
	1730	..	..	..	.	27·9	23·9	22·2	26·4	72	..	6·4	..	4·3 (f)	0	0	16	0	2	0	1	1	4	9	4	9	0
Sonepur	0830	..	..	..	..	28·9	25·9	24·5	31·0	78	..	..	..	6·7	0	0	28	0	1	5	3	0	15	4	0	2	0
Ginabahar	0830	..	..	..	..	26·2	23·5	22·2	26·8	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Narbada Catchment																											
Punasa (R)	0830	..																									
(R)	1730	..																									
Bagra Tawa	0830	..	..	..	..	25·9	23 0	21·7	25·8	79	..	2·8	..	9·3	0	0	30	0	3	0	0	6	20	1	0	0	0
	1730	..	..	..	..	28·4	23·7	21·5	25·4	67	..	3·8	..	4·9	0	0	26	0	1	1	3	3	9	9	0	4	0
Thikri	0830	..	..	..	..	25·9	23·7	22·8	27·4	83	..	5·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	23·1	20·8	19 3	22·4	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..
Dharoi	0830	..	..	..	..	26·5	23·1	21·7	25·4	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	31·8	23·2	18·3	21·5	45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim*	0830	..	..	..	..	18·5	15·6	13·8	15·8	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·1	16·4	14·9	17·0	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri	0830	..	..	..	..	22·7	20·2	18·9	21·9	80	..	3·2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	28·3	22·4	19·5	22·9	61	..	3·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha	0830	..	..	..	..	22·1	21·1	20·7	24·3	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	23·9	21·4	20·0	23·7	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

*Wind direction for the complete month (R)—Register not received. (g) Mean of 24 days. (f) Mean of 25 days.
*Observations for 28 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C.			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations. Wind direction.									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories —(contd.)																											
Gandak Catchment —(contd.)																											
Poakhara	0830	..	..	..	..	24·7	22 2	20 8	24·8	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·5	23·1	21·8	26·6	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	25·1	23 1	22·3	26·9	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·1	21·9	20·5	24·1	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jomosom	0830	..	..	..	..	16·3	12·1	9·6	11·7	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·7	12·4	9·6	12·0	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timure	0830	..	..	..	..	16·8	15·2	14·1	16·1	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1730	..	..	..	..	20·5	17·9	16·5	18·9	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region).																											
Dailekh	0830	..	..	..	..	21.7	19 8	19·1	21·8	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·8	19·9	19·1	22·0	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura	0830	..	..	..	..	17·5	16·1	15·3	17·4	87	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19 6	17·9	17·2	19·5	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari (R)	0830																										
	1730																										
Sallyana (R)	0830	..	..	..	..	21·9	19·1	17·4	20·1	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·9	19·1	18·1	20·8	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal	0830	..	..	..	..	27·9	24·8 (b)	23·4 (b)	28·9 (b)	77 (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	29·1	26·9	25·9	33·8	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1485·9	886·2	..	21·7	19·2	17·5	20·5	79	..	4·1	..	0·8	0	0	8	2	0	2	2	1	0	0	1	22	0
	1130	,,	1481·6	865·5	..	26·3	20·7	17·7	20·3	59	..	3·9	..	1·8	0	0	15	2	1	2	5	1	1	1	2	15	0
	1730	,,	1458·2	863·3	..	23·5	20·3	18·6	21·6	74	..	4·4	..	1·7	0	0	12	3	1	2	1	0	0	0	5	18	0
Kosi Catchment																											
Cha utara	0830	..	..	..	..	20·5	18·7 (c)	17·5 (c)	20·3 (c)	84 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·8	19·9	18 7	21·2	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldunga	0830	..	..	..	..	19·4	18·2	17·6	20·1	89	..	5·8	..	0·5	0	0	4	0	0	1	0	2	0	0	1	26	0
	1130	..	..	..	..	21·7	19·4	18·3	21·1	82	..	5·7	..	0·9	0	0	14	0	0	2	0	0	4	5	3	16	0
	1730	..	..	..	..	18·8	17·7	16·9	19·5	89	..	6·2	..	1·8	0	0	14	0	0	0	0	0	4	9	1	16	0
Barahkshetra	0830	146	1007·1	990·6	..	26·5	24·7	23·9	29·7	86	..	5·0	..	2·8	0	0	18	0	1	0	0	1	7	7	2	12	0
	1130	,,	1006·0	990·1	..	29·5	26·0	24·5	30·7	73	..	5·4	..	9·5	0	0	27	0	3	1	0	1	11	11	0	3	0
	1730	,,	1003·6	987·3	..	27·9	26·1	25·3	32·3	85	..	5·8	..	3·3	0	0	12	1	2	1	0	1	6	1	0	18	0
Angbung	0830	..	..	..	..	22·1	20·8	20·2	23·7	89	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung	0830	..	..	..	..	20·0	18·3	17·5	20·0	86	..	6·6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	22·5	19·7	18·4	21·2	77	..	5·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·1	17·6	16 3	18·5	79	..	6·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok	0830	..	..	..	..	19·9	18·4	17·5	20·1	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)	0830																										
(R)	1730																										
Bhojpur	0830	..	..	..	..	20·8	19·1 (c)	18·5 (c)	21·0 (c)	85 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·4	18·9	18·4	21·6	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur	0830	..	..	..	..	22·3	21·0	20·2	24·1	89	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1730																										
Tista Catchment																											
Gangtok	0830	1812	1491·4	819·1	..	17·7	17·0	16·6	18·9	93	..	5·8	..	1·8	0	0	17	0	0	0	1	1	7	4	4	13	0
	1130	,,	1481·9	818·5	..	20·4	18·7	17·9	20·5	86	..	6·2	..	4·6	0	0	29	0	0	0	1	10	12	5	1	1	0
	1730	,,	1465·5	816·7	..	18·3	17·3	16·8	19·1	92	..	6·9	..	4·0	0	0	27	0	0	1	12	6	5	2	1	3	0
Geyzing	0830	..	..	..	..	20·6	19·4	18·8	21·9	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·5	19·4	18·9	21·8	90	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

*Data not reliable.
*Observations for 29 days.

(R) Register not received.
(b) Mean of 29 days.

(c) Mean of 28 days.

MONTHLY MEANS OF UPPER WINDS, SEPTEMBER, 1957 (BHADRA 10—ASVINA 8, 1879 SAKA)

During the month, observations of velocity and direction of upper winds were made at 54 stations in India. Out of these, at 42 stations all the observations were taken by means of pilot balloons and at 12 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data up to 9·0 km. a.m.s.l. are given under Table IV and data above 9·0 km. a.m.s.l. under Table V.

In Tables IV and V :

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction,

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0·15 km. a.g., 0·3, 0·6, 0·9, 1·5, 2·1, 3·0, 3·6, 4·5, 5·4, 6·0, 7·2, 9·0, 10·5, 12·0, 14·1, 16·2, 18·0, 21·0, 24·0, 27·0, 30·0, 33·0 and 36·0 km. a.m.s.l. Of these the levels 1·5, 3·0, 5·4, 7·2, 9·0, 12·0, 14·1 and 16·2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

	Station	Lat. N.	Long. E.	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
1	Agartala	23°53′	91°15′	17	28th November 1951	0530	1730	2330	
2	Ahmedabad	23°04′	72°38′	60	19th May 1928	0530	1730	2330	
3	Amausi	26°45′	80°53′	132	20th November 1950	0530	1730	2330	
4	Ambala	30°23′	76°46′	283	1st April 1941	0530	1730	2330	
5	Amritsar	31°38′	74°52′	230	21st June. 1957	0530*	1730*		
6	Anantapur	14°41′	77°37′	364	12th February 1946	0530	1730	2330	
7	Asansol	23°41′	86°59′	136	29th May 1942	0530	1730	2330	
8	Baghdogra	26°38′	88°19′	140	7th June 1953	0530	1730	2330	
9	Bairagarh	23°17′	77°21′	532	26th February 1943	0530	1730	2330	
10	Bamrauli	25°27′	81°44′	103	28th February 1930	0530*	1130	1730*	2330
11	Bangalore	12°58′	77°35′	936	19th May 1915	0530	1730	2330	
12	Bareilly	28°22′	79°24′	180	12th January 1943	0530	1730		
13	Begumpet	17°27′	78°28′	553	1st September 1929	0530	1730	2330	
14	Bhagalpur	25°14′	86°57′	61	19th May 1950	0530	1730		
15	Bhubaneshwar	20°15′	85°50′	55	5th December 1942	0530	1730	2330	
16	Bhuj	23°15′	69°48′	111	14th September 1937	0530	1730	2330	
17	Bikaner	28°00′	73°18′	229	18th October 1946	0530	1730	2330	
18	Chikalthana	19°51′	75°24′	583	7th October 1951	0530	1730	2330	
19	Cochin†	09°56	76°14′	3	16th March 1942	0530	1730	2330	
20	Darjeeling	27°03′	88°16′	2115	21st May 1956	0530	1730		
21	Dum Dum	22°39′	88°27′	19	14th May 1921	0530*	1130	1730*	2330
22	Gadag	15°25′	75°38′	650	3rd May 1943	0530	1730	2330	
23	Gannavaram	16°32′	80°48′	24	8th April 1942	0530	1730	2330	
24	Gauhati	26°05′	91°43′	51	12th March 1955	0530*	1130	1730*	2330
25	Gaya	24°45′	84°57′	119	19th March 1937	0530	1730	2330	
26	Gopalpur	19°16′	84°53′	24	15th February 1946	0530	1730	2330	
27	Gorakhpur	26°45′	83°22′	83	5th January 1943	0530	1730		
28	Gwalior	26°14′	78°15′	219	7th May 1938	0530	1730	2330	
29	Imphal	24°51′	93°58′	805	8th March 1952	0530	1730	2330	
30	Jabalpur	23°10′	79°57′	402	30th July 1928	0530	1730	2330	
31	Jagdalpur	19°05′	82°02′	562	25th March 1948	0530	1730	2330	
32	Jaipur	26°49′	75°48′	404	6th June 1953	0530	1730		
33	Jamshedpur	22°49′	86°11′	147	23rd July 1942	0530	1730		
34	Jharsuguda	21°55′	84°05′	234	1st May 1944	0530	1730	2330	
35	Jodhpur	26°18′	73°01′	229	15th October 1934	0530*	1130	1730*	2330
36	Madras	13°00′	80°11′	29	8th April 1926	0530*	1130	1730*	2330
37	Mangalore	12°52′	74°51′	40	4th June 1928	0530	1730	2330	
38	Minicoy	08°18′	73°00′	16	14th April 1941	0530	1730	2330	
39	Mohanbari	27°29′	95°01′	110	1st June 1948	0530	1730	2330	
40	Mussoorie	30°27′	78°05′	2050	3rd November 1955	0530	1730		
41	Nagpur	21°06′	79°03′	316	23rd April 1943	0530*	1130	1730*	2330
42	Nanpara	27°53′	81°30′	141	23rd April 1957	0530	1730		
43	New Delhi	28°35′	77°12′	227	20th October 1936	0530*	1130	1730*	2330
44	Poona	18°32′	73°51′	593	5th January 1925	0530	1730	2330	
45	Port Blair	11°40′	92°43′	93	29th October 1945	0530*	1130	1730*	2330
46	Raipur	21°14′	81°39′	308	15th July 1944	0530	1730	2330	
47	Santa Cruz	19°07′	72°51′	12	14th May 1933	0530*	1130	1730*	2330
48	Tezpur	26°37′	92°47′	79	12th August 1932	0530	1730	2330	
49	Tiruchirapalli	10°46′	78°43′	96	22nd June 1936	0530	1730	2330	
50	Trivandrum	08°29′	76°57′	73	8th December 1928	0530*	1130	1730*	2330
51	Udaipur	24°35′	73°42′	587	24th June 1947	0530	1730	2330	
52	Vengurla	15°52′	73°38′	8	22nd November 1941	0530	1730	2330	
53	Veraval	20°54′	70°22′	17	13th October 1941	0530*	1130	1730*	2330
54	Visakhapatnam	17°43′	83°14′	10	24th September 1928	0530	1730	2330	

*Radiowind ascents.

†Naval Meteorological Office.

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	AGARTALA												AHMEDABAD											
Time in I.S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.0	2.5	135	30	2.6	1.2	210	30	2.5	2.2	155	30	4.6	3.8	275	30	5.1	3.3	270	30	5.2	3.9	219
0.15 a.g. . .	26	8.4	4.2	145	29	6.3	2.4	200	29	9.0	6.5	176	30	13.1	10.6	285	30	7.5	5.5	270	30	12.8	9.2	229
0.3 a.m.s.l. .	26	8.9	5.7	196	29	6.8	3.9	202	29	9.0	6.5	193	30	15.2	12.3	290	30	8.5	5.8	270	30	13.6	9.7	233
0.6 „ .	26	8.3	5.3	204	29	7.4	4.4	202	29	8.4	6.3	206	30	14.2	11.3	295	30	9.1	6.3	275	30	13.1	9.3	256
0.9 „ .	26	7.7	4.3	209	29	7.2	4.5	216	29	7.9	5.8	217	29	10.8	7.2	292	30	9.9	7.4	275	30	10.8	7.2	271
1.5 „ .	23	7.0	2.1	186	28	6.3	3.6	215	25	5.4	2.8	222	27	8.8	3.4	252	30	10.2	7.6	274	30	8.4	5.1	291
2.1 „ .	21	7.0	1.4	211	27	6.6	2.9	222	21	6.5	3.0	229	26	9.2	1.9	205	30	10.8	7.3	273	28	9.2	4.0	292
3.0 „ .	21	6.8	1.4	207	22	7.1	2.3	240	18	7.2	3.7	214	24	13.3	5.0	201	27	10.9	4.4	243	27	11.4	0.2	318
3.6 „ .	18	5.9	1.7	197	20	6.9	2.0	237	10	6.3	2.0	163	18	12.8	6.6	202	23	11.7	4.4	197	13	12.5	6.7	119
4.5 „ .	16	5.9	2.2	225	18	7.8	1.5	237	5	7.8	4.9	170	11	6.5	2.6	211	22	10.1	5.0	228	5	10.4	8.4	247
5.4 „ .	14	7.2	2.7	211	15	9.1	2.5	236	3	10.7	8.9	142	5	6.0	5.0	203	21	7.7	5.6	258	5	12.2	11.0	291
6.0 „ .	12	8.4	4.8	200	10	6.8	2.7	124	3	10.3	8.1	150	5	5.6	3.3	214	20	7.9	5.8	277	3	14.7	13.5	280
7.2 „ .	10	8.3	5.5	122	6	5.2	1.6	140	1	6.0	6.0	175	5	7.0	4.1	255	16	8.3	5.2	257				
9.0 „ .	17	13.3	11.6	105	3	9.7	8.3	151					4	6.0	3.4	200	8	7.2	3.6	189				

Station	AMAUSI												AMBALA											
Time in I.S.T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	4.4	0.5	310	30	6.0	0.1	335	30	4.2	0.5	206	30	3.0	1.8	346	30	5.0	3.2	313	30	4.4	2.7	315
0.15 a.g. . .	27	13.2	5.1	292	28	10.4	3.8	291	28	13.8	4.9	300	28	11.5	6.6	335	28	12.6	9.4	322	29	14.8	10.4	341
0.3 a.m.s.l. .	27	13.5	4.7	303	28	10.9	3.5	260	28	14.0	5.0	298	38	5.6	3.0	339	28	7.0	4.9	318	29	6.9	4.2	321
0.6 „ .	26	14.9	3.0	320	28	12.6	3.4	287	28	15.7	4.9	296	28	12.2	7.0	334	28	13.7	9.4	321	29	15.7	11·4	336
0.9 „ .	25	15.3	5.1	316	28	14.4	4.5	288	28	17.0	5.2	301	28	14.1	8.0	332	28	15.5	10.3	319	29	17.0	11.8	333
1.5 „ .	25	16.7	6·5	324	26	17.7	7.8	289	21	15.8	7.3	293	28	16.4	8.7	330	26	17.4	12.4	322	29	19.1	9.9	331
2.1 „ .	23	19.7	8.5	332	21	17.6	14.2	292	17	15.1	9.7	298	27	17.4	9.6	335	26	19.3	11.3	328	28	20.0	10.5	333
3.0 „ .	17	14.4	9.3	320	18	16.2	13.9	288	10	10.8	6.6	304	18	16.1	14.5	331	23	12.5	9.7	321	22	14.8	6.2	328
3.6 „ .	6	10.5	4.8	206	14	12.3	9.4	285	2	14.0	8.7	217	7	14.3	8.5	004	23	9.2	5.4	322	9	8.7	1.0	314
4.5 „ .	3	13.7	11.2	203	13	14.1	9.1	260					3	14.0	2.9	252	20	9.3	2.7	321	5	10.0	7.1	168
5.4 „ .					12	13.5	10.6	250					1	15.0	15.0	200	19	11.4	5.5	300	1	15.0	15.0	320
6.0 „ .					10	14.7	12.3	248									18	14.1	10.4	264	1	10.0	10.0	330
7.2 „ .					5	16.0	14.2	248									15	22.4	21.2	253				
9.0 „ .					2	14.0	13.9	252									7	48.0	47.5	252				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	AMRITSAR								ANANTAPUR												ASANSOL			
Time in I.S.T.	0530*				1730*				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.1	1.7	101	30	4.7	1.7	309	30	6.7	6.5	265	30	9.3	7.5	281	30	9.3	7.7	270	30	2.1	0.4	351
0.15 a.g. . .	27	5.5	0.6	274	26	5.3	2.2	301	30	13.8	13.5	264	28	14.3	11.4	278	28	16.8	15.6	268	27	8.0	2.7	301
0.3 a.m.s.l. .	27	5.3	0.3	059	26	5.2	2.3	302													27	8.2	2.9	309
0.6 „ .	27	8.6	3.8	292	26	7.8	4.8	295	30	15.9	15.5	267	28	14.1	11.1	282	28	17.3	16.2	266	27	9.8	3.0	331
0.9 „ .	27	8.8	6.3	294	26	7.5	4.9	272	30	18.5	17.7	288	28	13.4	11.4	285	28	18.0	17.1	274	26	9.1	3.5	331
1.5 „ .	27	9.9	7.2	305	26	8.3	6.4	284	29	16.2	15.0	305	28	12.0	10.7	288	28	12.6	11.4	305	25	9.8	3.3	348
2.1 „ .	27	10.1	8.9	323	26	8.4	7.0	305	29	10.8	8.0	314	26	12.8	11.0	298	27	10.2	8.3	322	19	10.3	4.6	326
3.0 „ .	27	11.3	10.4	336	26	11.1	10.2	305	26	9.8	4.8	326	21	13.2	10.6	303	24	9.4	5.7	33	14	8.5	0.2	328
3.6 „ .	27	11.9	10.6	339	25	11.6	8.8	330	25	9.3	5.7	309	19	12.7	9.7	299	17	8.5	3.7	335	11	7.0	1.4	121
4.5 „ .	27	11.4	8.5	330	25	9.2	7.2	312	22	7.5	4.8	303	12	9.1	7.4	291	13	7.7	5.0	295	7	7.3	1.3	129
5.4 „ .	27	11.8	5.8	261	24	12.6	8.5	274	19	7.7	4.7	330	9	8.4	7.3	281	9	6.7	5.5	330	6	8.8	3.6	324
6.0 „ .	27	16.3	11.9	245	23	16.3	14.0	256	19	8.4	4.8	353	9	8.7	7.1	280	8	7.0	4.1	310	5	6.4	2.0	053
7.2 „ .	26	26.0	25.0	248	21	25.0	22.9	251	14	7.6	5.2	037	8	8.5	2.4	250	3	6.3	4.7	041	1	3.0	3.0	155
9.0 „ .	23	46.7	46.0	257	20	43.8	42.7	251	9	10.5	9.0	092	5	10.4	3.2	111								

Station	ASANSOL								BAGHDOGRA												BAIRAGARH			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.5	1.4	127	30	2.0	0.6	168	30	2.3	1.4	045	30	2.9	0.9	320	30	3.0	2.1	044	30	4.5	3.2	283
0.15 a. g. .	29	9.0	2·4	130	29	7.7	2.3	237	27	6.5	4·1	060	30	6.6	1.8	280	28	6.2	3.2	083	29	18.2	14.8	308
0.3 a.m.s.l. .	29	9.3	2.5	130	29	7.8	2.3	230	27	6.5	4.2	073	30	6.7	1.6	264	28	6.3	2.7	116				
0.6 „ .	29	9.4	2.5	125	28	9.6	2.5	225	27	6.8	3.0	084	30	7.6	2.3	225	27	5.5	1.5	146	29	17.4	13.9	309
0.9 „ .	28	8.9	0.9	178	25	9.1	1.8	279	27	6.5	2.0	093	29	7.4	3.8	225	24	7.0	2.3	252	28	16.4	13.0	319
1.5 „ .	27	9.5	3.1	318	25	9.0	3.1	319	23	9.2	3.0	092	27	9.2	4.8	237	23	8.2	3.0	258	23	9.3	7.1	319
2.1 „ .	25	10.1	4.4	312	23	10.0	3.3	323	21	11.1	3.7	064	25	9.4	5.1	250	21	9.2	3.9	245	22	6.2	4.4	335
3.0 „ .	18	9.4	3.5	286	7	7.7	1.4	250	17	9.0	3.4	241	21	8.6	3.5	272	15	7.5	3.0	253	20	7.5	4.9	340
3.6 „ .	9	10.3	3.5	242	3	3.7	0.7	092	11	7.2	4.9	257	16	8.9	4.4	278	7	7.1	5.0	271	15	9.9	6.1	323
4.5 „ .	7	6.9	0.7	344	1	3.0	3.0	105	9	8.4	5.9	265	11	7.7	3.9	270	3	4.0	3.3	275	7	9.0	4.1	258
5.4 „ .	4	7.3	4.0	012					7	8.6	5.3	223	3	6.7	4.0	298	2	3.5	2.9	198	3	6.7	1.9	163
6.0 „ .	3	6.7	2.5	012					6	7.5	4.3	201	3	7.7	5.1	300					2	6.0	6.0	355
7.2 „ .									3	8.0	3.2	336	1	2.0	2.0	130					1	7.0	7.0	085
9.0 „ .									2	9.0	5.1	194	1	11.0	11.0	110								

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TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	BAIRAGARH								BAMRAULI											
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5.6	4.1	310	30	3.2	2.1	273	30	2.8	0.8	194	30	6.6	2.8	283	29	5.0	2.7	299	30	2.9	1.3	241
0.15 a.g.	28	9.9	7.9	311	28	12.0	7.5	298	28	5.8	1.9	286	27	8.5	2.8	294	26	6.0	2.4	302	29	13.8	5.9	265
0.3 a. m. s. l.									28	7.1	2.4	289	27	8.5	3.2	297	26	6.6	2.7	301	29	14.0	6.0	272
0.6 ,,	28	9.4	7.5	309	29	11.0	6.7	294	28	11.1	4.7	292	25	9.7	5.0	291	26	9.5	4.0	285	29	15.4	6.3	278
0.9 ,,	28	11.2	8.6	315	27	12.6	8.7	304	28	12.8	5.5	290	23	12.1	6.8	290	26	12.1	5.3	273	29	15.7	7.2	280
1.5 ,,	27	12.3	9.4	318	27	10.5	8.0	326	28	14.7	7.3	305	20	14.3	10.9	300	26	14.0	6.4	283	28	15.7	9.4	290
2.1 ,,	26	12.3	7.9	327	26	8.7	7.0	325	28	15.2	6.1	312	17	14.3	13.3	306	26	15.5	7.0	277	22	16.0	11.8	300
3.0 ,,	24	10.5	7.1	334	22	8.5	5.5	338	28	13.2	3.4	263	14	10.4	9.0	295	26	14.7	5.7	276	8	9.3	3.3	319
3.6 ,,	20	11.9	8.6	311	8	9.7	6.8	005	27	13.7	5.2	208	14	13.9	9.6	266	26	14.5	5.5	255	4	10.5	6.8	167
4.5 ,,	17	10.9	9.4	279					27	13.7	8.6	186	13	13.9	10.4	259	25	13.8	7.2	240				
5.4 ,,	13	8.3	4.9	272					27	12.8	8.0	184	12	12.0	9.3	246	25	13.4	7.7	233				
6.0 ,,	13	7.5	4.3	265					27	11.7	6.4	192	11	12.1	9.9	240	25	13.3	7.3	229				
7.2 ,,	8	6.9	1.6	338					27	11.4	5.6	196	11	11.6	9.3	254	25	11.7	5.5	217				
9.0 ,,	7	5.9	0.9	117					24	12.4	5.2	174	7	12.3	10.8	236	18	14.1	7.2	207				

Station	BANGALORE												BAREILLY								BEGUMPET			
Time in I.S.T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	6.8	6.4	274	30	6.8	5.3	276	30	5.7	4.7	266	30	2.8	0.7	129	30	5.4	1.3	280	30	4.9	4.2	295
0.15 a.g.	24	13.9	12.8	280	30	10.5	8.4	290	30	13.7	11.9	268	28	11.8	4.5	316	28	10.8	3.7	313	28	13.3	11.4	300
0·3 a. m. s. l.													28	10.6	4.0	322	28	10.1	3.8	309				
0.6 ,,													27	15.7	3.6	296	28	14.3	4.9	306	28	9.3	7.8	298
0.9 ,,													25	16.2	4.7	314	27	14.0	6.7	298	27	15.3	12.6	325
1.5 ,,	23	16.1	14.7	300	30	12.9	11.3	288	30	14.7	13.1	290	23	19.7	7.6	321	27	15.1	6.9	306	27	12.4	9.6	339
2.1 ,,	19	12.3	8.0	311	29	12.7	10.9	294	25	10.9	8.3	322	18	20.6	5.0	354	26	11.8	5.3	305	27	10.5	7.3	339
3.0 ,,	18	9.8	6.8	299	21	9.6	7.8	300	22	10.0	6.0	325	8	8.1	5.0	329	22	10.9	3.7	305	27	9.9	6.1	339
3.6 ,,	15	8.8	4.9	297	18	10.1	7.6	299	17	9.2	5.9	315	3	7.7	4.6	244	19	9.2	2.9	297	22	10.2	5.6	330
4.5 ,,	11	7.0	4.3	325	13	6.6	4.5	328	11	7.5	4.8	330	1	2.0	2.0	200	18	9.1	3.2	297	20	7.9	3.5	315
5.4 ,,	7	5.1	3.3	332	12	7.0	2.5	334	8	7.3	3.6	023	1	10.0	10.0	200	16	12.5	10.0	261	16	6.1	2.2	330
6.0 ,,	3	4.7	4.6	300	11	7.1	3.3	017	4	5.5	4.0	351	1	12.0	12.0	225	15	17.7	16.3	256	15	7.0	3.6	353
7.2 ,,	1	7.0	7.0	010	8	6.7	5.8	043	2	4.0	3.7	183	1	15.0	15.0	225	13	24.6	23.7	250	12	8.0	4.0	028
9.0 ,,	1	6.0	6.0	085	7	12.4	10.1	081					1	23.0	23.0	235	5	33.4	32.8	252	4	7.3	6.0	103

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	BEGUMPET								BHAGALPUR								BHUBANESHWAR							
Time in I. S. T.	1730				2330				0530				1730				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	4.9	3.5	313	30	2.2	1.9	284	30	2.9	1·3	149	30	4.0	1.0	244	30	2.5	1.1	336	30	4.9	2.8	163
0.15 a.g. .	28	10.3	7.4	311	28	9.5	5.7	311	28	8.7	2.9	235	28	8.2	3.5	264	29	10.2	5.4	301	30	8.3	3.2	167
0.3 a.m.s.l. .									28	9.5	2.6	245	28	8.9	3.4	263	29	12.9	4.3	287	30	10.0	3.2	156
0.6 „ .	28	9.3	6.9	313	28	6.3	3.6	301	27	8.7	3.5	271	28	9.4	3.1	250	29	11.0	3.8	286	30	10.0	2.7	142
0.9 „ .	28	11.7	8.8	313	28	11.5	7.2	330	26	9.1	3.5	284	27	9.1	3.9	249	27	10.1	3.8	319	28	9.6	1.2	093
1.5 „ .	28	12.4	8.8	320	28	13.1	9.7	335	25	9.4	3.9	290	26	8.8	4.5	262	26	8.7	5.5	351	26	10.3	3.0	036
2.1 „ .	28	13.1	9.4	317	27	12.8	9.9	334	25	9.5	3.4	289	25	9.7	5.9	267	24	11.6	5.6	359	22	11.1	5.1	019
3.0 „ .	26	12.1	10.4	304	27	10.6	8.2	324	23	8.7	2.9	245	23	7.2	2.1	263	19	8.0	2.7	049	15	12.2	6.9	346
3·6 „ .	25	11.4	9.4	301	15	9.9	7.2	331	17	8.2	3.6	257	23	7.6	1.8	300	18	10.5	1.4	353	7	11.0	3.4	307
4.5 „ .	18	9.1	7.4	284	6	6.8	3.6	321	15	7.2	1.8	257	21	7.8	3.5	307	12	7.8	1.4	164	1	5.0	5.0	140
5.4 „ .	10	7.0	2.9	293	2	9.5	9.5	087	13	6.8	3.0	251	19	7.6	4.2	301	10	5.6	2.7	082	1	6.0	6.0	160
6.0 „ .	10	7.2	1.7	068					12	5.0	2.3	286	17	7.9	2.6	289	9	5.9	4.9	072	1	9.0	9.0	150
7.2 „ .	10	10.2	3.5	039					7	5.1	1.1	250	15	7.4	2.1	272	8	7.6	6.5	085				
9.0 „ .	5	13.8	8.7	077					3	8.0	4.9	189	5	8.0	1.3	064	2	8.5	8.5	079				

Station	BHUBANESWAR				BHUJ								BIKANER							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	2.5	0.6	204	30	3.7	3.3	236	30	8.0	6.5	244	30	5.8	5.5	240	30	4.9	4.2	230	30	4.5	1.8	252
0.15 a.g. .	30	10.1	4.2	222	30	14.1	13.3	264	29	12.8	11.9	247	30	14.2	13.7	254	30	19.6	15.6	250	30	8.1	3.9	256
0.3 a.m.s.l. .	30	10.8	4.5	213	30	15.2	14.2	266	29	13.1	12.3	247	30	14.7	14.2	258	30	15.0	11.8	243	30	8.0	3.7	256
0.6 „ .	30	11.2	4.0	211	30	18.1	16.7	268	29	13.7	12.5	253	30	17.4	15.8	264	30	19.4	15.9	259	30	8.9	4.7	259
0.9 „ .	29	10.9	1.3	219	30	15.1	13.5	261	29	12.3	11.3	253	30	13.1	11.0	256	30	17.0	12.8	263	30	9.2	5.4	264
1.5 „ .	29	10.5	2.3	035	29	10.5	7.0	219	29	8.3	4.9	258	30	10.1	3.9	200	29	11.4	5.2	291	29	9.2	5.0	274
2.1 „ .	26	11.2	4.0	020	28	8.2	4.1	165	29	7.9	2.4	234	30	8.4	1.7	086	28	9.1	2.4	285	28	10.1	5.2	301
3.0 „ .	17	8.5	5.9	007	26	12.0	4.1	050	27	9.4	1.5	025	30	9.4	2.5	031	27	10.9	5.6	042	26	9.4	3.7	325
3·6 „ .	9	10.5	4.9	015	20	12.5	6.3	043	25	8.8	1.5	096	24	10.5	2.6	022	20	10.9	6.7	054	22	9.3	3.3	346
4.5 „ .	2	3.5	3.1	076	12	7.3	1.6	051	23	9.6	4.1	274	11	11.8	4.2	347	8	9.7	2.8	070	20	12.6	7.1	285
5.4 „ .	1	8.0	8.0	085	8	5.9	1.5	292	23	10.6	8·1	274	9	7.7	4.8	303	4	13.7	7.5	198	18	16.3	12.9	271
6.0 „ .	1	7.0	7.0	050	4	7.7	3.3	037	23	11.7	8.1	266	7	6.7	5·4	282	1	3.0	3.0	215	18	21.3	18.5	265
7.2 „ .	1	10.0	10.0	070					20	12.7	9.7	271	2	14.5	14.5	267	1	21.0	21.0	260	15	27·4	26.8	259
9.0 „ .									15	14.4	10.2	254	1	4.0	4.0	275	1	39.0	39.0	255	10	31.8	30.7	258

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	BIKANER				CHIKALTHANA												COCHIN							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	4.7	3.7	219	30	7.0	6.8	274	30	10.1	6.5	311	30	7.3	6.4	293	30	1.3	0.8	025	30	6.8	6.4	307
0.15 a.g. .	30	17.2	13.0	224	29	13.1	12.1	292	30	12.9	8.5	305	29	12.3	10.1	306	28	5.9	4.7	022	30	9.6	9.1	304
0.3 a.m.s.l. .	30	14.9	11.3	220													28	8.8	8.3	334	30	13.5	12.9	305
0.6 ,, .	30	16.2	11.3	237													28	12.9	12.4	321	30	15.4	15.0	308
0.9 ,, .	30	13.9	9.4	250	29	14.5	12.8	313	30	13.4	9.5	319	29	14.1	11.5	320	28	14.1	13.7	316	30	15.9	15.6	309
1.5 ,, .	30	9.7	5.3	290	29	11.4	7.8	310	30	12.4	8.9	315	28	14.0	10.0	345	28	15.0	4.5	304	30	15.9	15.6	308
2.1 ,, .	30	10.5	5.4	312	26	9.7	2.4	359	27	11.0	7.0	306	26	10.7	4.7	010	27	14.6	13.0	300	29	13.2	12.3	303
3.0 ,, .	29	11.6	6.1	015	23	7.7	1.3	275	19	10.0	6.1	280	18	8.2	0.3	245	21	14.8	12.9	299	22	11.7	9.5	304
3.6 ,, .	25	12.9	7.1	006	16	7.4	0.8	003	10	9.7	8.2	247	14	9.1	2.4	209	17	13.8	11.4	285	17	12.3	9.5	303
4.5 ,, .	14	10.6	5.9	351	4	9.3	7.7	270	4	12.0	6.9	245	7	5.7	0.7	302	8	11.7	7.9	304	8	10.1	6.4	355
5.4 ,, .	10	12.9	8.2	299	1	22.0	22.0	265	2	14.0	13.0	307	3	4.0	3.7	085					4	8.3	4.1	352
6 0 ,, .	7	15.7	14.5	271	1	10.0	10.0	235	2	14.0	13.8	293	2	4.0	3.2	163					2	9.0	9.0	098
7.2 ,, .													1	6.0	6.0	150					1	15.0	15.0	135
9.0 ,, .																								

Station	COCHIN				DARJEELING								DUM DUM											
Time in I. S. T.	2330				0530				1730				0530*				1130				1730*			
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	1.4	1.1	344	30	3.3	0.6	099	30	2.1	0.6	122	30	2.7	0.4	164	30	4.0	1.7	126	30	2.9	0.7	144
0.15 a.g. .	21	5.8	5.3	336	12	4.3	0.9	058	2	30.5	30.5	110	29	8.8	1.8	235	29	6.8	3.3	132	30	7.5	3.8	163
0.3 a.m.s.l. .	21	8.7	8.3	323									29	8.9	1.7	250	29	7.8	3.0	134	30	7.5	3.6	158
0.6 ,, .	21	14.7	14.6	319									29	8.9	0.9	229	29	8.2	2.7	135	30	6.9	3.7	171
0.9 ,, .	21	15.8	15.3	318									29	9.7	0.5	092	27	8.7	1.7	119	30	7.9	2.9	175
1.5 ,, .	19	13.8	13.4	315									29	10.7	3.6	091	23	9.9	2.7	135	30	8.6	3.0	166
2.1 ,, .	17	12.9	11.8	311									29	10.9	4.0	088	17	11.5	2.7	154	30	9.2	2.7	166
3.0 ,, .	7	10.3	5.8	314	12	4.7	0.8	150	3	6.0	3.6	278	29	9.9	2.7	125	11	12.9	3.4	200	30	10.2	3.5	210
3.6 ,, .	1	4·0	4·0	060	12	7.4	0.7	279	1	5·0	5.0	125					7	10.9	1.2	221				
4.5 ,, .					9	7.0	1.0	201	1	3.0	3.0	080	29	10.1	6.0	197	4	10.5	2.7	183	30	9.4	3.0	152
5.4 ,, .					9	6.9	3.8	227	1	5.0	5.0	155	29	9.0	4.5	195	4	7.0	3.2	136	30	10.0	3.1	147
6.0 ,, .					6	7.0	5.7	228	1	5.0	5.0	145	29	8.0	4.1	179	4	6.0	1.7	125	30	9.7	2.8	150
7.2 ,, .					5	5.8	4.3	210					29	8.8	4.0	144	2	5.0	4.9	109	30	8.2	1.7	141
9.0 ,, .					3	4.3	1.1	213					27	12.0	6.0	138					30	9.6	4.6	143

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	DUM DUM				GADAG												GANNAVARAM							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.1	1.8	166	30	8.0	8.0	268	30	7.3	6.5	264	30	8.7	8.4	268	30	3.8	3.0	279	30	6.5	4.1	305
0.15 a. g. . .	29	9.4	6.2	192	29	15.2	14.5	275	29	15.1	13.4	253	28	18.5	18.3	263	28	8.7	6.3	294	28	10.5	6.6	315
0.3 a.m.s.l. .	29	10.3	6.8	189													28	10.6	7.6	299	28	11.0	7.8	320
0.6 „ .	29	9·5	5.7	189													28	13.0	9.8	315	28	12.1	8.6	325
0.9 „ .	28	8.3	3.4	190	29	16.6	15.5	286	29	15.8	14.0	261	28	19.9	19.0	273	27	14.4	11.4	320	28	13.3	10.1	325
1.5 „ .	27	7.8	1.6	163	23	13.5	10.9	292	28	12.6	10.5	279	21	12.9	10.9	290	27	11.1	11.7	331	27	14.8	11.7	325
2.1 „ .	26	8.0	0.3	254	22	8.6	2.0	319	25	10.0	8.3	303	20	8.9	2.8	315	27	13.7	11.2	337	26	16.6	13.9	327
3.0 „ .	23	8.2	0.7	165	18	6.3	2.4	091	18	8.8	5.5	343	17	6.9	1.6	340	27	12.4	9.1	335	22	15.3	11.6	326
3.6 „ .	7	5.6	3.5	135	10	5.9	3.3	215	12	8.5	3.3	316	12	7.7	2.3	310	26	12.3	8.6	340	21	13.6	10.6	320
4.5 „ .					1	6.0	6.0	295	10	9.9	6.0	287	5	6.0	3.9	297	21	11.1	6.3	007	18	9.2	5.2	283
5.4 „ .					1	10.0	10.0	325	8	7.4	5.4	283	2	5.5	1.7	202	11	8.7	2.9	026	13	8.1	3.5	285
6.0 „ .					1	16.0	16.0	315	7	7.3	5.1	345	1	5.0	5.0	020	8	10.4	2.3	047	11	9.5	3.7	260
7.2 „ .									1	6.0	6.0	075					2	11.0	9.9	042	7	12.6	3.3	040
9.0 „ .																	1	5.0	5.0	115	4	16.7	15.5	080

Station	GANNAVARAM				GAUHATI												GAYA			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.1	1.7	293	30	0.8	0.3	220	30	4.5	2.2	018	30	1.9	0.7	260	30	1.7	0.9	215	30	2.6	1.4	167
0.15 a. g. . .	29	8.6	3.5	303	30	5.5	0.6	242	30	6.7	2.3	006	30	6.7	2.3	250	30	5.8	3.6	222	28	11.2	4.5	210
0.3 a.m.s.l. .	29	9.6	4.6	310	30	6.7	1.9	240	30	6.6	2.0	022	30	7.4	2.3	259	30	6.2	3.6	233	28	11.0	3.9	238
0.6 „ .	29	11.1	7.7	321	30	9.2	2.5	240	30	7.9	0.9	070	30	8.6	4.2	270	30	7.7	5.3	247	28	14.1	3.7	273
0.9 „ .	29	13.4	9.6	036	30	10.5	2.6	240	28	10.2	1.5	212	30	9.6	5.7	261	30	9.3	5.8	250	27	13.8	5.6	268
1.5 „ .	28	14.0	10.5	327	30	11.3	3.9	247	23	13.2	4.0	211	30	11.3	7.8	246	28	12.9	8.9	246	27	12.3	3.6	280
2.1 „ .	24	13.7	10.7	333	30	12.1	4.1	234	21	14.9	6.8	219	30	12.1	7.2	239	23	12.1	7.4	258	25	12.3	2.8	283
3.0 „ .	20	11.5	9.2	321	30	11.5	3.3	240	13	10.0	3.9	161	30	10.2	5.3	241	13	8.6	5.6	220	20	11.3	3.9	246
3.6 „ .	15	8.3	4.6	326	29	11.3	3.1	231	9	9.1	4.1	213	29	9.6	3.8	242	8	9.2	6.5	214	14	10.6	4.1	201
4.5 „ .	11	7.2	3.0	012	29	11.1	4.6	242	7	7.4	3.4	200	29	9.5	3.8	257	5	6.8	6.4	177	12	11.0	3.7	191
5.4 „ .	6	8.5	4.0	048	29	9.2	4.7	244	5	9.4	5.0	267	29	9.8	4.5	255	1	2.0	2.0	245	8	6.6	4.4	198
6.0 „ .	3	11.7	5.0	079	26	10.1	4.2	238	5	8.4	3.0	330	29	9.8	4.2	261	1	6.0	6.0	185	8	5.4	3.2	178
7.2 „ .					25	9.5	5.0	212	3	4.0	3.4	105	27	10.3	3.5	246					3	9.0	5.8	139
9.0 „ .					14	10.6	3.5	233	3	6.0	5.8	097	16	12.3	7.0	250					2	5.5	4.1	124

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	GAYA								GOPALPUR												GORAKHPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3.5	0.4	318	30	2.1	1.0	165	30	3.3	1.5	309	30	4.7	2.1	167	30	3.8	1.4	232	30	3.2	0.9	256
0.15 a.g.	29	9.4	2.8	298	30	10.0	4.3	230	30	10.6	5.8	317	28	9.1	2.4	180	28	9.7	3.8	255	28	10.8	1.3	360
0.3 a.s.l.	29	9.3	3.1	298	30	10.4	4.2	237	30	9.9	3.1	324	28	8.9	2.1	185	28	9.0	3.2	250	28	11.5	1.4	029
0.6 „	29	11.3	2.7	280	30	12.1	4.0	253	29	10.7	3.0	319	28	4.3	1.0	171	28	8.4	2.8	252	28	12.9	1.0	004
0.9 „	29	11.9	3.6	277	30	9.6	5.1	256	29	11.9	4.1	326	26	10.7	1.8	354	28	8.3	2.2	281	28	13.4	0.7	007
1.5 „	28	11.8	4.6	271	28	12.5	6.1	268	28	11.8	5.4	345	24	11.0	5.0	348	27	9.6	3.3	002	26	12.9	1.0	304
2.1 „	28	12.2	3.1	267	26	11.4	5.7	272	28	10.3	4.1	003	21	11.3	7.5	348	25	9.5	5.8	0 5	26	12.2	0.5	269
3.0 „	26	11.5	1.2	240	10	7.4	2.2	209	25	9.4	3.2	352	19	10.2	6.1	355	22	9.0	4.8	007	19	7.9	4.0	217
3·6 „	24	10.6	1.7	282					20	9.6	2.1	020	18	11.0	5.6	350	15	7.9	1.7	047	16	7.8	5.4	187
4.5 „	17	10.5	4.7	293					19	9.8	1.1	351	18	10.6	3.7	352	11	7.9	2.2	113	14	7.7	6.7	197
5.4 „	11	7.5	4.8	282					16	9.7	2.4	035	17	9.1	0.6	047	5	9.4	2.2	128	12	9.6	8.2	221
6.0 „	8	4.9	2.1	305					12	11.3	5.3	069	16	8.7	1.8	105	4	6.5	4.9	165	10	8.9	6.5	224
7.2 „	3	6.0	3.3	317					6	12.3	9.9	123	12	9.6	4.8	095	2	9.0	9.0	128	9	8.7	5.2	233
9.0 „	2	6.0	2.7	056					3	15.7	14.9	135	5	13.6	11.0	118					4	9.7	8.6	248

Station	GORAKHPUR				GWALIOR								IMPHAL							
Time in I.S.T.	1730				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3.9	1.0	203	30	5.7	3.7	273	30	4.2	2.5	312	30	3.9	2.4	253	30	0.7	0.3	133	30	3.1	2.0	236
0.15 a.g.	29	10.9	2.9	220	30	15.8	10.8	287	29	10.8	7.1	304	30	12.9	8.2	279	28	2.4	1.0	101	27	6.0	4.1	240
0.3 a.s.l.	29	12.1	2.9	229	30	13.1	8.8	279	29	8.7	5.5	305	30	10.8	7.0	271								
0.6 „	28	13.1	4.5	218	28	18.5	12.5	299	29	13.0	8.9	300	29	14.1	9.1	290								
0.9 „	28	13.6	4.1	243	26	18.4	13.7	305	29	14.4	9.9	301	29	14.9	9.7	296	28	2.2	0.9	117	27	5.9	3.9	236
1.5 „	28	14.1	3.3	243	23	16.3	14.9	317	23	16.8	13.5	311	29	16.3	11.6	309	27	4.9	1.1	094	27	5.0	2.1	216
2.1 „	28	14.6	3.5	236	22	17.0	15.1	327	23	18.3	14.8	317	25	15.9	12.5	321	24	9.0	2.8	112	26	6.9	3.0	165
3.0 „	24	12.4	4.4	266	21	14.1	12.3	336	21	17.7	15.6	313	19	12.7	10.7	334	14	9.6	4.7	222	23	7.1	2.7	179
3.6 „	23	9.6	2.7	202	19	12.8	11.2	329	20	16.9	14.8	316	8	11.1	6.9	342	13	7.7	4.1	213	20	7.9	3.4	178
4.5 „	21	6.8	2.1	251	18	12.0	9.1	277	18	14.8	11.6	310	2	3.5	2.4	052	8	7.5	2.4	227	16	9.8	5.3	188
5.4 „	21	9.2	6.5	258	18	13.3	10.4	250	14	15.6	13.8	275	1	8.0	8.0	190	4	6.7	6.0	173	9	9.9	4.3	207
6.0 „	18	11.2	9.3	260	18	14.2	12.2	240	14	17.6	16.7	268	1	8.0	8.0	230	4	6.3	5.7	175	8	8.0	2.4	219
7.2 „	14	13.1	10.8	259	18	14.9	13.3	252	12	16.2	15.6	252					2	6.5	5.3	122	6	7.8	2.8	180
9.0 „	5	11.0	10.0	259	15	13.1	11.5	256	9	19.3	19.0	247									1	5.0	5.0	050

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	IMPHAL				JABALPUR												JAGDALPUR							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	1.3	0.5	216	30	8.0	1.4	238	30	3.9	1·8	291	30	1.9	0.4	231	30	1.1	0.2	244	30	2.8	0.9	324
0.15 a.g. . .	29	2.4	0.3	154	29	12.1	7.1	263	30	10.9	4.8	310	29	9.1	3·5	265	30	10.0	5.3	302	30	10.0	4.8	346
0.3 a.s.l. .																								
0.6 „ .					29	12.9	7.3	270	30	11.7	5.1	310	29	10.1	4.1	277	30	6.2	3.4	285	30	6.8	3.1	344
0.9 „ .	29	2.3	0.3	163	26	16·0	8.2	302	28	13.6	6.7	313	29	13.3	6.0	296	27	12.2	8.9	329	30	11.9	5.8	349
1.5 „ .	29	4.8	1.0	206	25	14.6	9.9	337	26	14.2	9.0	320	27	13.1	6.9	325	24	15.3	11.3	341	27	12.6	8.1	334
2.1 „ .	27	8.1	4.3	185	24	14.7	10.5	347	23	14.8	11.7	330	26	13.8	9.6	331	21	13.9	10.6	342	24	13.3	8.3	333
3.0 „ .	23	10.3	6.9	179	22	14.6	10.4	348	17	16.1	14.8	329	24	12.9	8.7	325	12	10.2	6.3	339	21	13.8	7.7	335
3·6 „ .	20	10.2	6.6	182	19	14.4	10.1	328	14	12.9	11.1	314	21	12.9	7.9	312	6	7.7	3.5	347	9	10.0	5.4	298
4.5 „ .	8	9.7	5.2	179	18	12.3	4.4	255	13	11.8	10.1	282	5	8.6	5.0	245					3	5.3	4.7	303
5.4 „ .	2	7.5	6.5	297	14	10.6	5.1	222	13	9.0	6.8	280									3	3.3	2.8	308
6.0 „ .	1	7.0	7·0	265	12	10.5	5.0	225	12	8·1	2.9	279									1	4.0	4.0	275
7.2 „ .					8	10.1	4.6	142	6	7.5	4.0	286												
9.0 „ .					2	4.5	2.5	196	1	3·0	3·0	320												

Station	JAGADALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I. S. T.	2330				0530				1730				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	1.4	0.6	235	30	4.3	3.5	330	30	5.4	3.3	308	30	2.3	0.8	327	30	3.3	1.3	081	30	3.4	0.2	112
0.15 a. g. . .	29	7.7	3.2	299	29	16.8	13.4	299	29	10.1	6.9	303	26	6.1	2.2	299	25	6.0	2.0	100	29	9.4	1.0	341
0.3 a.m.s.l. .													26	6.4	1.9	299	25	6.0	1.9	101	29	7.7	0.9	024
0.6 „ .	29	5.2	2.4	264	29	18.7	14.7	299	29	7.7	6.7	307	26	8.8	2.6	329	26	7.9	1.5	084	29	19.2	2.4	320
0.9 „ .	29	9.4	3.9	339	29	20.2	16.3	300	29	11.5	8.1	310	26	10.3	3.2	350	26	9.0	0.7	027	28	12.0	3.7	342
1.5 „ .	26	13.0	9.3	354	26	13.5	10.0	305	26	11.0	8.5	315	25	10.4	3.8	350	23	9.4	2.6	011	25	12.1	6.9	345
2.1 „ .	22	13.4	10.2	355	24	11.0	6.6	339	24	12.0	8.7	318	23	8.7	3.1	342	23	11.3	2.7	350	25	12.2	5.7	189
3.0 „ .	18	11.1	8.9	347	20	10.1	6.1	021	20	11.0	8.5	299	21	8.0	0.5	013	17	9.5	2.1	319	19	9.9	2.5	016
3·6 „ .	6	8.7	6.2	348	13	7.6	4.5	012	19	12.6	10.2	314	16	8.0	1.0	180	15	9.0	0.7	127	8	9·4	7·4	085
4.5 „ .	1	6.0	6.0	185	6	9.3	3.7	245	18	12.9	10.3	305	13	8.7	2.8	162	11	7.9	3.5	091	2	9.0	8.5	040
5.4 „ .	1	5.0	5.0	250	2	10.0	7.8	260	18	17·3	13.8	281	9	7.7	4.7	175	4	7.0	1.6	142				
6.0 „ .					2	12·5	10.8	274	14	19.2	18.0	266	8	7.6	5.4	168	1	3.0	3.0	065				
7.2 „ .					1	10.0	10.0	310	8	19.7	19.4	258	5	5.6	4.9	113								
9.9 „ .					1	15.0	15.0	315	2	23.0	22·0	262	4	9.3	8.6	148								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	JHARSUGUDA								JODHPUR															
Time in I. S. T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	3.7	1.1	201	30	2.3	0.1	012	29	4.0	3.3	244	30	6.7	5.0	239	30	6.7	4.1	236	30	4.4	3.2	228
0.15 a. g. . .	27	7.6	2.8	214	29	8.6	0.9	289	29	6.9	5.8	246	30	8.4	6.3	243	30	8.1	4.8	239	30	16.4	13.4	230
0.3 a.m.s.l. .	27	6.6	2.7	220	29	6.2	0.5	255	29	5.9	5.0	246	30	8.1	6.0	248	30	7.6	4.4	237	30	13.1	10.3	228
0.6 „ .	27	7.7	0.4	217	29	9.8	0.9	286	29	9.6	8.1	248	30	9.1	6.8	244	30	9.5	5.6	244	30	16.3	12.9	237
0.9 „ .	27	8.6	0.8	318	29	10.9	1.7	284	28	12.3	9.8	251	30	11.5	8.6	248	30	11.5	6.9	254	30	14.7	10.4	246
1.5 „ .	23	10.0	4.4	338	26	9.0	2.6	353	28	9.9	5.8	245	30	11.6	5.6	247	30	11.2	6.4	272	29	10.9	4.3	277
2.1 „ .	22	11.5	5.9	343	23	7.9	2.9	344	28	9.6	1.4	248	29	11.1	2.8	220	30	10.9	4.7	295	29	11.1	3.7	328
3·0 „	20	10·6	5.7	336	21	8.4	0.8	035	25	11.6	2.0	043	27	11.3	2.2	124	30	12.3	2.0	308	24	12.6	2.3	030
3.6 „ .	19	9.7	4.8	319	13	7.6	1.8	032	25	11.6	1.9	034	26	11.7	3.8	119	30	12.9	1.5	298	3	9.3	4.0	057
4.5 „ .	12	9.9	4.2	278					23	11.8	1.1	350	26	12.7	5.3	183	29	12.8	4.3	254	1	5.0	5.0	180
5.4 „ .	5	5.6	0.6	345					23	12.8	8.0	238	25	11.6	9.0	235	28	15.6	11.6	252	1	7.0	7.0	325
6.0 „ .	4	4.7	3·0	256					23	14.9	12.0	244	22	14.5	12.5	248	27	17.0	13.2	260	1	13.0	13.0	300
7.2 „ .	2	2.5	1.6	292					23	21.8	20.8	250	19	19.8	18.8	250	26	20.0	18.2	252	1	17.0	17.0	275
9.0 „ .	1	4.0	4.0	195					22	23.3	22.6	204	9	19.3	18.4	245	23	20.4	18.1	247				

Station	MADRAS												MANGALORE							
Time in I. S. T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	5.6	4.8	245	30	8.9	7.5	281	30	5.7	1.5	104	30	3.6	3.0	187	30	5.0	2.6	064	30	3.7	6.1	302
0.15 a. g. . .	30	12.7	11.2	252	30	11.1	10.1	286	30	7.8	1.4	041	29	11.3	9.0	192	30	6.7	3.6	345	30	9.7	9.2	3 2
0.3 a.m.s.l. .	30	13.4	11.6	259	30	10.7	9.9	287	30	8.0	1.6	351	29	11.4	8.0	202	30	7.6	5.7	322	30	12.4	12.0	3 2
0.6 „ .	30	14.2	11.6	269	30	12.3	11.1	292	30	8.8	4.7	313	29	9.0	5.2	249	30	10.2	9.0	314	30	15.2	14.7	306
0.9 „ .	30	14.7	11.3	257	30	12.5	11.2	299	30	10.1	8.2	316	29	9.5	6.6	290	30	11.4	10.6	307	30	15.0	14.3	309
1.5 „ .	30	13.9	12.2	310	30	11.3	10.1	320	30	12.7	11.2	308	28	12.9	11.2	310	30	12.2	11.0	300	30	12.2	10.2	304
2.1 „ .	30	14.4	12.4	320	29	11.0	9.3	320	30	15.5	13.5	302	28	14.4	12.7	311	28	12.1	9.1	300	29	10.7	8.7	292
3.0 „ .	30	13.5	10.8	325	27	11.2	9.3	312	30	15.2	11.9	301	25	12.3	10.9	320	20	9.6	6.3	294	23	8.9	7.3	276
3.6 „ .	30	11.8	8.7	323	26	10·1	8.2	306	30	13.3	10.6	305	17	8.8	7.5	324	16	6.6	5.0	273	23	10.6	8.7	274
4.5 „ .	30	10.6	6.5	326	22	9.2	4.8	308	30	10.3	7.3	313	7	6.9	4.5	025	8	7.1	3.3	287	21	8.0	4.1	293
5.4 „ .	29	10.5	3.1	324	20	7.9	2.6	308	30	9.5	4.4	323	2	9.0	6.7	039	3	8.3	7.9	355	19	5.5	2.3	017
6.0 „ .	29	11.1	2.3	350	20	7.9	1.6	017	30	9.4	2.3	324					1	10.0	10.0	360	19	7.0	3.6	034
7.2 „ .	29	11.8	4.2	075	18	10.1	1.8	042	30	11.1	3.0	035					1	11.0	11.0	075	17	8.6	5.7	047
9.0 „ .	24	14.8	12.2	085	16	14.0	11.4	077	25	14.1	10.2	085									13	12.1	11.6	080

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	MANGALORE				MINICOY												MOHANBARI							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.1	2.7	011	30	7.2	7.0	304	30	8.4	8.1	304	30	7.1	6.8	304	30	1.2	0.7	070	30	1.3	0.4	035
0.15 a.g.	30	7.8	6.3	327	30	13.6	13.0	305	30	14.4	13.3	300	27	12.1	11.7	305	26	7.0	4.5	060	30	5.0	1.6	061
0.3 a.m. s.l.	30	8.8	7.7	321	30	13.2	12.6	305	30	13.8	13.4	300	27	11.9	11.4	305	26	7.1	4.9	060	30	5.0	1.6	068
0.6 „	30	11.7	10.9	318	30	14.8	14.4	309	30	15.8	15.4	307	27	14.2	13.6	309	26	7.1	4.3	077	30	4.3	1.9	095
0.9 „	30	12.6	11.8	314	30	15.6	14.6	310	30	17.0	16.4	307	27	15.0	14.2	308	22	8.0	2.3	092	29	4.0	0.9	091
1.5 „	27	10.4	9.4	311	30	15.5	14.6	305	30	17.8	16.9	300	27	14.4	13.7	304	19	7.2	0.7	141	28	6.7	4.5	217
2.1 „	25	8.8	6.9	300	29	14.2	13.1	301	30	16.2	15.2	296	25	14.6	14.0	298	15	6.5	2.2	102	25	8.2	5.9	201
3.0 „	22	8.7	6.4	307	27	14.2	12.7	290	25	17.1	16.1	287	22	15.9	14.9	285	10	7.9	4.6	192	20	9.7	7.2	207
3.6 „	18	7.9	5.6	298	24	13.4	11.6	279	25	16.3	15.3	282	18	15.2	13.7	276	8	7.8	5.2	195	15	7.4	5.4	205
4.5 „	14	6.0	3.5	322	21	8.9	5.0	278	20	12.2	10.5	298	8	10.3	6.0	294	8	10.0	7·3	226	9	8.5	7.2	231
5.4 „	10	5.6	3.4	338	19	7.8	0.6	020	18	6.7	2.6	315	2	4.5	3.1	202	6	10.1	6.7	245	6	11.5	10.6	232
6.0 „	6	5.7	2.7	055	17	8.8	3.5	096	18	6.7	0.8	345	2	6.0	3.7	120	6	10.3	8.1	250	4	9.5	8.7	223
7.2 „	3	7.6	7.4	045	12	11.0	10.6	077	17	12.3	10.4	078	2	10.5	10.5	098	3	15.6	15.4	258	1	7.0	7.0	209
9.0 „					10	14.1	13.7	093	17	17.7	17.2	096					1	3.0	3.0	010				

Station	MOHANBARI				MUSSOORIE								NAGPUR											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1.0	0.7	060	30	3.3	1.1	340	30	3.6	1.4	189	30	4.2	2.9	360	30	7.1	5.0	320	30	6.2	3.4	316
0.15 a.g.	27	7.5	2.2	051	20	4.9	2.0	264	7	4.9	3.5	217	30	6.4	4.0	318	28	9.2	7.1	320	30	7.2	4.0	320
0.3 a.m. s.l.	27	7.1	1.5	060																				
0.6 „	27	5.8	1.3	103									30	8.9	5.9	322	28	8.6	6.5	333	30	8.2	4.6	320
0.9 „	27	5.7	1.5	144									30	13.0	8.4	335	27	9.2	6.7	343	30	10.4	6.0	301
1.5 „	25	6.2	2.0	193									30	12.4	7.9	339	26	10.4	7.4	349	30	12.1	7.3	330
2.1 „	23	8.2	5.6	220	20	6.6	3.9	335	7	6.1	5.0	215	30	11.5	6.9	331	27	11.9	7.6	337	30	12.4	7.1	328
3.0 „	16	11.1	10.2	224	19	5.6	2.1	331	6	5.7	2.5	288	30	11.3	4.9	329	21	10.2	6.5	351	30	11.7	7.2	320
3.6 „	6	9.3	5.6	194	19	6.8	4.0	104	4	7.7	7.1	144	30	11.1	4.4	310	17	9.3	4.3	349	29	11.4	6.5	303
4.5 „	2	11.0	10.7	168	14	10.3	9.0	133	4	10.3	9.1	121	28	10.6	3.1	290	16	8.3	2.4	253	28	10.9	5.5	287
5.4 „	1	17.0	17.0	170	12	11.3	7.6	170	2	5.5	5.5	330	28	9.7	2.0	255	15	6.6	1.6	215	28	10.0	2.6	264
6.0 „	1	14.0	14.0	165	10	13.4	11.5	213	2	10.0	10.0	285	27	9.4	1.3	246	15	5.9	1.1	117	27	9.8	1.7	245
7.2 „					6	29.3	28.8	255	2	32.0	29.5	279	26	10.5	1.3	130	13	8.1	5.8	100	25	9.9	1.1	134
9·0 „													28	10.6	7.0	111	95	9.6	8.9	093	18	11.1	6.0	104

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra to Asvina 8, 1879 Saka)

Station	NAGPUR				NANPARA								NEW DELHI											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4.1	2.8	311	30	3.6	2.0	112	30	4.5	0.6	189	30	7.5	4.3	250	30	10.2	6.9	297	30	7.1	3.7	335
0.15 a.g.	30	10.0	5.7	328	29	9.7	3.0	091	27	9.6	1.4	247	30	16.4	9.5	300	27	12.1	7.7	297	30	12.9	4.7	334
0.3 a.m. s.l.					29	10.0	2.9	098	27	9.8	1.5	244	30	14.6	8.4	298	27	12.0	7.8	295	30	11.0	4.9	341
0·6 ,,	30	11.2	5.7	333	29	15.1	4.5	103	27	12.0	2.1	228	30	15.9	8.9	304	27	14.1	8.5	307	30	13.1	6.7	333
0.9 ,,	28	12.1	7.1	333	28	14.9	3.7	107	26	11.3	2.9	248	30	15.6	7.9	313	25	17.3	11.3	320	30	13.9	6.8	332
1.5 ,,	27	11.2	7.3	325	25	13.3	1.1	356	25	13.1	1.9	240	30	16.2	8.0	331	22	20.5	12.0	321	30	16.3	8.0	324
2.1 ,,	26	10.5	7.5	347	22	10.5	3.7	335	24	12.4	2.4	281	30	17.5	12.3	316	22	20.5	11.0	326	30	17.6	9.4	319
3.0 ,,	23	10.7	6.4	325	17	10.2	5.1	121	22	10.5	1.5	148	30	15.8	9.9	341	20	14.5	12.0	331	29	16.0	9.4	320
3.6 ,,	8	8.7	4.2	294	14	11.3	8.1	148	22	8.3	3.8	141	30	12.1	6.1	346	20	11.2	7.9	326	29	12.9	7.2	324
4.5 ,,	3	7.0	5.8	239	11	11.8	11.4	192	19	9.3	3.6	248	30	9.1	2.1	254	19	10.1	6.3	296	29	10.3	5.2	306
5.4 ,,	2	12.0	7.2	257	9	16.6	13.7	206	15	15.3	12.8	254	30	10.4	5.3	246	19	14.0	12.0	249	29	12.1	8.9	275
6.0 ,,	1	7.0	7.0	035	5	16.8	15.8	219	14	19.0	17.7	253	30	14.4	10.5	243	19	18.1	15.9	236	29	14.3	12.0	263
7.2 ,,	1	10.0	10.0	020	5	20.0	14.0	233	8	23.7	22.1	252	29	22.2	18.1	253	18	29.5	28.6	241	29	20.3	18.8	261
9.0 ,,					2	16.5	16.5	242	2	26.5	25.6	246	29	24.4	23.5	251	17	37.5	36.1	248	26	25.7	23.8	253

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2.8	1.6	276	30	1.9	1.8	258	30	5.4	5.1	277	30	2.8	2.6	260	30	6.3	5.9	240	30	9.7	9.2	243
0.15 a.g.	26	11.0	4.2	286	30	8.0	7.6	277	30	12.7	12.1	274	29	9.7	9.4	274	27	13.4	12.5	244	29	13.8	12.9	247
0.3 a.m. s.l.	28	9.7	4.8	288													27	15.0	14.2	245	29	14.2	13.4	247
0.6 ,,	26	13.1	5.1	309	30	4.4	4.1	256	30	8.4	8.0	277	29	5.3	5.2	262	27	17.0	16.3	250	28	16.3	15.1	250
0.9 ,,	24	14.7	9.6	316	30	9.7	9.0	285	30	13.0	12.6	278	29	11.4	10.6	283	27	17.3	16.3	252	27	16.4	15.4	248
1.5 ,,	24	16.8	12.4	312	28	10.5	7.0	298	30	11.8	10.5	280	29	12.2	8.6	293	26	15.1	13.0	250	17	14.1	12.7	250
2.1 ,,	23	17.9	13.0	312	25	9.6	2.3	226	27	9.9	2.7	267	26	9.0	11.2	109	25	13.8	12.2	248	7	12.7	10.6	250
3.0 ,,	22	17.0	14.2	323	22	9.1	4.7	195	20	8.0	3.9	215	23	7.6	5.4	153	21	11.1	8.9	243	2	9.0	6.9	309
3.6 ,,	12	12.0	9.7	332	19	9.2	5.0	204	18	7.8	4.3	249	18	7.1	4.4	232	20	9.2	5.6	232	2	8.0	1.1	336
4.5 ,,	5	6.6	2.3	133	8	10.0	5.2	262	16	7.9	5.3	271	9	9.6	4.1	271	18	8.4	3.5	192	1	4.0	4.0	150
5.4 ,,	3	11.0	8.4	183	1	9.0	9.0	280	13	7.5	3.5	276	8	6.7	2.9	347	15	8.1	1.2	179				
6.0 ,,	3	12.3	10.0	291	1	4.0	4.0	205	10	5.9	2.6	335	6	5.5	2.1	024	13	9.4	2.7	105				
7.2 ,,					1	9.0	9.0	125	7	7.1	5.3	063	2	13.5	13.5	048	12	8.6	3.0	110				
9.0 ,,					1	5.0	5.0	180	5	13.2	11.7	096	1	11.0	11.0	(9)	8	15.4	13.1	075				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	PORT BLAIR								RAIPUR												SANTA CRUZ			
Time in I. S. T.	1730*				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	7.1	5.3	229	30	6.1	5.9	232	30	3.7	1.2	277	30	4.8	1.7	319	30	3.8	1.3	283	30	4.1	1.9	292
0.15 a. g.	30	13.4	13.0	240	29	13.0	12.4	234	29	11.6	4.9	305	30	10.3	3.1	349	29	9.4	4.7	287	26	9.5	2.6	319
0.3 a. m. s. l.	30	14.3	13.7	241	29	13.5	12.9	236													26	9.6	3.4	299
0.6 ,,	30	16.4	15.7	246	29	15.2	14.5	240	29	11.7	6.8	328	29	11.4	3.6	347	29	10.4	4.2	301	26	9.7	5.7	290
0.9 ,,	29	17.0	16.3	250	25	13.6	12.8	243	28	15.7	8.3	326	29	12.0	4.6	348	29	11.1	5.1	316	26	9.7	7.2	293
1.5 ,,	27	15.1	14.0	250	21	9.9	8.9	251	26	13.5	8.4	338	28	13.7	7.1	337	26	10.7	6.1	315	26	9.7	5.6	287
2.1 ,,	27	13.6	12.8	254	14	6.9	4.9	263	24	13.4	9.0	353	24	15.1	10.3	321	24	9.9	7.3	003	26	9.6	3.4	284
3.0 ,,	22	12.3	10.4	250	12	5.7	3.2	246	17	11.4	7.2	347	18	13.1	9.3	330	20	11.5	8.8	351	26	11.0	2.1	183
3.6 ,,	19	11.5	7.8	235	7	5.1	3.2	153	11	10.5	6.3	332	15	10.1	8.9	323	8	9.7	4.7	311	26	11.0	4.1	209
4.5 ,,	14	10.6	6.5	232	5	4.6	3.2	136	3	9.7	7.3	278	7	5.1	2.9	288	4	5.0	3.7	035	26	10.9	6.6	240
5.4 ,,	13	9.5	2.9	218	1	5.0	5.0	350	3	6.7	3.6	214	6	3.7	0.4	270	1	3.0	3.0	335	26	9.9	4.5	274
6.0 ,,	13	8.8	1.7	268	1	7.0	7.0	020	2	2.5	1.9	282	6	4.8	2.5	107	1	6.0	6.0	255	26	9.8	4.3	300
7.2 ,,	12	7.8	4.8	109					2	3.0	2.7	120	4	6.8	5.5	112					26	9.7	4.1	010
9.0 ,,	6	17.3	13.8	095					1	9.0	9.0	100	3	13.3	9.2	110					23	10.1	4.7	049

Station	SANTA CRUZ									TEZPUR									
Time in I. S. T.	1130				1730*				2330	0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	5.7	3.6	291	30	7.8	6.8	290	30	2.8	1.4	271	30	0.9	0.8	074	30	0.9	0.6	142	30	0.6	0.1	087
0.15 a. g.	30	8.9	6.1	279	26	14.1	12.3	297	30	7.8	5.6	286	28	6.4	3.2	099	30	7.1	3.8	117	28	7.5	2.3	177
0.3 a. m. s. l.	30	8.6	6.5	280	26	13.3	11.4	297	30	8.3	6.6	288	28	7.6	3.0	119	30	6.8	3.6	122	28	7.4	2.8	262
0.6 ,,	29	9.1	6.6	278	26	11.2	9.5	293	30	8.6	6.9	288	28	9.4	1.8	161	30	6.6	2.2	194	28	7.0	3.5	234
0.9 ,,	25	8.3	5.7	283	26	9.4	7.4	290	29	8.2	6.1	287	26	9.8	1.2	219	30	8.4	3.5	222	28	8.4	4.6	247
1.5 ,,	18	7.1	2.1	245	26	8.0	4.3	276	26	7.8	4.1	273	22	8.6	1.8	185	26	10.6	6.1	236	23	8.0	3.4	238
2.1 ,,	7	9.0	4.5	173	26	8.9	3.1	265	22	7.5	0.2	019	20	9.3	2.2	227	25	11.8	7.1	232	21	9.2	6.2	226
3.0 ,,	4	13.0	12.4	175	26	8.8	3.1	243	19	7.6	5.0	132	10	10.6	4.8	240	19	11.5	6.6	228	11	9.0	4.9	198
3.6 ,,	2	19.5	19.3	172	25	9.4	4.8	241	12	8.9	5.7	205	7	9.1	6.0	242	14	10.4	6.1	230	9	11.5	8.4	218
4.5 ,,	1	15.0	15.0	165	25	9.7	6.1	247	6	11.8	8.7	207	4	6.5	6.1	230	9	9.2	6.3	222	2	7.5	5.8	220
5.4 ,,	1	9.0	9.0	230	25	9.0	3.6	256	4	13.5	5.0	226	3	7.7	7.6	218	4	8.7	7.9	241	1	2.0	2.0	265
6.0 ,,	1	3.0	3.0	255	25	8.6	2.0	266	4	13.3	4.7	245	3	12.0	11.6	262	3	13.3	12.7	272				
7.2 ,,					25	8.7	4.3	022	1	4.0	4.0	305	1	3.0	3.0	085								
9.0 ,,					22	10.8	7.6	066																

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	TIRUCHIRAPALLI												TRIVANDRUM											
Time in I.S.T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	11.9	11.7	270	30	8·7	5·4	293	30	7.2	6.4	264	30	5.5	5.1	333	30	9.1	8.2	323	30	12.6	12.0	294
0.15 a. g.	30	19.9	19.6	278	30	11.0	7.3	294	27	13.3	10.7	259	30	9.6	9.2	330	29	12.4	11.3	313	30	13.6	13.0	298
0.3 a. m. s. l.	30	22.3	22.0	277	30	11.5	7.5	291	27	14.5	12.0	261	30	11.1	10.6	328	29	12.4	11.6	311	30	14.3	13.8	298
0.6 ,,	30	23.4	23.0	281	30	12.4	9.7	282	27	16.5	14.6	265	30	14.7	14.1	323	28	12.0	11.4	317	30	16.6	16.2	308
0.9 ,,	30	19.1	18.3	280	30	12.5	10.9	275	27	16.0	14.9	268	30	18.1	17.6	315	23	17.3	16.7	315	30	18.6	18.3	313
1.5 ,,	30	11.9	11.3	285	30	13.2	11.9	270	27	12.6	11.7	278	30	19.2	18.8	316	14	17.4	16.6	311	30	18.2	17.9	313
2.1 ,,	29	10.1	7.9	305	30	13.9	12.8	273	26	11.3	10.4	303	30	16.7	15.6	300	7	10.6	8.9	315	30	16.3	16.1	305
3.0 ,,	28	11.3	9.0	310	30	14.5	13.3	294	22	12.6	11.0	319	30	15.2	13.3	071	5	12.0	10.0	321	30	16.0	14.7	298
3.6 ,,	24	11.5	10.0	309	29	14.7	13.0	298	20	10.5	8.7	305	29	13.6	12.0	293	3	12.3	10.3	332	30	14.9	13.3	298
4.5 ,,	20	10.1	8.1	310	24	11.7	9.0	298	14	7.4	5.2	299	29	11.2	8.9	300	2	12.5	10.5	306	30	12.4	10.0	298
5.4 ,,	15	8.8	3.4	327	21	8.8	5.0	300	10	5.8	0.9	288	29	8.8	4.1	312	1	13.0	13.0	065	30	9.0	4.1	313
6.0 ,,	13	8.5	2.2	046	18	8.0	3.2	337	6	7.3	0.9	347	29	8.0	1.9	327	1	13.0	13.0	105	30	7·9	1.7	358
7.2 ,,	9	10.0	8.4	074	17	8.6	3.9	080	3	7.7	2.0	151	29	10.2	6.3	075	1	12.0	12.0	100	30	9.6	6.5	080
9.0 ,,	4	16.7	16.6	084	12	14.6	13.7	100	1	17.0	17.0	085	26	17.5	16.0	094					27	18.6	17.0	180

Station	TRIVANDRUM				UDAIPUR												VENGURLA							
Time in I.S.T.	2030				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	6.6	6.4	320	30	0.6	0.5	273	30	3.2	2.9	274	30	0.7	0.4	280	30	0.8	0.8	360	30	4.3	4.0	273
0.15 a. g.	30	16.1	15.8	322	30	7.1	5.9	279	30	18.0	7.8	267	30	7.0	4.4	275	29	8.0	5.1	349	27	10.3	9.6	287
0.3 a. m. s. l.	30	19.3	19.0	322													29	9.6	7·5	325	27	13·0	11·7	293
0.6 ,,	29	22.7	22.2	320													29	11.6	10.2	314	27	13·1	12·0	297
0.9 ,,	29	22.8	22.4	320	30	9.9	8.0	282	30	10.8	7.6	271	30	8.5	5.9	280	29	12·6	11.5	305	22	11.2	10.4	300
1.5 ,,	27	20.4	20.1	316	29	7.6	4.1	303	30	10.5	6.5	285	28	10.1	6.7	292	22	11.6	9.9	289	20	7.7	6·4	302
2.1 ,,	24	18.3	17.4	310	28	8.1	1.2	034	28	10.0	5.8	318	28	9.6	2.5	304	17	9.7	3.4	251	18	7.2	3.3	267
3.0 ,,	16	8.2	5.6	340	27	10.4	1.1	115	24	8.7	2.5	280	27	9.6	0.6	166	15	10.0	3.7	148	16	7.9	4.7	220
3.6 ,,	13	10.1	8.0	320	21	10.8	2.7	187	23	11.1	3.1	256	22	9.7	4.5	201					15	9.3	6.8	243
4.5 ,,	9	9.2	7.7	316	9	11.0	4.3	229	19	10.8	4.5	235	15	9.5	6.6	233					13	8.6	6.5	251
5.4 ,,	5	7.4	3·0	262					17	11.4	9.7	253	2	12.0	11.5	248					12	6.9	3.5	292
6.0 ,,	5	6.4	2.3	234					16	15.5	14.8	262									12	6.9	0.8	340
7.2 ,,	2	6.5	4.9	147					9	13.3	10.3	260									6	7.3	3.7	035
9.0 ,,									8	16.1	10.9	254												

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Station	VENGURLA				VERAVAL												VISAKHAPATNAM			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	30	0.4	0.2	315	28	12.1	10.3	294	30	8.5	7.7	269	30	13.6	12.5	275	30	6.7	6.2	284	30	1.3	1.0	283
0.15 a. g. .	28	7.9	5.9	320	28	14.0	12.2	292	30	11.2	10.3	271	29	16.1	15.2	276	30	10.9	10.0	281	28	4.5	2.8	269
0.3 a. m. s. l.	28	10.4	8.9	311	28	14.0	12.1	290	30	11.8	10.9	278	29	16.1	14.8	280	30	11.9	10.9	282	28	5.7	2.8	281
0.6 „ .	28	12.4	11.3	312	28	13.7	11.6	285	29	11.0	9.7	278	29	14.4	12.9	284	30	12.0	11.3	281	28	8.0	2.7	316
0.9 „ .	24	11.7	10.8	310	28	13.1	10.6	280	28	9.9	7.8	276	29	12.8	10.7	286	25	9.0	8.2	272	28	8.9	4.4	336
1.5 „ .	24	9.1	7.8	298	28	11.9	4.2	255	21	8.2	4.5	224	29	10.5	5.7	281	20	6.1	2.5	216	27	11.8	7.9	358
2.1 „ .	20	8.1	1.8	269	28	9.7	1.3	185	16	7.2	4.6	185	29	9.1	1.9	250	18	7.1	4.4	1.6	26	10.4	6.9	352
3.0 „ .	18	8.6	1.8	150	27	12.6	0.4	224	13	7.2	5.8	185	29	10.7	3.7	211	13	8.2	5.5	174	21	10.3	6.5	342
3.6 „ .	6	7.3	1.9	094	27	11.9	2.5	230	8	7.7	6.7	185	29	9.7	4.3	240	6	13.2	10.1	179	16	9.0	5.3	020
4.5 „ .					26	10.0	3.7	252	4	5.3	5.1	241	29	8.8	5.7	263	2	10.5	10.5	213	11	7.5	3.8	336
5.4 „ .					24	10.2	5.7	272	3	5.0	3.0	229	29	9.5	5.9	277					8	9.0	5.4	055
6.0 „ .					24	9.9	5.1	264	3	5.3	5.1	242	29	9.9	5.7	286					5	8.8	5.9	081
7.2 „ .					22	10.8	3.4	294					28	9.6	4.7	221					3	12.3	11.2	096
9.0 „ .					20	9.9	2.1	163					21	10.6	2.5	161					2	21.5	20.2	108

Station	VISAKHAPATNAM																			
Time in I.S.T.	1730				2330															
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface. .	30	5.3	1.3	241	30	2.3	1.2	294												
0.15 a. g. .	27	7.7	1.6	215	28	5.6	1.7	285												
0.3 a. m. s. l. .	27	7.6	1.7	210	28	6.4	1.9	292												
0.6 „ .	27	7.4	0.6	289	28	7.8	2.4	320												
0.9 „ .	27	8.0	1.7	324	25	8.3	4.5	011												
1.5 „ .	25	10.7	4.1	342	24	8.7	6.8	004												
2.1 „ .	22	13.8	5.6	332	23	7.6	5.9	001												
3.0 „ .	19	11.1	3.4	322	18	6.6	4.0	341												
3.6 „ .	15	10.7	1.6	317	15	7.7	3.9	333												
4.5 „ .	13	11.8	2.7	320	5	6.8	5.9	046												
5.4 „ .	10	10.2	1.9	065	3	11.7	10.5	090												
6.0 „ .	8	10.4	6.3	069	1	5.0	5.0	060												
7.2 „ .	3	11.7	11.1	050																
9.0 „ .	2	20.0	20.0	083																

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS.

Winds above 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

AGARTALA

0530 hrs.

Ht in Km	n	V	v	D
10.5	5	18.8	16.9	077
12.0	2	25.0	23.3	115
14.1	1	33.0	33.0	095

1730 hrs.

Ht in Km	n	V	v	D
10.5	2	10.5	10.5	138

AHMEDABAD

0530 hrs.

Ht in Km	n	V	v	D
10.5	2	6.0	4.5	2 2
12.0	1	11.0	11.0	185

1730 hrs.

Ht in Km	n	V	v	D
10.5	6	10.8	5.5	184
12.0	6	14.5	9.2	173
14.1	5	24.0	20.8	169
16.2	3	31.7	22.3	17·5
18.0	1	16.0	16.0	135

AMBALA

1730 hrs.

Ht in Km	n	V	v	D
10.5	1	37.0	37.0	245

AMRITSAR

0530 hrs.*

Ht in Km	n	V	v	D
10.5	20	63.7	56.7	251
12.0	18	58.1	57.7	251
14.1	14	50.3	49.2	246
16.2	6	36.6	36.0	244
18.0	4	26.3	25.5	220

1730*

Ht in Km	n	V	v	D
10.5	18	53.1	52.0	248
12.0	16	60.5	59·4	248
14.1	11	49.4	48.8	244
16.2	5	42.4	41.2	252
18.0	1	67.0	67.0	260
21.0	1	93.0	93.0	270
24.0	1	96.0	96.0	270

ANANTAPUR

0530 hrs.

Ht in Km	n	V	v	D
10.5	8	18.5	17.4	098
12.0	5	24.6	22.5	110
14.1	3	37.0	36.6	097

ANANTAPUR

1730 hrs.

Ht in Km	n	V	v	D
10.5	3	15.3	14.5	143
12.0	3	24.3	22.8	090
14.1	3	45.7	44.6	092
16.2	2	58.0	58.0	107
10.8	2	36.0	34.9	093

BAGHDOGRA

0530 hrs.

Ht in Km	n	V	v	D
10.5	1	7.0	7.0	355

BAIRAGARH

1730 hrs.

Ht in Km	n	V	v	D
10.5	6	6.7	5.7	137
12.0	5	1.44	13.2	149
14.1	3	15.7	13.6	115
16.2	1	25.0	25.0	130

BAMRAULI

0530 hrs.*

Ht in Km	n	V	v	D
10.5	22	12.0	6.7	192
12.0	21	14.4	6.5	206
14.1	17	16.8	7.3	178
16.2	11	17.2	9.0	161
18.0	6	14.7	8.3	157

1130 hrs.

Ht in Km	n	V	v	D
10.5	7	14.1	13.1	222
12.0	6	15.6	9.5	230
14.1	6	20.6	19.1	192
16.2	6	12.3	10.6	173
18.0	5	17.2	15.8	103
21.0	3	34.0	29.6	135

1730 hrs.*

Ht in Km	n	V	v	D
10.5	17	15.8	7.0	185
12.0	14	18.8	9.3	179
14.1	10	20.3	14.2	186
16.2	5	17.4	13.1	167
18.0	2	14.0	12.5	186
21.0	2	17.5	17.1	140
24.0	1	34.0	34.0	140

BANGALORE

0530 hrs.

Ht in Km	n	V	v	D
10.5	1	3.0	3.0	105

1730 hrs.

Ht in Km	n	V	v	D
10.5	5	18.6	11.8	077
12.0	4	30.0	29.0	093
14.1	1	35.0	35.0	070
16.2	1	55.0	55.0	095
18.0	1	30.0	30.0	120
21.0	1	23.0	23.0	105

BAREILLY

0530 hrs.

Ht in Km	n	V	v	D
10.5	1	31.0	31.0	225

1730 hrs.

Ht in Km	n	V	v	D
10.5	1	43.0	43.0	270
12.0	1	45.0	45.0	260

BEGUMPET

0530 hrs.

Ht in Km	n	V	v	D
10.5	3	9.0	8.6	104
12.0	2	16.0	16.0	115
14.1	2	39.5	39.5	117
16.2	2	41.5	41.5	120
18.0	2	42.0	41.3	106
21.0	2	18.0	17.6	092
24.0	2	29.0	29.0	062
27.0	2	27.0	26.5	045

1730 hrs.

Ht in Km	n	V	v	D
10.5	4	17.0	16.5	088
12.0	4	20.0	19.3	091
14.1	4	25.0	25.2	100
16.2	4	38.0	37.5	098

BEGUMPET

1730 hrs.

Ht in Km	n	V	v	D
18.0	4	31.5	31.4	101
21.0	2	35.5	31.7	112
24.0	1	34.0	34.0	080
27.0	1	32.0	32.0	090

BHAGALPUR

0530 hrs.

Ht in Km	n	V	v	D
10.5	2	7.0	6.5	101
12.0	2	6.5	6.2	151
14.1	1	10.0	10.0	160
16.2	1	14.0	14.0	155

1730 hrs.

Ht in Km	n	V	v	D
10.5	2	5.0	3.8	221
12.0	2	11.0	10.4	201

BHUBANESHWAR

0530 hrs.

Ht in Km	n	V	v	D
10.5	1	19.0	19.0	110

BHUJ

1730 hrs.

Ht in Km	n	V	v	D
10.5	12	13.6	9.4	201
12.0	10	14.8	11.9	186
14.1	6	20.5	18.1	181
16.2	3	33.0	22.7	150
18.0	2	56.0	40.9	270
21.0	1	50.0	50.0	125

BIKANER

1730 hrs.

Ht in Km	n	V	v	D
10.5	7	25.7	24.9	251
12.0	5	19.2	18.3	252
14.1	2	25.0	21.5	237

DARJEELING

0530 hrs.

Ht in Km	n	V	v	D
10.5	2	10.5	4.1	217

DUM DUM

0530* hrs.

Ht in Km	n	V	v	D
10.5	27	12.9	8.5	125
12.0	26	16.0	14.1	117
14.1	19	17.8	15.5	101
16.2	12	27.2	25.2	106
18.0	3	31.3	30.7	103

1730 hrs.*

Ht in Km	n	V	v	D
10.5	30	9.9	6.9	114
12.0	26	11.6	9.0	102
14.1	19	19.5	13.4	263
16.2	10	23.7	18.7	065
18.0	2	17.5	17.4	125

GANNAVARAM

1730 hrs.

Ht in Km	n	V	v	D
10.5	2	16.0	13.5	115
12.0	1	36.0	36.0	130
14.1	1	43.0	43.0	110

GAUHATI

0530 hrs.*

Ht in Km	n	V	v	D
10.5	12	12.3	4.3	209
12.0	11	14.5	2.0	199
14.1	6	16.2	2.4	183
16.2	3	17.7	16.8	104
18.0	1	13.0	13.0	020

1730 hrs.*

Ht in Km	n	V	v	D
10.5	8	13.2	5.9	270
12.0	5	12.6	3.8	044
14.1	2	9.5	9.5	270

GAYA

0530 hrs.

Ht in Km	n	V	v	D
10.5	2	11.0	5.1	144
12.0	1	12.0	12.0	175
14.1	1	7.0	7.0	125

1730 hrs.

Ht in Km	n	V	v	D
10.5	1	15.0	15.0	180

GOPALPUR

0530 hrs.

Ht in Km	n	V	v	D
10.5	3	17.7	17.4	107
12.0	2	17.0	15.7	104

1730 hrs.

Ht in Km	n	V	v	D
10.5	4	16.0	14.9	107
12.0	1	16.0	16.0	135

Table V—Monthly Mean Directions and Velocities of Upper Winds.

Winds above 9·0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Ht in km	n	V	v	D
	GORAKHPUR			
	0530 hrs.			
10.5	3	11.3	9.9	215
	1730 hrs.			
10.5	4	9.3	7.9	204
12.0	3	9.3	5.0	280
14.1	1	16.0	16.0	010
	GWALIOR			
	0530 hrs.			
10.5	11	12.1	10.1	240
12.0	8	21.9	14.7	237
14.1	6	29.5	28.5	220
16.2	4	24.0	17.7	214
18.0	2	24.0	10.2	185
	1730 hrs.			
10.5	4	23.3	21.9	261
12.0	2	31.0	29.8	242
	JABALPUR			
	0530 hrs.			
10.5	1	4.0	4.0	280
12.0	1	5.0	5.0	125
14.1	1	22.0	22.0	095
	1730 hrs.			
10.5	1	3.0	3.0	340
12.0	1	12.0	12.0	110
14.1	1	16.0	16.0	100
	JAIPUR			
	0530 hrs.			
10.5	1	18.0	18.0	315
	1730 hrs.			
10.5	1	11.0	11.0	215
	JAMSHEDPUR			
	0530 hrs.			
10.5	2	6.0	5.7	124
12.0	1	11.0	11.0	120
	JODHPUR			
	0530 hrs.*			
10.5	19	25.2	24.4	232
12.0	14	27.7	26.8	232
14.1	9	28.7	28.2	226
16.2	8	14.0	11.0	189

Ht in Km	n	V	v	D
	JODHPUR			
	1130 hrs.			
10.5	4	16.3	15.4	214
12.0	2	26.0	25.4	243
14.1	2	10.5	10.3	160
16.2	2	12.0	7.9	143
18.0	1	17.0	17.0	065
	1730 hrs.*			
10.5	20	21.4	18.9	240
12.0	14	21.5	19.7	218
14.1	8	26.0	23.9	212
	MADRAS			
	0530 hrs.*			
10.5	18	24.4	23.8	091
12.0	14	39.1	38.2	092
14.1	11	48.5	46.3	090
16.2	5	45.6	45.5	091
18.0	2	30.0	28.7	100
21.0	1	24.0	24.0	085
	1130 hrs.			
10.5	14	21.2	20.6	100
12.0	9	37.0	36.4	098
14.1	7	48.9	48.6	102
16.2	5	34.4	34.2	095
18.0	3	18.0	17.8	091
21.0	1	51.0	51.0	090
	1730 hrs.*			
10.5	24	23.3	22.4	090
12.0	20	36.0	35.2	087
14.1	18	45.4	44.1	087
16.2	10	48.9	48.3	092
18.0	2	58.5	58.5	088
21.0	1	69.0	69.0	100
	MANGALORE			
	1730 hrs.			
10.5	12	18.3	17.5	090
12.0	7	34.0	33.6	109
14.1	6	52.0	50.9	100
16.2	6	47.5	47.0	099
18.0	3	29.0	28.8	101
21.0	1	17.0	17.0	115

Ht in Km	n	V	v	D
	MINICOY			
	0530 hrs.			
10.5	7	24.6	24.0	102
12.0	4	40.7	28.3	098
	1730 hrs.			
10.5	15	28.1	27.3	103
12.0	10	33.5	32.9	100
14.1	5	49.8	36.8	117
	NAGPUR			
	0530 hrs.*			
10.5	20	13.1	11.4	109
12.0	15	17.2	14.1	106
14.1	4	22.7	22.0	124
16.2	1	10.0	10.0	120
18.0	1	12.0	12.0	085
	1130 hrs.			
10.5	5	10.0	9.6	092
12.0	5	13.2	12.7	105
14.1	3	14.3	14.1	100
16.2	2	27.5	27.3	110
18.0	1	55.0	55.0	105
	1730 hrs.*			
10.5	13	15.2	12.5	100
12.0	10	17.5	16.7	094
14.1	5	26.2	25.3	112
16.2	3	36.3	34.8	113
18.0	3	40.3	38.3	111
21.0	1	41.0	41.0	100
24.0	1	45.0	45.0	100
	NANPARA			
	0530 hrs.			
10.5	1	20.0	20.0	270
	NEW DELHI			
	0530 hrs.*			
10.5	29	27.1	25.8	249
12.0	26	28.5	26.2	244
14.1	24	27.3	24.9	239
16.2	22	19.9	16.3	232
18.0	15	14.3	2.3	224
21.0	6	17.7	6.5	230
24.0	2	24.5	7.7	240
27.0	2	10.5	10.4	243

Ht in Km	n	V	v	D
	NEW DELHI			
	1130 hrs.			
10.5	17	38.9	38.0	242
12.0	12	38.6	36.3	236
14.1	9	30.1	29.1	235
16.2	7	29.4	27.6	216
18.0	6	27.3	25.2	203
21.0	1	9.0	9.0	040
24.0	1	35.0	35.0	085
	1730 hrs.*			
10.5	25	27.6	24.1	240
12.0	25	27.4	25.4	241
14.1	24	27.7	24.1	237
16.2	17	25.2	22.9	231
18.0	14	15.9	10.2	216
21.0	6	17.7	10.2	198
24.0	4	15.5	13.2	243
27.0	2	32.0	11.0	185
30.0	1	14.0	14.0	090
	POONA			
	1730 hrs.			
10.5	3	14.7	13.0	104
12.0	3	17.0	15.9	112
14.1	3	26.3	24.4	117
	PORT BLAIR			
	0530 hrs.*			
10.5	5	27.0	25.8	081
12.0	4	43.7	43.2	091
14.1	2	65.0	64.7	096
16.2	1	81.0	81.0	100
	1730 hrs.*			
10.5	3	29.7	25.7	087
12.0	2	51.5	50.9	090
	RAIPUR			
	0530 hrs.			
10.5	1	11.0	11.0	120
	1730 hrs.			
10.5	3	14.7	9.8	131
12.0	2	19.0	18.9	130
14.1	2	38.5	38.5	131

Ht in Km	n	V	v	D
	SANTA CRUZ			
	0530 hrs.*			
10.5	20	12.9	8.8	092
12.0	16	17.3	14.6	091
14.1	12	27.6	26.1	105
16.2	4	69.8	66.5	110
18.0	3	30.7	30.0	107
21.0	1	49.0	49.0	110
24.0	1	57.0	57.0	090
27.0	1	82.0	82.0	110
	1730 hrs.*			
10.5	18	14.0	10.4	084
12.0	17	20.0	18.4	107
14.1	15	30.5	29.1	120
16.2	8	30.4	29.9	107
18.0	2	22.0	22.0	086
	TIRUCHIRAPALLI			
	0530 hrs.			
10.5	3	23.3	22.4	091
12.0	2	27.0	26.8	075
14.0	1	47.0	47.0	100
	1730 hrs.			
10.5	12	22.8	22.3	095
12.0	11	39.4	38.5	100
14.1	7	57.7	54.1	092
16.2	3	50.3	49.3	090
	TRIVANDRUM			
	0530 hrs.*			
10.5	20	25.0	24.1	099
12.0	18	40.4	38.1	092
14.1	9	50.8	49.5	088
16.2	6	47.2	45.8	099
18.0	2	75.0	74.5	096
	1730 hrs.*			
10.5	23	27.9	26.3	093
12.0	20	41.1	40.6	089
14.1	16	49.2	47.4	092
16.2	11	39.0	38.1	085
18.0	3	29.7	29.3	098

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 Km. above mean sea level

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Ht in Km	n	V	v	D	Ht in Km	n	V	v	D	Ht in Km	n	V	v	D	Ht in Km	n	V	v	D	Ht in Km	n	V	v	D
			UDAIPUR																					
			1730 hrs.																					
10.5	3	17.6	8.7	227																				
12.0	1	16.0	16.0	100																				
14.1	1	23.0	23.0	095																				
16.2	1	37.0	37.0	125																				
			VERAVAL																					
			0530 hrs.*																					
10.5	18	12.4	6.3	145																				
12.0	16	20.6	15.7	136																				
14.1	12	25.0	22.7	128																				
16.2	5	24.0	22.4	115																				
18.0	3	42.0	41.6	100																				
21.0	1	36.0	36.0	090																				
			1730 hrs.*																					
10.5	19	15.6	9.9	133																				
12.0	19	20.7	17.2	135																				
14.1	13	31.3	28.0	132																				
16.2	9	33.7	30.6	122																				
18.0	5	30.4	30.1	117																				
			VISAKHAPATNAM																					
			0530 hrs.																					
10.5	1	22.0	22.0	100																				

RADIOSONDE DATA

September, 1957 (Bhadra 10—Asvina 8, 1879 Saka)

During the month, observations of upper air temperature, pressure and humidity were made at 13 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I.M.D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

S.No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad . . .	Clock type	1st October 1944	00 and 12	
2	Amritsar . . .	Clock type	21st June 1957	00 and 12	
3	Bombay . . .	Clock type	7th September 1954	00 and 12	
4	Calcutta . . .	Clock type	13th December 1946	00 and 12	Fan type used from 13th December, 1946 to 30th November, 1947.
5	Gauhati . . .	Clock type	22nd July 1955	00 and 12	
6	Jodhpur . . .	Clock type	17th April 1946	00 and 12	
7	Madras . . .	Fan type	29th June 1946	00 and 12	
8	Nagpur . . .	Fan type	1st October 1946	00 and 12	
9	New Delhi . . .	Clock type	3rd December 1943	00 and 12	
10	Port Blair . . .	Fan type	4th December 1949	00 and 12	
11	Trivandrum . . .	Fan type	1st July 1947	00 and 12	
12	Veraval . . .	Fan type	3rd October 1944	00 and 12	
13	Visakhapatnam . .	Fan type	8th December 1946	00 and 12	

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Standard pressure Surface mbs.	ALLAHABAD Surf. Pr. (993 mb.)						AMRITSAR (979 mb.)						BOMBAY (1007 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	98	297.9	300	295	295.9	30	230	296.8	299	293	293.5	30	13	298.4	301	297	296.0
1000	26	39	..	..	..	..	29	41	..	..	..	..	30	76	..	..	..	..
900	26	965	296.2	299	293	289.3	29	967	297.4	303	293	286.6	30	997	293.2	297	290	290.7
850	26	1462	293.0	297	290	286.6	29	1465	294.4	299	291	283.8	30	1490	290.7	294	287	287.4
800	26	1983	289.7	294	287	283.4	29	1988	291.0	294	287	281.3	30	2007	288.1	292	284	284.4
700	26	3108	283.2	287	278	275.9	29	3116	283.4	287	280	271.9	30	3129	282.1	288	278	277.7
600	26	4378	277.4	283	273	265.7	29	4379	274.6	279	271	260.7	30	4394	276.9	280	273	266.5
500	26	5846	270.5	274	266	..	29	5821	265.3	273	261	..	30	5863	271.1	275	265	258.8
400	26	7586	261.7	265	257	..	27	7531	256.7	263	251	..	30	7606	261.0	269	251	..
300	23	9725	247.0	253	244	..	26	9662	245.3	257	239	..	26	9744	247.0	264	231	..
250	22	11016	237.7	248	234	..	22	10941	237.0	250	228	..	23	11 22	236.7	250	220	..
200	21	12534	226.3	233	221	..	21	12445	226.1	241	216	..	19	12562	225.2	232	219	..
175	20	13103	219.5	227	213	..	21	13329	219.2	237	209	..	18	13393	218.7	226	210	..
150	20	14385	213.1	222	206	..	20	14312	213.3	229	200	..	14	14378	211.9	220	203	..
125	17	15525	207.6	218	199		18	15437	207.3	221	194	..	12	15508	205.9	215	198	..
100	13	16861	202.5	214	195		14	16748	203.5	231	193		7	16832	199.7	207	193	
80	10	18194	197.9	210	188		12	18088	206.0	237	196							

	CALCUTTA (1004 mb.)						GAUHATI (1000 mb.)						JODHPUR (982 mb.)					
Surface	29	6	300.0	304	297	299.0	30	49	298.9	303	297	298.6	29	218	297.7	301	294	291.6
1000	29	46	..	..	..	..	30	53	..	..	..	..	29	56	..	..	..	..
900	29	970	295.0	298	291	291.9	30	977	294.5	299	290	293.0	29	980	296.4	300	293	287.0
850	29	1465	292.6	299	288	288.6	30	1471	291.5	296	287	289.9	29	1477	293.7	297	285	282.8
800	29	1985	289.5	293	285	285.5	30	1989	288.6	295	284	286.9	29	1996	290.3	299	285	280.0
700	29	3111	283.2	288	277	278.7	30	3114	283.1	291	279	280.3	29	3121	282.5	288	277	270.8
600	28	4385	277.2	281	273	271.6	30	4382	276.3	286	271	272.1	29	4379	274.5	281	268	260.8
500	28	5841	269.5	275	263	..	29	5840	268.2	277	260	..	28	5832	268.3	273	260	..
400	28	7584	259.6	267	249	..	28	7562	258.5	270	247	..	28	7562	259.5	266	248	..
300	24	9702	243.9	252	230	..	16	9688	245.9	257	231	..	25	9704	244.9	252	233	..
250	22	10980	234.8	243	220	..	15	10999	238.3	250	231	..	23	11005	235.8	249	223	..
200	20	12503	225.5	233	209	..	14	12529	227.6	241	220	..	20	12503	224.7	234	213	..
175	13	13443	220.4	229	207	..	11	13408	220.7	232	215	..	18	13359	217.6	228	206	..
150	10	14437	213.6	223	201	..	9	14416	214.8	223	208	..	10	14262	208.5	220	191	..
125						..	8	15439	207.0	219	199	..	9	15354	202.4	209	193	..
100						..	7	16785	200.3	213	195	..	6	16713	196.3	202	187	
80												..						

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Standard pressure Surface mbs.	MADRAS Surf. Pr. (1005 mb.)						NAGPUR (971 mb.)						NEW DELHI (981 mb.)				
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A		
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	15	299.6	301	298	296.4	30	311	297.7	301	296	294.0	30	210	296.7	300	295	293.0
1000	30	59	..	..	..	..	30	50	..	..	..	..	30	38	..	..	..	..
900	30	986	295.9	299	292	289.0	30	975	296.6	300	294	288.8	30	963	296.7	302	291	288.0
850	30	1482	292.6	295	290	286.9	30	1472	293.1	295	290	285.9	30	1460	293.5	298	290	285.8
800	30	2002	288.8	291	286	285.1	30	1992	289.6	291	287	282.5	30	1981	291.2	293	288	282.1
700	30	3124	281.7	284	278	277.3	30	3117	282.6	287	279	275.4	30	3105	282.2	285	278	274.2
600	30	4386	275.0	279	270	268.5	28	4379	276.0	279	271	267.6	30	4364	274.5	278	270	264.3
500	29	5836	266.4	271	261	..	28	5839	269.2	273	264	..	30	5817	268.1	273	263	..
400	29	7548	257.0	263	249	..	25	7568	259.1	264	253	..	29	7552	258.8	265	247	..
300	23	9653	242.1	250	239	..	22	9686	243.1	250	235	..	29	9670	243.9	254	235	..
250	18	10920	237.2	243	226	..	19	10998	234.8	243	224	..	27	10952	234.4	244	231	..
200	11	12373	218.5	229	211	..	13	12469	222.8	232	212	..	26	12491	222.6	235	216	..
175	11	13212	212.9	222	206	..	8	13377	218.4	225	212	..	25	13310	215.5	229	208	..
150	9	14162	205.2	215	199	..	7	14340	210.7	219	204	..	25	14267	207.6	223	199	..
125	6	15233	201.0	209	193	..	..	..	..	..	..	..	24	15367	201.3	217	195	..
100	..	..	..	..	..	..	..	..	..	..	..	..	23	16633	198.2	211	190	..
80													18	17984	200.8	207	189	..

	PORT BLAIR (999 mb.)						TRIVANDRUM (1003 mb.)						VERAVAL (1007 mb.)					
Surface	30	79	297.8	299	296	296.6	30	64	297.1	298	297	294.9	30	8	298.8	301	297	295.8
1000	11	72	..	..	..	..	30	87	..	..	..	..	30	71	..	..	..	..
900	11	993	293.8	296	292	291.4	30	1004	292.2	295	290	288.7	30	990	293.2	298	290	288.0
850	11	1485	291.2	295	288	288.4	30	1495	289.8	295	287	284.9	30	1482	291.1	297	287	281.0
800	11	2003	288.4	291	286	284.6	30	2011	287.8	291	282	281.4	30	2001	288.0	292	285	281.7
700	11	3127	283.2	286	281	279.3	30	3131	281.9	285	278	274.4	29	3117	281.4	285	278	273.7
600	11	4395	276.8	279	273	272.7	30	4389	274.2	277	271	264.9	29	4377	276.1	282	271	258.6
500	11	5852	268.1	272	265	..	30	5837	266.5	269	263	..	29	5841	270.4	274	265	..
400	11	7571	257.2	266	251	..	30	7546	255.8	259	253	..	27	7580	259.9	265	257	..
300	6	9686	242.6	254	237	..	27	9637	240.4	247	234	..	24	9700	243.4	248	238	..
250	6	10961	234.5	248	228	..	21	10899	230.2	240	223	..	21	10977	233.4	240	225	..
200	..	..	..	..	..	..	19	12355	219.2	233	209	..	17	12479	222.3	229	217	..
175	..	..	..	..	..	..	16	13187	212.7	221	201	..	15	13340	216.9	224	213	..
150	..	..	..	..	..	..	16	14156	206.7	217	195	..	14	14304	209.7	219	205	..
125	..	..	..	..	..	..	10	15284	201.8	212	195	..	11	15380	202.4	208	197	..
100							7	16604	201.7	216	196	..	7	16700	197.0	201	194	..
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Standard pressure surface mbs.	VISAKHAPATNAM Surf. Pr. (999 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	30	48	300.3	303	298	296.6
1000	30	42	..	..	.	..
900	30	971	295.9	300	291	290.5
850	30	1468	292.9	296	287	288.1
800	30	1988	289.4	293	283	284.8
700	30	3113	283.2	287	278	278.8
600	30	4380	276.6	282	272	272.4
500	30	5841	268.8	276	262	..
400	30	7566	258.2	262	246	..
300	27	9691	243.2	248	235	..
250	25	10957	232.1	237	219	..
200	20	12468	221.5	229	211	..
175	17	13318	216.1	224	208	..
150	17	14278	209.3	219	199	..
125	13	15379	201.3	207	195	..
100	9	16662	198.3	204	193	..
80						

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Standard pressure surface mbs.	ALLAHABAD Surf Pr. (992 mb.)						AMRITSAR Surf. Pr. (978 mb.)						BOMBAY (1006 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point.
Surface	30	98	303.8	307	299	296.2	30	23	3 6.5	310	299	293.4	30	13	302.2	303	299	296.1
1000	25	25	..	..	..	..	30	28	..	..	..	..	30	68	..	..	..	..
900	25	962	298.2	305	295	289.5	29	971	300.4	304	296	286.6	30	997	295.2	302	292	289.3
850	25	1462	294.9	3 3	291	286.7	29	1473	296.4	301	292	283.1	30	1492	291.9	295	289	285.8
800	25	1987	291.9	295	288	282.9	29	1999	292.7	296	289	278.9	30	2011	289.1	292	286	282.7
700	25	3122	285.6	292	283	273.8	29	3133	285.0	289	282	269.3	29	3135	283.0	287	277	274.8
600	25	4402	279.5	282	275	262.9	28	4403	275.9	282	270	257.4	29	4406	278.1	281	274	263.9
500	24	5880	272.5	277	269	254.3	27	5856	267.9	275	263	..	29	5876	271.6	275	268	..
400	24	7633	262.6	267	256	..	26	7578	257.6	267	248	..	29	7625	261.9	268	257	..
300	21	9799	249.2	254	244	..	24	9701	2:6.2	258	238	..	26	9767	246.6	257	241	..
250	18	11121	240.0	246	235	..	21	10987	237.6	251	227	..	25	11055	237.3	252	231	..
200	15	12661	228.3	237	223	..	20	12490	226.4	2:0	214	..	22	12552	226.5	247	219	..
175	14	13539	221.9	234	217	..	19	13377	22).3	237	208	..	19	13411	218.4	230	211	..
150	12	14538	215.5	230	209	..	17	14375	214·9	232	208	..	17	14373	211·2	225	202	..
125	10	15691	207.9	225	201	..	17	155(6	209·1	226	201	..	12	15484	203·2	210	193	..
100	5	17082	204.4	221	198	..	14	16872	205·2	220	197	..	9	16842	200.0	204	195	..
80							10	18262	207.3	217	199	..						

	CALCUTTA (1003 mb.)						GAUHATI (998 mb.)						JODHPUR Surf Pr. (98) mb)					
Surface	30	6	302.8	307	298	299.2	30	49	302.4	306	299	300.8	30	218	306.2	309	3 2	290.4
1000	30	30	..	..	..	..	30	31	..	..	..	..	30	38	..	..	..	..
900	30	929	297.1	300	292	292.9	30	964	296.8	301	294	294.2	30	983	3 0.2	304	295	285.2
850	30	1460	294.1	297	288	289.3	30	1463	294.1	299	290	290.7	30	1484	296.3	301	291	282.1
800	30	1983	291.5	295	287	286.5	30	1985	291.2	297	285	287.7	30	2011	292.1	299	287	279.1
700	30	3117	285.4	290	279	28 1.1	30	3119	285.2	291	280	281.2	30	3138	283.7	291	278	269.5
600	30	4397	279.3	284	272	273.2	30	4393	278.8	285	275	274.4	30	44 5	276.2	286	270	252.4
500	30	5873	271.5	276	265	261.3	30	5865	270.6	279	267	..	29	5869	270.9	277	264	..
400	30	7620	260.8	267	253	..	30	7601	260.1	268	230	..	29	7615	261.5	267	254	..
300	24	9755	246.3	257	237	..	21	9737	246.4	254	241	..	24	9766	247.0	254	239	..
250	23	11056	236.2	252	225	..	17	11049	235.4	247	217	..	22	11055	236.8	244	226	..
200	17	12574	226.1	244	216	..	14	12561	225.4	237	213	..	20	12572	226.0	238	216	..
175	14	13413	219.0	229	209	..	6	13423	219.8	229	213	..	17	13428	219.5	234	210	..
150	12	14351	210.5	228	199	..							15	14401	212.6	230	203	..
125	8	15430	200.1	206	191	..							9	15472	204.1	211	193	..
100	7	16780	194.9	203	180	..							6	16850	200.5	209	197	..
80													5	18215	207.4	216	201	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Standard pressure Surface mbs.	MADRAS (1003 mb.)						NAGPUR (969 mb.)						NEW DELHI (980 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	15	303.4	306	298	296.6	30	311	303.8	306	299	293.5	30	210	302.6	306	296	294.6
1000	30	45	..	..	..	..	30	30	..	..	..	..	30	29	..	..	..	..
900	30	981	297.4	300	295	290.7	30	967	299.2	304	295	288.0	30	966	298.3	303	292	288.2
850	30	1479	293.6	297	289	287.9	30	1471	294.9	298	292	285.9	30	1465	294.9	301	290	284.9
800	30	2001	289.8	293	287	285.3	30	1993	290.8	294	285	283.0	30	1988	291.5	297	287	281.3
700	30	3126	282.9	287	279	278.1	30	3121	283.3	288	279	275.7	30	3117	283.8	288	277	272.6
600	30	4395	276.6	280	273	269.6	28	4390	277.1	281	268	267.3	30	4384	276.5	285	270	261.1
500	30	5854	268.3	273	264	..	27	5861	270.8	274	266	261.8	30	5848	269.8	276	263	..
400	30	7576	257.4	266	252	..	24	7599	260.8	270	256	..	29	7584	260.4	268	251	..
300	24	9687	242.6	247	236	..	15	9730	245.6	256	241	..	26	9726	245.3	251	238	..
250	22	10964	233.0	240	226	..	13	11024	236.1	249	226	..	26	11009	234.8	242	228	..
200	19	12457	221.7	229	215	..	11	12548	224.7	243	212	..	26	12506	222.8	232	217	..
175	17	13298	214.8	224	206	..	8	13473	218.7	236	210	..	25	13375	216.1	226	208	..
150	17	14257	207.9	219	197	..	6	14466	212.6	228	201	..	25	14336	209.1	219	199	..
125	14	15334	202.0	214	193	..						..	20	15447	203.5	210	197	..
100	8	16636	198.9	211	191	..							17	16772	198.3	203	191	..
80													16	18065	200.1	209	193	..

	PORT BLAIR (998 mb.)						TRIVANDRUM (1001 mb)						VERAVAL Surf. pr. (1007 mb.)					
Surface	30	79	299.5	301	298	297.1	30	64	301.6	303	300	295.8	30	8	302.1	303	301	297.1
1000	11	61	..	..	..	..	30	73	..	..	..	..	30	69	..	..	..	..
900	11	988	294.5	298	293	291.9	30	1000	294.7	298	291	288.8	30	994	294.5	297	289	288.6
850	11	1482	291.5	293	288	288.6	30	1494	291.9	295	289	285.7	30	1487	291.9	295	289	285.0
800	11	2010	288.8	291	286	286.2	30	2013	289.2	293	287	282.4	30	2006	289.0	293	286	281.5
700	11	3126	283.6	289	281	277.8	30	3138	283.6	287	281	274.3	30	3128	282.1	287	279	274.0
600	11	4395	277.0	281	273	272.2	30	4405	276.3	279	273	267.7	29	4391	277.1	283	271	261.3
500	11	5856	269.1	276	263	..	30	5862	268.2	273	262	..	29	5856	271.2	277	264	..
400	11	7582	257.8	268	253	..	30	7588	257.6	263	250	..	28	7601	260.2	265	258	..
300		..				..	28	9696	242.2	250	236	..	21	9728	243.5	249	234	..
250		..				..	24	10975	233.3	241	224	..	20	10959	234.3	242	226	..
200		..				..	20	12463	220.7	230	211	..	19	12511	223.4	233	217	..
175		..				..	19	13270	215.6	224	207	..	15	13368	217.4	228	207	..
150		..				..	17	14265	207.9	218	203	..	14	14339	211.2	225	200	..
125		..				..	12	15328	203.7	211	198		13	15444	203.9	222	192	..
100							11	16671	201.7	298	194		8	16821	203.4	216	195	..
80													6	18150	201.3	210	196	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G.M.T.

September 1957 (Bhadra 10—Asvina 8, 1879 Saka)

Standard pressure Surface mbs.	VISAKHAPATNAM Surf. pr. (998 mb.)											
	No. of Obs.	Ht. gpm.	Temperature °A									
			Mean	Max.	Min.	Dew point						
Surface	30	48	302.9	305	299	298.2						
000	30	28	..	..	..	..						
900	30	962	296.4	300	294	291.4						
850	30	1460	293.0	297	290	288.2						
800	30	1980	288.9	295	286	285.9						
700	30	3107	283.7	289	279	279.3						
600	30	4377	277.1	285	271	270.7						
500	30	5839	268.6	275	259	..						
400	29	7561	257.5	267	246	..						
300	26	9676	243.1	254	229	..						
250	23	10957	233.6	245	218	..						
200	18	12504	220.4	235	205	..						
175	15	13304	214.9	232	202	..						
150	14	14266	206.9	226	192	..						
125	10	15295	198.9	216	184	..						
100	5	16496	198.6	209	194	..						
80	..	..	..	..	..	..						

NOTE:—Number of observations refer to those of dynamic height.

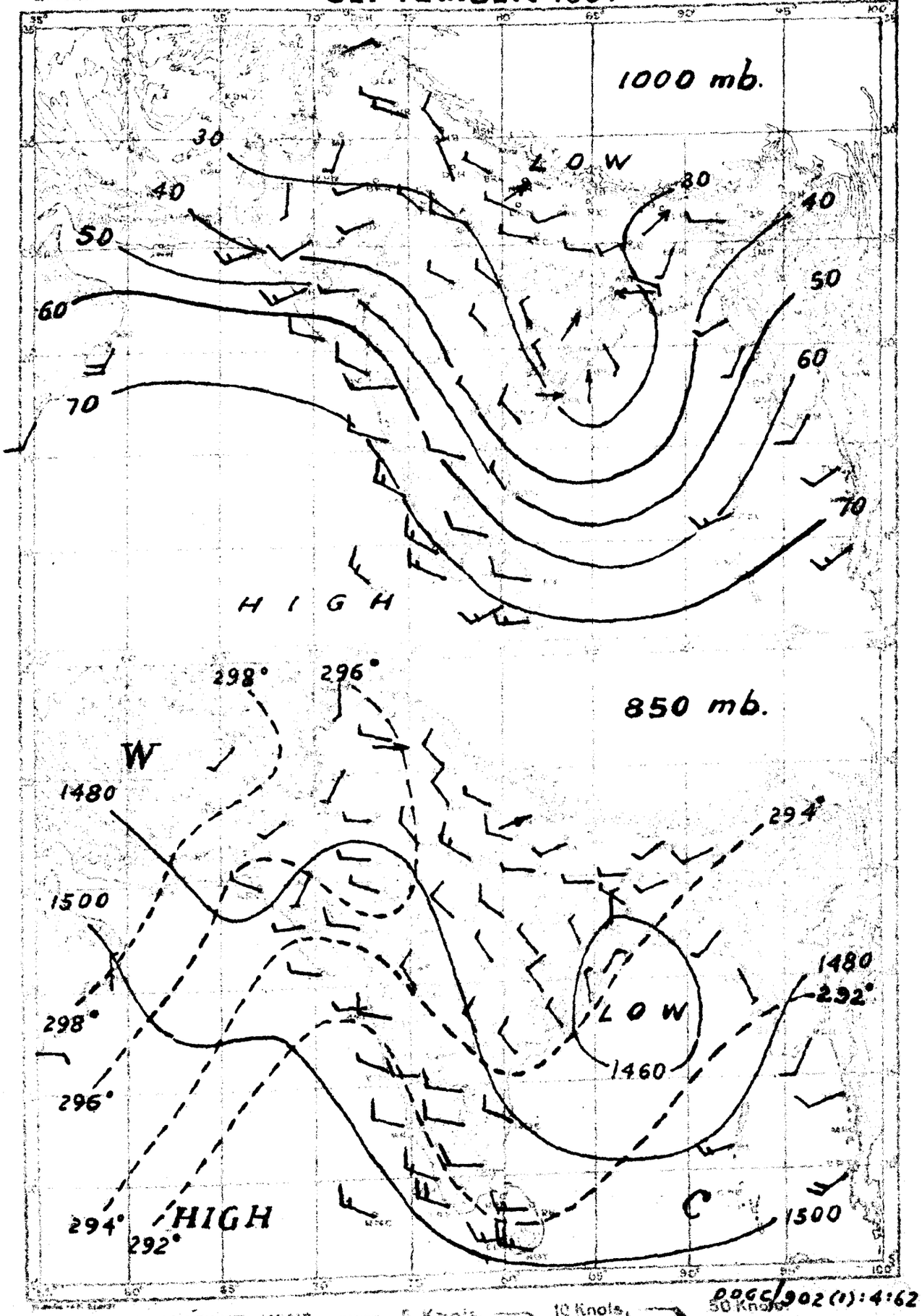
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273°A.

Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—S3—340 D. D. G. Obs. (Poona)/62—22-6-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I.Met.D. **SEPTEMBER 1957** *Plate I*



DOCC/902(1):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots

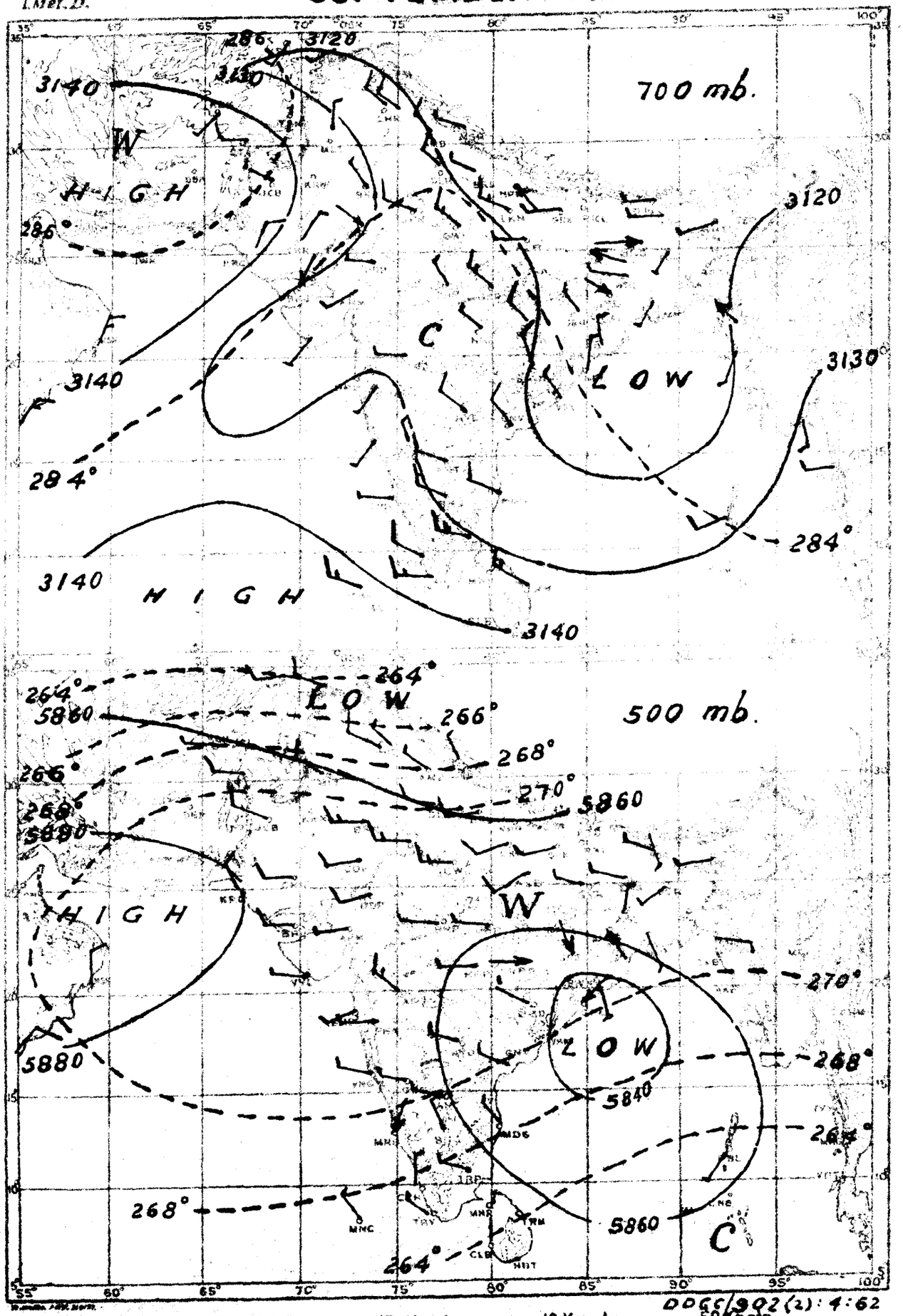
Isotherms in degrees absolute. —— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I.Met.D.

SEPTEMBER 1957

Plate II



DOCC/902(2):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

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INDIA WEATHER REVIEW, 1957

Monthly Weather Report

OCTOBER

APR 18 1964

Published by authority of the Government of India

Chief features :—

(1) Withdrawal of the monsoon from Assam and West Bengal on the 9th,

(2) Deficient rainfall over the country outside the south Peninsula and the extreme north and

(3) A good spell of rains over the Peninsula in the fourth week of the month in association with a depression in the Arabian Sea.

A shallow low pressure area which formed over the north Bay of Bengal on the 3rd, became well marked on the 4th with an associated cyclonic circulation extending upto 4 kms. It persisted there on the following day and became unimportant on the 6th. Under its influence, fairly widespread or local thundershowers occurred in Gangetic West Bengal from the 4th to 6th and in Assam from the 5th to 7th. The monsoon withdrew from West Bengal and Assam on the 9th.

A trough of low pressure formed in the east Arabian Sea off the Malabar Kanara coasts on the 7th and persisted there with varying intensities till the 11th. Under its influence, fairly widespread or local thundershowers occurred in Kerala between the 8th and 12th. Local or scattered thundershowers also occurred in the Mysore State during this period. Cochin recorded 13 cms on the 10th and Alleppey 12 cms on the 12th.

In association with an easterly wave which moved into the north Andaman Sea acros the Tenasserim on the 11th a trough of low pressure formed over the southeast Bay of Bengal and neighbourhood on the 13th. Moving slowly westwards across the south Bay, the trough was situated over the southwest Bay off the Coromandel coast on the 15th. It moved further westwards across the Comorin area and the extreme south of the Peninsula between the 17th and 18th causing widespread and locally heavy to very heavy rain in south Madras State on these days. Nagapattinam recorded 14 cms on the 17th and Pamban 12 cms on the 18th. The trough moved into the southeast Arabian Sea on the 19th and accentuated another feeble trough of low pressure which developed over the east central Arabian Sea on the 14th. By the morning of 21st, a well marked trough of low pressure lay over the southeast and east central Arabian Sea. It concentrated into a depression by the 22nd morning, when it was centred near Lat. 12° N and Long. 72° E. Moving initially northwards and later northwestwards, the depression lay in the east central Arabian Sea on the morning of 25th with its centre near Lat. 16° N and Long. 70° E. It, however, weakened rapidly into a trough of low pressure by the same night and merged into the seasonal low over the east Arabian Sea by the 26th. In association with the depression, moist air penetrated into the Peninsula between the 20th and the 25th. During this period, fairly widespread or local rain occurred in the southern parts of the Peninsula and scattered showers in the northern parts. Sholapur recorded 13 cms on the 24th and Hanamkonda 14 cms on the 25th. Local or scattered thundershowers were also reported from east Madhya Pradesh on the 24th and 25th, from Saurashtra and Kutch on the 24th and from west Madhya Pradesh and Gujarat on the 25th. According to press reports, the rainfall in the States of Mysore and Andhra Pradesh was timely and proved beneficial to crops.

A shallow low pressure area formed over the south Bay of Bengal on the 25th. Moving westwards, it became well marked on the 26th when it lay over the southwest Bay off the Coromandel Ceylon coast and persisted there for another day. Pursuing a westerly course across the extreme south of the Peninsula as a low pressure wave, it emerged into the southeast Arabian Sea on the 28th. By the next day, the low pressure wave moved further westwards into the Laccadives area and became unimportant on the 30th. Another easterly wave moved westwards across the Comorin area and the adjoining parts of Madras and Kerala States during the period 29th to 31st. Under the influence of the two disturbances, the wet spell in the southern parts of the Peninsula continued till the end of the month. Widespread and locally heavy rain occurred in south Madras and Kerlaa on the 27th and 28th. Some noteworthy amounts of rainfall were : Cochin 9 cms on the 27th, Tuticorin 17 cms and Cuddalore and Punalur 7 cms each on the 28th, Trivandrum 7 cms on the 29th. An isolated very heavy fall of 9 cms was reported from Jagdalpur in southeast Madhya Pradesh on the 30th.

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A westerly wave which moved across Jammu and Kashmir between the 15th and 16th caused local snow or thundershowers there from the 15th to 17th. With the eastward movement of the westerly wave over the Tibetan Plateau to the north of the Himalayas, scattered showers also occurred in west Utter Pradesh, Bihar and West Bengal on the 17th and local thundershowers in Assam and West Bengal on the 18th.

A western disturbance moved into the northern divisions of West Pakistan on the 19th. On the next day, it lay as a well marked trough of low pressure over West Pakistan and the adjoining areas of northwest India and remained practically stationary till the 22nd. Thereafter, it weakened and moving rapidly northeastwards became unimportant over Jammu and Kashmir on the 24th. It was responsible for a good spell of rainfall in Jammu and Kashmir, Himachal Pradesh, the Punjab (I) and west Uttar Pradesh from the 21st to 23rd. Srinagar and Mussooree recorded 5 cms and 4 cms of rain respectively on the 21st. Scattered showers were also reported from Rajasthan and east Uttar Pradesh on the 22nd and 23rd.

The total rainfall during the month was in large excess in the Punjab (I), Jammu and Kashmir, Telangana and north Mysore, in moderate excess in south Mysore and in slight excess in Maharashtra, Madras State and Kerala. It was normal in the Bay Islands, West Uttar Pradesh and coastal Mysore, in slight defect in Assam and in moderate defect in east Rajasthan, the Konkan, Coastal Andhra Pradesh and Rayalaseema. Over the rest of the country, it was in large defect.

Mean maximum temperature was above normal in Chota Nagpur, Bihar, east Madhya Pradesh Gujarat, Telangana and Rayalaseema, below normal in Jammu and Kashmir and normal elsewhere, Mean minimum temperature was above normal in west Rajasthan, Telangana, Rayalaseema and Interior Mysore and normal over the rest of the country.

Mean relative humidity was in excess in south Mysore, in defect in Chota Nagpur, Madhya Pradesh and Gujarat and normal elsewhere over the country.

Mean cloud amount was in excess in west Uttar Pradesh, Jammu and Kashmir, west Madhya Pradesh, Maharashtra, Vidarbha, Telangana, Madras State and coastal and north Mysore, in defect in east Uttar Pradesh and normal elsewhere.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
Dated the 17*th February* 1959.

S. S. LAL,
for *Director General of Observatories.*

Errata t o M.W.R. October 1957. (Asvina 9 - Kartika 9 1879 Saka)

Page No.	Station	Hour	Column	For	Read
Table I - Division					
489	3. Orissa		2	-11.5	-111.5
489	4. Bihar		2	-5.0	-55.0
489	10. Bombay		6	(Not clear)	-1
Sub-Division					
489	5. Orissa		2	-11.5	-111.5
489	6. Chota Nagpur		5	2.5	20.5
489	24. Rayalaseema		2	5 .0	51.0
489	24. Rayalaseema		2	-5 .6	-50.6
489	26. Coastal Mysore		2	+ 5.9	+ 15.9
489	26. Coastal Mysore		3	1 0	110
489	27. Mysore (North)		2	62.0	262.0
489	28. Mysore (South)		2	2 5.1	205.1
489	29. Kerala (Including Laccadives)		3	23	123
Table II					
				(n)	(n)
490	Digboi		17	6.5	5.6
491	Gopalpur		11	46.2	46.0
491	Jamshedpur		2	32.6	32.7
491	Hazaribagh		12	+76.6	-76.6
491	Forbesganj		23	3	4
491	Varanasi (Banaras) (Babatpur Aerodrome)		2	34.4	33.4
491	Lucknow (Amausi Aerodrome)		2	31.1	33.1
492	Mainpuri		1	Mainpuri*	Mainpuri
492	Aligarh		12	- .8	+6.8
492	Dehra Dun		7	-0.4	+0.4
492	Dehra Dun		10	0.1	20.1
492	Ambala		6	17.9	17.3
492	Srinagar		12	+1409	+140.9
492	Sonamarg		1	Sonemarg	Sonamarg
493	Surat		6	28.8	23.8
493	Surat		7	-1.5	+1.5
495	Trivandrum		12	-1.9	+1.9
496	Lokpal		8	5.6	-5.6

P.T.O.

Page No.	Station	Hour	Column	For	Read
Table III					
501	Bolangir	1730	2	1730	(R) 1730
501	(Heading)		15	Mean wind Velocity Kms. per hour.	Mean Wind speed Kms. per hour.
509					
502	Lucknow (Amausi Aerodrome)	2330	24	0	2
503	Aligarh	0830	8	19.	19.0
503	Aligarh	1730	8	20.	20.9
503	New Delhi	1130	8	20.	20.0
505	Barmer	0530	1	Barme	Barmer
506	Bhopal (Bairagarh)	2330	20	Blank	2
507	Dohad	1730	4	08.9	1008.9
507	Bhuj (P.B.O.)	0230	1	Bhuj (P.B.O.) contd. (o)	Bhuj (P.B.O.)
507	Bhuj (P.B.O.)	1730	15	10.9	10.9
508	Jamnagar	0830	2	,,	23
508	Jamnagar	1730	27	2	0
508	Veraval	0230	1	(Not clear)	Veraval
508	Veraval	0830	14	+0.3	-0.3
508	Vengurla	2330	2	* 2330	+2330
508	(Foot note)	-	-	(Not given)	+Wind directions for 26
508	(Foot note)	-	-	(Not given)	(g) Mean of 24 days
509	Aurangabad (Chikalthana Aerodrome)	0830	10	17.	17.1
509	Kolhapur	1730	28	Blank	0
509	(Foot note)	-	-	*Wind direction for 26 days	(delete)
509	(Foot note)	-	-	(g) Mean of 24 days	(delete)
510	Chanda - contd.	1730	3	,,	193
510	Chanda - contd.	1730	26	3	0
510	Rentachintala	0830	28	Blank	0
511	(Heading)	-	-	...March 1957	...October 1957
511	Anantapur	2330	21	1	11
511	Palayamcottai	1730	20	6	3
511	Tuticorin	0830	20	10	1
511	Tuticorin	1730	20	0	1
511	Cuddalore	0830	18	4	14
511	Madras	1130	17	0	3
511	Madras	1730	17	3	0
513	Cochin (Naval Air Station)	1730	23	0	1
513	Alleppey	1730	17	0	3
514	Hazaribagh	0830	4	1010.	1010.9

Errata to monthly weather report - October 1957 (Asvina 9 - Kartika 9, 1879 Saka)

Page No.	Station	Time in I.S.T	Ht. in Km.	Entry under column	Existing entry	Correct entry
518	Bangalore			Approximate time of flight	0730	1730
520	Anantapur	0530	0.6	v	3.5	8.5
520	Anantapur	2330	6.9	v	6.9	6.3
520	Baghdogra	1730	3.6	D	29	290
520	Baghdogra	1730	4.5	D	274	275
521	Bangalore	2330	7.2	v	4.0	24.0
523	Cochin	0530	6.0	V	0.5	10.5
524	Gannavaram	2330	0.3	v	1.7	7.7
525	Gaya	1730	7.2	D	293	290
525	Gopalpur	1730	4.5	D	29	290
525	Gopalpur	1730	6.0	D	238	328
526	Jabalpur	1730	3.6	D	3 9	309
526	Jagdalpur	0530	4.5	v	9.0	0.8
526	Jagdalpur	1730	0.15	D	336	036
526	Jagdalpur	1730	6.0	V	3.3	10.3
528	Mohanbari	0530	0.6	D	(9	049
528	Mohanbari	2330	0.15	D	048	048
528	Nagpur	1730	Surface	D	060	061
529	New Delhi	0530	0.3	D	3 5	305
529	New Delhi	0530	1.5	D	3 4	304
529	New Delhi	0530	2.1	D	3 8	308
529	New Delhi	0530	4.5	D	3 3	303
529	New Delhi	2330	1.5	D	3 2	302
529	New Delhi	2330	2.1	D	3 2	302
530	Raipur	1730	Values printed for heights 7.2, 9.0 Km. and in the line below that may be read for heights 6.0, 7.2 and 9.0 respectively.			
530	Raxual	0530	Values for 7.2 level may be read for 6.0 level.			
531	Trivandrum	0530	3.6	D	38	238
531	Trivandrum	1130	0.6	v	3 9	3.9
531	Udaipur	1730	1.5	n	32	31
532	Veraval	0530	6.0	V	14.1	14.9
532	Veraval	1730	0.9	v	2.1	2.8
532	Visakhapatnam	1730	0.6	v	6.2	6.1
532	Visakhapatnam	0530	0.15	v	2.3	2.2
532	Visakhapatnam	2330	0.15	v	1.3	1.0
533	Begumpet	0530	14.1	v	5.8	5.9
533	Begumpet	0530	18.0	D	2 3	203
534	Poona	0530	16.2	v	11.9	11.1
534	Trivandrum			Time of ascent	113 hrs.	1130 hrs.

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RADIOSONDE DATA

Page No.	Station	Standard pressure surface mb.	Existing entry under column: No. of obs	Ht. gpm	Temperature °A: Mean	Max.	Min.	Dew point	Correct entry under column: No. of obs	Ht. gpm	Temperature °A: Mean	Max.	Min.	Dewpoint.
536	Allahabad	Surface		216						296				
536	Bombay	125	2	4.3							204.3			
536	Calcutta	100			291								191	
539	Jodhpur	Surface	3	6.4							306.4			

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C.	Mean minimum temperature °C	Relative humidity %. 0830 hrs. IST.	Relative humidity %. 1730 hrs. IST.	Cloud 0830 hrs. IST.	Cloud 1730 hrs. IST.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur, Tripura).	117.7	88	30.1	21.1	82	79	3.5	2.7
	−14.7		+0.3	−0.6	−2		−0.7	
2. West Bengal .	46.7	39	32.0	23.3	75	68	2.6	2.9
	−73.8		+0.7	+0.4	−2		−0.2	
3. Orissa . .	38.3	26	32.4	23.7	77	67	3.3	4.1
	−11.5		+0.9	+0.5	−1		+0.2	
4. Bihar . .	11.6	17	32.6	20.9	67	60	1.9	2.5
	−15.0		+1.7	0	−5		−0.4	
5. Uttar Pradesh .	13.4	39	32.8	18.8	64	47	1.0	1.2
	−20.9		+0.3	+0.3	−1		0	
6. Punjab (I) (Including Himachal Pradesh and Delhi.)*	23.3	193	33.0	17.5	63	43	0.6	0.8
	+11.2		−0.7	+0.1	+5		−0.1	
7. Jammu and Kashmir.	70.2	408	20.6	7.5	59	47	3.1	3.7
	+53.0		−2.4	−0.3	−2		+1.4	
8. Rajasthan .	4.6	53	34.9	18.9	50	28	0.8	1.5
	−4.1		+0.2	+0.4	−1		−0.1	
Sub-Division								
1. Bay Islands .	314.9	309	29.7	23.7	83	89	5.4	4.9
	+27.2		+0.9	+0.5	+2		+0.2	
2. Assam (Including Manipur, Tripura).	107.7	88	30.1	21.1	82	79	3.5	2.7
	−14.7		+0.3	−0.6	−2		−0.7	
3. Sub-Himalayan West Bengal.	54.6	37	30.5	21.4	77	65	2.4	1.9
	−91.2		−0.3	−0.5	−2		+0.3	
4. Gangetic West Bengal.	43.8	39	32.4	23.8	75	69	2.7	3.2
	−67.3		+0.9	+0.7	−2		−0.4	
5. Orissa . .	38.3	26	32.4	23.7	77	67	3.3	4.1
	−11.5		+0.9	+0.5	−1		+0.2	
6. Chota Nagpur .	7.4	11	32.2	21.5	65	56	2.2	3.1
	−62.4		+1.8	+0.4	−6		−0.4	
7. Bihar . .	13.7	21	33.0	21.3	69	63	1.7	2.0
	−51.3		+1.7	−0.5	−3		−0.4	
8. Uttar Pradesh (East).	2.6	6	33.4	19.5	65	50	0.9	1.1
	−45.1		+0.8	+0.1	−4		−0.3	
9. Uttar Pradesh (West).	22.9	101	32.3	18.2	64	44	1.0	1.3
	+0.3		−0.1	+0.4	+1		+0.2	
10. Punjab (India) (Including Delhi)	23.3	193	33.0	17.5	63	43	0.6	0.8
	+11.2		−0.7	+0.1	+5		−0.1	
11. Himachal Pradesh.	51.7	..	29.2	12.8	84	51	2.3	1.9
	..		..	..	..		..	
12. Jammu & Kashmir.	70.2	408	20.6	7.5	59	47	3.1	3.7
	+53.0		−2.4	−0.3	−2		+1.4	
13. Rajasthan (West)	0	0	35.9	20.0	48	23	0.6	0.9
	−4.0		+0.3	+1.4	−3		−0.1	
14. Rajasthan (East)	9.1	68	34.0	18.1	52	31	1.0	1.9
	−4.2		+0.2	−0.5	0		−0.1	
15. Madhya Pradesh (West).	9.7	32	33.0	18.0	55	36	2.0	2.7
	−20.8		+0.9	0	−6		+0.5	
Division—*contd.*								
9. Madhya Pradesh	19.2	40	32.7	18.4	58	41	2.3	2.9
	−29.0		+1.3	+0.1	−7		+0.4	
10. Bombay . .	40.6	75	33.4	21.7	69	50	2.9	3.1
	−13.3		+0.7	+0.6	−1		+0.4	
11. Andhra Pradesh	103.3	73	33.0	23.7	76	62	4.3	5.3
	−37.3		+1.0	+0.8	+1		+0.4	
12. Madras . .	242.9	114	31.1	23.9	82	73	5.6	6.3
	+29.8		0.6	+0.4	+3		+1.2	
13. Mysore . .	223.1	183	29.8	21.3	82	64	5.4	6.4
	+101.4		−0.1	+1.3	+6		+1.3	
14. Kerala . .	358.1	123	30.1	24.6	83	79	5.9	6.8
	+67.1		+0.3	+0.2	−2		+0.8	
Mean of India .	63.1	80	32.6	20.7	68	52	2.7	3.2
(Excluding Jammu & Kashmir and Himachal Pradesh).	−15.7		+0.6	+0.4	−1		+0.3	
Sub-Division—*contd*								
16. Madhya Pradesh (East).	32.7	44	32.3	19.0	63	47	2.7	3.3
	−40.8		+2.0	+0.2	−9		+0.2	
17. Gujarat . .	2.8	9	36.3	21.3	58	33	1.7	1.7
	−29.1		+1.3	+1.0	−11		0	
18. Saurashtra & Kutch.	3.3	26	34.5	21.4	71	51	1.7	1.4
	−9.3		+0.2	−0.3	+2		0	
19. Konkan . .	50.8	68	31.8	24.4	82	73	4.0	3.8
	−24.3		+0.5	+0.9	+2		+0.5	
20. Maharashtra .	87.2	115	32.5	23.5	69	45	3.9	4.9
	+11.1		+0.6	+1.0	+2		+0.8	
21. Vidarbha .	11.3	23	33.5	20.0	61	43	3.0	3.7
	−38.9		+0.8	+0.1	−5		+0.7	
22. Coastal Andhra Pradesh.	133.4	67	32.7	24.6	79	71	4.6	5.7
	−67.1		+0.7	+1.5	+1		+0.3	
23. Telangana .	95.2	159	32.5	21.7	71	50	3.9	4.6
	+35.4		+1.1	+1.4	−1		+0.8	
24. Rayalaseema .	5.0	50	34.5	24.1	73	53	4.1	5.2
	−5.6		+1.5	+1.2	+1		+0.1	
25. Madras . .	242.9	114	31.1	23.9	82	73	5.6	6.3
	+29.8		−0.6	+0.4	+3		+1.2	
26. Coastal Mysore	168.0	100	31.1	24.2	84	79	6.1	6.9
	+59		+0.6	+0.8	0		+1.3	
27. Mysore (North)	62.0	299	30.4	21.4	77	59	4.8	6.1
	+174.5		−0.4	+1.1	+5		+1.6	
28. Mysore (South)	251	140	28.8	20.3	88	65	5.7	6.4
	+58.8		+0.1	+1.1	+8		+0.9	
29. Kerala (Including Laccadives).	358.1	23	30.1	24.0	83	79	5.9	6.8
	+67.1		+0.3	+0.2	−2		+0.8	

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.
*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	27·7	..	30·2	30	24·3	..	22·7	7	77·2	279·9	..	64·8	7	18	..	12·0	8·3	..	18	0	0	0	0	0	0	0	0	0
Long Island	30·1	..	31·6	30	23·5	..	22·0	11	162·5	303·3	..	73·7	3	14	..	2·7	1·5	..	16	0	0	0	0	0	0	0	0	0
Port Blair	29·7	+0·9	31·3	23,31	23·7	+0·5	22·2	15	155·1	344·9	+27·2	54·3	11	12	−4·7	11·6	8·5	−3·7	15	0	0	1	8	0	0	0	0	0
Car Nicobar	30·0	..	30·9	7	23·1	..	21·1	14	127·1	288·3	..	38·6	22	14	..	6·0	3·2	..	20	0	0	1	0	0	0	0	0	0
Nancowry	30·2	..	33·3	29	24·5	..	22·9	3	136·0	256·6	..	52·3	2	15	..	5·9	4·5	..	21	0	0	1	0	0	0	0	0	0
Kondul	28·7	..	30·8	10	24·5	..	22·5	15	74·5	175·8	..	24·9	31	13	..	5·5	3·9	..	16	0	0	5	0	0	0	0	0	0
Assam (Including Manipur, Tripura)																												
Pasighat	28·1	..	32·1	5	19·6	..	15·3	29	36·2	146·7	..	66·3	8	8	..	6·5 n	10·8 m	..	13	0	0	0	0	0	0	0	0	0
Digboi	29·0	..	32·8	15	19·8	..	15·0	29	6·4	39·0	..	9·7	18	6	..	6·5	5·6	..	12	0	0	1	0	0	0	1	0	0
Dibrugarh	29·4	+0·3	33·8	2	20·1	−0·7	15·6	20	10·5	91·9	−57·2	35·1	26	6	−2·6	2·1	1·5	+0·4	10	0	0	3	1	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	28·5	..	31·7	12	19·3	..	14·4	29	10·2	71·3	..	25·1	26	6	..	5·0	3·4	..	10	0	0	6	2	0	0	0	0	0
North Lakhimpur	28·9	..	32·3	2	19·2	..	14·3	20	42·3	137·0	..	31·0	8	7	..	..	..	..	10	0	0	5	0	0	0	0	0	0
Sibsagar	29·1	..	32·3	2	20·9	−0·5	16·3	20	48·9	93·0	38·3	30·7	17	8	+0·1	2·1	1·3	−1·0	13	0	0	0	0	0	0	0	0	0
Jorhat	29·6	..	33·4	9	20·0	..	15·6	29	49·5	145·8	..	38·2	16	5	..	..	..	..	10	0	0	7	14	0	0	0	0	0
Golaghat	29·7	..	32·8	8,9	..	..	..	..	5·8	99·2	..	40·6	18	7	..	..	..	..	8	0	0	0	0	0	0	0	0	0
Gohpur(R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tezpur	30·3	+0·1	33·1	3	21·1	−0·7	17·7	29	19·6	144·0	+39·9	45·5	25	9	+2·7	0·5	0·2	−2·2	10	0	0	6	0	0	0	0	0	0
Tezpur (P.B.O.)	29·6	..	32·8	2,9	20·6	..	17·2	29	17·5	145·8	..	52·3	25	9	..	3·7	1·9	..	10	0	0	5	1	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	13·7	64·8	..	25·4	25	5	..	6·0	4·0	..	6	0	0	3	0	0	0	0	0	0
Chaparmukh(R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tangla	30·4	..	33·0	3	19·8	..	15·5	29	5·1	44·7	..	26·2	25	4	..	5·7	3·8	..	5	0	0	0	0	0	0	0	0	0
Gauhati	30·3	−0·3	32·9	9	21·7	0	16·6	28	43·2	62·3	−8·3	44·2	5	2	−2·2	4·1	2·1	+0·2	4	0	0	2	1	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	29·9	..	32·5	9	21·0	..	15·2	28	1·8	31·3	..	17·0	18	2	..	6·4	3·8	..	5	0	0	8	0	0	0	0	0	0
Rangiya (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Goalpara	31·3	..	34·6	9	21·3	..	16·3	28	0	71·2	..	36·1	5	3	..	..	..	..	3	0	0	0	0	0	0	0	0	0
Dhubri	30·0	+0·9	32·8	2	22·7	0	18·9	31	32·3	32·3	−92·2	23·9	5	2	−3·0	5·5	5·6	+0·5	2	0	0	3	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome)	30·5	..	32·8	15	20·2	..	15·6	27	18·3	18·3	..	18·3	18	1	..	5·7	3·6	..	1	0	0	1	2	0	0	0	0	0
Tura	28·3	..	32·4	3	19·9	..	16·1	28	58·4	104·8	..	22·6	5	9	..	3·4	4·2	..	9	0	0	0	0	0	0	0	0	0
Agartala	30·9	..	32·7	3	20·8	..	14·9	31	23·8	43·0	..	12·9	6	6	..	6·9	4·3	..	8	0	0	4	0	0	0	0	0	0
Silchar	31·0	−0·3	33·9	2	21·2	−1·1	16·4	31	5·8	235·2	+51·1	99·1	7	5	−2·9	2·0	1·1	−0·5	8	0	0	6	0	0	0	0	0	0
Silchar (Kumbhigram Aerodrome)	31·2	..	34·4	3	20·3	..	15·4	31	4·1	150·2	..	57·2	6	8	..	5·5	6·3	..	11	0	0	8	0	0	0	0	0	0
Imphal	26·8	..	29·6	2	15·4	..	9·2	29	17·5	75·3	..	33·5	5	7	..	6·7	3·4	..	9	0	2	1	13	0	0	0	0	0
Haflong	26·6	..	28·7	1,4,13	17·7	..	13·2	31	5·6	222·7	..	67·6	6	8	..	.. (a)	.. (a)	..	11	0	0	1	4	0	0	0	0	0
Lumding	30·5	+1·1	34·4	8	19·7	−1·4	14·7	28	31·3	92·0	+2·1	38·1	2	5	−0·9	2·1	1·2	..	7	0	0	1	0	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar(C.W.O.)	30·7	..	33·1	9	19·8	..	15·1	27	26·7	53·8	−131·9	14·2	19	4	−2·2	4·8	2·7	..	5	0	0	7	6	0	0	0	0	0
Jalpaiguri	28·8	−1·6	32·2	6	20·8	−0·5	16·7	27	27·9	83·5	−57·7	30·2	6	6	+0·5	7·9	5·2	+3·3	10	0	0	8	0	0	0	0	0	0
Bagdogra	29·9	..	33·3	12	19·2	..	15·2	29	44·7	259·1	..	82·0	6	9	..	4·3	2·8	..	10	0	0	6	1	0	0	0	0	0
Malda	32·1	+0·9	35·2	10	22·2	−0·2	15·6	30	20·5	26·6	−83·9	12·9	18	4	−0·3	5·9	4·3	−0·2	5	0	0	5	0	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	32·1	..	35·9	10	23·8	..	19·4	31	39·5	50·0	..	16·0	24	6	..	6·2	3·8	..	9	0	0	3	2	0	0	0	0	0
Calcutta	32·6	+0·8	35·6	10	24·0	+0·8	19·9	31	89·5	128·8	+15·0	40·4	15	8	+1·8	4·7	3·0	−0·4	11	0	0	5	3	0	0	0	1	0
Barrackpore	32·1	..	34·3	1	23·7	..	18·5	31	37·4	44·0	..	8·9	6	4	..	..	..	..	6	0	0	5	0	0	0	0	0	0
Saugor Island	31·0	+0·6	32·8	9	25·9	+1·3	22·6	26	15·5	59·5	−145·5	20·8	7	5	−2·5	..	..	..	8	0	0	2	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	20·1	84·4	−33·2	41·1	4	6	+0·3	..	..	..	8	0	0	0	0	0	0	0	0	0
Contai	31·8	..	34·2	1	25·0	..	23·0	26,30	45·9	70·3	..	53·3	4	4	..	4·6	3·7	..	4	0	0	0	0	0	0	0	0	0
Midnapore	32·4	+0·7	35·1	9,20	23·2	+0·2	18·7	31	0	9·7	+86·8	9·7	4	1	−4·6	3·5	2·5	+0·2	1	0	0	0	0	0	0	0	0	0
Purulia	31·9	..	34·6	18,19	22·1	..	17·4	30,31	28·6	28·6	..	22·3	5	2	..	4·0	2·9	..	2	0	0	0	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	15·7	−63·6	9·9	6	2	−2·5	..	..	..	2	..	..	..	..	..	..	..	..	..
Burdwan	31·0	−0·7	34·4	1	23·9	+0·5	18·9	31	5·1	5·1	−78·7	5·1	4	1	−3·4	4·8	3·7	+1·6	1	0	0	0	0	0	0	0	0	0
Krishnagar	34·0	+2·1	36·7	11	23·5	+0·7	18·2	31	17·7	53·2	−54·5	25·1	18	4	−1·0	5·8	4·4	+1·5	5	0	0	3	0	0	0	0	0	0
Asansol	32·5	+0·8	35·1	10	22·6	+1·0	16·6	31	18·8	35·8	−74·4	20·1	17	2	−3·5	5·6	4·0	−0·8	3	0	0	4	0	0	0	0	0	0
Suri	32·1	..	35·5	10	22·5	..	17·0	30,31	27·7	66·0	..	21·1	18	4	..	5·8	4·7	..	5	0	0	0	0	0	0	0	0	0
Berhampore	33·6	+2·3	35·7	9	23·5	+0·2	18·2	31	17·5	42·4	+50·1	39·6	5	2	−2·5	1·8	1·0	−1·3	2	0	0	1	0	0	0	0	0	0
Orissa																												
Baripada	33·4	..	35·9	1	..	..	..	..	5·1	5·1	..	2·3	7	0	..	2·2	1·1	..	4	0	0	2	1	0	0	0	0	0
Balasore	31·7	+0·4	34·6	10	23·7	+0·8	20·7	3	14·2	15·2	−148·1	10·4	24	2	−4·4	6·3	3·3	+0·4	4	0	0	6	0	0	0	0	0	0

(R) R gister not received.
(n) Mean of 17 days.
(m) Mean of 18 days.
(a) Mean of 30 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Totalfall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orrisa—*Contd.*																												
Chandbali	30·4	−0·7	33·3	17	24·0	−0·3	21·7	26,31	38·6	62·5	−131·3	29.7	26	4	−4·3	6·5	4·5	−1·5	4	0	0	1	0	0	0	0	0	0
Cuttack	33·6	+1·5	35·9	11,12	23·9	+0·3	21·1	26	9·2	10·2	−125·4	3·8	18	3	−3·3	5·5	3·7	+1·6	4	0	0	1	0	0	0	0	0	0
Bhubaneswar	33·0	..	35·1	11	23·3	..	20·6	26	83·8	113·0	..	58·2	7	5	..	8·1	6·8	..	5	0	0	3	1	0	0	0	0	0
Puri	32·6	+1·2	35·9	11	25·6	+0·6	22·4	26	17.7	48·2	−134·9	22·3	30	4	−3·3	11·5	10·1	−0·2	5	0	0	0	0	0	0	0	0	0
Gopalpur	32·8	+1·6	36·3	11	24·1	+0·4	22.6	9,11	3·0	46·2	−172·4	18·3	26	6	−0.9	..	..	..	6	0	0	4	0	0	0	0	0	0
Koraput	28·1	..	30·6	16	18·2	..	15·6	4 days	10·9	37·8	..	12·2	23	4	..	..	..	..	7	0	0	0	0	0	0	0	0	0
Titilagarh	31·7	..	34·5	9	22·1	..	17·5	31	19·3	20·3	..	20·3	24	1	..	3.3	1·9	..	1	0	0	0	1	1	0	0	0	0
Bolangir (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angul	32·6	+1·2	35·1	11	22·7	+0·7	17·7	31	21·8	21·8	−78·3	21·8	26	1	−4·7	5·8	3·7	−1·3	1	0	0	1	6	0	0	0	0	0
Keonjhar	30·5	..	33·0	20	20·2	..	15·0	31	60·2	84·9	..	27·2	7	6	..	5·0	3·6	..	9	0	0	4	0	0	0	0	0	0
Sambalpur	32·8	+1·2	35·3	10,18	22·1	+0·2	16·2	31	20·6	64·3	+9·9	43·7	25	2	−1·5	3·7	1·9	−1·8	2	0	0	1	3	0	0	0	0	0
Jharsuguda	32·9	..	36·1	12	21·4	..	15·5	31	19·6	44·5	−	14·5	23	4	..	5·7	4·3	..	4	0	0	1	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	32·6	+0·6	35·3	18	22·8	+1·1	15·9	31	0	3·6	−64·0	3·6	22	1	−3·2	5·5	3·8	+0.4	1	0	0	1	0	0	0	0	0	0
Jamshedpur (P.B.O.)	32·4	..	34·8	18,19	21·7	..	15·0	31	1·8	3·9	..	1·0	22	0	..	5·9	3·3	..	5	0	0	1	0	0	0	0	0	0
Chaibasa	32·4	+1·2	36·6	11	22·6	+0·8	15·4	31	11·7	15·8	−58·6	10·7	5	1	−3·4	2·5	1·6	−0·3	4	0	0	2	0	0	0	0	0	0
Ranchi	31·5	−3·1	35·1	20,21	18·4	−0·6	15·4	12,28, 31	13·2	15·7	−63.8	14·4	23	1	−3·8	7·3 (m)	5·3	+0·6	2	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	29·5	..	31·9	20	19·5	..	14·5	30	23·4	51·6	..	21·3	6	3	..	9·8	7·4	..	3	0	0	0	0	0	0	0	0	0
Daltonganj	33·6	+1·9	35·9	18,19	19·3	+0·1	12·8	31	0	0	−49·0	0	..	0	−3·2	4.6	2·6	−0·6	0	0	0	0	0	0	0	0	0	0
Hazaribagh	30·8	+2·1	33·3	19	20·0	+0·8	15·1	30,31	0·8	2·1	+76·6	1·3	23	0	−4·6	7.5	5·0	−1·9	2	0	0	1	0	0	0	0	0	0
Dhanbad	32·7	..	34·9	20	21·8	..	17·7	31	2·0	2·0	..	1·5	22	0	..	5·2	4·3	..	2	0	0	2	10	0	0	0	0	0
Bihar																												
Purnea	32·5	+1·4	35·6	7,8	20·5	−1·1	12·9	29	0·8	0·8	−81·0	0·8	18	0	−3·4	6·2	3·3	+1·2	1	0	0	1	0	0	0	0	0	0
Forbesganj	32·6	..	35·7	12	19·2	..	12·8	28,29	29·7	29·7	..	27·9	17	1	..	6·7	4·5	..	2	0	0	3	3	0	0	0	1	0
Darbhanga	32·2	+1·0	35·3	7	21·7	−0·3	16·1	30	11·7	11 7	−46·7	11·7	18	1	−1·5	1·6	0·5	−1·6	1	0	0	1	0	0	0	0	0	0
Motihari (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Muzaffarpur	..	..	..	..	..	..	..	..	..	0	−61·2	0	..	0	−2·5	..	..	..	0	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	0	−53·6	0	..	0	−2·5	..	..	..	0	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	0·8	−60·7	0·8	6	0	−3·0	..	..	..	1	..	..	..	..	..	..	..	..	..
Patna	34·2	+2·8	35·6	3,7	22·6	−0·1	15·6	29	0	0	−58·4	0	..	0	−2·9	6·1	4·8	+1·6	0	0	0	0	0	0	0	0	0	0
Patna (Aerodrome)	32·6	..	34·4	4 days	20·9	..	14·4	31	0	0	..	0	..	0	..	6·3	3·2	..	0	0	0	0	0	0	0	0	0	0
Dehri	33·2	..	35·0	4 days	21·0	..	14·7	31	0	0	−49·5	0	..	0	−2·6	4·4	2·8	..	0	0	0	0	0	0	0	0	0	0
Gaya	33·1	+1·7	35·4	9,10	20·3	−0·8	13·8	29	0	0	−48·8	0	..	0	−2·9	3·1	1·8	−3·0	0	0	0	0	0	0	0	0	0	0
Jamui	32·8	..	34·7	16	21·5	..	15·2	30,31	43·2	43·2	..	42·7	5	1	..	4·0	2·0	..	2	0	0	0	0	0	0	0	0	0
Dumka	32·7	+1·5	35·7	9	21·4	−0·1	15·4	30,31	9·9	119·2	+22·4	70·9	5	4	−0·6	..	..	..	4	0	0	3	0	0	0	0	0	0
Bhagalpur	33·0	..	36·3	7	22·9	..	17·4	30	5·1	6·2	..	4·9	20	1	..	6·2	4·4	..	3	0	0	6	0	0	0	0	0	0
Sabour	33·1	+1·9	35·6	17	21·4	−0·3	14·0	30	4·1	4·6	−75·2	3·1	20	1	−1·9	7·9	4·9	+0·9	3	0	0	5	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	32·4	−0·3	34·8	4,5,6	18·6	−1·1	12·2	28	0	0	−45·5	0	..	0	−1·7	2·5	1·9	−1·3	0	0	0	0	0	0	0	0	0	0
Nautanwa	33·5	..	36·4	22	20·1	..	14·3	27	2·0	7·6	..	7·6	17	1	..	3·8	2·4	..	1	0	0	0	0	0	0	0	0	0
Gorakhpur	33·3	+1·6	36·4	7	21·1	+0·3	14·5	27	0	14·2	−61·2	14·2	19	1	−1·3	4·4	2·3	+0·7	1	0	0	1	0	0	0	0	0	0
Azamgarh	34·2	..	36·7	6	20·3	..	14·0	27	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ballia	33·9	..	36·1	8,9	..	..	..	..	1·3	1·3	..	1·3	15	0	..	4·9	2·9	..	1	0	0	0	0	0	0	0	0	0
Varanasi (Banaras)	33·9	+1·4	36·4	6	20·1	+0·1	13.9	31	0	0	−55·4	0	..	0	−2·2	4·6	3·0	−0·2	0	0	0	0	1	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome)	34·4	..	35·4	12	19·9	..	13·2	28	0	0	..	0	..	0	..	8·5	5·3	..	0	0	0	0	1	0	0	0	0	0
Allahabad (Bamrauli)	34·4	+2·0	37·7	12	19·8	+0·3	13.6	30	0	0	−59·4	0	..	0	−2·5	6·4	3·2	−0·5	0	0	0	0	0	0	0	0	0	0
Banda	34·8	..	38·3	12	20·0	..	13·2	28	0	0	..	0	..	0	..	0·8	0·3	..	0	0	0	0	0	0	0	0	0	0
Fatehpur	31·9	−1·7	34·5	1	18·9	−0·3	13·4	30	0	0	−22·6	0	..	0	−1·4	6·9	3·2	+0·6	0	0	0	0	0	0	0	0	0	0
Kanpur	33·5	+0·6	36·8	3,5	19·2	+0·3	12·9	28	0	3·8	−29·2	3·8	22	1	−0·5	11·1	6·7	+1·1	1	0	0	0	0	0	0	0	0	0
Lucknow	33·3	+0·3	36·5	12	19·5	+0·3	13.5	28	0	0	−32·5	0	..	0	−1·7	..	..	..	0	0	0	0	0	0	0	0	0	0
Lucknow (Amausi Aerodrome)	31·1	+0·1	35·8	12,17	18·0	+0·3	10·6	28	0	0	−32·5	0	..	0	−1·7	8·9	5·4	..	0	0	0	0	0	0	0	0	0	0
Hardoi	32·9	..	36·7	12	18·8	..	12·9	28	1·0	22·3	..	21·8	22	1	..	6·4	3·5	..	3	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri	31·5	..	34·4	6	19·4	..	13·9	30	7·2	14·1	..	7·2	22	2	..	3·3	1·7	..	2	0	0	3	0	2	0	0	0	0
Bahraich	31·2	−1·1	34.9	4	19·5	−0·7	13.6	28	0	0	−40·1	0	..	0	−1·7	4·8	3·0	+0·7	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh (West)																												
Orai	34·2	..	37·2	4 days	..	..	..	..	1·0	1·0	..	1·0	26	0	..	9·7	7.3	..	1	0	0	0	0	0	0	0	0	0
Jhansi	34·0	+0·1	37·5	11	19·3	0	12·2	27	0	0.5	−24·6	0·5	22	0	−1·1	4·3	2·9	−1·0	1	0	0	1	0	0	0	0	0	0
Agra	33·4	−0·4	36·9	12	18·4	0	12·9	27	3·3	15·7	−2·3	12·9	22	2	+1·2	3·5	2·6	−1·3	2	0	0	1	0	0	0	0	0	0

(m) Mean of 18 days.

(R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, Km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm.or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West)—*Contd.*																												
Agra Aerodrome (R)																												
Mainpuri*	34·6	+0·6	38·3	16,17	18·9	+0·6	12·3	28	1·0	14·0	−10·1	10·4	22	2	+1·0	3·2	1·7	−0·1	2	0	0	0	0	0	0	0	0	0
Aligarh	33·3	−0·6	37·2	16	18·6	−0·2	13·2	27	0	14.7	— ·8	14.7	22	1	+0·7	7·7	5·3	+0·3	1	0	0	1	0	0	0	0	0	0
Bareilly	32·3	+0·2	35·6	6	19·5	+0·7	13·8	28	11·9	38.2	+5·9	15·2	17	3	+2·1	6·1	3·6	+2·0	3	0	1	3	0	1	0	0	0	0
Meerut	32·6	+0.1	36·1	12,17	17·9	+0.9	11·8	28	..	25·4	+4·8	25.4	22	1	+0·1	..	4·6	..	1	0	0	0	0	0	0	0	0	0
Najibabad	31·3	..	33·7	12	17·1	..	11·7	27	55·7	62·3	..	53.9	21	2	..	2·1	1·5	..	4	0	0	0	0	0	0	0	0	0
Roorkee	30·4	−0·8	33·9	9	17.2	+0·9	11·9	27	5.1	25·6	+4·3	10.4	21	3	+2·1	4·8	2·8	+0·9	4	0	0	5	0	0	0	0	0	0
Dehra Dun	28·0	−0·3	31·6	9	16·1	−0·4	11·7	25,26	0·1	49·2	+17·2	21.3	21	3	+1·4	4·1	3·9	+0·8	3	0	0	3	0	0	0	0	0	0
Punjab India (Including Delhi)																												
New Delhi	33·0	−0·3	36·3	8,11	18·9	+0·4	13·1	26	2.5	39.6	+29·4	29.7	22	3	+2·4	13·4	7·9	+2·1	3	0	0	3	0	0	0	0	1	0
Hissar	34·8	0	38·7	11	16·8	−0·5	11·1	26,27	15·0	28.4	+12·9	17·0	22	2	+1·4	7·0	6·9	+1·8	2	0	0	0	0	0	0	0	0	0
Karnal	31·8	..	39·3	2	16.6	..	11·1	30	17.8	88·4	..	35.6	22	3	..	0·7	0·6	..	4	0	1	5	0	0	0	0	0	0
Patiala	32·9	..	37·8	11	16.9	..	10·8	27	7·1	15·3	+13·5	8·4	22	2	+1·7	7·9	7·8	..	3	0	0	2	0	0	0	0	0	0
Ambala	30·2	−3·0	36·3	11	17·3	+0·6	11·8	27	7·8	13·5	−8·6	7·6	21	2	+1·1	8·1	6·2	+3·1	3	0	0	0	0	0	0	0	0	0
Ambala(Aerodrome) (R)	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chandigarh	32·2	..	35·2	12	17·2	..	11·2	26,30	0·8	47·3	..	34·3	22	2	..	..	..	..	3	0	0	0	0	0	0	0	0	0
Ludhiana	34·0	+0·5	38·1	8	17·2	−0·1	11·2	26	0	19·5	+8·6	10·9	21	2	+1·3	4·0	3·3	+1·7	2	0	0	0	0	0	0	0	0	0
Ferozepur	33·4	..	38.3	15	16·3	..	10·4	27	2·0	23·2	..	21·4	22	1	..	2·2	1·7	..	2	0	0	2	0	0	0	0	0	0
Amritsar	32·6	..	36·4	11	15·2	..	9·6	27	0	16·0	..	6·6	22	3	..	9·3	6·2	..	3	0	0	5	0	0	0	0	0	0
Pathankot	31·1	..	34·7	7	17·0	..	12·1	26	12·2	37·5	..	25·1	22	2	..	3·8	3·0	..	5	0	0	0	0	0	0	0	0	0
Himachal Pradesh																												
Bilaspur	29·9	..	32·8	6	13·7	..	9·7	31	19.1	54·4	..	25·4	21	3	..	5·0	3·3	..	5	0	0	4	8	0	0	0	0	0
Mandi	28·5	..	31·6	11	11·9	..	7·7	31	20·5	49·0	..	26·4	21	3	..	2·3	1·9	..	4	0	0	2	6	0	0	0	0	0
Jammu and Kashmir																												
Srinagar	17·3	−5·9	27·5	1	5·8	+1·0	0·1	21	54·9	170·6	+1409	51·4	21	8	+5.2	4·8	4·9	+1·7	10	4	0	0	0	0	0	0	0	0
Gulmarg	Closed during winter months.																											
Sonemarg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dras	..	..	..	..	..	..	..	..	..	124·9	-105·3	96·8	16	2	−0·3	..	..	..	2	..	..	..	..	..	..	..	..	..
Kargil (R)																										..		
Leh	12·3	−2·3	18·3	1,12	−1·9	−1·1	−7·0	30	10·2	11·0	+8·5	11·0	20	1	+0·7	7·2	5·2	+2·1	1	1	0	0	0	0	0	0	0	0
Skardu (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gurez (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gilgit (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Misgar (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jammu	32·1	+0·9	36·3	10	18·7	−0·9	13·1	26	..	29·0	+9·7	15·2	21	2	+0·9	..	..	..	5	0	0	3	0	0	0	0	0	0
Gund	..	..	..	..	..	..	..	..	..	169·3	..	38·6	20	11	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Pandras†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	11·2	..	3·8	19	1	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Khangral	..	..	..	..	..	..	..	..	..	7·1	..	2·0	21	0	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	5·1	..	4·8	10	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	47·5	..	25·4	5	3	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	377·1	..	165·1	15	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	35·2	+0·1	39·3	13,14	18·1	+2·7	11·8	25	0	0	−2·5	0	..	0	−0·3	5.1	4·2	−2·9	0	0	0	0	0	3	0	0	0	0
Churu	34·8	..	37·9	13,15	17·5	..	10·6	27	0.8	12.7	..	12.7	22	1	..	10·8	7·0	..	1	0	0	5	0	0	0	0	0	0
Bikaner	35·5	−0·5	38·8	14	19.9	+0·8	9·0	26	0	0	−5·3	0	..	0	−0·4	7.6	6.4	+0.3	0	0	0	1	0	0	0	0	0	0
Jaisalmer	36·1	..	39·4	13	19·5	..	9·8	26	0	0	..	0	..	0	..	12·2	9·0	..	0	0	0	0	0	0	0	0	0	0
Phalodi	34·6	..	37·4	14	20·8	..	12·8	26	0	0	−1·8	0	..	0	−0·1	11·0	9·9	..	0	0	0	0	0	0	0	0	0	0
Jodhpur	36·4	+1·1	39·2	14	20·3	+1·7	13·1	27	0	0	−8·1	0	..	0	−0·5	9·0	7·5	−0·2	0	0	0	0	0	0	0	0	0	0
Barmer	36·6	+0·4	39·8	13	21·8	+0·5	15·7	27	0	0	−2·5	0	..	0	−0·5	9·8	9·1	+1·5	0	0	0	0	0	0	0	0	0	0
Rajasthan (East)																												
Alwar	34·0	..	40·6	8	..	..	..	..	12·9	12.9	..	12.9	25	1	..	..	..	..	1	0	0	1	0	0	0	0	0	0
Sikar	33·7	..	36·7	13,14	17·1	..	9·3	26	15.0	88.8	..	21.3	25	3	..	6·9	5·0	..	3	0	0	0	0	0	0	0	0	0
Jaipur	33·8	−0·7	37·0	7	18·1	+0·2	6·9	28	12.0	18.5	+6·3	7.6	25	3	+2·3	7·8	4·9	−0.2	3	0	0	3	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	33·2	..	36·0	4,5	18·3	..	12·0	28	0	9.1	..	5.3	21	2	..	..	..	..	2	0	0	3	0	0	0	0	0	0
Dholpur	34·8	..	38·2	10,11	18·1	..	11·1	29	0	6.8	..	3.8	21	2	..	4·5	4·1	..	2	0	0	0	0	0	0	0	0	0
Ajmer	33·2	+0·1	35·9	12	17·1	−1·0	8·6	27	9.4	9.4	−0·3	8.1	22	1	+0·3	8·3	4·9	+1·5	2	0	0	1	0	0	0	0	0	0
Kotah	35·3	+0·5	37·8	15,16	20·9	−0·4	13·4	27	0·8	5.1	−11·4	4.3	22	1	0	4·6	3·3	+0·9	2	0	0	3	0	0	0	0	0	0
Chambal	34·6	..	37·2	16	18·9	..	9·0	27	8.4	12.0	..	7.7	22	2	..	6·3	3·7	..	3	0	0	5	0	0	0	0	0	0
Jhalawar	34·2	+0·9	36·8	16	18·1	+0·3	11·8	27	5.8	12.7	−1·3	6.3	22	2	+0·5	5·5	3·2	+0.6	3	0	0	3	0	0	0	0	0	0

(R) Register not received.

†Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, Km. per hours.			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (East)— *Contd.*																												
Udaipur	33·5	+0·3	36·4	7	16·2	−1·4	9·9	29	0	0	−14·5	0	..	0	−1·1	3·5	1·8	..	0	0	0	1	0	0	0	0	0	0
Erinpura (Jawai Dam).	34·4	..	36·9	11	22·3	..	12·8	26	0	22·1	..	22·1	23	1	..	5·4	6·1	..	1	0	0	1	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	33·3	−0·2	37·2	11	17·9	0	10·4	27	0	9·7	+1·3	4·1	25	2	+1·4	7·6	5·2	..	3	0	0	3	0	0	0	0	0	0
Sheopur Kalan	34·3	..	37·2	17	17·4	..	10·2	27	0	12·4	..	8·9	22	2	..	7·3	6·2	..	3	0	0	1	0	0	0	0	0	0
Guna	32·5	+0·5	35·6	17	17·1	+0·3	8·3	27	0	17·0	−9·7	17·0	22	1	−0·6	8·1	4·2	..	1	0	0	2	0	0	0	0	0	0
Rajgarh	34·2	..	37·0	10	17·0	..	10·2	27,28	0	0	..	0	..	0	..	8·2	5·5	..	0	0	0	0	0	0	0	0	0	0
Neemuch	33·5	+0·7	36·1	17	18·9	+0·8	12·7	29	0	12·0	−3·7	8·4	22	1	+0·1	7·0	5·3	−1·0	3	0	0	1	0	0	0	0	0	0
Ratlam	33·7	..	36·7	20	19·1	..	13·7	29	1·6	7·4	..	4·8	22	1	..	7·5	4·6	..	4	0	0	1	0	0	0	0	0	0
Alirajpur	34·8	..	37·3	17	19·4	..	13·1	30	0	0	..	0	..	0	..	7·4	4·1	..	0	0	0	0	0	0	0	0	0	0
Indore	32·2	+0·7	34·6	18	17·8	+1·0	13·6	28	9·7	31·3	+0·6	21·1	22	2	0	9·5	7·1	..	3	0	0	1	1	0	0	0	0	0
Bhopal (Bairagarh)	32·2	+1·1	34·6	17	17·8	0	12·3	29	0	4·6	−37·6	4·1	23	1	−1·4	6·9	4·4	−0·9	2	0	0	0	0	0	0	0	0	0
Khandwa	35·3	+1·7	38·7	19	19·0	+0·1	11·9	30	3·6	5·1	−30·2	5·1	23	1	−1·0	7·0	3·7	−0·5	1	0	0	0	0	0	0	0	0	0
Hoshangabad	33·7	+1·6	36·2	9	18·5	−0·8	12·9	30	1·5	1·5	−31·0	1·5	23	0	−2·0	1·3	0·6	−1·5	1	0	0	0	0	0	0	0	0	0
Betul	30·7	..	33·4	19	16·5	..	10·2	30	1·8	9·1	..	5·8	23	2	..	6·9	3·8	..	3	0	0	1	0	0	0	0	0	0
Chhindwara	30·5	..	34·1	12	16·7	..	10·8	30	24·1	39·3	..	16·5	23	3	..	5·5	4·4	..	3	0	0	0	0	0	0	0	0	0
Seoni	31·1	+0·9	34·2	10	18·5	+0·7	12·8	30	1·8	10·7	−47·0	7·6	25	1	−2·1	4·9	2·3	−1·6	4	0	0	0	0	0	0	0	0	0
Sagar	31·9	+0·7	34·6	12	19·2	+0·4	14·9	27,29	2·0	5·3	−22·4	5·3	23	1	−0·9	7·4	5·3	..	1	0	0	2	0	0	0	0	0	0
Nowgong	33·9	+1·3	36·7	9,11	15·7	−2·5	8·4	27	0	0	−28·7	0	..	0	−1·5	5·7	3·2	+1·3	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	33·5	+2·2	36·1	12	17·6	−1·2	11·5	29	0	0·5	−48·5	0·5	23	0	−2·2	6·0	3·4	0	1	0	0	0	0	0	0	0	0	0
Umaria	32·6	+2·2	35·2	18	16·8	−0·5	10·4	29	0	0	−62·7	0	..	0	−2·7	4·6	2·7	−0·2	0	0	0	0	0	0	0	0	0	0
Jabalpur	33·6	+2·6	36·0	9,10	18·1	+0·6	11·4	29	0	2·8	−44·9	2·5	22	1	−1·3	4·6	2·8	+0·5	2	0	0	0	0	0	0	0	0	0
Mandla	31·9	..	34·4	19	16·3	..	10·0	30	1·0	2·3	..	1·0	24	0	..	3·8	1·7	..	3	0	0	0	2	0	0	0	0	0
Pendra	30·4	+2·0	32·6	9,10	18·5	+0·7	13·5	29	5·4	10·9	−65·0	3·8	24	2	−2·1	7·2	4·7	..	5	0	0	1	0	0	0	0	0	0
Ambikapur	30·6	..	33·3	18	16·9	..	9·9	31	6·1	19·6	..	10·4	25	3	..	8·4	5·8	..	5	0	0	0	1	0	0	0	0	0
Champa	32·8	..	36·2	12	21·2	..	15·5	31	3·8	3·8	..	3·8	26	1	..	2·7	1·9	..	1	0	0	0	1	0	0	0	0	0
Raigarh	33·7	..	36·2	11,12	21·8	..	16·1	31	7·6	17·0	..	8·4	26	2	..	4·5	3·6	..	3	0	0	0	0	0	0	0	0	0
Raipur	32·7	+1·3	35·9	10	21·7	+0·8	16·6	31	4·8	25·9	−29·2	20·6	25	2	−1·3	5·7	3·7	−1·8	3	0	0	0	1	0	0	0	0	0
Kanker	31·5	+1·2	34·5	12	20·1	+0·5	14·1	31	24·9	37·1	−75·7	23·4	24	2	−3·3	2·5	1·2	−2·5	3	0	0	0	0	0	0	0	0	0
Jagdalpur (P.B.O.).	32·0	+2·3	34·2	11	20·2	+0·8	17·8	9,13,31	0	151·4	+45·7	94·5	30	4	−1·7	3·7	2·4	..	6	0	0	3	0	0	0	0	0	0
Gujarat																												
Deesa	36·5	..	38·8	16	19·8	..	12·7	27	0	0	..	0	..	0	..	8·3	6·4	..	0	0	0	1	0	1	0	0	0	0
Idar	36·4	..	38·6	16,17	20·8	..	15·7	31	0	0	..	0	..	0	..	11·2	10·3	..	0	0	0	0	0	0	0	0	0	0
Ahmedabad	36·8	+0·6	39·1	17	21·3	+0·5	15·7	29	0	0	−8·9	0	..	0	−0·7	7·8	5·8	+1·0	0	0	0	0	0	0	0	0	0	0
Dohad	34·3	+0·5	36·6	6	20·3	+0·9	14·9	29	0	6·6	−29·0	5·6	21	1	−1·0	9·4	9·5	+4·8	2	0	0	1	0	0	0	0	0	0
Baroda	36·6	+1·4	38·9	17	19·9	+1·0	13·9	30	0	1·0	−43·7	0	22	0	−1·3	4·5	2·8	−0·3	1	0	0	1	0	0	0	0	0	0
Baroda (Aerodrome)	36·8	..	40·0	17	21·1	..	16·2	30	0	0	..	0	..	0	..	8·7	5·7	..	0	0	0	1	0	0	0	0	0	0
Broach	37·9	..	40·8	16	22·6	..	17·6	30	0	0	..	0	..	0	..	6·6	5·0	..	0	0	0	1	0	0	0	0	0	0
Surat	37·4	+2·9	40·7	15	28·8	−1·5	20·2	31	3·6	3·6	−34·7	3·6	23	1	−1·0	9·7	7·4	+3·2	1	0	0	0	0	0	0	0	0	0
Saurashtra and Kutch																												
Bhuj (P.B.O.)	36·0	+0·4	37·7	14,18	20·2	−1·2	14·6	27	0	1·3	−7·1	1·3	24	0	−0·5	4·8	6·2	−1·0	1	0	0	0	0	0	0	0	0	0
Bhuj (Aerodrome)	35·8	..	37·7	12	20·1	..	13·7	27	0	0·5	..	0·5	24	0	..	10·0	8·8	..	1	0	0	0	0	0	0	0	0	0
Kandla	33·6	..	36·7	31	22·4	..	19·8	27	1·5	1·5	..	1·5	25	0	..	13·1	13·3	..	1	0	0	0	0	0	0	0	0	0
Mandvi	30·7	..	35·0	26	21·8	..	17·3	28	0	0	..	0	..	0	..	23·5	18·7	..	0	0	0	0	0	0	0	0	0	0
Dwarka	30·5	−0·2	36·1	30	23·3	−0·9	20·1	27	0	0	−6·3	0	..	0	−0·3	14·1	11·1	0	0	0	0	0	0	0	0	0	0	0
Porbander	31·9	..	37·9	29	22·6	..	20·0	30	0	0	..	0	..	0	..	12·1	8·2	..	0	0	0	0	3	0	0	0	0	0
Porbander(Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	1	0	0
Jamnagar	..	..	..	..	21·1	+0·1	16·1	29	0	0	−7·9	0	..	0	−0·5	..	..	..	0	0	0	1	2	0	0	0	0	0
Rajkot (Aerodrome)	34·7	−0·7	36·9	19	20·2	−0·2	17·3	30	3·3	18·8	+4·3	9·4	24	3	+1·9	15·5	13·5	+6·7	3	0	0	2	5	0	0	0	0	0
Surendranagar	36·7	..	38·9	11	22·6	..	17·9	30	0	0	..	0	..	0	..	10·6	9·4	..	0	0	0	2	0	1	0	0	0	0
Bhavnagar	36·6	+1·2	39·0	15	22·3	+0·8	17·9	30	0	0	−22·9	0	..	0	−0·9	9·7	7·2	+1·7	0	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome)	35·2	..	38·7	14	23·2	..	17·8	30	..	0	..	0	..	0	..	..	13·5	..	0	0	0	1	0	0	0	0	0	0
Mahuva	35·0	..	38·8	14	22·8	..	18·5	31	0	0	..	0	..	0	..	13·0 (a)	8·6	..	0	0	0	0	0	0	0	0	0	0
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17·5	12·7	..	..	0	0	0	0	0	0	0	0	0
Veraval	32·7	..	36·9	29	21·7	..	19·4	31	0	0	−15·7	0	..	0	−0·8	19·2	14·8	..	0	0	0	0	1	0	0	0	0	0

(a) Mean of 30 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5 mm. or more)		Wind speed, (Km. per hour.			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Konkan																												
Dahanu	32·6	+1·1	35·8	20,31	23·5	+0·3	20·2	31	0	0·3	−21·5	0 3	21	0	−1·8	15·4	10·7	+0·4	1	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	32·5	+0·9	36·6	29	25·2	+1·0	23·7	22	0·3	21·2	−43·3	14·0	22	2	−1·1	9·2	7·6	−2·2	5	0	0	2	0	0	0	0	0	0
Bombay (Santa Cruz Aerodrome)	33·4	+1·6	37·0	19	23·8	+1·7	21·4	19	0	12·7	−51·8	6·1	3	3	−0·1	11·7	7·3	..	3	0	0	0	0	0	0	0	0	0
Alibag	31·2	−0·2	34·9	30	23·8	+0·2	21·9	12	..	81·0	−46·8	37·3	2	3	−2·1	..	7·6	−0·8	3	0	0	3	0	0	0	0	0	0
Harnai	29·8	−0·6	33·3	30	25·2	+1·4	22·3	21	17·8	51·0	−13·8	20·3	21	4	+1·6	12·8	11·2	+1·2	6	0	0	5	0	0	0	0	0	0
Ratnagiri	31·0	..	34·4	19	24·5	..	21·8	21	12·5	133·4	+23·4	43·7	4	8	+2·6	..	..	..	12	0	0	4	0	0	0	0	0	0
Devgad	31·1	+0·4	33·3	18,30	25·0	+0·6	22·5	21	12·5	56·0	−16·4	14·7	21	8	+3·2	13·4	10·5	+0·8	12	0	0	16	0	0	0	0	0	0
Vengurla	31·0	..	34·9	20	24·2	..	22·5	21	38·9	102·3	..	19·1	22	11	..	9·1	5.5	..	18	0	0	21	0	0	0	0	0	0
Maharashtra																												
Nandurbar	36·1	..	38·3	15,20	..	..	..	..	0	15·5	..	14·7	23	1	..	6·6	5·0	..	2	0	0	2	0	0	0	0	0	0
Jalgaon	35·2	..	38·1	19	18·9	..	13·2	30,31	2.0	5.3	−31·3	5·3	25	1	−0·8	10·1	8·0	..	1	0	0	0	0	0	0	0	0	0
Malegaon	34·1	+0·9	36·6	19,20	19·5	+0.7	13·0	30	0	0	−43·4	0	..	0	−2·7	8·2	5·6	−0·7	0	0	0	0	0	0	0	0	0	0
Deolali	32·7	..	35·7	13,21	18·8	..	15·2	30	11·9	28·0	..	12·2	21	3	..	8·5	5·5	..	3	0	0	3	3	0	0	0	0	0
Aurangabad	32·5	+0·4	36·3	11	20·1	+0·7	15·2	31	13·3	77·8	+32·3	58·4	21	4	+1·2	8·8	7·0	−0·9	5	0	0	1	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	32·1	..	35·2	12	17·9	..	12·2	31	23·1	57·3	..	29·0	25	4	..	11·2	6·8	..	5	0	0	1	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	40·4	−139·7	24·9	1	2	−4·3	..	..	..	6	..	..	..	..	..	..	..	..	..
Ahmednagar	31·6	+0·2	35·1	13	19·8	+1·1	14·4	31	35·3	147·3	+92·2	76·2	21	6	+2·6	8·3	5·9	−1·8	6	0	0	0	0	0	0	0	0	0
Parbhani	32·8	..	36·4	12	19·5	..	13·8	31	5·6	47·9	−5·2	26·1	25	3	0	8·5	5·8	..	5	0	0	0	0	0	0	0	0	0
Poona	32·6	+0·7	36·3	12,14	20·6	+1·5	17·0	31	40·7	75·8	−14·1	23·6	24	5	−0·1	4·6	2·7	−3·7	8	0	0	2	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	32·5	..	36·0	12	20·2	..	18·4	8,21	36·9	50·9	..	22·3	24	3	..	..	..	..	4	0	0	2	0	0	0	0	0	0
Baramati	32·5	..	36·7	4 days	20·7	..	17·2	31	80·0	197·9	..	75·4	24	7	..	7·8	7·0	..	8	0	0	0	0	0	0	0	0	0
Jeur	32·2	..	36·3	14	19·8	..	14·8	31	29·3	77·5	..	32·0	25	5	..	8·4	6·0	..	5	0	0	0	0	0	0	0	0	0
Sholapur	32·9	+0·3	36·4	12	21·8	+1·4	18·0	31	125·1	193.3	+116·1	125 5	24	6	+1·7	10·7	9·4	−0·1	7	0	0	5	0	0	0	0	0	0
Miraj	31·5	+1·0	34·4	14	21·0	+0·8	19·6	18,31	32·5	197·3	+92·6	47·5	25	9	+2.6	8·3	5·6	−3·1	9	0	0	3	3	0	0	0	0	0
Kolhapur	31·6	..	34·7	14,18	20·7	..	19·6	31	30·8	121·1	..	24·1	21	10	..	9·9	8·0	..	12	0	0	10	2	0	0	0	0	0
Vidarbha																												
Buldana	30·4	..	33·1	20	20·7	..	14·4	31	1.0	1·8	..	1·8	25	1	..	7·0	6·2	..	1	0	0	0	0	0	0	0	0	0
Akola	34·5	+0·8	37·4	9,11	20·2	+0·8	14·2	31	2·8	5·4	−40·8	3·1	24	1	−1·5	7·1	4·6	+0·3	3	0	0	0	0	0	0	0	0	0
Amravati	33·3	+0·6	36·3	11	20·5	+0·1	17·4	31	4·4	8·5	−40·0	4·9	24	1	−1·6	7·4	6·1	+1·0	3	0	0	0	0	0	0	0	0	0
Yeotmal	32·1	..	35·4	10	20·0	..	15·0	30	12·3	29·2	..	15·1	30	4	..	8·0	5·9	..	4	0	0	0	0	0	0	0	0	0
Nagpur	33·1	+1·0	36·3	10,12	19·3	−0·4	12·3	29	3·3	8·2	−46·9	3·1	24	2	−1·1	9·0	7·1	..	4	0	0	0	0	0	0	0	0	0
Gondia	32·5	..	35·3	12	20·3	..	14·4	30	0·5	2·5	..	2·5	24	1	..	4·1	2·1	..	1	0	0	0	0	0	0	0	0	0
Brahmapuri	32·9	..	35·6	4 days	19·3	..	16·3	8	7·6	16·0	..	7·6	26	2	..	5·7	3·4	..	5	0	0	1	0	0	0	0	0	0
Chanda	32·9	+0·8	36·6	10	20·1	0	13·3	31	1·5	22·9	−28·9	20·6	25	1	−1·9	6·1	3·6	+0·9	2	0	0	4	0	0	0	0	0	0
Sironcha	33·8	..	36·9	12	22·7	..	19·3	14	56·1	147·1	..	115·8	25	3	..	6·0	3·8	..	4	0	0	4	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	32·9	+0·3	37·2	7,13	25·0	+0·6	22·2	21	111·6	193·4	−49·4	38·9	21	11	+2·1	8·0	5·0	+0·3	14	0	0	8	0	0	0	0	0	0
Ongole	31·0	..	35·9	13	24·9	..	22·2	21	30·0	133·5	..	25·1	24	12	..	7·2	3·8	..	13	0	0	6	0	0	0	0	0	0
Rentachintala	34·4	+1·3	38·1	13	23·3	+0·1	21·2	14	39·7	50·4	−76·3	25·2	30	3	−4·6	4·5	2·6	−4·2	3	0	0	1	0	0	0	0	0	0
Gannavaram	32·3	..	35·6	9	24·6	..	22·2	21	60·8	63·6	..	14·5	20	7	..	12·0	8·5	..	10	0	0	8	0	0	0	0	0	0
Masulipatam	31·5	+0·1	35·1	12	25·1	+0·7	21·9	21	59·0	225·1	+6·7	75·9	23	11	+2·5	9·7	6·9	+1·1	13	0	0	14	0	0	0	0	0	0
Nidadavolu	32·8	..	36·5	13	23·8	..	22·7	13	76·7	74·5	..	26·4	6	4	..	9·2	6·0	..	9	0	0	7	0	0	0	0	0	0
Kakinada	32·4	+1·3	36·7	13,14	25·0	+0·6	23·3	23,29	3·8	212·3	−4·1	106·7	23	8	−0·6	11·1	9·3	+1·4	13	0	0	3	0	0	0	0	0	0
Visakhapatnam	33·3	+1·0	36·8	12	24·5	+0·1	22·5	23	33.2	69·6	−129·3	21·9	30	7	−1·3	10·8	5·6	−1·2	12	0	0	7	0	0	0	0	0	0
Calingapatam	31·7	+0·5	35·4	11	24·9	+0·6	22·8	10	25·4	49·5	−150·4	17·8	23	5	−2·3	11·8	8·6	+1·0	6	0	0	0	0	0	0	0	0	0
Telangana																												
Ramagundam	34·2	..	38·4	11	23·4	..	19·2	31	16·3	53·5	..	32·8	23	3	..	6·6	3·9	..	4	0	0	4	0	0	0	0	0	0
Nizamabad	32·7	+0·9	36·2	12,27	21·5	+1·5	16·0	31	41·7	67·6	+16·8	42·5	24	3	0	4·8	3·5	−0·2	4	0	0	0	0	0	0	0	0	0
Mahabub Nagar	32·0	..	35·1	12	22·0	..	19·9	25	25·1	41·1	..	15·2	22	3	..	10·0	8·8	..	5	0	0	2	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	31·5	+0·9	34·7	12	20·7	+1·4	17·1	31	4·6	59·7	−2·5	27·5	25	5	+0·7	10·6	7·3	−0·9	7	0	0	4	1	0	0	0	1	0
Hakimpet	..	..	..	..	21·4	..	18·9	25,31	0·8	81·6	..	67·3	25	5	..	..	..	..	5	0	0	3	0	0	0	0	0	0
Hanamkonda	33·3	+1·4	37·3	12	22·8	+1·2	20·1	31	13·8	158·3	+92·0	136·4	25	4	−0·1	7·4	5·1	+0·3	6	0	0	2	0	0	0	0	0	0
Bhadrachallam	34·5	..	37·6	12	22·9	..	20·9	10	8·1	11·9	..	9·9	31	1	..	7·2	4·0	..	2	0	0	2	0	0	0	0	0	0
Khammameth	34·0	..	37·4	12	23·2	..	21·1	10	14·0	14·0	..	7·4	18	2	..	5·9	3·8	..	5	0	0	0	0	0	0	0	0	0
Rayala Seema																												
Arogyavaram	28·9	..	31·8	12	20·1	..	16·9	31	16·7	98·4	..	42·7	2	7	..	7·6	4·7	..	14	0	0	4	0	0	0	0	0	0
Cuddapah	34·5	+1·2	38·1	12	24·6	+1·0	23·2	11	15·3	20·8	−102·6	5·6	29	5	−1·8	6·8	5·3	−0·7	7	0	0	0	0	0	0	0	0	0
Anantapur	32·6	..	34·7	13	23·1	..	21·3	1	6·9	103·4	+3·3	66·3	1	6	+0·5	8·7	7·7	..	9	0	0	9	0	0	0	0	0	0
Kurnool	34·4	+1·8	37·2	12	23·5	+1·4	21·0	11	24·6	28·9	−52·4	13·2	21	4	−0·9	9·3	6·7	+1·7	4	0	0	0	0	0	0	0	0	0

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, Km. per hour.			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Madras																												
Palayamcottai	33·5	..	36·8	9	25·1	..	22·3	26	98·4	207·8	+28·7	61·5	18	9	+0·4	9·9	8·2	..	10	0	0	4	0	0	0	0	0	0
Tuticorin	31·1	..	35·0	8	25·1	..	21·7	28	17·8	331·2	..	167·4	28	13	..	17·0	12·4	..	13	0	0	0	0	0	0	0	0	0
Pamban	29·4	—1·7	30·7	15	25·4	0	22·1	18	8·2	187·1	—29·6	116·9	18	9	—0·4	8·7	8·5	—3·1	12	0	0	0	0	0	0	0	0	0
Mathurai	32·7	+0·4	35·7	14	23·0	—0·1	21·8	20	11·5	202·8	+14·3	78·7	1	11	+0·8	4·4	4·3	0	18	0	0	0	0	0	0	0	0	0
Nagapattinam	30·7	—0·8	34·4	14	24·8	+0·1	22·8	2	15·3	345·8	+77·1	139·7	17	14	+3·8	10·0	9·1	+2·2	16	0	0	6	0	0	0	0	0	0
Tiruchirapalli	31·9	—0·5	34·8	13	23·9	+0·6	21·9	6	27·1	257·5	+74·4	55·6	6	12	+2·5	10·2	8·9	—0·3	20	0	0	11	0	0	0	0	0	0
Coimbatore	29·6	—1·3	33·1	13	23·2	+1·7	21·0	22	41·7	248·0	+87·7	82·3	21	12	+2·3	9·9	7·4	+3·1	17	0	0	11	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	31·1	..	33·6	1	22·3	..	21·1	22	50·7	239·3	..	50·8	21	12	..	14·8	13·3	..	18	0	0	15	1	0	0	0	0	0
Salem	32·0	—0·1	35·1	14	22·8	+0·6	20·6	12	86·7	133·1	—25·5	38·1	1	11	+1·3	7·0	6·3	+2·4	18	0	0	11	0	0	0	0	0	0
Kallakurichi	32·2	..	36·1	13	23·5	..	20·9	12	39·7	168·5	..	54·6	20	13	..	6·7	4·4	..	15	0	0	8	0	0	0	0	0	0
Cuddalore	30·9	—0·5	34·8	14	24·1	+0·1	21·8	3	100·6	364·3	+71·4	70·4	2	17	+6·2	5·4	3·9	—1·1	20	0	0	11	0	0	0	0	0	0
Vellore	31·3	—0·3	34·3	13	23·0	+0·3	20·6	13	152·0	290·8	+118·1	67·3	2	14	+4·8	6·6	5·0	+1·8	20	0	0	11	2	0	0	0	0	0
Madras	31·5	—0·8	36·1	13	24·4	+0·5	22·9	12,17	65·7	187·1	—118·7	33·8	17	10	—0·7	11·6	7·9	—2·9	15	0	0	9	2	0	0	0	1	0
Madras (Nungambakkam)	31·4	..	35·4	12	24·3	..	22·7	12	..	218·2	..	56·4	17	14	..	..	3·7	..	16	0	0	6	1	0	0	0	0	0
Coastal Mysore																												
Karwar	30·5	..	34·3	29	24·6	..	22·7	22	22·1	114·4	—28·6	24·4	20	7	—0·1	10·0	5·5	..	15	0	0	1	0	0	0	0	0	0
Honavar	31·4	+0·3	34·1	19	24·1	+1·0	22·4	25	79·5	269·7	+163·3	90·2	25	9	+2·8	7·3	6·0	+2·5	12	0	0	6	0	0	0	0	0	0
Mangalore	30·8	+0·9	33·3	29	24·3	+0·6	21·9	27	66·4	120·0	—87·0	43·4	17	8	—2·4	9·5	7·4	+0·8	15	0	0	17	0	0	0	0	2	0
Mangalore (Bajpe Aerodrome)	30·6	..	33·2	29	23·2	..	21·5	27	58·4	123·0	..	23·6	19	11	..	..	..	..	18	0	0	14	0	0	0	0	0	0
Mysore (North)																												
Bidar	30·5	+0·7	34·1	12	21·5	+0·6	18·7	22	96·3	163·5	+137·4	91·0	25	4	+0·3	10·7	8·5	—0·4	7	0	0	0	0	0	0	0	0	0
Gulbarga	32·6	+0·1	36·2	11,12	21·8	+1·2	17·8	31	26·0	137·4	+69·1	54·6	25	4	0	11·1	9·2	+0·2	10	0	0	0	0	0	0	0	0	0
Bijapur	31·5	0	35·0	13	21·8	+1·4	19·0	31	64·3	275·8	+202·4	96·0	24	9	+4·9	6·5	5·0	—0·3	10	0	0	3	0	0	0	0	0	0
Belgaum	28·7	+0·1	30·9	9,11	19·8	+1·2	18·2	21	141·5	594·4	+473·2	101·6	23	17	+9·5	5·1	4·2	—0·8	19	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	..	..	..	..	19·9	+1·6	18·8	21	83·0	314·9	+195·8	49·2	28	14	+6·5	8·4	5·5	—2·3	18	0	0	5	0	0	0	0	0	0
Belgaum (Sambre Aerodrome)	29·3	..	31·6	1,20	19·3	..	18·4	1	244·7	459·4	..	91·4	28	15	..	11·8	10·0	..	18	0	0	7	10	0	0	0	0	0
Gadag	31·4	+1·0	34·2	12	21·6	+1·0	20·6	3,4,30	58·1	223·3	+126·5	69·9	1	13	+5·7	7·6	6·6	—1·6	15	0	0	8	0	0	0	0	0	0
Raichur	32·9	+0·7	36·7	14	23·2	+0·9	20·4	24	2·0	124·6	+47·1	38·1	4	7	+2·7	8·8	7·9	—1·3	8	0	0	5	0	0	0	0	0	0
Mysore (South)																												
Bellary	32·1	0	34·8	11,12	22·9	+1·1	20·1	1	23·3	156·3	+50·6	63·5	1	9	+3·1	5·8	4·3	—0·7	9	0	0	7	0	0	0	0	0	0
Chitaldrug	29·4	—0·2	31·4	12	21·1	+1·0	18·7	2	17·4	230·6	+109·7	73·7	22	11	+4·6	6·7	5·3	—0·7	14	0	0	3	0	0	0	0	0	0
Shimoga	30·1	..	31·6	13	21·4	.	20·0	2	64·3	206·4	..	48·5	2	13	..	5·8	3·5	..	17	0	0	10	0	0	0	0	0	0
Balehonnur	26·6	+0·5	28·4	31	18·6	+0·6	17·6	1	..	439·5	+240·6	48·8	21,30	20	+8·6	..	..	..	26	0	0	0	0	0	0	0	0	0
Hassan	27·8	—0·1	29·6	13	19·5	+1·3	18·5	2	44·0	130·4	—23·8	29·0	2	11	+1·9	6·7	5·5	+0·2	15	0	0	13	0	0	0	0	0	0
Mysore	28·9	—0·1	30·6	13	20·4	+1·0	18·3	26	47·3	122·7	—26·6	50·5	6	8	—0·6	9·5	7·6	+0·2	16	0	0	3	0	0	0	0	0	0
Bangalore (Central Observatory)	27·8	+0·2	29·8	1	19·6	+1·3	18·4	3	59·9	151·3	+2·2	28·5	29	8	—0·5	8·9	8·1	+1·5	12	0	0	12	4	0	0	0	0	0
Bangalore (Aerodrome)	28·9	..	31·7	12	19·8	..	18·7	3	74·4	150·1	..	29·0	6	8	..	..	..	..	14	0	0	8	0	0	0	0	0	0
Kerala (Including Laccadives)																												
Kozhikode	30·0	—0·2	31·7	8,29	24·1	+0·3	22·7	22	40·2	305·0	+44·1	47·0	29	14	+2·8	10·3 (i)	9·4 (i)	+2·3	18	0	0	14	0	0	0	0	0	0
Palghat	32·0	..	33·8	30	23·8	..	22·8	18	2·0	160·0	..	39·4	18	10	..	11·6	8·4	..	13	0	0	11	0	0	0	0	0	0
Fort Cochin	29·9	+0·8	31·7	6	24·3	+0·2	23·1	25	88·9	494·8	+155·2	125·0	10	14	—0·2	7·2	4·6	—1·4	17	0	0	12	0	0	0	0	0	0
Cochin (Naval Air Station)	30·6	..	34·1	16	24·2	..	23·2	25	87·3	464·8	..	138·4	10	14	..	9·0	6·1	..	17	0	0	13	0	0	0	0	1	0
Alleppey	30·0	..	31·1	9,25	23·9	.	22·9	18	62·5	498·4	..	120·7	12	16	..	13·3	9·6	..	20	0	0	9	0	0	0	0	0	0
Punalur	32·3	..	34·4	30	22·7	..	20·4	1,26	197·2	413·2	..	98·5	10	15	..	5·4	2·9	..	16	0	0	0	0	0	0	0	0	0
Trivandrum	30·4	+0·4	32·5	1	23·6	+0·2	21·6	10	144·4	274·4	—1·9	73·1	29	12	—0·2	10·2	7·5	+1·5	17	0	0	10	0	0	0	0	0	0
Trivandrum (Aerodrome)	30·2	..	31·7	6	23·9	..	21·9	10	..	223·3	..	80·8	10	11	..	..	7·0	..	16	0	0	9	0	0	0	0	0	0
Hill Stations (Excluding Kashmir)																												
Walong (R)																												
Kohima	21·2	..	24·5	12	15·2	..	12·1	28	58·6	81·3	..	26·4	3	5	..	..	..	..	11	0	0	0	3	0	0	0	0	0
Aijal*																												
Shillong	21·5	—0·2	23·5	8	12·2	—0·5	7·8	30	118·9	134·7	—36·0	59·9	14	6	—4·0	1·3	0·6	—1·3	11	0	0	3	0	0	0	0	0	0
Cherrapunji	22·3	+0·1	24·7	2	14·7	—1·1	10·2	28	38·1	88·5	—404·8	30·5	7	8	—1·3	7·0	6·3	+1·3	9	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	108·9	..	26·7	3	9	..	..	..	..	9	..	..	..	..	..	..	..	..	..
Darjiling (Rajbhawan)	17·3	—0·5	21·7	4	10·6	—0·5	7·3	31	28·3	46·7	—90·7	21·0	16	6	+1·2	0·2	0·1	—1·8	9	0	0	0	16	0	0	0	0	0
Kalimpong	24·4	+2·2	26·1	13	16·5	+0·8	10·7	31	5·1	22·9	—104·4	10·2	1	4	—0·8	6·8	5·4	—4·9	4	0	0	0	0	0	0	0	0	0
Katmandu	27·1	+0·4	30·6	1	12·0	—1·6	7·2	26,28	21·6	29·7	—6·9	21·6	11	2	—1·2	2·4	1·2	—0·1	2	0	0	3	12	0	0	0	0	0
Mukteswar (Kumaon)	19·3	+1·0	23·0	2	9·6	—0·2	5·1	22	11·2	22·1	—25·6	12·0	22	2	—0·3	12·6	11·5	+3·9	2	0	0	2	2	0	0	0	0	0

*Temporarily closed. (i) Mean of 22 days. (R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days, (2·5 mm. or more)		Wind speed, Km. per hour.			Weather phenomena--No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hill Stations (excluding Kashmir)—(*Contd.*)																												
Nainital	19·2	..	22·3	8	9·3	..	5·6	28 30	7·1	20·8	..	15·7	21	2	..	5·6	6·9	..	3	0	0	0	0	0	0	0	0	0
Tapoban	20.6	..	25·0	5	9·2	..	5·6	21,22	..	44·7	..	35.6	22	2	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Badrinath (R)																												
Lokpal	3·3	..	6·1	4,5	—2·5	..	5·6	31	..	82·3	..	20·8	21	9	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Jamuna Chetty	..	..	..	..	..	..	..	..	..	83.8	..	33·0	21	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Mussooree	19·7	+1.9	24·9	5	11·2	+0·5	5·7	22	35·3	83·0	+54.0	40·6	22	3	+0·7	8·4	7·4	+0·5	3	0	0	4	0	0	0	0	0	0
Kharsali (R)																												
Rana (R)																												
Simla	18·1	+0·2	21·6	4	10.2	—0·6	3·8	21	6·3	39·4	+9·4	17·8	21	4	+2·1	4·8	3·5	—1·0	5	0	1	4	0	0	0	0	0	0
Dharampore (R)																												
Kyelang	..	..	..	..	..	..	..	..	..	67.9	+48·1	39.9	20	4	+2·7	..	..	..	4	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	114.3	..	69·9	20	3	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	143.7	..	45·2	20	7	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Koksar	..	..	..	..	..	..	..	..	..	91.0	..	58·7	3	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Dalhousie	21·9	..	25·7	4 days	11.5	..	3·9	23	33·5	83.0	+49·0	63·5	22	4	+1·9	3·8	4·2	..	4	0	0	0	0	0	0	0	0	0
Dharamshala	24·5	..	27·4	16	15·6	..	10.4	23	35·6	98·3	..	45·7	22	4	..	7·8	6·2	..	4	0	0	3	0	0	0	0	0	0
Abu	27·6	+1·4	30·2	15	17.8	—0·2	12.8	27	2.5	2·5	-16·8	2·5	23	1	+0·1	8·1	6·3	+0·8	1	0	0	1	0	0	0	0	0	0
Pachmarhi	27·5	+1·2	30·6	18	13·8	—1·1	7·2	29	6·6	11·7	—46·7	10·2	23	1	—2·0	4·6	2·6	—1·1	2	0	0	1	1	0	0	0	0	0
Mahabaleshwar	26·1	+2·7	30·6	9	16·1	—0·2	15.1	4,5,21	56.7	108.7	—52·6	36.3	2	7	—0·9	11·2	10·9	—1·3	8	0	0	8	5	0	0	0	0	0
Nandi Hills	24·1	..	25·1	16	15·7	..	13·9	6	..	212·9	..	50·3	5	9	..	..	..	..	9	0	0	0	0	0	0	0	0	0
Mercara	24·8	+0·7	26·6	6	17·7	+0·8	16·4	5	87·0	244·2	+33·6	66·5	20	13	+0·1	9·0	7·5	+2.0	13	0	0	2	0	0	0	0	0	0
Kodaikanal	16·7	0	18·8	1,2	10·9	+0·2	8·9	30	132·1	284.5	+24·4	35·3	22	23	+7·7	12·7	12·1	+1·2	26	0	0	12	20	0	0	0	0	0
Ootacamund	19·2	+1·1	21·7	31	10·3	0	7·2	12	152·3	242·9	+40·2	26·9	7	20	+6·2	5·4	4·0	—0·5	25	0	0	4	0	0	0	0	0	0
Coonoor	21 3	+0·4	23·3	1,14	14·1	+0·7	11·4	12	..	524·9	+267·6	73·1	24	18	+3·9	..	1·1	—3·4	25	0	0	3	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	22·6	..	5·3	13	4	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	137·2	..	23·9	10	13	..	..	..	..	16	..	..	..	..	..	..	..	..	..
Lachen	17·8	..	18·9	5 days	0·7	..	—5·6	30	..	51·9	..	8·9	13,22	10	..	..	..	..	14	..	..	..	..	..	..	..	..	..
Tibet Yatung (Chumbi)	16.5	+1·7	20·0	6	2·0	—0·7	—4·3	28	..	10·1	—39·2	3·8	2,28	3	—0·4	..	..	..	3	0	0	0	0	0	0	0	0	0
Lhasa (R)																												
Ceylon																												
Colombo	29·9	+0·1	32·0	15	23·3	—0·6	22·0	5 days	62·3	236·3	—130·7	73·4	20	17	+0·9	..	..	..	20	0	0	3	2	0	0	0	0	0
Trincomalee	31·9	+0·1	36·0	3	24·7	+0·5	23·0	21	85.4	335.8	+124·7	83·1	26	12	+1·1	..	..	..	18	0	0	4	0	0	0	0	0	0
Batticoloa	30·4	..	33·0	14,15	24·0	..	23·0	8 days	76·0	166.4	..	29·0	15	10	..	..	..	..	13	0	0	5	0	0	0	0	0	0
Hambantota	29·5	—0·6	31·0	13	24·4	+0·5	22·0	14	91·2	139·1	+30·4	49·8	14	10	+2·1	..	..	..	13	0	0	2	0	0	0	0	0	0
Mannar	30·5	..	34·0	14	25·6	..	23·0	27	103·0	236.6	..	43·2	21	11	..	..	..	..	14	0	0	7	0	0	0	0	0	0
Hydrometeorological Observatories Damodar Catchment																												
Bokaro	32·9	..	35·2	19,20	19·3	..	12·0	31	9·6	12.7	..	8·9	14	2	..	5·5	3·8	..	3	0	0	3	1	0	0	0	0	0
Hazaribagh	31·0	..	34·0	14	19·1	..	12·6	30	1·8	3·3	..	1·5	23	0	..	7·6	4·3	..	3	0	0	0	0	0	0	0	0	0
Tilaiya	31·3	..	32·9	16,18	21·2	..	14·0	31	49·0	50·6	..	32·5	6	2	..	8·1	5·4	..	3	0	0	0	0	0	0	0	0	0
Ramgarh	33·7	..	37·2	19	18·4	..	10·8	31	10·7	11·0	..	10·2	5	1	..	2·6	1·1	..	3	0	0	3	0	0	0	0	0	0
Panchet Hills	33·3	..	35·8	11	22·1	..	15·6	30	0·8	3·4	..	2·3	17	0	..	7·2	5·5	..	3	0	0	4	0	0	0	0	0	0
Durgapur	33·1	..	35·3	11	26·3	..	25·6	29,31	..	13·2	..	5·8	17	2	..	..	..	..	3	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	35·8	..	20·1	17	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	5·1	..	5·1	13	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	9·7	..	9·7	5	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	6·9	..	5·3	17	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	8·9	..	7·6	5	1	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	4·3	..	3·3	23	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	3·5	..	2·0	23	0	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Baramul	33·6	..	35·6	11,12, 18	20·9	..	17·1	31	14·5	14·5	..	14·5	26	1	..	2·7	1·5	..	1	0	0	1	0	0	0	0	0	0
Hirakud	33·0	..	36·4	12	22·9	..	17·4	31	40·6	107·7	..	66·5	25	2	..	4·8	3·2	..	4	0	0	1	0	0	0	0	0	0
Khijrawan	31·5	..	34·4	12	20·1	..	16·2	13	33·6	48·3	..	32·3	24	3	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Sonepur	33·9	..	35·8	11,14, 16	27·5	..	21·1	31	..	2·5	..	2·5	26	1	..	..	2·9	..	1	..	..	..	..	..	..	..	..	..
Sinabahar	33·3	..	35·6	21	17·7	..	11·4	31	..	21·0	..	6·3	15	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Bhimkund	31·5	..	33·8	19,20	20·8	..	17·1	31	31·0	31·0	..	16·0	5	2	..	3·5	2·3	..	4		0	6	4	0	0	0	0	0

(R)—Register not received

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, Km. per hour.			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hydrometeorological Observatories—(*Contd.*)																												
Narbada Catchment																												
Punasa (R)																												
Bagra Tawa	33·3	..	36·3	9	17·3	..	10·4	29	4·6	4·6	..	4·6	23	1	..	4·6	2·9	..	1	0	0	0	0	0	0	0	0	0
Thikri	36·0	..	38·2	22	19·1	..	12·8	30	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sabarmati Catchment																												
Jhadol	32·6	..	37·3	13,16	13·6	..	7·2	27	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Kotra Cantonment	..	..	..	..	..	..	..	..	..	58·4	..	30·5	22	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Dharoi	36·2	..	39·1	16	..	..	..	..	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Ganga Catchment																												
Mukhim	21·5	..	24·8	5	10·8	..	6·6	21,22	17·5	65·0	..	36·8	21	3	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Tehri	29·4	..	33·1	7	..	..	..	..	22·3	65·6	..	34·5	21	2	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Gandak Catchment																												
Gorkha	(a) 25·3	..	27·9	1	16·6	..	13·9	4 days	0	52·8	..	30·2	15	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Pokhara	27·1	..	29·6	7	16·1	..	12·1	26	34·2	90·0	..	31·7	1	6	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Nawakot	27·9	..	30·6	7	16·7	..	13·2	27	9·9	18·0	..	12·9	18	2	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Jomosom	18·6	..	22·4	7	6·1	..	2·3	22	0	7·1	..	7·1	17	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Timure	(i) 23·3	..	25.9	5,7	11·1	..	7·8	28	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh	(d) 23·3	..	25·9	5	..	..	..	..	12·4	18·0	..	10·9	13	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	21·6	..	25·2	5	11·8	..	6·1	28	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Munsiyari	..	..	..	..	..	..	..	..	0	29·0	..	23·4	20	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Sallyana	..	..	..	..	..	..	..	..	0	3·6	..	2·8	19	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Butwal	(d) 31·1	..	33·4	6	21·5	..	17·3	25	30·5	80·0	..	40·6	11	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	25·9	..	28·7	7	11·6	..	6·9	26	20·3	28·7	..	19·8	12	2	..	2·3	1·2	..	4	0	0	4	10	0	0	0	0	0
Kosi Catchment																												
Chautara	(m) 24·3	..	27·4	1	(f) 14·5	..	11·6	19	0	39·4	..	14·7	12	4	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Okhaldunga	21·4	..	24·9	7	12·3	..	9·3	18	20·3	31·2	..	18·0	2	2	..	2·9	2·7	..	11	0	0	3	2	0	0	0	0	0
Barahkshetra	29·5	..	32·3	8	19·7	..	14·9	28	2·8	115·9	..	69·3	6	5	..	6·5	4·2	..	6	0	0	4	0	0	0	0	0	0
Angbung	28·7	..	30·4	16	19·8	..	14·3	31	..	133·8	..	63·3	9	6	..	..	..	..	11	..	..	..	..	..	..	..	..	..
Taplejung	20·9	..	24·4	7	12·9	..	8·4	19	4·2	82·5	..	24·6	18	9	..	..	..	..	15	0	0	4	6	0	0	0	0	0
Taplethok	25·6	..	29·6	5	13·3	..	10·2	17	..	105·7	..	14·2	5	10	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)																												
Bhojpur	(b) 21·7	..	25·0	9	13·7	..	10·6	31	5·6	18·0	..	4·3	16	5	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Chainpur	25·3	..	28·1	13	15·8	..	12·1	18	..	23·3	..	12·2	2	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	19·6	..	23·8	4	11·4	..	8·1	19	15·4	156·6	..	30·7	10	13	..	4·8	4·1	..	19	0	0	5	11	0	0	0	0	0
Geyzing	23·4	..	26·8	23	13·7	..	10·1	26	0	150·2	..	27·9	27	12	..	..	..	..	13	..	..	..	..	..	..	..	..	..

(R) Register not received. (a) Mean of 30 days. (b) Mean of 29 days. (d) Mean of 27 days. (f) Mean of 25 days. (i) Mean of 22 days. (m) Mean of 18 days.

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloudamount (Oktas)		Mean wind speed, Km. per hour	Wind speed (Km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest isobaric level.	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	1	11	12	13	14	15	6	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar . .	0830	23	1012·0	1008·4	..	27·5	25·4	24·5	31·1	85	..	4·9	..	7.7	0	0	22	0	9	4	0	0	9	0	0	9	0
	1730	,,	1009·3	1006·7	..	26·4	24·5	23·7	29·9	86	..	5·2	..	6·8	0	0	26	1	8	1	0	0	11	5	0	5	0
Long Island . .	0830	33	1012·8	1009·0	..	27·4	25·5	24·7	31·0	86	..	4·6	..	1·1	0	0	11	0	0	0	2	0	5	0	4	20	0
	1730	,,	1010·3	1006·6	..	26·6	25·1	24·1	31·0	85	..	5·0	..	1·1	0	0	8	0	1	0	0	1	4	1	1	23	0
Port Blair . .	0530	79	1010·6	1001·6	..	24·3	23·8	23·4	28·9	96	..	5·1	..	5·7	0	1	18	0	3	2	0	0	7	7	0	12	0
	0830	,,	1012·3	1003·4	+1·3	27·9	25·6	24·6	31·2	83	+2	5·4	+0·2	8·0	0	0	28	1	5	10	0	0	6	5	1	3	0
	1130	,,	1010·5	1001·7	..	28·5	25·8	24·6	30·8	80	..	5·7	..	12·1	0	2	26	0	5	9	1	2	6	5	0	3	0
	1730	,,	1009·7	1000·8	..	26·0	24·5	23·9	29·8	89	..	4·9	..	7·7	0	1	26	0	6	5	1	0	7	7	1	4	0
	2330	,,	1011·1	1002·1	..	24·9	24·2	23·8	29·3	94	..	4·6	..	6·5	0	2	16	0	4	2	2	0	4	6	0	13	0
Car Nicobar . .	0830	10	1012·3	1011·1	..	28·3	25·7	24·5	31·3	80	..	4·8	..	4·6	0	0	24	0	5	2	2	0	5	5	1	7	4
	1730	,,	1009·5	1008·3	..	26·7	24·9	24·0	30·4	86	..	4·9	..	1·9	0	0	10	0	1	1	0	0	3	3	2	21	0
Nancowry . .	0830	26	1012·7	1009·7	..	27·7	25·5	24·6	30·8	83	..	5·2	..	2·1	0	0	12	0	1	0	0	0	6	4	1	19	0
	1730	,,	1010·1	1007·2	..	26·5	24·6	23·8	29·3	85	..	4·4	..	2·7	0	0	11	0	0	0	0	0	6	4	1	20	0
Kondul . .	0830	8	1012·8	1011·9	..	27·6	25·3	24·5	30·6	83	..	5·1	..	4·3	0	0	20	0	0	10	10	0	0	0	0	11	0
	1730	,,	1010·0	1009·1	..	26·6	25·0	24·3	30·2	87	..	5·3	..	3·0	0	0	12	0	0	6	5	0	0	0	0	19	1
Assam (Including Manipur, Tripura)																											
Pasighat . .	0830	..	..	..	..	23.1	20.2	18.1	21.3	74	..	4·8	..	13.8	0	7	23	8	1	1	0	0	0	0	20	1	0
	1730	..	..	..	..	22·9	21.2	20.3	23.9	85	..	4·6	..	4.5 (m)	0	1	23	3	1	1	0	1	0	0	18	7	0
Digboi . . .	0830	..	..	..	..	23·6	21·4	20·5	23·6	81	..	5·1	..	3.2 (n)	0	0	18	5	3	1	0	3	2	2	2	0	0
	1730	..	..	..	..	26·1	23·0	22·3	25·6	78	..	4·9	..	3.0	0	0	17	7	3	0	1	1	1	2	2	0	0
Dibrugarh . .	0830	106	1013·6	1001·5	+0·6	24·7	21·8	20·3	23·7	77	—5	4·6	+0·4	2·3	0	0	16	2	4	10	0	0	0	0	0	15	0
	1730	,,	1009·7	997·6	..	24.8	22·3	21·0	24.8	80	..	4·0	..	0·2	0	0	2	0	0	2	0	0	0	0	0	29	0
Dibrugarh (Mohanbari Aerodrome).	0230	111	1011·0	998·1	..	20·2	19·6	19·2	22·4	94	..	4·1	..	1·6	0	0	4	1	1	1	0	0	0	0	1	27	0
	0530	,,	1012·2	999·3	..	19·9	19·4	18·9	22·1	95	..	5·3	..	0·7	0	0	4	1	2	0	1	0	0	0	0	27	0
	0830	,,	1013·9	1001·2	..	24·2	21·6	20·2	23·7	79	..	5·0	..	4·5	0	0	23	1	12	8	2	0	0	0	0	8	0
	1130	,,	1011·7	999·1	..	26·7	22·2	19·9	23·2	66	..	4·5	..	5·1	0	0	25	1	15	7	1	0	0	0	1	6	0
	1730	,,	1010 0	997·3	..	24.0	22·0	20·9	24·9	81	..	4·5	..	0·7	0	0	4	1	3	0	0	0	0	0	0	27	0
	2330	,,	1011·7	998·9	..	20·8	20·1	19·6	23·2	93	..	3·6	..	0·8	0	0	4	0	2	1	1	0	0	0	0	27	0
North Lakhimpur .	0830	102	1013·5	1001·8	..	24·0	21·7	20·4	24·1	81	..	4·8	..	..	0	0	30	10	10	6	0	0	0	1	3	1	0
	1130	,,	1011·5	1000·0	..	26·9	22·5	20·3	23·7	68	..	4·7	..	..	0	0	30	6	8	12	1	0	0	0	2	1	0
	1730	,,	1009·5	997·9	..	24·7	22.8	21·8	26·1	84	..	4·8	..	..	0	0	7	4	2	1	0	0	0	0	0	24	0
Sibsagar . . .	0830	97	1013·8	1002·7	+1·0	25·0	22·7	21·6	25·8	82	—6	5·1	—0·8	1·3	0	0	10	5	3	1	0	0	1	0	0	21	0
	1730	,,	1009·8	998·8	..	25·6	23·7	22·7	27·9	84	..	4·2	..	0·9	0	0	7	2	3	0	0	0	0	1	1	24	0
Jorhat . . .	0530	90	1011·4	1001·0	..	20·3	20·2	20·1	23·6	99	..	4·9	..	2·2	0	1	2	1	1	0	0	0	0	0	1	28	0
	0830	,,	1013·3	1003·0	..	24·9	23·0	22·1	25·8	84	..	5·1	..	2·2	0	0	13	7	4	0	0	1	0	0	1	18	0
	1130	,,	1011·3	1001·2	..	28·1	23·9	21·9	26·2	69	..	4·5	..	9·5	0	0	29	10	10	1	1	1	1	2	3	2	0
	1730	,,	1009·1	998·9	..	24·7	23·1	22·3	27·2	86	..	2·6	..	1·5	0	0	6	4	2	0	0	0	0	0	0	25	0
Golaghat . . .	0830	..	..	..	..	24·5	22·2	21·1	25·0	81	..	6·2	..	..	0	0	6	0	0	0	6	0	0	0	0	25	0
	1730	..	..	..	..	27·6	23·7	21·7	25·6	71	..	6·2	..	..	0	0	2	0	0	0	2	0	0	0	0	29	0
Gohpur . (R)	0830	..																									
(R)	1730	..																									
Tezpur . . .	0830	79	1013·9	1004·8	+0·6	23·1	21·9	21·2	25·4	89	+7	3·3	—0·4	1·3	0	0	13	0	6	7	0	0	0	0	0	18	0
	1730	,,	1009·3	1000·3	..	26·4	23·6	22·2	26·9	78	..	1·6	..	0·5	0	0	4	0	1	2	0	0	0	1	0	27	0
Tezpur (P.B.O.) .	0230	78	1011·1	1002·0	..	21·5	20·9	20·6	24·4	95	..	3·3	..	0·4	0	0	2	0	0	2	0	0	0	0	0	29	0
	0530	,,	1012·2	1003·0	..	21·2	20·6	20·2	23·8	95	..	4·6	..	1·3	0	0	9	2	4	2	1	0	0	0	0	22	0
	0830	,,	1013·7	1004·7	..	24·9	22·3	20·9	25·0	79	..	3·6	..	4·4	0	0	26	3	9	9	2	0	3	0	0	5	0
	1130	,,	1012·1	1003·3	..	27·6	23·5	21·4	25·7	69	..	3·3	..	5·3	0	0	30	1	4	14	5	2	2	1	1	1	0
	1730	,,	1009·5	1000·6	..	25·5	23·0	21·6	25·5	80	..	2·9	..	1·5	0	0	7	0	3	3	0	0	1	0	0	24	0
	2330	,,	1011·9	1002·8	..	22·3	21·5	21·0	25·0	92	..	3·3	..	1·4	0	0	8	2	3	3	0	0	0	0	0	23	0
Majbat . .	0830	..	..	..	..	..	..	..	..	..	..	5·0	..	7·0	0	0	30	0	7	14	6	0	2	0	1	1	0
	1730	..	..	..	..	..	..	..	..	..	..	4·1	..	1·6	0	0	11	3	3	2	1	0	0	2	0	20	0
Chaparmukh (R)	0830	66																									
(R)	1730	,,																									
Tangla .	0830	78	1013·1	1004·2	..	25·9	23·6	20·9	24·7	74	..	2·7	..	7·0	0	0	31	3	7	11	4	4	1	1	0	0	0
	1730	,,	1008·8	1000·1	..	25·7	23·6	22·5	27·4	83	..	1·6	..	1·3	0	0	9	2	0	2	1	0	1	2	1	22	0
Gauhati . .	0830	55	1013·2	1006·8	+0·7	24·5	22·6	21·7	25·8	85	+2	2·6	—1·6	2·6	0	0	27	4	13	4	2	0	2	0	2	4	0
	1730	,,	1009·2	1003·0	..	27·3	23·6	21·7	26·0	72	..	2·8	..	0·6	0	0	6	0	4	0	1	0	1	0	0	25	0

(R) Register not received. (m) Mean of 18 days. (n) Mean of 17 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in m.b.s.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (km.p.h.): Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur, Tripura)—(Contd.)																											
Gauhati (Kaikuchi Aerodrome)	0230	49	1010·4	1004·7	..	21·8	21·1	20·7	24·5	94	..	3·0	..	1·5	0	0	13	1	3	2	1	1	1	2	2	18	0
	0530	,,	1011·4	1005·7	..	21·2	20·7	20·3	24·0	95	..	4·0	..	1·0	0	0	7	0	1	3	0	1	2	0	0	24	0
	0830	,,	1013·1	1007·5	..	25·5	22·8	21·6	25·5	78	..	4·0	..	3·5	0	0	19	3	11	2	0	2	0	1	0	12	0
	1130	,,	1011·2	1005·7	..	28·3	23·8	21·6	25·9	67	..	3·7	..	7·4	0	0	31	6	18	1	0	0	0	3	3	0	0
	1730	,,	1009·2	1003·6	..	26·2	23·8	22·6	27·5	81	..	3·8	..	2·1	0	0	10	0	5	1	0	1	2	1	0	21	0
	2330	,,	1011·3	1005·6	..	22·6	21·8	21·4	25·5	93	..	3·4	..	2·2	0	0	14	0	1	1	0	5	5	2	0	17	0
Rangiya (R)	0830																										
(R)	1730																										
Goalpara	0830	33	1012·6	1008·2	..	25·2	22·7	21·7	25·5	82	..	4·2	..	..	0	0	25	0	11	5	3	0	3	3	0	6	0
	1730	,,	1008·6	1004·1	..	28·1	25·0	22·9	29·1	72	..	1·9	..	..	0	0	17	0	6	1	2	1	4	3	0	14	0
Dhubri	0830	35	1013·1	1009·4	+1·1	26·3	24·1	23·0	28·1	82	0	1·4	−1·6	6·5	0	0	31	0	26	1	0	0	2	2	0	0	0
	1730	,,	1009·3	1005·6	..	26·3	24·0	23·0	27·8	82	..	1·3	..	3·1	0	0	21	0	10	0	0	1	10	0	0	10	0
Dhubri (Rupsi Aerodrome)	0830	..	..	..	..	26·2	23·7	22·2	27·2	79	..	2·8	..	6·4	0	0	30	0	6	5	11	4	3	1	0	1	0
	1130	..	..	..	..	28·9	25·8	24·2	30·8	77	..	3·4	..	6·0	0	0	31	0	5	8	10	1	5	2	0	0	0
	1730	..	..	..	..	25·2	23·9	23·0	28·6	87	..	1·8	..	1·9	0	0	13	0	1	2	0	5	3	1	1	18	0
Tura	0830	379	1013·9	971·9	..	22·6	21·3	20·3	24·4	88	..	3·1	..	1·1	0	0	9	0	3	5	0	0	1	0	0	22	0
	1730	,,	1008·8	968·6	..	25·9	23·8	22·8	27·9	83	..	4·5	..	2·0	0	0	21	0	2	2	2	4	9	2	0	10	0
Agartala	0230	16	1009·5	1007·7	..	22·3	21·8	21·5	25·7	96	..	2·9	..	3·0	0	0	13	3	3	0	4	3	0	0	0	18	0
	0530	,,	1010·6	1008·7	..	21·5	21·0	20·7	24·8	96	..	4·2	..	3·3	0	1	14	1	4	0	3	5	0	0	2	16	0
	0830	,,	1012·2	1010·4	..	27·1	24·1	22·6	27·5	77	..	3·5	..	3·6	0	0	21	3	7	3	4	1	1	1	1	10	0
	1130	,,	1010·7	1008·9	..	29·6	24·4	21·9	26·5	64	..	4·6	..	6·3	0	0	27	8	4	3	4	1	0	0	7	4	0
	1730	,,	1008·7	1006·9	..	26·8	24·1	22·9	27·7	78	..	4·1	..	2·7	0	0	22	9	0	1	2	2	1	1	6	9	0
	2330	,,	1010·6	1008·7	..	22·8	22·2	21·9	26·4	94	..	3·0	..	2·5	0	0	13	2	1	0	6	4	0	0	0	18	0
Silchar	0830	29	1013·5	1010·1	+1·0	26·0	25·1	21·6	25·8	77	−5	3·7	−0·3	2·1	0	0	22	1	6	11	3	1	0	0	0	9	0
	1730	,,	1009·1	1005·8	..	27·5	24·5	23·2	28·3	77	..	2·6	..	0·2	0	0	2	0	0	0	0	1	0	1	0	29	0
Silcher (Kumbhigram Aerodrome)	0530	97	1010·4	999·2	..	20·6	20·2	19·9	23·4	96	..	3·9	..	5·2	0	0	25	0	3	19	2	1	0	0	0	6	0
	0830	,,	1011·9	1000·9	..	25·1	22·7	21·4	25·5	80	..	3·7	..	7·3	0	0	30	0	0	19	8	1	1	0	1	1	0
	1130	,,	1009·8	998·9	..	28·7	25·8	21·3	25·6	65	..	2·6	..	5·7	0	0	29	1	2	8	5	3	6	3	1	2	0
	1730	,,	1007·9	996·9	..	25·4	23·3	22·3	26·8	82	..	2·4	..	2·7	0	0	19	5	2	5	1	0	2	0	4	12	0
Imphal	0530	301	1014·7	924·7	..	16·1	15·8	15·6	17·8	97	..	4·6	..	0·1	0	0	1	1	0	0	0	0	0	0	0	30	0
	0830	,,	1014·8	926·1	..	20·5	18·6	17·5	19·9	83	..	4·9	..	2·5	0	0	17	1	0	3	6	4	2	1	0	14	0
	1130	,,	1011·5	924·0	..	24·6	19·8	17·1	17·4	61	..	4·0	..	7·4	0	1	28	0	1	2	6	8	9	2	1	2	0
	1730	,,	1010·4	922·4	..	21·9	19·0	17·2	19·8	75	..	3·1	..	4·5	0	0	22	0	2	2	0	4	5	3	6	9	0
	2330	,,	1013·8	924·3	..	17·6	17·0	16·6	19·0	95	..	3·7	..	2·1	0	0	12	1	0	2	0	0	4	2	3	19	0
Haflong	0830	682	1013·1	937·2	..	21·8	19·6	18·4	22·1	82	..	3·9	..	..	0	0	31	2	12	0	0	7	10	0	0	0	0
	1730	,,	1008·8	933·7	..	23·3	20·3	18·7	21·6	76	..	3·4	..	..	0	0	31	1	4	0	5	10	9	0	2	0	0
Lumding	0830	149	1013·8	996·8	..	24·7	22·5	21·6	25·4	82	−5	4·6	..	1·0	0	0	8	0	1	3	3	0	0	0	1	23	0
	1730	,,	1009·1	992·3	..	26·9	24·1	23·0	27·8	78	..	3·6	..	0·5	0	0	4	0	0	1	2	0	1	0	0	27	0
Sub-Himalayan West Bengal																											
Cooch Behar (C.W.O.)	0830	43	1013·5	1008·5	..	26·0	22·8	21·0	25·5	75	..	2·8	..	8·0	0	0	28	1	5	21	0	1	0	0	0	3	0
	1130	,,	1011·7	1006·8	..	29·1	23·8	21·2	25·3	63	..	3·6	..	9·0	0	0	30	0	5	15	1	1	1	2	1	1	4
	1730	,,	1009·6	1004·6	..	25·8	23·3	22·1	26·7	80	..	2·7	..	0·4	0	0	2	0	0	1	1	0	0	0	0	29	0
Jalpaiguri	0830	88	1013·6	1004·0	+1·4	23·4	21·4	20·3	23·9	83	0	2·1	−0·2	4·5	0	0	25	15	7	1	1	0	0	0	1	6	0
	1730	,,	1009·3	1000·0	..	28·2	23·0	20·2	23·9	62	..	0·9	..	3·9	0	0	24	0	2	9	2	0	6	3	2	7	0
Bagdogra	0230	131	1009·9	994·9	..	21·1	20·5	20·0	23·8	94	..	3·0	..	0·4	0	0	9	7	0	0	0	0	0	0	2	22	0
	0530	,,	1011·0	995·9	..	19·9	19·5	19·3	22·6	95	..	3·8	..	1·5	0	0	12	8	0	2	0	0	0	0	2	19	0
	0830	,,	1012·5	997·9	..	25·0	22·0	20·4	23·9	76	..	3·7	..	4·3	0	0	22	2	4	15	1	0	0	0	0	9	0
	1130	,,	1011·2	996·4	..	28·0	22·9	20·2	24·1	64	..	3·7	..	5·8	0	0	27	1	1	8	13	2	2	0	0	4	0
	1730	,,	1008·9	994·0	..	25·5	23·3	22·1	26·8	82	..	3·7	..	1·0	0	0	7	0	0	2	2	2	0	0	1	24	0
	2330	,,	1010·9	995·9	..	22·3	21·2	20·6	24·3	91	..	3·4	..	3·6	0	0	19	16	0	1	0	0	0	0	2	12	0
Maida	0830	31	1012·5	1008·9	+0·8	27·4	23·6	21·6	25·8	71	−4	2·7	+0·9	6·2	0	0	30	2	9	4	2	5	3	3	2	1	0
	1730	,,	1009·0	1005·5	..	28·3	23·9	21·7	26·0	68	..	2·8	..	3·8	0	0	25	1	6	3	5	3	3	1	3	6	0
Gangetic West Bengal																											
Dum Dum	0230	6	1009·5	1008·7	..	24·8	24·3	24·1	29·8	96	..	1·7	..	1·0	0	0	8	1	3	0	2	0	2	0	0	23	0
	0530	,,	1010·2	1009·5	..	24·2	23·9	23·7	29·4	97	..	3·6	..	1·5	0	0	11	4	4	0	0	0	1	0	2	20	0
	0830	,,	1012·1	1011·4	..	28·1	25·4	24·1	29·9	80	..	3·2	..	4·7	0	0	27	7	8	1	1	2	3	4	1	4	0
	1130	,,	1010·8	1010·1	..	30·4	25·8	23·9	29·1	69	..	4·7	..	6·1	0	0	29	8	9	3	1	1	2	4	1	2	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed Kms. per hour	Wind speed (Km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61		Wind direction									
																		N	NE	E	SE	S	S W	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal—(*Contd.*)																											
Dum Dum—(*Contd.*)	1730	6	1008·8	1008·1	..	28·0	25·6	24·5	30·6	82	..	4·8	..	2·4	0	0	17	1	5	0	6	2	1	0	2	14	0
	2330	,,	1010·5	1009·8	..	25·2	24·4	24·0	29·8	94	..	2·0	..	1·3	0	0	11	2	2	2	2	1	1	1	0	20	0
Calcutta	0830	6	1012·3	1011·6	+0·9	28·5	24·8	23·0	28·3	73	—9	3·2	+0·2	2·5	0	0	26	6	6	1	0	1	6	2	4	5	0
	1130	,,	1010·8	1010·1	..	31·4	25·3	22·4	27·2	60	..	4·6	..	4·6	0	0	26	4	5	2	2	0	5	3	5	5	0
	1730	,,	1009·0	1008·3	..	27·9	24·4	22·8	27·4	74	..	4·0	..	2·2	0	0	14	2	2	3	2	1	3	0	1	17	0
Barrackpore	0530	7	1010·4	1009·6	..	23·9	23·6	23·4	28·9	98	..	3·0	..	0·9	0	0	8	1	0	0	1	0	1	2	3	23	0
	0830	,,	1012·2	1011·5	..	28·2	25·4	24·1	30·2	79	..	3·2	..	6·3	0	1	23	4	3	6	0	0	3	4	4	7	0
	1130	,,	1010·9	1010·2	..	30·7	26·6	24·9	31·2	71	..	4·1	..	0·7	0	0	28	3	4	6	2	0	1	4	8	3	0
	1730	,,	1008·9	1008·2	..	27·3	25·3	24·3	30·7	84	..	4·2	..	2·6	0	0	14	2	0	2	3	2	1	0	4	17	0
	2330	,,	1010·7	1009·9	..	24·6	24·0	23·7	29·4	95	..	2·0	..	1·7	0	0	8	1	0	1	1	1	2	1	1	23	0
Saugor Island	0830	3	1011·5	1011·2	+0·4	28·3	25·8	24·6	28·2	81	+3	4·4	+0·3	10·7	0	1	30	8	9	1	1	2	4	3	3	0	0
	1730	,,	1008·5	1008·2	..	28·6	25·2	23·6	29·4	74	..	4·5	..	7·6	0	1	28	3	3	1	3	8	7	3	1	2	0
Sandheads	0530	10	1010·1	1009·0	..	28·1	25·0	23·4	29·2	77	..	4·4	..	..	0	2	21	3	3	1	1	0	9	3	3	8	0
	0830	,,	1011·9	1010·8	+0·4	29·0	25·5	23·9	29·8	75	+3	3·7	+0·2	..	0	1	24	4	5	1	1	1	7	3	3	6	0
	1130	,,	1010·8	1009·8	..	30·1	25·7	23·8	29·4	69	..	3·9	..	..	0	1	27	4	8	2	1	1	5	4	3	3	0
	1730	,,	1009·2	1008·1	..	29·6	25·1	23·0	28·3	68	..	3·7	..	..	0	0	23	1	8	0	3	1	5	2	3	8	0
	2330	,,	1010·4	1009·3	..	28·4	25·0	23·6	29·0	75	..	2·0	..	..	0	0	21	2	1	2	0	6	7	2	1	10	0
Contai	0830	11	1012·0	1010·8	..	28·5	25·7	24·4	30·8	79	..	3·0	..	1·0	0	0	10	5	0	0	0	0	2	3	0	21	0
	1730	,,	1008·8	1007·6	..	28·8	25·8	24·3	30·8	77	..	3·2	..	0·6	0	0	6	0	0	0	0	4	2	0	0	25	0
Midnapore	0830	45	1012·1	1007·0	+0·8	28·4	24·4	22·5	27·5	70	—5	1·9	—0·7	2·5	0	0	21	5	6	2	1	2	2	0	3	10	0
	1730	,,	1008·6	1003·5	..	29·8	24·7	22·4	26·9	65	..	1·8	..	1·4	0	0	11	1	1	3	0	6	0	0	0	20	0
Purulia	0830	255	1012·5	983·9	..	25·9	21·6	19·0	22·0	67	..	1·4	..	2·5	0	0	26	5	1	0	4	2	0	8	6	5	0
	1730	,,	1008·3	980·4	..	28·3	22·9	19·4	23·9	59	..	2·8	..	0·8	0	0	7	2	0	0	1	0	0	2	2	24	0
Burdwan	0830	32	1012·3	1008·6	+0·7	27·2	24·2	22·6	27·7	75	—2	2·4	—0·6	0·5	0	0	5	2	1	0	1	1	0	0	0	26	0
	1730	,,	1009·3	1005·6	..	29·0	24·8	22·9	27·8	69	..	2·7	..	0·5	0	0	5	0	1	2	1	1	0	0	0	26	0
Krishnagar	0830	15	1012·5	1010·8	+0·9	28·8	25·0	23·5	28·6	73	0	1·9	—1·0	1·5	0	0	16	3	3	4	0	3	0	2	1	15	0
	1730	,,	1009·1	1007·4	..	28·4	24·6	23·1	27·5	72	..	2·3	..	0·6	0	0	6	0	0	0	0	4	0	2	0	25	0
Asansol	0230	126	1009·7	995·3	..	23·4	21·8	21·1	24·5	86	..	2·3	..	1·1	0	0	5	0	0	1	1	2	0	1	0	26	0
	0530	,,	1010·4	996·0	..	22·7	21·3	20·5	24·2	87	..	3·6	..	0·9	0	0	5	0	0	0	0	1	1	1	2	26	0
	0830	,,	1012·2	997·9	+0·6	26·7	23·3	21·5	26·0	73	—3	2·7	—0·2	4·0	0	0	21	2	1	2	4	1	1	5	5	10	0
	1130	,,	1010·9	996·8	..	30·4	23·6	19·7	23·2	54	..	3·5	..	4·7	0	0	22	1	0	1	3	0	3	6	8	9	0
	1730	,,	1008·5	994·4	..	28·3	23·5	20·9	25·2	65	..	3·9	..	2·0	0	0	13	0	1	2	5	1	0	1	3	18	0
	2330	,,	1010·8	996·4	..	24·0	22·0	20·9	25·0	83	..	2·6	..	1·8	0	0	10	2	0	2	2	2	0	2	0	21	0
Suri	0830	77	1012·5	1003·8	..	26·8	23·7	21·7	27·0	73	..	2·6	..	5·3	0	0	29	2	5	4	3	4	3	4	4	2	0
	1730	,,	1009·5	1000·8	..	27·9	23·6	21·5	25·4	69	..	3·7	..	4·0	0	0	27	1	4	7	7	4	1	2	1	4	0
Berhampore	0830	19	1011·1	1008·9	—0·6	27·0	24·1	22·7	28·0	78	0	2·1	—0·8	1·9	0	0	13	1	1	5	2	4	0	0	0	18	0
	1730	,,	1008·6	1006·3	..	29·3	24·2	22·1	26·4	67	..	3·4	..	0·9	0	0	6	1	1	1	1	1	1	0	0	25	0
Orissa																											
Baripada	0830	54	1012·4	1006·3	..	26·9	22·9	20·8	24·7	70	..	2·5	..	1·5	0	0	18	10	1	0	0	0	0	0	7	13	0
	1730	,,	1008·8	1002·7	..	28·4	24·2	22·1	26·7	69	..	3·7	..	0·9	0	0	7	0	1	1	5	0	0	0	0	24	0
Balasore	0830	20	1012·0	1009·7	+0·7	27·9	24·4	22·7	27·5	74	—4	3·5	+0·4	5·0	0	0	26	9	6	0	0	2	4	0	5	5	0
	1730	,,	1008·8	1006·6	..	28·3	25·1	23·8	29·0	77	..	4·5	..	1·3	0	0	11	1	0	0	3	6	1	0	0	20	0
Chandbali	0830	6	1012·2	1011·5	+1·0	28·1	25·9	25·0	31·6	83	+2	3·0	—0·4	3·3	0	0	31	1	2	0	0	0	3	3	22	0	0
	1730	,,	1009·1	1008·4	..	28·3	25·5	24·4	30·5	77	..	4·3	..	3·8	0	0	31	0	10	1	12	1	1	3	3	0	0
Cuttack	0830	27	1011·8	1008·8	+0·4	27·2	24·4	23·1	28·4	78	0	2·3	—0·9	0·7	0	0	5	1	0	0	0	0	0	1	3	26	0
	1730	,,	1008·7	1005·7	..	29·9	25·0	22·6	27·5	65	..	4·1	..	0·3	0	0	2	0	0	1	1	0	0	0	0	29	0
Bhubaneswar	0230	46	1010·0	1004·7	..	24·5	23·6	23·1	28·6	92	..	2·3	..	2·7	0	0	19	6	1	0	0	2	0	4	6	12	0
	0530	,,	1010·6	1005·3	..	23·7	22·9	22·5	27·2	93	..	3·5	..	3·2	0	0	21	10	1	1	0	0	0	5	4	10	0
	0830	,,	1012·3	1007·1	..	28·3	24·6	22·8	28·2	72	..	3·8	..	5·2	0	0	25	4	3	1	0	2	0	4	11	6	0
	1130	,,	1011·2	1006·0	..	31·1	24·7	21·5	25·9	57	..	4·4	..	8·7	0	0	31	6	5	2	2	7	0	2	7	0	0
	1730	,,	1009·2	1004·0	..	28·5	24·3	22·6	27·0	71	..	5·5	..	6·9	0	0	27	5	4	2	5	8	0	0	3	4	0
	2330	,,	1011·2	1005·9	..	25·5	24·2	23·6	28·9	90	..	2·9	..	3·2	0	0	20	3	1	0	0	5	0	5	6	11	0
Puri	0830	6	1012·3	1011·6	+1·3	28·6	25·2	23·7	29·5	75	—2	3·7	+0·7	8·2	0	1	29	13	5	1	0	2	3	1	5	1	0
	1730	,,	1009·3	1008·6	..	29·3	25·4	23·8	29·4	73	..	4·7	..	12·2	0	1	30	1	3	1	7	5	12	2	0	0	0
Gopalpur	0530	17	1010·5	1008·9	..	24·5	23·4	22·5	28·7	91	..	3·3	..	2·8	0	0	20	7	0	0	0	1	0	0	12	11	0
	0830	,,	1012·5	1010·6	+1·5	27·8	24·7	23·2	28·8	77	—1	3·5	+0·7	5·3	0	0	28	17	0	0	1	0	0	1	9	3	0
	1130	,,	1011·3	1009·4	..	31·4	25·5	22·8	28·1	61	..	4·1	..	5·7	0	0	31	8	1	7	8	4	0	0	3	0	0
	1730	,,	1009·4	1007·5	..	29·4	25·3	23·4	28·8	70	..	4·4	..	6·7	0	0	27	0	2	7	7	9	2	0	0	4	0
	2330	,,	1011·3	1009·3	..	26·7	24·5	23·5	28·9	83	..	3·2	..	2·8	0	0	19	2	0	1	3	2	1	5	5	12	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind velocity Kms. per hour	Wind speed (Km.p.h.)			No. of observations									
			At mean sea level or height in g. p. m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—(*Contd.*)																											
Koraput . . .	0830	913	1530·0	912·3	..	22·0	19·1	17·5	20·3	76	..	2·5	..	..	0	0	31	1	0	5	3	15	6	1	0	0	0
	1730	,,	1511·0	910·4	..	24·3	19·2	16·1	18·7	62	..	5·2	..	..	0	0	31	12	4	2	6	2	1	0	4	0	0
Titilagarh . . .	0830	211	1012·4	988·7	..	26·1	22·5	20·7	24·3	72	..	2·6	..	2·7	0	0	23	7	4	3	2	2	1	1	3	8	0
	1730	,,	1008·3	984·9	..	31·0	23·6	19·6	22·8	52	..	2·5	..	2·3	0	0	22	9	8	2	1	0	1	0	1	9	0
Bolangir (R) . .	0830																										
	1730																										
Angul . . .	0830	139	1012·9	997·2	+1·7	25·7	23·0	21·6	25·8	79	+2	4·2	+0·7	2·6	0	0	20	1	1	1	1	1	3	8	4	11	0
	1730	,,	1008·9	993·4	..	30·4	23·2	19·0	22·6	52	..	3·8	..	2·7	0	0	22	2	3	1	8	2	2	3	1	9	0
Keonjhar . . .	0830	463	1009·6	958·2	..	24·7	21·3	19·4	24·2	73	..	2·6	..	3·1	0	0	28	7	2	1	2	1	1	3	11	3	0
	1730	,,	1006·3	955·2	..	26·9	21·9	19·1	22·6	63	..	4·4	..	4·3	0	0	29	3	5	2	5	2	1	6	5	2	0
Sambalpur . .	0830	148	1012·8	996·0	+1·1	26·6	23·1	21·2	25·4	73	−3	3·0	+0·3	2·0	0	0	17	1	6	3	2	3	1	1	0	14	0
	1730	,,	1008·8	992·4	..	29·4	22·9	19·4	22·6	56	..	2·9	..	1·6	0	0	13	2	3	3	1	2	1	0	1	18	0
Jharsuguda . .	0230	230	1010·1	984·0	..	22·6	21·4	20·6	24·6	89	..	2·4	..	1·6	0	0	11	3	6	0	0	0	0	0	2	20	0
	0530	,,	1010·9	984·7	..	21·7	20·8	20·5	24·0	92	..	3·0	..	3·3	0	0	20	11	6	0	1	0	0	0	2	11	0
	0830	,,	1012·6	966·7	..	25·4	22·1	20·5	23·9	74	..	3·2	..	3·5	0	0	22	6	6	1	0	2	0	1	6	9	0
	1130	,,	1011·2	985·6	..	30·1	23·1	19·3	22·6	54	..	3·2	..	4·1	0	0	27	2	7	0	1	4	1	4	8	4	0
	1730	,,	1008·6	982·6	..	28·5	22·7	19·5	22·8	59	..	3·4	..	2·5	0	0	19	0	3	2	1	7	1	2	3	12	0
	2330	,,	1011·0	985·0	..	23·7	21·8	20·9	25·4	84	..	2·7	..	1·9	0	0	14	5	3	1	1	1	0	1	2	17	0
Chota Nagpur																											
Jamshedpur . .	0830	129	1012·6	997·8	+0·8	25·6	22·5	21·1	24·9	76	+1	2·6	−0·5	5·0	0	0	27	0	1	1	1	0	0	18	6	4	0
	1730	,,	1008·5	994·1	..	29·3	23·5	20·8	24·2	61	..	3·2	..	2·2	0	0	15	0	0	7	0	0	0	6	2	16	0
Jamshedpur (P.B.O.) .	0530	145	1010·8	994·1	..	22·2	21·2	20·6	24·0	91	..	4·1	..	1·7	0	0	14	1	0	0	0	0	2	5	6	17	0
	0830	,,	1012·3	995·8	..	25·6	22·8	21·3	25·5	77	..	1·8	..	3·8	0	0	29	1	2	0	2	0	3	9	12	2	0
	1130	,,	1010·8	994·6	..	29·8	23·5	20·1	23·5	57	..	3·7	..	4·2	0	0	31	3	3	2	1	0	3	9	10	0	0
	1730	,,	1008·5	992·3	..	29·5	23·7	20·8	24·5	61	..	4·4	..	1·7	0	0	16	2	1	3	3	0	0	5	2	15	0
	2330	,,	1010·8	994·2	..	23·9	22·2	21·4	25·5	85	..	2·9	..	1·3	0	0	12	2	2	1	1	0	0	2	4	19	0
Chaibasa . .	0830	226	1012·1	986·6	+0·8	26·4	22·7	20·7	24·9	71	−5	3·2	+0·4	1·2	0	0	12	0	0	0	2	0	10	0	0	19	0
	1730	,,	1008·4	983·2	..	28·3	23·1	20·1	23·9	62	..	3·7	..	0·2	0	0	2	0	1	0	0	0	1	0	0	29	0
Ranchi . . .	0830	655	1010·2	938·5	−0·2	25·6	20·7	18·0	20·6	64	−2	1·5	−1·3	0·4	0	0	4	3	0	0	1	0	0	0	0	27	0
	1730	,,	1008·6	936·8	..	25·6	19·4	16·6	18·2	58	..	3·2	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Ranchi (C.W.O.) .	0530	652	1011·2	938·3	..	19·9	17·5	16·0	18·3	79	..	2·8	..	0·5	0	0	14	1	0	0	0	1	2	6	4	17	0
	0830	,,	1011·9	940·1	..	25·1	19 3	15·6	18·1	57	..	2·0	..	3·7	0	0	26	6	3	0	0	4	5	4	4	5	0
	1130	,,	1009·9	939·0	..	28·0	19·6	14·4	16·7	45	..	3·3 (m)	..	6·5 (m)	0	0	28	7	3	0	0	1	3	7	7	3	0
	1730	,,	1007·4	936·3	..	26·3	19·8	15.9	18·5	55	..	2·7	..	2 2	0	0	9	1	1	1	0	0	0	3	3	9	0
Daltonganj . .	0830	221	1012·7	987·8	+1·0	26·2	20·7	17·9	20·0	58	−18	1·8	0	1·5	0	0	14	1	0	6	2	1	2	1	1	17	0
	1730	,,	1008·6	984·0	..	29·4	22·2	18·4	20·8	48	..	2·5	..	1·3	0	0	12	1	3	0	2	0	1	4	.	19	0
Hazaribagh . .	0830	611	1012·0	944·6	+0·6	25·4	19·5	16·0	18·5	57	−8	1·9	−0·6	3·3	0	0	19	3	4	1	1	0	3	2	5	12	0
	1730	,,	1008·8	941·7	..	26·1	19·4	15·6	19·0	52	..	3·1	..	2·3	0	0	18	7	3	0	0	0	1	0	7	13	0
Dhanbad . .	0830	257	1012·4	983·5	..	27·1	21·8	18·6	22·8	61	..	3·1	..	4·7	0	0	29	7	3	2	3	0	4	10	0	2	0
	1730	,,	1008·9	980·1	..	28·1	21·7	17·9	20·8	55	..	4·0	..	3·3	0	0	22	3	3	1	3	1	1	7	3	9	0
Bihar																											
Purnea . . .	0830	38	1012·8	1008·5	+1·0	27·0	23·0	20·8	25·1	69	−11	1·8	−0·4	2·8	0	0	24	0	4	11	0	0	5	4	0	7	0
	1730	,,	1008·8	1004·5	..	28·1	23·5	21·0	24·6	66	..	1·6	..	0·7	0	0	7	0	1	4	0	0	1	1	0	24	0
Forbesganj . .	0830	61	1012·3	1005·5	..	26·3	22·8	21·1	24·7	73	..	2·9	..	5·7	0	0	27	1	2	20	2	0	0	2	0	4	0
	1730	,,	1008·5	1001·7	..	28·7	23·8	21·4	25·3	65	..	2·7	..	2·4	0	0	24	1	1	10	2	1	0	9	0	7	0
Darbhanga . .	0830	49	1012·8	1007·2	+1·2	25·3	23·2	21·9	26·5	82	+11	1·7	−0.2	1·9	0	0	20	0	4	8	1	1	0	6	0	11	0
	1730	,,	1008·9	1003·4	..	29·3	25·2	23·3	28·2	73	..	1·5	..	0·1	0	0	1	0	0	1	0	0	0	0	0	30	0
Motihari . (R) .	0830	65																									
(R) .	1730	,,																									
Patna . . .	0830	53	1011·9	1005·9	+0·3	27·5	22·4	19·5	23·2	62	−7	1·4	−0·5	5·9	0	0	31	2	8	2	2	3	6	8	0	0	0
	1730	,,	1008·5	1002·6	..	29·9	22·8	18·9	21·7	52	..	1·5	..	3·9	0	0	24	2	4	1	1	4	8	3	1	7	0
Patna (Aerodrome) .	0530	60	1010·0	1003·2	..	21·4	20·4	19·7	23·0	92	..	1·1	..	3·6	0	0	13	1	1	4	1	1	1	4	0	18	0
	0830	,,	1011·7	1004·9	..	26·7	22·3	19·8	24·1	66	..	1·4	..	7·9	0	0	28	1	1	4	6	1	6	6	3	3	0
	1130	,,	1010·7	1004·1	..	30·9	23·1	18·9	22·0	50	..	2·3	..	9·7	0	0	31	2	1	6	5	4	1	9	3	0	0
	1730	,,	1008·1	1001·4	..	29·6	23·3	19·9	23·3	56	..	1·5	..	3·9	0	0	15	0	1	1	1	2	7	3	0	16	0
	2330	52	1010·7	1004·8	..	26·1	23·8	22·6	27·8	81	..	0·2	..	3·5	0	0	11	0	3	0	5	1	0	2	0	20	0
Dehri . . .	0830	107	1012·1	1000·0	..	27·3	21·8	18·7	21·4	60	..	1·3	..	2·7	0	0	28	2	0	0	3	2	18	3	0	3	0
	1730	,,	1007·7	995·7	..	30·5	23·6	19·7	23·5	54	..	1·4	..	1·8	0	0	19	7	1	0	0	0	1	4	6	12	0
Gaya . . .	0230	116	1010·3	996·9	..	22·0	20·7	19·8	23·2	88	..	0·8	..	0·5	0	0	3	0	0	0	1	2	0	0	0	28	0
	0530	,,	1010·8	997·4	..	20·7	19·7	19·1	21·9	91	..	1·6	..	0·4	0	0	3	0	0	0	0	1	2	0	0	28	0

(m) Mean of 18 days. (R) Register not received.

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas): Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind velocity Kms. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—(*Contd.*)																											
Gaya—*Contd.*	0830	116	1012·6	999·4	+1·2	26·6	22·1	19·5	23·1	65	−3	1·6	−0·3	1·5	0	0	9	0	0	0	0	1	7	1	0	22	0
	1130	,,	1011·4	998·4	..	31·5	23·1	18·2	21·6	46	..	1·8	..	3·1	0	0	13	0	0	1	1	1	2	1	7	18	0
	1730	,,	1009·0	995·9	..	29·0	22·8	18·8	22·9	55	..	1·9	..	1·1	0	0	8	2	1	2	0	0	0	0	3	23	0
	2330	,,	1011·2	997·8	..	23·2	21·2	20·1	23·5	83	..	0·8	..	0·3	0	0	3	0	0	1	0	1	1	0	0	28	0
Jamui	0830	82	1011·7	1002·2	..	26·3	23·1	21·4	25·6	74	..	1·7	..	2·3	0	0	19	0	1	10	3	0	1	0	4	12	0
	1730	,,	1008·7	999·3	..	28·8	24·5	22·2	27·3	68	..	2·1	..	1·0	0	0	8	0	0	2	0	0	0	0	6	23	0
Lumka	0830	149	1012·4	995·6	+0·7	28·0	23·2	21·0	24·5	66	−6	1·5	−0·6	..	0	0	26	1	2	4	2	2	5	8	2	5	0
	1730	,,	1008·7	992·0	..	28·1	23·0	20·0	24·1	63	..	2·6	..	..	0	0	23	0	2	4	7	3	0	5	2	8	0
Bhagalpur	0530	49	1010·7	1005·1	..	23·3	21·8	20·8	25·1	86	..	2·2	..	3·9	0	0	20	1	0	8	1	2	7	1	0	11	0
	0830	,,	1012·5	1007·0	..	27·2	23·3	21·3	25·4	71	..	1·8	..	3·9	0	0	24	0	1	9	2	1	4	7	0	7	0
	1130	,,	1011·5	1006·0	..	30·3	23·9	20·5	24·5	57	..	2·5	..	5·3	0	0	28	2	3	8	0	0	3	10	2	3	0
	1730	,,	1008·9	1003·4	..	28·8	23·7	21·2	25·5	64	..	2·2	..	3·4	0	0	22	1	0	4	5	0	1	6	5	9	0
	2330	,,	1010·9	1005·4	..	25·0	22·7	21·4	25·9	81	..	1·3	..	2·4	0	0	16	0	2	6	2	2	3	0	1	15	0
Sabour	0830	37	1012·3	1008·0	+0·5	27·5	23·6	21·4	25·9	71	−5	2·2	−0·4	5·2	0	0	27	1	3	7	3	0	6	6	1	4	0
	1730	,,	1008·6	1004·4	..	28·7	24·4	22·1	27·2	69	..	3·0	..	2·6	0	0	18	2	1	3	3	0	3	1	5	13	0
Uttar Pradesh (East)																											
Gonda	0830	110	1012·6	999·8	..	24·2	21·1	19·7	22·5	73	−3	0·7	−0·7	0·9	0	0	9	2	0	4	0	0	0	2	1	22	0
	1730	,,	1008·1	996·0	..	28·5	22·5	18·0	21·8	56	..	0·3	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Nautanwa	0830	..	..	..	..	24·4	21·7	20·2	23·7	77	..	1·1	..	3·1	0	0	19	3	1	6	9	0	0	0	0	12	0
	1730	..	..	..	..	27·7	22·1	19·8	22·3	60	..	0·8	..	2·3	0	0	17	4	0	1	3	0	2	2	5	14	0
Gorakhpur	0830	77	1010·1	1001·3	−1·3	26·0	21·8	19·6	23·0	68	−7	1·1	−0·1	1·8	0	0	20	0	2	10	0	0	0	8	0	11	0
	1730	,,	1008·4	999·7	..	29·7	22·9	19·0	22·3	56	..	1·3	..	1·2	0	0	12	0	0	3	0	0	2	7	0	19	0
Gorakhpur (P.B.O)	0230	73	1009·6	1000·6	..	22·9	20·8	19·5	23·1	81	..	0·9	..	3·2	0	0	20	0	3	4	2	1	0	6	4	11	0
	0530	,,	1010·3	1001·2	..	21·7	20·3	19·4	22·7	87	..	1·8	..	3·1	0	0	24	6	8	2	0	1	3	3	1	7	0
	1130	,,	1011·3	1002·5	..	31·0	22·8	18·1	20·9	48	..	1·8	..	4·9	0	0	31	0	1	5	3	6	8	3	5	0	0
	1730	,,	1010·4	1001·4	..	24·1	21·1	19·6	22·8	76	..	0·8	..	3·0	0	0	20	2	6	2	0	0	0	6	4	11	0
Azamgarh	0830	78	1011·6	1002·9	..	25·9	22·2	20·1	23·8	71	..	0·8	..	..	0	0	27	2	0	11	0	0	0	14	0	4	0
	1730	,,	1008·0	999·3	..	29·1	23·6	20·8	24·5	61	..	0·3	..	..	0	0	1	1	0	0	0	0	0	0	0	30	0
Ballia	0830	64	1011·4	1004·2	..	26·4	21·5	18·6	21·8	62	..	2·2	..	3·6	0	0	28	0	4	2	7	2	9	3	1	3	0
	1730	,,	1007·4	1000·5	..	31·5	22·1	16·4	19·1	41	..	2·8	..	2·4	0	0	19	0	2	0	1	1	7	6	2	12	0
Varanasi (Banaras)	0830	76	1011·9	1003·4	+0·6	26·7	21·5	18·4	21·2	61	−8	1·7	0	3·4	0	0	17	3	2	0	1	1	7	2	1	14	0
	1730	,,	1008·3	999·8	..	30·4	23·6	18·7	23·5	50	..	2·0	..	2·5	0	0	14	2	0	0	1	0	3	3	5	17	0
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	1011·3	1001·4	..	20·5	19·1	18·4	21·1	88	..	1·7	..	3·5	0	0	21	1	2	2	0	3	6	5	2	10	0
	0830	,,	1013·1	1003·4	..	26·3	21·7	19·0	21·6	65	..	1·3	..	6·8	0	0	29	1	1	2	1	1	11	11	1	2	0
	1130	,,	1012·2	1002·6	..	31·3	23·1	18·4	20·9	47	..	1·4	..	8·3	0	1	27	1	1	1	2	1	6	11	5	3	0
	1730	,,	1009·4	999·8	..	29·9	22·8	18·9	21·8	53	..	1·3	..	4·3	0	0	22	6	0	0	0	0	2	7	7	9	0
	2330	,,	1011·5	1001·7	..	22·8	20·7	19·7	23·7	82	..	0·7	..	2·4	0	0	14	0	3	0	0	4	5	1	1	17	0
Allahabad (Bamrauli)	0230	98	1009·9	998·6	..	21·6	19·0	16·7	19·6	74	..	0·8	..	1·3	0	0	11	1	0	1	0	2	4	2	1	20	0
	0530	,,	1010·6	999·2	..	20·3	18·1	16·6	18·9	79	..	1·1	..	1·3	0	0	12	1	0	3	0	2	2	4	0	19	0
	0830	,,	1012·3	1001·2	+0·9	26·4	20·3	16·4	18·8	55	−12	1·2	−0·5	5·0	0	1	21	1	1	1	1	3	2	10	3	9	0
	1130	,,	1011·4	1000·6	..	32·3	21·9	16·8	18·0	36	..	1·2	..	8·5	0	3	25	3	2	1	2	3	2	7	8	3	0
	1730	,,	1008·8	997·9	..	30·9	21·3	16·3	18·9	43	..	1·1	..	1·9	0	0	15	3	1	1	0	0	1	5	4	16	0
	2330	,,	1010·8	999·5	..	23·2	19·2	16·6	19·4	66	..	0·6	..	0·3	0	0	12	1	0	3	1	0	2	4	1	19	0
Banda	0830	121	1012·7	999·0	..	26·4	20·3	17·0	19·2	55	..	0·7	..	0·3	0	0	2	0	1	0	1	0	0	0	0	29	0
	1730	,,	1008·4	994·9	..	31·6	22·8	17·6	20·5	45	..	0·9	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Fatehpur	0830	114	1012·1	999·0	..	25·0	20·3	16·6	19·9	60	−8	0·9	−0·4	1·8	0	0	22	2	1	2	0	0	2	2	9	20	0
	1730	,,	1008·8	996·1	..	30·8	22·2	17·0	22·5	45	..	1·2	..	0·5	0	0	1	1	0	0	0	0	0	0	1	29	0
Kanpur	0830	126	1012·6	998·2	+1·2	25·5	20·1	16·7	18·9	59	−9	0·8	−0·1	6·7	0	0	27	2	0	3	4	1	3	12	2	4	0
	1730	,,	1009·1	995·0	..	30·3	21·6	16·3	19·3	44	..	1·4	..	5·2	0	0	27	12	1	3	0	0	0	6	5	4	0
Lucknow	0830	113	1012·4	999·3	+0·9	23·7	20·5	17·8	22·1	71	+2	0·5	−0·5	..	0	0	25	0	0	2	0	0	0	18	5	6	0
	1730	,,	1008·9	996·2	..	29·1	22·2	18·4	20·7	53	..	0·5	..	..	0	0	26	0	0	0	0	2	1	19	4	5	0
Lucknow (Amausi Aerodrome)	0230	128	1009·9	995·1	..	19·6	18·2	17·1	20·2	86	..	0·3	..	2·2	0	0	13	0	0	1	1	0	2	5	4	18	0
	0530	,,	1010·4	995·4	..	18·7	17·5	16·6	19·5	88	..	0·7	..	4·2	0	1	17	0	4	1	3	1	1	5	3	13	0
	0830	,,	1012·1	997·5	+0·7	25·2	20·7	18·1	20·6	65	+8	0·6	−0·4	7·6	0	1	21	1	2	2	5	1	1	3	7	9	0
	1130	,,	1011·4	997·2	..	30·7	21·6	16·0	18·0	43	..	0·9	..	9·0	0	4	20	3	2	2	2	1	1	6	7	7	0
	1730	,,	1008·7	994·7	..	28·8	21·2	16·8	18·7	49	..	0·9	..	4·6	0	0	23	5	3	1	1	0	0	5	8	8	0
	2330	,,	1010·6	995·9	..	20·5	18·7	17·2	19·9	93	..	0·3	..	1·9	0	0	11	0	1	2	2	0	0	2	2	20	0

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—OCTOBER, 1957 (ASVINA 9—KARTIKA 9, 1879 SAKA)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Could amount (Oktas): Mean amount	Could amount (Oktas): Departure from normal	Mean wind velocity Kms. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (East) –*Contd.*																											
Hardoi	0830	142	1012·1	995·8	..	23·2	20·5	18·9	22·8	77	..	0·8	..	3·2	0	0	27	4	1	2	5	0	2	9	4	4	0
	1730	,,	1008·5	992·6	..	29·9	23·2	19·9	23·8	55	..	1·0	..	1·2	0	0	12	3	2	0	0	0	0	2	5	19	0
Lakhimpur Kheri	0830	147	1012·2	995·3	..	23·3	20·9	19·6	22·4	80	..	0·4	..	1·0	0	0	10	0	3	3	0	0	0	0	4	21	0
	1730	,,	1008·5	991·9	..	27·8	22·9	20·9	23·7	64	..	0·4	..	3·3	0	0	3	0	0	0	0	0	1	0	2	28	0
Bahraich	0830	124	1012·3	998·0	+1·2	26·0	21·8	19·1	23·0	66	7	0·5	−0·5	4·5	0	0	23	0	1	10	4	0	0	5	3	8	0
	1730	,,	1008·7	995·0	..	28·1	22·2	18·7	22·5	55	..	0·6	..	0·4	0	0	4	1	1	0	0	0	0	1	2	26	0
Uttar Pradesh (West)																											
Orai	0830	141	1013·2	997·2	..	26·8	20·9	17·2	19·9	56	..	1·0	..	3·8	0	0	29	2	2	2	1	1	6	6	9	2	0
	1730	,,	1009·1	993·4	..	31·3	22·4	17·4	20·1	44	..	0·4	..	2·9	0	0	30	14	3	2	0	0	0	0	11	1	0
Jhansi	0830	251	1012·4	984·0	+0·5	24·5	18·8	15·2	17·3	55	0	1·5	+0·5	1·7	0	0	14	3	0	1	1	0	3	3	3	17	0
	1730	,,	1008·7	981·0	..	32·1	20·4	12·2	15·3	31	..	1·6	..	1·4	0	0	14	0	0	1	0	0	3	2	8	17	0
Agra	0830	169	1012·5	993·3	+1·1	25·3	19·2	15·6	16·9	54	+2	0·5	−0·3	1·5	0	0	11	0	0	0	2	2	3	3	1	20	0
	1730	,,	1008·8	990·1	..	31·8	20·4	12·3	14·3	33	..	1·1	..	2·6	0	0	15	0	0	1	1	0	0	1	12	16	0
Agra (Aerodrome)	0530 (R)	168																									
	0830 (R)	,,																									
	1130 (R)	,,																									
	1730 (R)	,,																									
	2330 (R)	,,																									
Mainpuri	0830	157	1012·4	994·3	+1·2	24·4	20·2	17·8	20·4	68	+6	0·7	−0·3	0·7	0	0	7	0	0	1	0	0	1	4	1	24	0
	1730	,,	1007·8	990·4	..	31·4	22·4	17·5	20·5	42	..	0·4	..	1·0	0	0	10	0	0	1	0	0	0	9	0	21	0
Aligarh	0830	187	1012·3	990·9	..	23·8	19·	15·8	18·4	59	+8	1·0	+0·5	2·4	0	0	15	0	0	4	0	0	0	10	1	16	0
	1730	,,	1008·9	988·3	..	30·3	20·	15·0	17·4	41	..	1·7	..	2·2	0	0	13	8	0	1	0	0	0	3	1	18	0
Bareilly	0830	173	1012·1	992·4	+0·9	24·4	20·5	18·2	21·1	69	−4	0·7	−0·2	4·3	0	0	23	1	0	9	2	0	0	9	2	8	0
	1730	,,	1008·4	989·1	..	28·6	21·4	16·6	19·6	51	..	1·0	..	1·4	0	0	11	0	1	1	0	0	1	3	5	20	0
Bareilly (P.B.O)	0230	172	1009·7	990·0	..	22·1	19·4	17·9	21·0	78	..	0·7	..	4·1	0	0	18	0	1	8	3	0	0	3	3	13	0
	0530	,,	1010·3	990·5	..	21·0	19·1	17·9	20·6	83	..	0·9	..	4·5	0	0	24	2	1	10	1	0	0	6	4	7	0
	1130	,,	1011·6	992·2	..	28·5	21·9	18·8	20·5	56	..	0·8	..	7·9	0	0	29	1	3	4	4	3	1	4	9	2	0
	2330	,,	1010·3	990·7	..	23·3	20·3	18·8	21·3	76	..	0·2	..	3·7	0	0	20	2	1	7	5	0	1	2	2	11	0
Meerut	0830	222	1012·4	987·1	+1·2	23·6	19·7	16·5	19·8	65	−2	0·5	0	2·2	0	0	14	0	3	4	0	0	1	6	0	17	0
Najibabad	0830	270	1012·7	981·7	..	20·7	18·1	16·4	18·7	77	..	0·7	..	3·2	0	0	16	2	7	2	3	1	0	0	1	15	0
	1730	,,	1009·7	979·6	..	29·2	21·7	17·2	19·8	50	..	0·5	..	2·0	0	0	12	2	1	1	0	0	0	0	8	19	0
Roorkee	0830	274	1012·3	981·0	+0·6	21·2	18·7	16·9	19·4	77	+5	2·1	+1·5	0·3	0	0	4	0	0	0	2	0	0	0	2	27	0
	1730	,,	1008·0	978·2	..	27·8	20·8	16·6	19·0	52	..	2·4	..	0·4	0	0	5	0	0	0	1	0	0	0	4	26	0
Dehra Dun	0530	682	1011·3	934·3	..	17·1	14·3	12·4	14·4	74	..	0·9	..	2·4	0	0	18	4	10	0	1	0	1	2	0	13	0
	0830	,,	1012·4	936·1	+0·5	21·1	16·6	13·7	15·7	64	−4	0·8	−0·2	1·0	0	0	9	0	4	1	2	0	0	1	0	22	1
	1130	,,	1011·3	936·5	..	25·9	18·7	14·3	16·2	50	..	1·2	..	2·2	0	0	22	0	1	0	1	9	7	4	0	9	0
	1730	,,	1008·9	934·1	..	25·4	19·9	16·9	19·3	61	..	1·1	..	0·6	0	0	7	1	0	0	1	1	1	3	0	24	0
	2330	,,	1011·5	935·0	..	19·2	15·9	13·7	15·9	72	..	0·7	..	3·4	0	0	28	9	16	0	0	0	0	1	2	3	0
Punjab (India) (Including Delhi)																											
New Delhi	0230	216	1010·4	985·4	..	20·7	17·1	14·1	16·4	65	..	0·6	..	3·5	0	1	16	1	0	2	0	0	4	8	2	14	0
	0530	,,	1010·8	985·8	..	19·4	16·1	13·5	15·6	70	..	0·7	..	5·4	0	0	22	1	0	3	2	1	3	9	3	9	0
	0830	,,	1012·3	987·5	+0·8	23·1	17·5	13·5	15·5	56	−2	0·8	−0·1	8·1	0	0	27	0	0	3	3	2	4	10	5	4	0
	1130	,,	1011·8	987·6	..	30·2	20·	13·1	14·6	36	..	0·8	..	12·1	0	3	27	1	2	2	2	1	2	10	10	1	0
	1730	,,	1008·8	984·7	..	29·9	20·0	13·2	15·3	37	..	1·1	..	6·6	0	3	22	4	1	3	0	0	0	2	15	6	0
	2330	,,	1011·0	986·2	..	22·1	17·9	15·2	17·3	66	..	0·4	..	2·4	0	0	13	0	0	3	1	1	2	5	1	18	0
Hisar	0530	221	1010·8	985·1	..	18·0	14·9	12·4	14·3	71	..	0·5	..	5·4	0	0	28	0	0	2	6	5	4	8	3	3	0
	0830	,,	1012·1	986·8	+0·5	21·9	16·9	13·2	14·9	59	+5	0·4	−0·2	4·4	0	0	23	1	2	1	3	3	5	5	3	8	0
	1130	,,	1011·5	987·0	..	31·7	20·6	12·6	15·2	33	..	0·7	..	4·8	0	0	23	1	0	0	5	3	2	3	9	8	0
	1730	,,	1008·6	984·1	..	31·2	20·3	13·0	15·0	35	..	0·9	..	5·1	0	0	25	6	4	3	1	0	0	2	9	6	0
	2330	,,	1010·9	985·5	..	21·7	16·6	13·0	14·9	59	..	0·8	..	5·4	0	2	20	1	0	3	5	2	0	9	2	9	0
Karnal	0830	249	1011·8	993·1	..	21·4	18·5	16·5	19·0	74	..	0·5	..	0·4	0	0	2	0	0	0	1	0	0	0	1	29	0
	1730	,,	1008·7	981·1	..	30·4	21·2	15·6	18·0	44	..	0·9	..	0·9	0	0	4	1	0	0	2	0	1	0	0	27	0
Patiala	0830	251	1012·0	983·4	..	22·6	18·5	15·1	18·1	65	..	0·8	..	4·5	0	0	21	4	1	3	7	0	0	2	4	10	0
	1730	,,	1009·3	981·1	..	28·3	20·4	16·2	17·2	47	..	0·9	..	5·1	0	2	15	8	0	0	4	0	0	1	4	14	0
Ambala	0830	272	1011·6	980·8	+0·5	20·8	17·9	15·6	18·8	74	+14	0·7	0	5·9	0	2	20	1	1	1	9	0	5	0	5	9	0
	1730	,,	1008·5	978·1	..	28·7	20·7	15·6	18·7	46	..	0·6	..	5·8	0	2	17	2	1	0	5	0	1	0	10	12	0
Ambala (P.B.O.)	0230	278	1009·7	977·9	..	20·9	17·5	15·6	17·7	72	..	0·8	..	7·3	0	2	23	2	3	5	4	1	0	1	9	6	0
	0530	,,	1009·9	978·0	..	19·3	16·6	15·0	16·7	77	..	0·4	..	5·1	0	1	19	4	1	3	6	0	3	1	2	11	0
	1130	,,	1011·5	980·5	..	27·5	20·0	16·0	17·7	50	..	0·7	..	8·0	0	0	30	3	1	1	13	0	3	5	4	1	0
	2330	,,	1010·2	978·6	..	22·3	17·8	15·0	16·8	65	..	0·9	..	9·1	0	1	24	5	1	5	4	0	1	2	7	6	0

(R) Register not received.

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind velocity Kms. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) Including Delhi—*Contd.*																											
Ambala (Arodrome) (R)	0530	273																									
(R)	0830	,,																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									
Chandigarh	0830	347	1011·4	971·9	..	20·9	16·5	14·1	15·4	63	..	0·4	..	..	0	0	6	0	1	0	3	0	0	0	2	25	0
	1730	,,	1008·3	969·8	..	28·3	19·3	14·5	17·5	40	..	0	..	..	0	0	16	1	0	0	4	0	2	0	9	14	0
Ludhiana	0330	247	1012·2	984·4	+1·2	24·1	19·5	16·3	18·4	62	+1	0·6	0	2·6	0	0	20	0	2	2	5	1	2	5	3	11	0
	1730	,,	1008·9	981·1	..	29·2	22·2	18·6	20·7	55	..	0·6	..	2·3	0	0	15	0	1	2	3	1	0	6	2	16	0
Ferozepur	0830	200	1011·2	988·4	..	21·5	17·7	14·9	17·2	69	..	0·8	..	0·9	0	0	8	0	1	0	4	1	0	0	2	23	0
	1730	,,	1008·0	986·2	..	31·1	21·8	16·3	17·2	42	..	0·3	..	0·4	0	0	4	0	0	0	3	0	0	1	0	27	0
Amritsar	0530	234	1010·8	983·5	..	16·1	15·4	14·5	16·7	89	..	1·0	..	5·5	0	0	26	1	6	6	3	0	4	4	2	5	0
	0830	,,	1012·1	985·3	..	20·8	17·8	15·8	17·5	74	..	1·3	..	6·1	0	0	22	0	5	9	4	0	2	0	2	9	0
	1130	,,	1011·7	985·5	..	28·8	20·1	14·4	16·2	43	..	1·0	..	9·2	0	0	28	5	1	4	8	4	2	2	2	3	0
	1730	,,	1008·9	982·8	..	29·1	20·2	14·5	16·2	42	..	0·8	..	7·6	0	0	28	4	2	6	2	0	1	4	9	3	0
Pathankot	0830	344	1012·3	973·1	..	20·8	16·5	13·4	15·3	63	..	1·1	..	2·5	0	0	19	0	6	9	4	0	0	0	0	12	0
	1730	,,	1009·8	971·8	..	28·0	21·1	17·0	19·0	53	..	1·9	..	0·7	0	0	5	1	2	0	1	0	0	1	0	26	0
Himachal Pradesh																											
Bilaspur	0830	493	1015·1	958·5	..	17·0	15·4	14·4	16·4	85	..	3·2	..	1·7	0	0	14	2	1	1	2	4	2	0	2	17	0
	1730	,,	1009·2	954·0	..	27·7	19·3	13·6	16·5	43	..	2·1	..	4·0	0	1	25	0	2	0	0	5	7	7	5	5	0
Mandi	0830	761	1014·8	928·6	..	15·4	13·7	12·4	14·5	83	..	1·3	..	0·6	0	0	5	1	0	0	0	0	1	2	1	26	0
	1730	,,	1008·7	925·7	..	23·4	18·0	14·6	15·9	58	..	1·6	..	2·7	0	1	18	0	0	1	8	5	2	3	0	12	0
Jammu and Kashmir																											
Srinagar	0830	1587	1550·1	846·4	+1·8	7·8	7·0	6·1	9·5	89	+3	4·2	+2·3	2·1	0	0	18	1	1	1	10	0	2	1	2	13	0
	1130	,,	1546·6	846·2	..	13·7	9·3	5·8	8·9	62	..	3·9	..	3·5	0	0	27	5	3	1	5	1	4	4	4	4	0
	1730	,,	1526·4	844·1	..	13·5	9·6	6·4	9·3	65	..	4·4	..	3·2	0	1	20	3	2	0	3	1	5	4	3	10	0
Gulmarg (R)	0830	2655																									
(R)	1730	,,																									
Leh *	0530	3514	3134·7	665·6	..	−0·6	−4·6	−11·3	1·5	41	..	1·7	..	4·3	0	0	16	6	10	0	0	0	0	0	0	13	0
	0830	,,	3111·8	666·0	−3·1	4·9	0·4	−9·2	2·7	36	−10	2·6	+0·4	0·6	0	0	3	1	0	0	0	1	1	0	0	28	0
	1730	,,	3091·3	665·6	..	8·9	2·1	−9·1	2·6	30	..	3·1	..	8·3	0	0	30	2	0	0	0	5	17	6	0	1	0
Skardu (R)	0830	2288																									
(R)	1730	,,																									
Gilgit (R)	0830	1490																									
(R)	1730	,,																									
Misgar (R)	0830	3106																									
(R)	1730	,,																									
Jammu	0830	..	..	..	..	21·2	15·6	11·3	13·2	53	0	2·4	+1·5	11·1	0	0	31	0	31	0	0	0	0	0	0	0	0
Rajasthan (West)																											
Sriganganagar	0530	177	1009·9	989·4	..	18·7	14·7	11·3	13·9	63	..	0	..	2·2	0	0	19	0	0	4	7	2	2	2	2	12	0
	0830	,,	1011·2	991·1	..	21·4	15·9	11·4	13·8	54	+4	0·5	+0·3	3·5	0	0	23	2	1	3	4	4	6	2	1	8	0
	1130	,,	1010·9	991·3	..	31·6	19·2	10·0	12·1	28	..	0·5	..	6·3	0	2	26	0	1	2	3	4	8	7	3	3	0
	1730	,,	1007·4	987·8	..	32·7	20·2	11·4	13·6	29	..	0·8	..	2·9	0	0	16	0	1	1	2	0	1	6	5	15	0
	2330	,,	1010·4	989·8	..	22·2	16·7	12·6	14·5	76	..	0·2	..	3·0	0	1	14	1	0	3	5	2	1	2	1	16	0
Churu	0830	291	1012·4	979·2	..	22·1	16·4	12·0	14·5	59	..	0·7	..	5·6	0	0	27	0	0	2	3	9	8	4	1	4	0
	1730	,,	1008·2	976·2	..	33·0	20·9	12·4	14·5	31	..	1·7	..	8·5	0	1	27	6	2	0	3	0	2	10	5	3	0
Bikaner	0830	224	1011·8	986·3	+0·5	23·3	15·7	8·8	11·9	40	−7	0·2	−0·4	5·1	0	0	26	1	0	0	6	0	11	3	5	5	0
	1730	,,	1007·5	983·1	..	34·7	19·2	6·5	10·0	18	..	0·4	..	6·2	0	0	23	3	2	0	2	0	9	3	9	3	0
Bikaner (P. B. O.)	0530	224	1010·2	984·5	..	21·3	17·3	13·9	15·9	65	..	0·7	..	4·9	0	1	15	0	0	0	1	6	6	3	0	15	0
	1130	,,	1011·1	986·3	..	33·3	24·5	19·4	22·9	46	..	0·3	..	7·8	0	1	28	2	1	0	1	4	8	7	6	2	0
	2330	,,	1010·4	984·8	..	25·6	19·7	15·8	18·3	56	..	0·9	..	5·5	0	1	20	1	2	0	0	8	9	0	1	10	0
Jaisalmer	0830	242	1011·4	984·1	..	24·4	18·7	13·9	16·7	53	..	0·1	..	1·9	0	4	19	0	3	0	0	9	11	0	0	8	0
	1730	,,	1007·4	981·0	..	34·7	21·1	11·6	14·4	26	..	0·2	..	17·4	0	8	22	0	2	0	2	9	11	0	6	1	0
Phalodi	0830	234	1012·3	985·6	..	23·7	17·8	13·1	16·0	52	..	0·3	..	7·0	0	0	27	1	0	0	1	7	13	3	2	4	0
	1730	,,	1008·7	983·0	..	34·5	22·0	13·9	16·2	29	..	1·0	..	11·3	0	2	27	1	2	0	5	0	16	1	4	2	0
Jodhpur	0230	224	1010·7	985·1	..	23·9	16·4	10·2	12·6	43	..	0·2	..	5·7	0	0	25	2	4	0	0	4	5	8	2	6	0
	0530	,,	1011·0	985·3	..	21·9	15·8	10·7	12·7	50	..	0·3	..	4·9	0	0	23	3	4	1	0	1	5	6	3	8	0
	0830	,,	1012·6	987·0	+2·1	24·2	17·0	11·2	13·8	45	−6	0·8	−0·2	4·2	0	0	18	1	4	2	1	2	4	4	0	13	0
	1130	,,	1012·1	987·2	..	32·1	20·4	12·1	14·7	31	..	0·6	..	6·4	0	0	24	0	2	2	1	4	8	7	0	7	0

(R) Register not received. * Observation for 29 days..

Division and station	Hour of observation I. S. T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in m/s.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind velocity in m/s.	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (West)—*Contd.*																											
Jodhpur—*Contd.*	1730	224	1008·7	984·1	..	31·3	19·9	8·7	11·7	21	..	1·4	..	9·1	0	1	27	2	3	0	2	4	11	5	1	3	0
	2330	,,	1011·2	985·8	..	26·2	17·2	10·2	12·5	37	..	0·5	..	8·0	0	0	29	1	4	1	0	1	5	15	2	2	0
Barme . .	0530	154	1010·2	988·1	..	23·1	17·8	12·9	15·4	53	..	0	..	9·8	0	1	25	1	0	2	2	0	4	10	7	5	0
	0830	,,	1012·1	990·1	+0·9	25·2	19·1	14·3	16·9	54	−2	0·8	0·1	7·1	0	0	27	2	3	4	3	3	4	2	6	4	0
	1130	,,	1011·7	990·5	..	33·5	20·6	11·6	14·9	28	..	0·4	..	10·3	0	1	30	0	2	1	7	7	8	3	3	0	0
	1730	,,	1008·2	986·8	..	31·5	20·6	10·4	14·0	24	..	0·9	..	8·8	0	0	29	1	2	2	6	8	6	2	2	2	0
	2330	,,	1010·6	989·0	..	23·4	18·6	10·9	13·6	55	..	0	..	12·3	0	1	29	1	0	1	1	1	14	8	4	1	0
Rajasthan (East)																											
Alwar . .	0830	271	1012·5	981·7	..	24·0	18·4	13·6	16·6	57	..	0·8	..	..	0	0	6	0	0	1	0	0	1	4	0	25	0
	1730	,,	1008·9	978·9	..	31·0	21·1	14·8	16·9	39	..	1·2	..	..	0	0	2	0	1	0	0	0	0	1	0	29	0
Sikar . .	0830	433	1011·3	962·7	..	22·9	..	..	..	..	..	1·3	..	2·3	0	0	24	0	0	2	9	5	5	2	1	7	0
	1730	,,	1008·3	961·1	..	31·3	..	..	..	..	..	1·3	..	2·3	0	0	25	2	1	2	0	1	1	17	1	6	0
Jaipur . . .	0830	436	1012·7	963·9	+0·5	25·1	18·2	13·3	15·1	50	+4	0·6	−0·4	4·1	0	1	19	8	1	4	1	1	0	0	5	11	0
	1130	,,	1011·6	963·8	..	31·3	19·3	10·1	12·5	29	..	0·5	..	8·3	0	0	30	3	0	2	4	2	2	7	10	1	0
	1730	,,	1008·7	961·0	..	31·3	20·1	12·5	14·4	34	..	1·2	..	5·0	0	0	26	4	1	1	0	3	1	7	9	5	0
Jaipur (Sanganer Aerodrome)	0230	390	1010·7	966·3	..	20·4	16·3	13·6	15·3	65	..	0·4	..	..	0	0	22	8	0	6	0	0	1	0	7	9	0
	0530	,,	1011·1	966·5	..	19·2	15·9	12·8	15·6	66	..	0·7	..	..	0	1	23	9	2	4	0	0	0	1	8	7	0
	0830	,,	1012·2	968·3	..	25·3	18·3	13·9	17·0	51	..	0·9	..	..	0	1	21	7	3	4	0	0	0	0	8	9	0
	1130	,,	1011·4	968·4	..	30·5	21·0	14·5	17·4	38	..	0·8	..	..	0	2	24	5	0	1	3	2	2	6	9	5	0
	1730	,,	1008·7	965·5	..	30·6	20·7	14·2	16·1	40	..	1·8	..	..	0	0	23	0	3	1	3	0	0	1	15	8	0
	2330	,,	1011·1	966·9	..	22·3	17·3	13·7	15·6	69	..	0·3	..	..	0	0	21	3	2	3	3	0	0	2	8	10	0
Dholpur . .	0830	176	1011·5	992·1	..	26·7	20·4	17·3	19·2	63	..	1·0	..	5·0	0	0	27	1	0	0	2	7	3	8	6	4	0
	1730	,,	1002·5	989·9	..	30·9	22·2	17·1	19·5	47	..	0·7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ajmer . . .	0830	486	1012·7	958·3	+0·4	24·0	16·9	11·8	13·7	48	+1	1·0	+0·1	4·3	0	0	17	1	1	1	1	1	4	6	2	14	0
	1730	,,	1008·5	955·5	..	30·9	18·0	7·9	11·5	26	..	2·2	..	7·0	0	0	29	5	4	1	1	1	4	7	6	2	0
Kotah . .	0530	257	1011·0	981·6	..	21·5	17·1	14·0	16·1	63	..	0·8	..	1·1	0	0	8	0	0	3	1	0	1	3	0	23	0
	0830	,,	1012·4	983·3	+0·5	25·5	18·8	14·1	16·4	50	+1	0·9	−0·4	2·0	0	0	10	1	1	0	2	0	2	4	0	21	0
	1130	,,	1011·6	983·3	..	32·7	20·6	12·1	14·3	31	..	0·8	..	2·9	0	0	15	2	0	2	1	0	0	3	7	16	0
	1730	,,	1008·7	980·4	..	32·5	20·6	12·1	14·9	31	..	1·5	..	1·8	0	0	9	0	0	0	4	0	0	2	3	22	0
	2330	,,	1011·1	982·0	..	21·5	13·4	14·1	16·1	53	..	0·5	..	1·1	0	0	7	1	1	0	2	0	2	1	0	24	0
Chaksu . .	0830	351	1013·0	973·5	..	23·6	19·1	15·8	19·0	63	..	1·2	..	1·5	0	0	13	1	2	2	3	1	2	1	1	18	0
	1730	,,	1008·6	970·1	..	31·7	21·4	14·3	17·1	39	..	2·8	..	4·7	0	1	28	3	3	0	6	2	5	2	8	2	0
Jhalawar .	0830	321	1012·9	976·2	+0·5	22·3	17·6	14·2	16·2	61	0	1·5	+0·1	1·3	0	0	12	2	2	1	3	0	3	1	0	19	0
	1730	,,	1008·6	973·4	..	31·9	20·1	12·2	14·3	32	..	1·4	..	3·0	0	0	23	3	5	3	2	0	0	3	7	8	0
Udaipur . . .	0230	582	1012·4	946·4	..	18·5	15·0	12·1	13·8	69	..	0·7	..	0·3	0	0	2	0	0	0	0	0	0	1	1	29	0
	0530	,,	1012·8	946·6	..	17·1	14·4	12·4	14·2	73	..	0·6	..	0·3	0	0	3	0	0	0	0	0	0	2	1	28	0
	0830	,,	1013·0	948·3	+0·7	24·3	17·7	13·4	15·5	51	−6	1·0	+0·2	0·5	0	0	3	0	0	0	0	1	0	0	2	28	0
	1130	,,	1011·5	948·3	..	31·4	18·9	10·1	12·1	28	..	1·8	..	2·9	0	0	16	1	3	2	1	2	2	5	0	15	0
	1730	,,	1009·2	945·5	..	30·1	19·0	11·6	13·7	33	..	3·3	..	1·5	0	0	13	0	2	2	0	0	0	5	4	18	0
	2330	,,	1012·9	947·3	..	20·1	15·8	12·8	14·6	63	..	1·3	..	0·5	0	0	3	0	0	1	0	0	0	2	0	28	0
Fatehpura (Jawai Dam) . .	0830	295	1012·7	979·3	..	25·2	19·4	15·7	17·5	57	..	1·5	..	5·2	0	0	22	1	0	0	6	12	1	1	0	9	0
	1730	,,	1008·8	976·3	..	32·8	21·9	14·8	17·5	36	..	2·3	..	3·7	0	0	13	1	2	2	0	3	0	5	0	18	0
Madhya Pradesh (West)																											
Gwalior (P.B.O.) .	0230	210	1010·2	986·1	..	20·2	17·1	15·0	17·0	73	..	0·9	..	4·4	0	0	19	0	0	0	1	8	4	1	5	12	0
	0530	,,	1010·9	986·7	..	18·9	16·2	14·1	16·2	76	..	1·6	..	5·1	0	1	17	2	0	1	3	3	4	2	3	13	0
	0830	,,	1012·2	988·5	+0·5	25·3	19·1	14·8	17·1	53	−6	1·3	+0·5	3·5	0	0	16	0	2	0	1	1	5	6	1	15	0
	1130	,,	1011·6	988·3	..	30·9	20·4	13·1	15·4	35	..	0·8	..	6·5	0	0	27	1	0	4	0	3	5	4	10	4	0
	1730	,,	1008·9	985·6	..	30·0	20·8	14·9	17·2	41	..	1·5	..	2·3	0	0	12	1	0	1	0	1	0	1	8	19	0
	2330	,,	1011·1	987·1	..	21·3	17·8	15·4	17·5	71	..	0·5	..	3·1	0	0	19	1	0	0	2	5	6	3	2	12	0
Sirsopurkalan . .	0830	235	1012·9	985·8	..	23·6	18·6	15·1	17·4	60	..	1·6	..	5·3	0	0	28	1	2	2	8	12	1	0	2	3	0
	1730	,,	1008·5	982·4	..	30·3	22·3	17·8	20·3	49	..	2·4	..	6·5	0	0	30	9	12	0	2	2	2	1	2	1	0
Guna . . .	0530	478	1012·1	957·5	..	17·7	15·2	13·4	15·4	76	..	1·4	..	0·8	0	0	6	0	1	3	2	0	0	0	0	25	0
	0830	,,	1012·8	959·3	+0·8	23·2	17·7	14·4	16·2	58	−4	2·1	+0·9	1·9	0	0	16	2	1	2	2	6	0	3	0	15	0
	1130	,,	1011·7	959·4	..	30·3	19·2	11·7	14·1	34	..	1·2	..	4·6	0	0	25	1	1	4	0	3	5	8	3	6	0
	1730	,,	1008·9	956·7	..	30·1	19·4	12·5	14·9	35	..	1·7	..	2·7	0	0	18	9	1	3	1	1	0	0	3	13	0
	2330	,,	1012·4	958·2	..	20·5	17·0	14·9	16·8	71	..	1·1	..	1·1	0	0	5	0	2	1	1	1	0	0	0	26	0
Rajgarh . . .	0830	382	1012·9	969·7	..	22·4	17·5	13·4	16·0	58	..	2·4	..	4·6	0	0	21	1	1	0	6	8	2	1	2	10	0
	1730	,,	1008·4	966·7	..	31·6	19·4	9·9	12·6	28	..	2·9	..	8·3	0	0	29	16	2	4	0	0	1	2	4	2	0
Neemuch . .	0830	496	1013·5	958·1	+1·2	24·4	17·6	12·9	15·0	50	+5	1·9	+0·7	3·9	0	0	24	0	13	3	2	2	1	3	0	7	0
	1730	,,	1009·1	955·2	..	31·6	19·0	10·3	12·8	28	..	2·8	..	6·3	0	0	26	3	12	1	1	1	0	7	1	5	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind velocity Kms. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (West) —*Contd.*																											
Ratlam	0830	486	1012·8	958·3	..	23·6	17·1	12·7	14·8	53	..	2·3	..	3·6	0	0	17	3	4	6	2	0	1	1	0	14	0
	1730	,,	1008·5	955·6	..	31·2	19·6	11·7	14·4	31	..	3·8	..	5·5	0	1	23	5	10	2	0	1	0	3	3	7	0
Alirajpur	0830	293	1013·2	980·1	..	24·3	19·1	15·5	17·8	59	..	2·4	..	4·9	0	0	24	0	2	11	1	0	3	6	1	7	0
	1730	,,	1008·5	976·5	..	32·7	21·7	14·4	16·9	36	..	3·0	..	6·7	0	0	25	2	0	3	2	0	1	11	6	6	0
Indore	0530	567	1011·7	947·6	..	18·9	15·3	12·7	14·7	69	..	2·0	..	6·3	0	2	17	0	3	3	1	5	3	3	1	12	0
	0830	,,	1012·9	949·7	+1·1	24·0	17·7	13·6	15·6	55	0	2·5	+0.9	4·9	0	1	18	2	3	3	2	2	1	5	1	12	0
	1130	567	1011·2	949·3	..	30·3	18·9	11·1	13·5	33	..	2·5	..	9·4	0	1	28	2	5	7	5	1	5	1	3	2	0
	1730	,,	1008·1	946·5	..	30·1	18·8	11·0	13·4	32	..	3·5	..	10·2	0	2	28	7	10	4	4	2	1	1	1	1	0
	2330	,,	1011·9	948.4	..	21·9	16·4	12·5	14·6	56	..	2·0	..	5·7	0	0	22	1	4	3	4	3	2	4	1	9	0
Bhopal (Bairagarh)	0230	523	1011·0	952·1	..	20·7	15·7	12·0	14.1	59	..	0·8	..	1.4	0	0	7	1	2	0	2	0	2	0	0	24	0
	0530	,,	1011·8	952·6	..	19·2	15·2	12·2	14·5	65	..	1·0	..	1·3	0	0	7	1	2	1	1	0	2	0	0	24	0
	0830	,,	1012·7	954·5	+0·8	24·7	17·9	13·3	15·6	51	—11	1·7	—0·1	3·1	0	0	12	0	4	1	1	2	1	2	1	19	0
	1130	,,	1011·0	954·0	..	30·5	18·8	10·6	13·2	31	..	1·8	..	7·8	0	0	27	1	3	5	3	4	1	3	6	4	1
	1730	,,	1008·5	951·5	..	29·7	18·1	9·8	12·3	31	..	2·2	..	7·5	0	2	25	9	6	1	3	1	0	0	7	4	0
	2330	,,	1011·8	953·2	..	22·0	16·1	11·8	14·0	53	..	0·7	..	1·0	0	0	5	1		0	2	0	0	0	0	26	0
Khandwa	0830	318	1012·9	977·0	+1·0	24·6	18·7	14·6	16·9	55	—7	2·7	+0·9	2·7	0	0	15	1	2	4	1	2	1	3	1	16	0
	1730	,,	1008·3	973·5	..	32·5	20·3	11·6	13·9	31	..	3·9	..	7·2	0	0	30	7	11	2	4	0	1	0	5	1	0
Hoshangabad	0830	302	1013·1	978·9	+0·5	23·4	18·5	15·1	17·3	60	—8	2·2	+0·4	0·2	0	0	2	0	0	1	1	0	0	0	0	29	0
	1730	,,	1008·6	975·3	..	31·2	21·1	14·6	16·8	38	..	3·1	..	0·7	0	0	5	2	1	0	0	0	0	0	2	26	0
Betul	0830	653	1013·1	940·7	..	23·8	18·4	14·9	17·6	59	..	2·9	..	2·6	0	0	18	1	2	7	1	4	1	0	2	13	0
	1730	,,	1008·8	937·5	..	27·4	19·1	13·7	15·9	45	..	2·7	..	5·3	0	0	29	8	13	2	3	1	0	1	1	2	0
Chhindwara	0830	685	1012·1	936·4	..	22·4	17·7	14·7	16·8	63	..	1·9	..	2·8	0	0	21	1	4	2	3	0	2	3	6	10	0
	1730	,,	1007·7	933·5	..	27·9	18·2	11·5	13·7	40	..	2·7	..	4·0	0	0	29	1	5	6	1	0	5	6	5	2	0
Seoni	0830	619	1012·1	943·8	+0·8	25·2	19·1	15·5	17·7	56	—5	3·2	+1·3	0·5	0	0	5	1	1	0	2	1	0	0	0	26	0
	1730	,,	1008·4	941·0	..	27·8	19·5	14·4	16·6	47	..	4·1	..	1·8	0	0	17	1	4	3	8	1	0	0	0	14	0
Sagar	0830	551	1012·4	951·1	+0·8	24·3	17·5	13·2	15·1	52	—3	1·5	—0·3	3·3	0	0	26	0	1	5	3	0	6	11	0	5	0
	1730	,,	1008·4	948·2	..	29·1	18·6	11·3	13·5	35	..	2·3	..	3·7	0	0	29	1	11	2	1	0	0	3	11	2	0
Nowgong	0830	229	1013·1	987·1	+1·3	23·7	18·6	15·1	17·6	59	+10	1·0	—0·7	3·8	0	0	26	2	2	1	1	8	12	0	0	5	0
	1730	,,	1008·9	983·6	..	31·1	21·5	15·3	17·8	40	..	1·5	..	0·7	0	0	7	1	1	1	0	0	2	0	2	24	0
Madhya Pradesh (East)																											
Sutna	0530	317	1011·6	974·9	..	18·4	15·8	13·8	15·9	75	..	1·7	..	0·9	0	0	9	1	0	2	0	0	2	4	0	22	0
	0830	,,	1012·4	976·6	+0·9	24·8	18·7	13·3	16·6	54	—13	1·7	—0·1	2·1	0	0	22	0	0	1	2	3	10	5	1	9	0
	1130	,,	1010·9	976·0	..	31·6	20·0	11·8	13·7	31	..	1·4	..	5·0	0	0	23	1	1	1	4	2	6	6	2	8	0
	1730	,,	1008·2	973·5	..	29·9	19·9	12·6	15·2	35	..	2·1	..	3·4	0	0	27	2	0	0	1	0	0	3	21	4	0
	2330	,,	1011·4	975·3	..	21·9	17·3	13·9	15·6	60	..	0·8	..	0·5	0	0	5	0	0	0	0	2	2	1	0	26	0
Umaria	0830	459	1012·7	961·2	..	23·8	18·8	15·6	18·0	61	—6	1·7	—0·7	1·6	0	0	14	0	2	0	3	4	4	1	0	17	0
	1730	,,	1008·4	958·1	..	29·0	20·9	16·6	19·6	48	..	2·1	..	0·6	0	0	3	0	0	0	1	0	1	1	0	28	0
Jabalpur	0530	393	1011·8	966·8	..	18·5	16·9	15·8	18·1	84	..	3·0	..	2·0	0	0	18	0	0	1	16	1	0	0	0	13	0
	0830	,,	1013·0	968·8	+1·3	23·9	19·1	16·0	19·3	61	—10	2·9	+1·2	3·1	0	0	24	1	0	1	12	9	1	0	0	7	0
	1130	,,	1011·1	967·9	..	30·9	21·0	14·4	16·9	38	..	1·8	..	4·7	0	0	29	1	4	4	4	3	5	5	3	2	0
	1730	,,	1008·6	965·3	..	30·2	21·4	15·9	18·4	43	..	2·3	..	2·4	0	0	20	2	8	6	3	1	0	0	0	11	0
	2330	,,	1011·8	967·2	..	21·2	18·1	16·0	18·3	73	..	1·6	..	1·6	0	0	12	0	1	2	6	3	0	0	0	19	0
Mandla	0830	443	1013·8	963·6	..	20·9	18·3	16·5	19·0	76	..	3·3	..	1·1	0	0	9	2	1	0	3	1	0	0	2	22	0
	1730	,,	1008·7	960·3	..	28·6	20·6	15·6	17·7	47	..	2·5	..	1·3	0	0	9	5	0	0	0	1	1	0	2	22	0
Pendra	0530	625	1011·9	941·7	..	19·1	15·5	12·9	15·0	69	..	2·3	..	1·7	0	0	17	4	1	0	0	1	4	2	5	14	0
	0830	,,	1012·5	943·5	+0·8	24·4	18·3	14·2	16·6	54	—13	2·4	0	2·3	0	0	17	4	0	0	0	1	3	3	6	14	0
	1130	,,	1010·9	942·9	..	28·7	18·7	11·9	14·2	38	..	2·6	..	6·2	0	0	27	6	3	1	0	2	7	4	4	4	0
	1730	,,	1009·0	940·6	..	26·3	19·1	14·5	16·8	50	..	2·8	..	4·3	0	0	24	7	1	0	1	1	5	3	6	7	0
	2330	,,	1012·1	942·2	..	20·6	16·1	12·9	15·1	63	..	1·5	..	2·8	0	0	22	1	0	0	0	2	7	7	5	9	0
Ambikapur	0830	611	1012·9	945·0	..	23·3	18·8	16·1	18·3	64	..	2·0	..	3·1	0	0	18	1	1	1	0	5	8	2	0	13	0
	1730	,,	1008·7	942·0	..	27·3	19·4	14·3	16·9	47	..	2·1	..	9·2	0	0	31	16	5	1	0	1	3	2	3	0	0
Champa	0830	245	1012·9	985·2	..	24·7	20·9	18·3	21·6	69	..	3·0	..	1·7	0	0	14	8	1	1	0	1	0	0	3	17	0
	1730	,,	1009·0	981·8	..	29·7	22·1	17·4	20·3	49	..	2·7	..	1·7	0	0	13	4	0	0	0	1	0	3	5	18	0
Raigarh	0830	220	1012·7	987·8	..	26·0	21·6	19·0	22·5	66	..	3·3	..	3·0	0	0	23	0	11	0	9	1	1	0	1	8	0
	1730	,,	1008·5	984·1	..	30·5	22·6	18·0	21·0	49	..	3·6	..	1·5	0	0	15	3	4	1	5	1	0	0	1	16	0
Raipur	0530	298	1010·7	976·9	..	22·3	19·8	18·4	21·0	78	..	3·3	..	1·0	0	0	10	5	2	0	0	1	0	1	1	21	0
	0830	,,	1012·5	979·0	+1·1	25·8	20·8	17·8	20·6	62	—9	3·2	+0·9	2·9	0	0	23	7	5	5	1	2	2	0	1	8	0
	1130	,,	1011·3	978·3	..	30·1	21·7	16·6	19·2	46	..	2·8	..	5·1	0	0	31	8	7	2	3	3	3	2	3	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in geopotential metres of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in m.b.s.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind velocity Km. per hour	Wind speed (Km.p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhaya Pradesh (East)																											
Raipur—*Contd.*	1730	293	1008·5	975·6	..	30·2	21·2	15·4	17·8	43	..	3·7	..	3·9	0	0	24	3	9	7	2	1	1	0	1	7	0
	2330	,,	1010·9	977·4	..	24·3	20·4	17·4	20·4	93	..	2·6	..	3·5	0	0	20	2	2	4	6	2	3	0	1	11	0
Kanker	0330	402	1012·7	967·7	+1·4	24·5	21·0	19·1	22·0	78	−6	3·2	−0·1	0·1	0	0	1	0	0	0	0	0	0	1	0	30	0
	1730	,,	1008·7	964·4	..	29·0	22·3	18·5	21·6	55	..	4·1	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Jagdalpur (P.B.O.)	0530	553	1011·3	949·2	..	20·5	19·6	19·1	22·2	91	.	4·8	..	0·1	0	0	1	0	0	0	0	0	0	1	0	30	0
	0830	,,	1012·3	950·9	+1·4	24·3	21·2	19·5	23·1	75	−4	3·5	+0·3	0·6	0	0	6	0	1	2	1	1	0	0	1	25	3
	1130	,,	1010·2	950·0	..	29·6	21·7	17·5	20·3	50	..	4·6	..	2·0	0	0	15	0	6	1	1	1	0	3	3	16	0
	1730	,,	1007·8	947·4	..	27·8	21·7	18·5	21·4	56	..	5·7	..	1·8	0	0	12	3	4	1	2	1	0	1	0	19	0
	2330	,,	1011·6	949·9	..	22·3	20·5	19·6	22·8	85	.	4·0	..	0·3	0	0	2	1	..	1	0	0	0	0	0	29	0
Gujarat																											
Deesa	0830	136	1012·7	997·1	+0·7	25·1	19·7	15·8	18·7	58	..	1·9	..	6·0	0	0	30	4	10	4	1	3	0	3	5	1	0
	1730	,,	1008·7	993·7	.	34·4	21·5	12·9	15·1	28	..	2·2	..	5·8	0	0	30	1	2	0	3	4	5	10	4	1	1
Idar	0830	219	1012·0	987·3	..	26·2	18·8	13·0	15·7	47	..	3·9	.	5·0	0	0	28	5	4	3	5	0	6	2	3	3	0
	1730	,,	1008·2	984·2	..	34·1	20·7	11·4	13·6	27		1·6	..	3·9	0	0	31	5	4	4	0	1	3	8	6	0	0
Ahmedabad	0230	55	1010·2	1003·9	..	21·3	18·5	14·4	16·6	55	..	0·8	.	8·1	0	0	23	1	3	5	2	0	0	1	11	8	0
	0530	,,	1010·5	1004·1	..	22·4	18·0	14·8	17·1	63	..	0·6	.	8·4	0	0	29	5	2	6	3	1	0	1	11	2	0
	0830	,,	1012·4	1006·1	+0·4	26·0	19·8	15·5	18·1	51	−10	2·2	+0·9	12·3	0	3	28	16	2	6	5	0	1	0	7	0	0
	1130	,,	1012·1	1006·0	..	33·1	22·1	15·9	17·6	35	..	1·6	..	14·9	0	4	27	7	3	5	6	3	1	3	5	0	0
	1730	,,	1008·7	1002·6	..	35·2	21·7	12·6	15·0	27	..	1·8	..	10·5	0	1	29	7	4	6	0	1	1	4	7	1	0
	2330	,,	1010·9	1004·6	.	25·9	19·3	14·8	17·0	51	..	0·7	..	5·0	0	0	20	5	3	1	1	0	4	2	4	11	0
Dohad	0830	333	1012·5	975·0	..	24·7	18·6	14·3	16·5	54	−17	0·9	−1·2	8·9	0	0	30	2	2	7	4	5	1	7	2	1	0
	1730	,,	08·9	972·5	..	32·8	19·9	10·4	12·7	27	..	0·7	..	11·6	0	1	30	1	4	1	0	1	16	5	3	0	0
Baroda	0530	35	1010·4	1006·4	..	20·8	18·8	17·4	20·2	91	..	0·5	..	1·4	0	0	11	1	7	0	1	1	0	0	1	20	0
	0830	,,	1012·3	1008·3	..	25·8	20·9	18·0	20·7	63	−9	1·5	+0·1	1·9	0	0	15	2	9	1	2	0	1	0	0	16	0
	1130	,,	1012·2	1008·3	..	32·9	23·0	17·4	20·1	41	..	1·2	..	3·8	0	0	28	0	16	2	4	1	1	1	3	3	0
	1730	,,	1008·6	1004·7	..	33·3	23·3	17·6	20·5	40	..	1·9	..	4·0	0	0	22	3	6	0	2	1	0	3	7	9	0
	2330	,,	1010·8	1006·8	..	23·3	19·6	16·9	19·7	66	..	0·5	..	1·7	0	0	15	1	3	0	2	0	3	2	4	16	0
Baroda (Aerodrome)	0830	38	1012·6	1008·3	..	26·8	20·7	17·0	19·4	55	.	1·7	..	5·0	0	0	26	7	1	4	3	1	1	4	5	5	0
	1130	,,	1012·2	1008·0	..	33·2	22·5	15·9	18·5	37	..	1·3	..	6·3	0	0	30	7	1	5	6	0	3	3	5	1	0
	1730	,,	1008·9	1004·7	..	34·5	21·9	13·9	16·2	30	..	2·5	..	6·7	0	1	27	3	2	4	0	2	4	4	9	3	0
Broach	0830	17	1012·1	1010·0	..	25·6	20·9	18·1	20·9	64	..	1·6	..	4·0	0	0	31	0	5	2	12	4	4	1	3	0	0
	1730	,,	1008·1	1006·1	..	35·5	22·9	15·2	17·8	30	..	2·7	..	5·7	0	0	30	2	5	2	5	1	12	1	2	1	0
Surat	0530	12	1010·3	1008·9	..	24·5	21·5	19·6	23·2	76	..	1·8	..	5·9	0	0	27	6	9	5	6	1	0	0	0	4	0
	0830	,,	1012·4	1011·0	+0·9	27·0	22·3	19·6	23·0	62	−6	2·3	+0·1	6·9	0	0	30	3	12	9	2	1	1	0	2	1	0
	1130	,,	1011·9	1010·6	..	33·6	24·0	18·6	22·0	43	..	2·4	..	9·7	0	0	31	9	6	6	1	1	1	3	4	0	0
	1730	,,	1008·4	1007·1	..	34·7	24·2	18·4	21·5	40	..	2·3	..	7·5	0	0	29	2	2	3	1	2	5	4	10	2	0
	2330	,,	1010·6	1009·3	..	27·2	23·0	20·6	24·7	69	..	1·4	..	5·6	0	0	27	6	3	3	1	2	5	4	3	4	0
Saurashtra & Kutch																											
Bhuj (P.B.O.)—*contd.*	0230	106	1010·9	998·6	..	23·0	21·0	19·3	23·5	83	..	0·2	..	2·7	0	0	12	0	0	0	0	0	7	3	1	19	1
	0530	,,	1011·0	998·9	..	21·6	19·8	18·1	21·7	84	..	0·4	..	2·4	0	0	10	0	0	0	0	2	4	3	1	21	0
	0830	,,	1012·4	1000·4	+0·7	24·1	21·4	19·4	23·2	77	+18	1·7	+0·6	4·3	0	0	18	0	2	0	0	0	5	6	5	13	0
	1130	,,	1012·4	1000·6	..	31·5	23·9	19·5	23·6	52	..	0·9	..	7·2	0	0	25	2	3	3	0	0	4	6	7	6	0
	1730	,,	1009·2	997·5	..	34·1	25·2	21·4	24·7	50	..	1·5	..	(o) 10·9	0	0	30	3	4	1	0	1	10	8	3	1	0
	2330	,,	1011·6	999·6	..	24·6	21·7	19·6	23·7	77	..	0·3	..	5·9	0	0	21	2	0	1	0	1	6	9	1	10	1
Bhuj (Aerodrome)	0830	80	1012·6	1003·3	..	24·6	21·1	18·7	22·0	71	..	1·9	..	6·3	0	0	18	2	1	0	0	0	2	7	6	13	0
	1130	,,	1012·5	1003·5	..	31·6	22·2	15·9	19·0	42	..	1·1	..	9·7	0	4	19	2	4	1	1	1	2	9	3	8	0
	1730	,,	1008·9	1000·0	..	34·2	22·7	14·9	18·1	35	..	1·7	.	14·8	0	4	27	2	4	1	1	1	8	10	4	0	0
Kandla	0830	5	1012·9	1012·3	..	24·3	20·7	18·3	21·5	71	..	2·1	..	8·0	0	1	28	4	1	1	1	0	11	1	10	2	0
	1730	,,	1009·6	1009·0	..	31·0	23·4	18·9	22·5	48	..	2·1	..	20·1	0	16	14	0	2	2	2	2	20	1	1	1	0
Mandvi	0830	9	1012·4	1011·4	..	24·6	22·1	20·3	24·5	79	..	1·6	..	12·6	0	1	29	5	6	0	0	0	1	1	17	1	0
	1730	,,	1009·8	1008·8	..	28·6	25·2	23·2	29·4	74	..	1·0	..	29·4	0	25	6	0	0	0	1	1	3	23	1	0	2
Dwarka	0830	11	1012·9	1011·6	+1·0	25·5	23·0	21·5	26·1	80	+1	1·9	0	8·3	0	1	28	4	7	1	0	0	1	4	12	2	0
	1730	,,	1010·5	1009·2	..	28·2	23·9	21·2	26·4	71	..	0·9	..	14·3	0	2	29	4	1	0	0	0	0	10	16	0	0
Porbander	0830	7	1012·4	1011·6	..	24·4	22·5	21·3	25·7	84	..	1·3	..	4·1	0	0	16	8	0	1	0	0	0	0	7	15	0
	1730	,,	1009·6	1008·8	..	29·5	24·8	22·2	27·4	66	..	2·6	..	15·9	0	2	29	0	0	0	0	0	2	16	13	0	0
Porbander (Aerodrome)	0830	7	1012·4	1011·6	..	26·4	23·4	22·1	26·5	79	..	2·1	..	15·3	0	9	15	15	2	2	1	1	0	1	2	7	0
	1130	,,	1012·9	1012·1	..	32·5	25·5	23·0	26·9	60	..	1·7	..	19·2	0	10	19	9	3	5	0	0	0	6	6	2	0
Jamnagar	0530	23	1010·8	1008·2	..	22·0	20·0	18·5	21·8	82	..	1·0	..	7·6	0	1	29	0	2	4	2	2	13	4	3	1	0

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount Oktas): Mean amount	Cloud amount Oktas): Departure from normal	Mean wind velocity Km. per hour	Wind speed (Km. p.h.): 26 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra and Kutch —*Contd.*																											
Jamnagar —*Contd.*	0830	,,	1012·6	1010·0	+0·9	26·1	22·0	19·3	23·1	69	−10	2·4	+0·9	10·2	0	4	23	1	4	2	0	1	5	9	5	4	0
	1130	,,	1012·8	1010·3	..	31·4	23·4	18·8	22·2	49	..	1·5	..	16.0	0	10	21	3	8	1	1	0	0	11	7	0	0
	1730	,,	1009·5	1007·1	..	31·2	22·9	17·8	21·1	48	..	1·3	..	21·5	0	18	13	7	2	0	0	0	0	12	10	2	0
Rajkot (Aerodrome)	0830	134	1012·7	997·5	+1·0	24·9	21·1	18·3	21·8	72	+1	1·6	−0·2	12·0	0	2	27	2	3	5	1	0	2	5	11	2	0
	1130	,,	1012·2	997·3	..	32·2	21·6	14·3	17·2	37	..	0·3	..	14·8	0	4	27	5	5	4	0	0	1	2	14	0	0
	1730	,,	1008·7	994·0	..	34·2	21·0	11·3	14·1	27	..	0·9	..	17·1	0	10	19	4	4	2	0	2	2	5	10	2	0
Surendranagar	0830	74	1012·2	1003·9	..	25·6	21·2	18·3	21·5	67	..	1·6	..	12·1	0	1	30	1	4	3	1	0	2	0	20	0	0
	1730	,,	1008·4	1000·2	..	35·6	22·5	14·2	16·6	28	..	2·5	..	9·8	0	0	29	8	3	2	1	0	6	2	7	2	0
Bhavnagar	0830	17	1013·0	1011·1	+1·4	24·9	20·3	17·1	19·9	63	+4	1·3	−0·9	5·0	0	0	27	1	2	1	1	0	1	8	13	4	0
	1730		1008·9	1007·1	..	34·9	22·6	14·8	17·4	32	..	1·3	..	3·3	0	0	31	0	14	0	15	1	0	0	1	0	0
Bhavnagar (Aerodrome)	0830	11	1012·3	1011·1	..	26·8	21·3	17·9	20·8	59	..	1·6	..	13·5	0	5	22	10	0	4	1	0	0	2	10	4	0
	1130	,,	1012·3	1011·1	..	32·1	22·6	17·1	19·7	42	..	1·2	..	15·8	0	8	21	10	8	9	0	1	0	0	1	2	0
Mahuva	0830	16	1011·9	1010·1	..	26·8	..	..	..	..	..	2·2 (a)	..	6·4 (a)	0	0	25	0	12	2	1	0	1	1	8	5	0
	1730	,,	1009·1	1007·3	..	31·5	..	..	..	..	..	2·4 (a)	..	15·3 (a)	0	2	28	0	0	7	7	9	7	0	0	0	0
Keshod	0830	51	1012·6	1006·8	..	26·0	21·9	19·7	22·9	71	..	2·5	..	11·6	0	2	29	10	11	5	0	0	0	1	4	0	0
	1130	,,	1012·6	1006·8	..	32·2	23·4	18·6	21·5	46	..	1·6	..	17·4	0	7	24	5	10	4	0	0	0	3	9	0	0
	1730	,,	1009·7	1004·0	..	32·8	23·9	19·9	22·4	47	..	2·4	..	30·1	0	28	3	2	7	0	0	0	0	12	10	0	0
	0230	8	1010·5	1009·6	..	23·2	21·4	20·0	24·1	84	..	0·9	..	8·5	0	0	27	10	4	0	0	0	0	0	13	4	0
	0530	,,	1010·4	1009·5	..	22·2	20·4	19·0	22·5	82	..	0·7	..	9·2	0	0	27	15	3	0	0	0	0	0	9	4	0
	0830	,,	1012·3	1011·4	+0·7	26·1	21·8	19·0	22·7	64	−2	1·5	+0·3	17·3	0	10	19	12	5	1	0	0	0	0	11	2	0
	1130	,,	1012·1	1011·2	..	31·4	24·1	20·2	23·9	55	..	1·6	..	15·9	0	4	27	5	6	1	1	0	3	8	7	0	0
	1730	,,	1009·6	1008·7	..	28·0	25·4	24·3	30·3	81	..	2·3	..	15·4	0	11	19	1	0	0	1	3	4	9	12	1	0
	2330	,,	1012·0	1011·1	..	24·6	22·8	21·7	26·4	85	..	1·0	..	8·1	0	0	26	10	0	1	0	1	1	1	12	5	0
Konkan																											
Dahanu	0830	5	1011·5	1011·0	+0·5	26·8	23·6	22·1	26·5	77	−4	2·0	−0·9	9·9	0	0	31	3	2	15	10	1	0	0	0	0	0
	1730	,,	1009·1	1008·6	..	29·9	25·6	23·6	29·2	70	..	2·9	..	16·2	0	0	31	20	0	0	0	1	0	4	6	0	0
Bombay (Colaba)	0830	11	1011·9	1010·7	+0·6	27·3	25·2	24·3	30·2	84	+3	4·1	+1·0	7·3	0	0	31	0	6	16	8	0	1	0	0	0	0
	1130	,,	1011·7	1010·5	..	30·7	26·2	24·3	30·5	69	..	3·4	..	7·5	0	0	28	1	3	7	4	3	1	2	7	3	0
	1730	,,	1008·8	1007·6	..	29·4	26·3	24·9	31·7	77	..	3·2	..	10·1	0	0	30	3	0	1	1	0	2	2	21	1	0
Bombay (Santacruz Aerodrome)	0230	8	1009·8	1008·9	..	25·2	23·7	22·7	28·2	87	..	3·1	..	1·9	0	0	9	4	0	2	0	1	0	0	2	22	0
	0530	,,	1010·0	1009·1	..	24·6	23·2	22·3	27·4	88	..	3·0	..	1·3	0	0	6	0	2	2	1	1	0	0	0	25	0
	0830	,,	1012·1	1011·2	+0·8	27·3	24·3	22·6	27·9	76	−6	4·1	+1·0	3·3	0	0	18	0	6	8	2	2	0	0	0	13	0
	1130	,,	1011·9	1011·0	..	31·7	24·7	21·0	25·5	55	..	4·0	..	9·5	0	0	30	3	3	6	3	7	0	1	7	1	0
	1730	,,	1008·9	1008·0	..	30·5	25·3	22·9	28·0	64	..	3·5	..	14·0	0	3	27	9	1	0	1	0	2	0	17	1	0
	2330	,,	1011·2	1010·3	..	25·9	23·9	22·7	28·0	84	..	2·5	..	2·8	0	0	9	1	2	3	0	1	0	0	2	22	0
Murbad	0830	7	1011·9	1011·1	+0·8	26·8	25·0	24·2	30·2	86	+10	4·2	+0·3	4·4	0	0	26	4	7	7	7	0	0	0	1	5	0
Harnai	0830	20	1011·0	1008·7	+0·5	26·8	24·4	23·4	28·5	82	+8	5·1	..	10·7	0	3	27	5	9	9	4	1	0	0	2	1	0
	1730	,,	1008·4	1006·1	..	28·7	25·7	24·3	30·5	78	..	4·7	..	16·3	0	11	20	4	2	1	1	1	0	8	14	0	0
Ratnagiri	0830	35	1011·6	1007·6	+0·6	26·5	24·7	23·9	29·7	85	..	4·5	..	.	0	0	31	0	0	31	0	0	0	0	0	0	0
	1730	,,	1009·6	1005·6	..	29·0	26·1	24·9	31·5	79	..	5·1	..	..	0	15	16	0	4	0	0	0	2	25	0	0	0
Devgad	0830	36	1011·6	1007·6	+0·8	27·0	25·2	24·3	30·5	85	+1	5·5	+1·3	6·4	0	0	30	2	5	16	4	1	1	0	1	1	0
	1730	,,	1008·8	1004·8	..	29·5	26·5	25·3	32·2	78	..	5·7	..	15·1 (h)	0	6	24	3	1	1	1	3	4	7	10	1	0
Vengurla	0230	9	1009·7	1008·7	..	24·9	24·2	23·9	29·6	94	..	5·5	..	0·5 (h)	0	0	3	1	2	0	0	0	0	0	0	20	0
*	0530	,,	1010·0	1009·0	..	24·6	23·9	23·5	29·3	94	..	4·3	..	4·0	0	1	8	7	0	2	0	0	1	0	1	14	0
	0830	9	1012·0	1011·0	..	26·8	24·8	23·9	29·8	85	..	5·4	..	4·3	0	0	19	6	2	5	5	1	0	0	0	12	0
	1130	,,	1011·9	1010·9	..	30·0	25·8	23·9	29·9	71	..	5·0	..	9·2	0	0	28	0	1	1	4	3	12	7	0	3	0
	1730	,,	1009·2	1008·2	..	28·6	25·6	24·3	30·2	78	..	6·2	..	7·9 (g)	0	1	24	2	0	3	1	1	5	10	3	6	0
*	2330	,,	1011·3	1010·3	..	25·4	24·4	24·0	29·9	92	..	5·2	..	3·5	0	1	4	4	0	1	1	0	1	0	0	19	0
Maharashtra																											
Nandurbar	0830	206	1012·7	989·5	..	27·8	21·5	17·1	20·5	55	..	2·1	.	7·6	0	0	30	1	4	9	0	1	6	7	2	1	0
	1730	,,	1008·3	985·7	..	33·4	22·0	14·5	16·4	35	..	3·4	..	5·1	0	0	29	3	4	6	1	3	3	7	2	2	0
Jalgaon	0830	201	1012·7	989·8	..	24·5	19·5	16·0	18·6	60	..	2·8	..	8·6	0	0	30	1	0	15	5	2	1	5	1	1	0
	1730	,,	1008·3	986·2	..	33·3	21·0	12·4	14·9	31	..	3·5	..	9·9	0	1	29	7	4	7	5	1	0	2	4	1	0
Malegaon	0830	437	1012·8	964·0	+0·9	25·5	19·3	15·1	17·3	54	−9	3·5	+0·9	3·3	0	0	21	1	0	2	3	0	3	7	5	10	0
	1730	,,	1008·4	960·6	..	31·3	20·3	12·3	15·0	34	..	4·2	..	6·2	0	0	30	6	11	9	1	2	0	0	1	1	0
Deolali	0830	571	1013·2	949·5	..	23·4	19·3	16·9	19·3	68	..	3·7	..	3·8	0	0	22	5	5	3	0	5	3	0	1	9	0
	1730	,,	1008·5	946·5	..	29·9	20·4	14·6	17·1	43	..	4·9	..	10·0	0	0	29	5	3	8	1	1	2	3	6	2	0
Aurangabad	0830	581	1012·9	948·5	+0·9	24·4	19·1	15·7	18·2	61	+3	3·4	+0·4	6·7	0	0	28	2	3	17	3	0	0	3	0	3	0
	1730	,,	1008·3	945·3	..	30·2	20·2	13·7	16·3	40	..	4·7	..	10·5	0	0	31	6	7	11	4	0	0	2	1	0	0

(a) Mean of 30 days. (h) Mean of 23 days. *Wind directions for 25 days.

Division and station	Hour of observation I.S.T.	Height barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest isobaric level	At station level	Departure from normal	Mean temperature in °C: Dry bulb	Wet bulb	Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Departure from normal	Mean wind velocity kms. per hour	Wind speed (Km. p.h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra—*Contd.*																											
Aurangabad (Chikalthana Aerodrome)	0230	579	1011·9	946·0	..	20·1	16·3	13·7	15·8	68	..	2·3	..	2·7	0	0	10	0	1	4	0	0	0	1	4	21	0
	0530	,,	1011·4	946·1	..	19·1	15·9	13·7	15·7	72	..	2·3	..	2·4	0	0	11	0	0	4	0	0	0	4	3	20	0
	0830	,,	1012·0	948·0	..	25·5	18·9	14·7	17·	54	..	3·1	..	3·6	0	1	9	6	1	2	1	0	0	0	0	21	0
	1130	,,	1010·8	947·8	..	30·0	20·1	13·9	16·2	40	..	3·0	..	8·8	0	0	25	4	2	6	10	1	1	1	0	6	0
	1730	,,	1007·7	944·8	..	29·9	19·6	12·8	15·2	38	..	5·1	..	8·3	0	1	23	4	9	8	3	0	0	0	0	7	0
	2330	,,	1011·8	947·1	..	21·8	17·0	13·8	15·9	62	..	2·9	..	3·5	0	0	11	1	0	3	2	0	0	3	2	20	0
Ahmednagar	0830	657	1012·1	939·4	+0·2	23·5	19·3	16·9	19·4	67	+3	3·3	+0·8	3·6	0	0	27	0	3	0	6	0	3	0	15	4	0
	1730	,,	1007·8	936·6	..	26·8	20·6	15·8	18·1	49	..	3·9	..	2·8	0	0	28	0	6	0	2	0	8	0	12	3	0
Parbhani	0830	423	1013·0	965·6	..	24·9	19·6	16·1	18·5	60	..	3·5	..	5·7	0	0	30	2	7	4	4	2	1	6	4	1	0
	1730	,,	1008·4	962·1	..	30·4	20·5	13·3	16·1	39	..	4·6	..	8·2	0	0	28	8	13	4	1	1	0	0	1	3	0
Poona	0530	559	1010·9	948·2	..	21·2	20·0	19·3	22·6	89	..	3·2	..	0·7	0	0	5	0	1	0	0	0	2	1	1	26	0
	0830	,,	1012·4	950·1	+0·5	23·9	20·8	19·2	22·4	75	—2	3·6	+0·4	0·8	0	0	7	0	2	1	0	3	0	1	0	24	0
	1130	,,	1010·6	949·7	..	29·8	21·3	16·4	19·1	48	..	3·6	..	4·8	0	0	23	1	12	5	2	1	0	1	1	8	0
	1730	,,	1007·5	946·7	..	29·5	21·4	17·0	19·7	50	..	4·7	..	4·2	0	0	20	1	4	4	0	0	1	5	5	11	0
	2330	,,	1011·3	949·1	..	24·0	21·4	20·1	25·6	79	..	3·9	..	1·2	0	0	8	0	1	2	0	0	4	1	0	23	0
Poona (Lohagaon Aerodrome)	0230	593	1010·5	944·5	..	21·9	20·2	19·1	22·5	85	..	3·9	..	4·3	0	0	16	0	2	4	1	0	0	4	5	15	0
	0530	,,	1011·1	944·6	..	20·8	19·5	18·7	21·7	88	..	3·6	..	5·6	0	1	17	0	1	5	4	0	0	3	5	13	0
	0830	,,	1012·0	946·2	..	24·1	20·3	18·3	21·0	71	..	4·1	..	5·7	0	0	25	0	1	8	2	0	0	7	3	10	0
	1130	,,	1010·7	946·1	..	29·6	19·4	12·2	15·0	38	..	4·6	..	12·5	0	4	24	0	3	20	5	0	0	0	0	3	0
	1730	,,	1007·7	943·2	..	29·1	20·4	15·1	17·7	47	..	5·4	..	13·4	0	5	24	0	6	7	4	0	0	5	7	2	0
	2330	,,	1011·5	945·5	..	23·3	20·5	19·1	22·1	78	..	4·6	..	6·4	0	1	24	0	1	7	1	0	0	8	8	6	0
Baramati	0830	551	1012·3	951·0	..	24·1	20·2	17·9	20·8	70	..	3·4	..	4·8	0	0	26	2	5	8	4	0	0	2	5	5	0
	1730	,,	1007·1	947·4	..	30·8	20·8	14·8	17·3	42	..	4·8	..	8·5	0	0	29	8	8	8	4	1	0	0	0	2	0
Jeur	0830	521	1011·8	953·9	..	24·6	19·6	16·8	19·1	64	..	3·4	..	2·8	0	0	21	1	2	5	3	2	0	4	4	10	0
	1730	,,	1006·9	950·3	..	30·8	20·8	14·6	17·3	42	..	4·3	..	2·9	0	0	23	0	6	9	2	0	0	3	3	8	0
Sholapur	0530	479	1010·6	956·9	..	22·5	19·3	17·4	20·0	75	..	4·1	..	6·0	0	0	24	4	6	4	5	1	1	2	1	7	0
	0830	,,	1012·2	958·8	+0·7	25·1	20·6	18·5	21·0	68	+4	5·1	+2·0	5·8	0	0	26	3	10	4	7	0	0	1	1	5	0
	1130	,,	1010·8	958·4	..	30·1	21·7	16·9	19·9	49	..	4·4	..	9·8	0	0	31	2	8	2	10	3	2	2	2	0	0
	1730	,,	1007·4	955·4	..	30·3	20·9	14·8	17·5	43	..	5·6	..	7·7	0	0	31	13	9	4	2	2	0	0	1	0	0
	2330	,,	1010·9	957·6	..	21·9	19·5	16·2	18·7	61	..	4·3	..	9·1	0	0	31	2	11	6	7	2	2	1	0	0	0
Miraj	0330	554	1012·0	950·4	+0·5	23·4	21·7	20·7	24·8	86	+14	4·4	+0·4	5·7	0	0	23	0	4	5	3	2	0	5	4	8	0
	1730	,,	1007·1	946·9	..	29·4	21·9	17·7	20·9	53	..	6·1	..	7·5	0	0	26	2	6	7	3	2	1	2	3	5	0
Kolhapur	0530	570	1010·3	946·6	..	21·4	20·8	20·5	24·3	94	..	3·4	..	6·9	0	1	24	0	3	9	1	0	0	11	1	6	0
	0330	,,	1011·9	948·6	..	23·6	21·7	20·8	24·5	85	..	4·3	..	6·7	0	1	23	1	6	7	1	0	0	7	2	7	0
	1130	,,	1010·6	948·3	..	28·5	22·5	19·5	22·9	60	..	4·4	..	12·3	0	4	27	2	8	16	3	0	0	2	0	0	0
	1730	,,	1007·6	945·3	..	27·7	22·4	19·4	23·3	64	..	5·9	..	11·6	0	1	29	1	3	8	0	0	3	13	2	1	
Vidarbha																											
Buldhana	0830	650	1011·9	940·3	..	24·3	18·3	14·6	16·5	55	..	3·1	..	1·8	0	0	15	0	0	0	2	0	7	0	6	16	0
	1730	,,	1008·0	937·7	..	29·3	19·3	12·6	15·2	37	..	3·0	..	0·6	0	0	6	0	1	0	0	0	1	0	4	25	0
Akola	0830	282	1012·3	980·5	+0·6	24·6	19·2	15·8	17·8	58	—3	2·4	0	3·5	0	0	30	0	1	7	5	0	0	7	10	1	0
	†1130	,,	1011·1	979·9	..	31·7	21·3	14·3	17·0	37	..	2·6	..	4·5	0	0	26	0	0	7	4	4	1	8	2	4	0
	1730	,,	1007·7	976·7	..	32·7	20·7	12·0	14·7	32	..	2·8	..	2·9	0	0	25	0	3	5	3	0	0	6	8	6	0
Akola (Aerodrome)	0530	309	1011·2	975·8	..	20·3	17·6	14·7	16·7	71	..	2·8	..	2·5	0	0	19	0	0	4	10	1	2	2	0	12	0
	2330	,,	1011·5	976·6	..	24·4	18·6	14·6	16·7	55	..	2·3	..	2·6	0	0	18	0	0	4	10	4	0	0	0	13	0
Amravati	0830	370	1012·7	971·3	+1·1	25·8	19·4	14·9	17·4	53	—5	3·2	+0·8	4·1	0	0	24	2	4	4	2	1	1	0	0	7	0
	1730	,,	1007·8	967·3	..	31·0	20·6	13·2	15·6	37	..	5·0	..	4·7	0	0	31	2	0	1	11	0	4	0	2	0	0
Yeotmal	0830	451	1012·3	962·0	..	25·9	19·9	15·7	19·2	57	..	2·4	..	4·5	0	0	22	4	4	4	3	4	0	0	13	9	0
	1730	,,	1008·3	958·6	..	29·7	20·6	14·7	16·8	43	..	2·9	..	3·5	0	0	20	6	7	4	1	1	0	0	1	11	0
Nagpur	0230	310	1010·5	975·1	..	21·3	18·0	15·7	18·0	71	..	2·0	..	5·9	0	0	29	10	4	1	0	0	1	0	13	2	0
	0530	,,	1011·3	975·7	..	20·0	17·1	15·7	17·0	77	..	2·6	..	5·5	0	0	24	11	2	2	0	0	0	1	8	7	0
	0830	,,	1013·0	977·9	+1·1	25·1	19·9	16·5	19·0	60	—8	2·7	+0·3	5·5	0	0	29	12	8	2	1	1	0	0	5	2	0
	1130	,,	1011·5	977·1	..	30·9	21·6	15·6	18·2	42	..	3·1	..	8·8	0	0	30	5	6	7	4	2	2	1	2	1	1
	1730	,,	1008·7	974·4	..	29·9	20·9	15·1	17·5	43	..	3·6	..	6·5	0	0	29	4	10	9	3	1	0	1	1	2	0
	2330	,,	1011·7	976·4	..	22·0	18·5	15·8	18·5	68	..	2·1	..	4·7	0	0	24	8	2	1	0	0	0	3	10	7	0
Gondia	0830	313	1013·2	977·9	..	24·2	20·4	18·1	21·0	69	..	2·8	..	2·3	0	0	19	2	6	3	1	1	3	0	3	12	0
	1730	,,	1009·0	974·5	..	30·1	21·3	15·1	18·3	42	..	2·3	..	2·2	0	0	17	5	1	3	1	0	1	1	5	14	0
Brahmapuri	0830	229	1012·8	986·8	..	23.9	21·0	19·4	22·5	77	..	3·5	..	3·7	0	0	25	11	5	1	3	4	1	0	0	6	0
	1730	,,	1008·8	983·5	..	30·8	21·8	16·0	18·9	44	..	2·8	..	7·2	0	0	31	9	14	4	1	1	1	1	0	0	0
Chanda	0830	193	1012·5	990·6	+0·8	25·2	21·7	19·6	23·2	71	—2	3·8	+1·5	2·6	0	0	21	3	3	6	3	1	0	1	4	0	0

* Wind directions for 26 days.

†Observation for 30 days.

(g) Mean of 24 days.

Division and station	Hours of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g. p. m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	0 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Vidharbha—*Contd.*																											
Chanda—*Contd.*	1730	,,	1008·7	987·1	..	29·2	23·3	20·2	23·9	59	..	3·6	..	2·9	0	0	22	1	8	7	6	0	0	0	3	9	0
Sironcha	0830	123	1012·8	998·8	..	26·4	23·1	21·5	25·6	75	..	3·0	..	2·4	0	0	20	4	3	6	5	2	1	0	1	11	0
	1730	,,	1008·6	994·9	..	31·3	23·2	18·9	21·9	51	..	3·6	..	3·9	0	0	29	6	10	7	3	0	0	0	3	2	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1009·5	1007·2	..	25·2	24·2	23·7	30·0	92	..	5·9	..	2·0	0	0	17	0	0	1	2	2	1	4	7	14	0
	0830	,,	1011·6	1009·3	+1·0	28·1	25·3	24·1	29·9	80	+1	5·5	+0·5	2·4	0	0	25	1	1	1	1	3	1	5	12	6	0
	1130	,,	1010·6	1008·4	..	31·3	26·1	23·8	29·4	66	..	6·0	..	4·2	0	0	31	2	9	7	6	1	0	1	5	0	0
	1730	,,	1008·4	1006·1	..	29·1	25·9	24·5	30·9	77	..	6·5	..	3·4	0	0	29	0	13	1	13	1	1	0	0	2	0
	2330	,,	1010·8	1008·5	..	26·7	25·3	24·6	31·1	89	..	4·0	..	1·2	0	0	12	0	4	0	2	1	2	1	2	19	0
Ongole	0830	12	1011·8	1010·5	..	28·3	25·3	24·0	29·8	78	..	4·9	..	2·4	0	0	16	5	5	1	2	1	1	0	1	15	0
	1730	,,	1008·2	1006·6	..	29·9	25·1	22·8	27·8	67	..	5·2	..	4·3	0	0	24	0	6	3	15	0	0	0	0	7	0
Rentachintala	0830	106	1011·9	1000·0	..	27·9	24·2	22·4	27·2	76	+2	4·7	−0·5	1·1	0	0	10	1	1	4	0	1	0	3	0	21	
	1730	,,	1008·0	996·2	..	31·1	23·4	19·2	22·4	51	..	5·6	..	3·1	0	0	25	8	4	9	0	3	0	1	0	6	0
Gannavaram	0230	23	1009·2	1006·6	..	25·5	24·6	24·1	30·2	92	..	2·9	..	2·6	0	0	11	0	4	5	0	1	0	1	0	20	0
	0530	,,	1009·7	1007·1	..	24·9	24·2	23·8	29·4	94	..	3·1	..	3·6	0	0	15	0	8	5	0	1	0	1	0	16	0
	0830	,,	1011·7	1009·1	..	27·9	25·2	24·1	30·0	80	..	3·5	..	8·3	0	0	25	1	9	8	3	1	1	1	1	6	0
	1130	,,	1010·9	1008·3	..	30·7	25·0	23·7	29·4	67	..	4·4	..	9·5	0	1	29	1	6	10	5	5	3	0	0	1	0
	1730	,,	1008·3	1005·7	..	29·0	25·5	24·0	29·6	75	..	5·2	..	6·4	0	0	27	0	2	15	8	2	0	0	0	4	0
	2330	,,	1010·7	1008·1	..	26·0	24·8	24·3	30·5	91	..	3·4	..	4·0	0	0	16	0	3	12	0	0	0	1	0	15	0
Masulipatam	0530	3	1009·8	1009·5	..	25·4	24·9	24·7	29·8	96	..	3·4 (h)	..	4·2	0	0	23	11	6	1	1	1	1	1	1	8	0
	0830	,,	1011·8	1011·5	+1·0	27·6	25·7	24·9	31·6	86	+6	4·7	+0·9	6·7	0	0	27	7	9	3	1	0	0	3	4	4	0
	1130	,,	1011·2	1010·9	..	30·0	26·2	24·6	31·0	74	..	6·1	..	7·9	0	0	30	7	3	8	5	3	1	0	3	1	0
	1730	,,	1008·8	1008·5	..	29·1	26·1	24·8	31·4	78	..	6·3	..	10·2	0	1	29	1	3	8	13	4	1	0	0	1	0
	2330	,,	1010·8	1010·5	..	26·7	25·6	25·1	32·0	91	..	1·0 (O)	..	4·1	0	0	22	5	5	1	4	5	2	0	0	9	0
Nidadavolu	0830	12	1012·0	1010·6	..	27·9	25·2	23·9	29·7	80	..	4·2	..	5·9	0	0	27	12	7	3	0	0	0	0	5	4	0
	1730	,,	1008·7	1007·3	..	28·9	25·0	23·3	28·5	73	..	6·2	..	7·4	0	0	27	2	1	14	2	3	2	2	1	4	0
Kakinada	0830	8	1012·1	1011·2	+1·3	29·4	26·1	24·7	31·1	76	−1	4·1	0	9·2	0	0	31	0	18	1	0	0	9	1	2	0	0
	1730	,,	1009·0	1008·1	..	29·7	25·9	24·2	30·3	73	..	4·7	..	8·9	0	0	31	0	11	2	12	0	5	0	1	0	0
Visakhapatnam	0230	3	1009·7	1009·5	..	25·6	24·3	23·8	29·3	90	..	3·2	..	2·2	0	0	13	3	0	0	0	0	2	0	8	18	0
	0530	,,	1010·3	1009·9	..	25·0	23·9	23·3	28·7	91	..	4·4	..	1·7	0	0	12	1	1	0	1	0	1	0	8	19	0
	0830	,,	1012·2	1011·8	+1·3	28·9	25·2	23·5	29·5	73	−4	3·5	−0·8	4·5	0	0	27	5	3	4	2	0	2	2	9	4	0
	1130	,,	1011·1	1010·7	..	31·8	26·0	23·3	28·8	62	..	4·2	..	9·8	0	2	29	2	3	10	4	0	7	0	5	0	0
	1730	,,	1009·2	1008·8	..	28·9	25·4	23·8	29·8	75	..	5·6	..	5·9	0	0	28	2	2	13	5	0	6	0	0	3	0
	2330	,,	1011·2	1010·8	..	26·4	24·9	24·2	30·4	88	..	3·9	..	2·8	0	0	14	8	1	1	0	0	0	0	4	17	0
Calingapatam	0830	6	1011·7	1011·0	+0·8	26·1	24·3	23·6	29·0	86	+5	4·9	+1·5	6·0	0	0	31	10	0	0	0	0	0	6	15	0	0
	1730	,,	1009·1	1008·4	..	29·3	25·4	23·6	29·4	72	..	5·8	..	7·9	0	0	31	0	2	12	10	3	3	0	1	0	0
Telangana																											
Ramagundam	0830	156	1012·0	994·4	..	27·3	22·9	20·6	24·4	67	..	3·2	..	3·5	0	0	21	11	2	0	2	2	0	3	1	10	0
	1730	,,	1008·3	991·0	..	31·3	23·0	18·3	21·3	48	..	4·2	..	4·3	0	0	27	9	11	3	1	1	0	1	1	4	0
Nizamabad	0830	381	1012·3	969·8	+1·1	26·3	22·0	19·6	23·0	68	−2	3·6	+1·0	1·3	0	0	13	2	3	2	3	0	1	1	1	18	0
	1730	,,	1008·0	966·2	..	30·2	21·8	16·4	19·4	47	..	4·5	..	2·0	0	0	19	2	13	4	0	0	0	0	0	12	0
Mahbubnagar	0830	505	1011·5	955·6	..	26·1	21·8	19·7	24·0	69	..	4·5	..	8·7	0	1	24	1	6	9	4	0	3	0	2	6	0
	1730	,,	1007·2	952·0	..	29·4	21·8	17·8	20·9	51	..	5·2	..	7·5	0	0	30	4	11	9	3	1	0	0	2	1	0
Hyderabad (Begumpet Aerodrome)	0230	545	1010·3	949·5	..	22·4	20·9	20·1	22·5	87	..	3·7	..	1·0	0	0	5	0	0	1	4	0	0	0	0	26	0
	0530	,,	1010·9	949·9	..	21·5	20·4	19·8	23·2	90	..	4·1	..	1·2	0	0	6	0	1	2	3	0	0	0	0	25	0
	0830	,,	1012·0	951·8	+1·4	25·7	21·6	19·5	22·9	70	−1	4·6	+1·2	4·9	0	0	18	0	0	3	9	2	2	0	2	13	0
	1130	,,	1010·4	951·0	..	29·4	21·7	17·4	20·2	51	..	5·0	..	7·3	0	0	23	2	4	9	8	0	0	0	0	8	0
	1730	,,	1007·8	948·4	..	28·7	21·3	17·2	19·8	52	..	5·3	..	4·7	0	0	19	4	6	4	5	0	0	0	0	12	0
	2330	,,	1011·6	950·9	..	23·2	20·9	19·7	23·1	81	..	3·7	..	2·1	0	0	8	0	0	3	5	0	0	0	0	23	0
Hakimpet	0830	613	1011·5	943·9	..	25·3	21·0	18·7	22·7	69	..	4·3	..	8·3	0	0	27	5	1	3	11	1	2	1	3	4	0
	1730	,,	1007·9	941·1	..	28·6	20·8	16·8	18·9	50	..	4·8	..	11·0	0	3	27	7	9	3	6	1	1	0	3	1	0
Hanamkonda	0830	269	1012·4	982·3	+1·2	26·4	22·9	21·1	25·2	74	+1	3·5	+0·2	5·1	0	0	28	6	2	1	4	10	2	1	2	3	0
	1730	,,	1008·6	979·0	..	30·3	22·7	18·3	21·4	52	..	3·9	..	4·7	0	0	31	11	10	5	3	1	1	0	0	0	0
Bhadrachallam	0830	111	1012·4	999·9	..	27·6	24·4	22·8	28·1	76	..	5·9	..	3·7	0	0	19	1	10	5	2	0	0	0	1	12	0
	1730	,,	1008·4	996·0	..	31·2	24·3	20·8	24·8	56	..	5·0	..	7·6	0	1	26	1	11	5	7	1	1	0	1	4	0
Khammameth	0830	112	1012·2	999·6	..	27·2	24·9	24·1	29·7	84	..	3·7	..	1·8	0	0	16	7	1	8	0	0	0	0	0	15	0
	1730	,,	1008·1	995·7	..	30·7	25·4	22·8	29·6	69	..	5·2	..	3·7	0	0	26	4	5	13	4	0	0	0	0	5	0

(c) Mean of 16 days.

(h) Mean of 23 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.m. nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Kms. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rayala seema																											
Arogyavaram	0830	701	1011·9	934·8	..	23·8	21·2	19·9	23·1	79	..	6·0	..	2·0	0	0	17	2	4	2	4	0	0	1	4	14	0
	1730	,,	1007·8	931·6	..	26·2	21·3	18·7	22·2	65	..	7·0	..	3·8	0	0	28	5	8	5	6	0	0	0	4	3	0
Cuddapah	0830	130	1012·1	997·5	+1·2	29·3	24·2	21·7	26·1	65	—8	3·8	—0·4	3·3	0	0	16	1	1	5	2	0	0	1	6	15	0
	1730	,,	1007·7	993·3	..	31·2	24·0	20·2	23·9	55	..	5·4	..	7·6	0	0	28	2	4	15	2	1	0	0	4	3	0
Anantapur	0530	350	1009·7	970·3	..	23·4	22·1	21·2	25·4	88	..	4·5	..	2·3	0	0	15	1	0	9	2	0	0	3	0	16	0
	0830	,,	1011·4	972·3	..	26·2	23·1	21·7	24·4	75	..	5·0	..	5·5	0	1	22	0	3	9	2	1	1	6	1	8	0
	1130	,,	1010·0	971·4	..	29·7	23·6	20·6	24·4	59	..	5·1	..	6·3	0	0	26	3	2	11	3	0	2	1	4	5	0
	1730	,,	1006·6	968·2	..	30·2	23·0	19·0	22·2	53	..	6·8	..	9·0	0	2	26	5	5	11	2	0	0	2	3	3	0
	2330	,,	1010·3	971·2	..	25·7	22·7	21·3	25·1	77	..	5·0	..	7·1	0	2	16	0	3	1	2	0	1	0	1	13	0
Kurnool	0830	281	1011·6	979·9	+0·6	25·2	22·8	21·6	26·2	81	+9	4·3	+0·6	1·5	0	0	4	0	0	0	0	0	1	3	0	27	0
	1730	,,	1007·4	976·5	..	31·4	23·9	19·3	23·2	52	..	5·0	..	9·6	0	1	26	2	7	4	7	1	0	2	4	4	0
Madras																											
Palayamcottai	0830	51	1011·7	1005·9	..	28·3	23·9	21·7	26·1	69	..	5·7	..	4·0	0	0	29	9	2	3	0	1	0	10	4	2	0
	1730	,,	1007·8	1002·1	..	30·2	24·3	21·3	25·7	61	..	6·7	..	8·7	0	1	28	1	6	5	5	3	0	8	4	2	0
Tuticorin	0830	4	1011·9	1011·5	..	28·0	24·2	22·4	27·0	73	..	4·7	.	6·5	0	0	30	8	10	0	1	2	2	7	9	1	0
	1730	,,	1008·3	1007·9	..	29·5	25·2	23·5	28·8	71	..	3·9	.	18·0	0	11	20	1	0	7	11	8	1	2	0	0	0
Pamban	0830	11	1011·6	1010·3	+1·0	27·9	25·7	24·7	31·1	83	+3	4·8	+1·2	8·8	0	1	25	2	1	3	5	2	8	1	4	5	0
	1730	,,	1008·4	1007·1	..	28·2	25·6	24·0	30·7	81	..	5·9	..	7·7	0	1	22	4	3	1	2	10	3	0	0	8	0
Mathurai	0830	133	1011·5	996·5	+0·6	27·3	24·3	23·0	28·0	77	+3	5·2	+0·1	3·2	0	0	31	13	4	3	1	0	1	4	5	0	0
	1730	,,	1007·7	992·8	..	29·7	24·9	22·6	27·7	67	..	5·5	..	3·2	0	0	31	1	6	12	5	3	3	0	1	0	0
Nagapattinam	0830	9	1011·7	1010·6	+1·0	26·8	24·8	23·9	29·7	84	+5	6·3	+1·3	5·3	0	1	26	2	4	0	3	0	6	9	3	4	0
	1730	,,	1008·3	1007·3	..	28·9	25·6	24·2	30·1	76	..	5·6	..	10·3	0	0	31	3	11	6	3	3	4	0	1	0	0
Tiruchirapalli	0230	88	1009·3	999·3	..	24·9	23·5	22·7	27·5	89	..	4·7	..	3·4	0	0	10	1	1	3	0	0	0	5	0	31	0
	0530	,,	1009·8	999·7	..	24·6	23·4	22·8	27·9	89	..	5·6	..	2·7	0	0	11	0	1	2	0	0	1	5	2	20	0
	0830	,,	1011·6	1001·6	+0·6	26·3	24·1	23·1	28·2	82	+3	6·0	+1·5	8·7	0	1	24	1	4	3	0	1	0	11	5	6	0
	1130	,,	1010·6	1000·7	..	29·3	25·0	23·0	28·2	69	..	5·8	..	11·7	0	3	26	2	4	5	0	0	1	14	3	2	0
	1730	,,	1007·9	998·0	..	29·5	24·4	21·9	26·5	66	..	6·6	..	7·3	0	0	23	3	3	9	1	4	2	1	0	8	0
	2330	,,	1011·1	1001·1	..	25·5	23·9	23·1	28·5	87	..	5·1	..	4·7	0	1	14	1	4	4	2	0	1	2	1	10	0
Coimbatore	0830	409	1011·9	966·4	+1·0	25·1	22·6	21·2	25·1	79	—2	6·9	+2·6	12·3	0	2	29	4	5	4	1	7	7	0	3	0	0
	1730	,,	1007·8	962·9	..	27·6	23·2	20·9	25·6	67	..	7·2	..	11·0	0	4	27	2	6	8	2	5	5	1	2	0	0
Coimbatore (Peelamedu Aerodrome)	0530	398	1009·9	965·2	..	22·9	22·1	21·8	25·7	94	..	6·3	..	10·0	0	1	25	1	4	5	1	7	8	0	0	5	0
	0830	,,	1011·8	967·2	..	24·6	22·7	21·8	26·1	85	..	5·7	..	9·5	0	2	26	0	6	5	1	8	7	0	1	3	0
	1130	,,	1010·2	966·3	..	28·4	23·3	20·6	24·5	63	..	5·8	..	10·6	0	0	30	0	12	2	4	5	5	2	0	1	0
	1730	,,	1007·8	963·8	..	27·7	22·9	20·5	24·1	67	..	6·3	..	16·6	0	10	21	0	13	2	2	4	7	1	2	0	0
	2330	,,	1011·2	966·5	..	23·6	22·5	21·9	26·3	91	..	6·1	..	14·0	0	11	18	0	7	2	0	6	12	0	2	2	0
Salem	0530	278	1010·1	978·6	..	23·3	22·4	22·0	26·5	92	..	5·8 (a)	..	3·0 (a)	0	0	21	3	6	1	0	0	3	5	3	9	0
	0830	,,	1011·6	980·3	+0·5	25·7	23·3	22·2	26·7	81	+3	5·3	+0·7	3·9	0	0	24	0	5	6	0	0	3	10	0	7	0
	1130	,,	1010·3	979·5	.	29·6	24·5	22·0	26·5	64	..	5·3	..	4·7	0	0	25	1	7	3	2	0	4	7	1	6	0
	1730	,,	1007·3	976·5	..	28·7	25·2	22·0	26·6	69	..	6·5	..	3·3	0	0	23	4	2	10	2	2	1	2	0	8	0
	2330	,,	1011·2	979·9	..	25·1	23·0	22·0	26·4	83	..	5·9	..	3·0	0	0	14	0	1	5	1	1	1	3	2	17	0
Kallakurichi	0830	127	1011·5	997·2	..	26·6	24·3	23·2	28·5	82	..	4·9	..	4·4	0	0	25	10	1	0	1	5	3	1	4	6	0
	1730	,,	1008·0	993·8	..	28·4	24·8	23·1	28·3	76	..	6·1	..	5·9	0	0	25	1	10	6	4	1	3	0	0	6	0
Cuddalore	0530	12	1009·5	1008·1	..	24·4	23·9	23·3	29·2	93	..	5·7	..	1·3	0	0	10	2	0	1	0	1	4	1	1	21	0
	0830	,,	1011·6	1010·3	+1·0	26·7	24·7	23·7	29·3	84	+3	5·6	+1·0	1·8	0	0	4	1	3	0	1	3	2	2	2	17	0
	1130	,,	1010·7	1009·3	..	29·3	25·4	23·7	29·5	73	..	6·0	..	3·1	0	0	18	1	6	1	5	2	2	0	1	13	0
	1730	,,	1008·3	1007·0	..	28·1	25·3	24·1	30·1	79	..	6·6	..	2·8	0	0	21	3	7	2	9	0	0	0	0	10	0
	2330	,,	1010·8	1009·4	..	26·0	24·7	24·2	29·8	89	..	4·8	..	1·3	0	0	6	1	0	0	1	1	3	0	0	25	0
Vellore	0530	214	1010·1	985·7	..	23·2	22·4	22·0	26·4	93	..	6·5	..	0·4	0	0	4	1	0	0	0	0	0	2	1	27	0
	0830	,,	1011·7	987·5	+1·2	25·4	23·5	22·6	27·4	85	+5	5·8	+2·0	2·7	0	0	18	2	3	1	0	1	1	4	6	13	0
	1130	,,	1010·5	986·6	..	29·4	24·5	22·3	26·5	66	..	5·6	..	5·3	0	0	26	5	8	3	1	0	1	7	1	5	0
	1730	,,	1008·1	984·2	..	27·9	23·8	21·8	26·6	72	..	6·9	..	3·8	0	0	22	0	5	7	3	3	1	2	1	9	0
	2330	,,	1011·3	987·1	..	24·7	23·3	22·7	27·6	89	..	5·9	..	2·9	0	0	22	4	4	5	0	3	3	2	1	9	0
Madras	0230	16	1009·3	1007·5	..	25·3	24·5	24·0	29·6	93	..	4·1	..	4·7	0	0	24	1	0	0	1	3	3	8	8	7	0
	0530	,,	1009·8	1008·0	..	24·8	24·1	23·7	29·5	94	..	4·6	..	5·1	0	0	24	4	0	0	0	3	4	6	7	7	0
	0830	,,	1011·8	1010·0	+1·1	26·9	25·0	24·4	30·1	86	+6	4·8	+0·2	7·1	0	0	27	4	1	0	0	2	8	3	9	4	0
	1130	,,	1010·8	1009·0	..	30·1	25·8	23·8	29·5	71	..	5·4	..	10·8	0	0	27	5	5	6	3	1	5	3	2	1	0
	1730	,,	1008·7	1007·0	..	28·4	25·7	24·5	30·5	80	..	5·7	..	7·6	0	3	31	3	7	11	4	3	1	0	2	0	0
	2330	,,	1011·0	1009·2	..	26·1	25·0	24·5	30·8	91	..	4·3	..	5·0	0	0	25	4	2	0	2	3	3	6	5	6	0
Madras (Nungambakkam)	0830	6	1011·1	1010·5	..	27·7	25·1	24·3	29·9	81	..	6·2	..	4·0	0	0	22	5	2	1	0	0	10	1	2	9	1

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas).		Mean wind speed, Kms. per hour.	Wind speed (Km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount		62 or more	20 to 61	1 to 19	Wind direction									
													Departure from normal				N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Mysore																											
Karwar	0830	4	1011·4	1010·9	+0·3	26·3	24·7	24·0	29·8	86	..	5·6	..	2·0	0	0	13	1	4	5	0	1	0	0	2	18	0
	1730	,,	1008·6	1008·2	..	28·7	25·5	24·1	30·3	75	..	6·5	..	10·2	0	1	26	1	1	1	2	1	0	5	7	4	9
Honavar	0830	26	1011·8	1008·9	+0·3	26·1	24·5	23·8	29·5	87	+3	6·5	+1·6	3·9	0	0	30	0	3	25	1	0	0	0	1	1	0
	1730	,,	1009·2	1006·3	..	28·9	26·1	25·0	31·6	80	..	6·8	..	3·4	0	0	30	0	0	0	1	2	15	9	3	1	0
Mangalore	0230	22	1009·4	1006·9	..	25·0	24·0	23·6	29·1	91	..	5·2	..	6·4	0	0	25	1	4	15	4	1	0	0	0	6	0
	0530	,,	1009·6	1007·1	..	24·7	23·8	23·4	29·0	93	..	4·8	..	9·1	0	0	30	1	3	21	2	2	0	0	1	1	0
	0830	,,	1011·7	1009·2	+0·5	27·1	24·6	23·4	28·9	81	−3	5·7	+0·9	7·6	0	0	31	0	3	16	10	1	1	0	0	0	0
	1130	,,	1011·3	1008·8	..	29·2	25·4	23·7	29·8	72	..	5·0	..	10·5	0	1	30	0	1	1	2	4	15	7	1	0	0
	1730	,,	1008·9	1006·4	..	28·3	25·5	24·3	30·4	79	..	7·0	..	11·3	0	0	31	1	0	0	2	5	8	9	6	0	0
	2330	,,	1011·2	1008·7	..	25·9	24·7	24·1	29·8	90	..	5·6	..	8·4	0	1	27	4	4	12	6	1	0	0	1	3	0
Mangalore (Bajpe Aerodrome)	0530	103	1010·5	998·5	..	23·6	23·3	23·1	28·5	98	..	5·7	..	5·0	0	0	13	1	0	9	2	1	0	0	0	18	0
	0830	,,	1011·9	1000·3	..	26·1	24·3	23·5	29·0	85	..	5·5	..	8·3	0	0	26	0	0	20	5	0	0	1	0	5	0
	1730	,,	1009·1	997·5	..	26·9	24·7	23·8	29·3	83	..	6·4	..	11·3	0	3	23	1	0	0	0	5	2	15	3	5	0
Mysore North																											
Bidar	0830	664	1011·9	938·8	..	24·5	20·3	217·7	20·7	68	−2	4·8	+1·8	11·3	0	1	30	1	3	9	7	3	4	3	1	0	0
	1730	,,	1007·7	935·7	..	28·1	20·0	14·8	17·6	49	..	5·7	..	10·8	0	1	30	9	19	1	0	0	0	0	2	0	0
Gulbarga	0830	458	1012·1	961·1	+0·9	26·2	21·5	18·8	22·2	67	+1	5·3	+2·7	10·7	0	9	30	1	14	5	4	2	2	0	2	1	0
	1730	,,	1007·4	957·3	..	30·3	21·0	15·6	18·1	47	..	7·1	..	14·3	0	3	28	7	12	7	0	3	0	0	2	0	0
Bijapur	0830	594	1011·9	946·1	+0·6	24·2	21·6	20·1	23·8	79	+11	5·6	+2·7	7·2	0	0	29	3	4	6	1	4	1	3	7	2	0
	1730	,,	1007·0	942·4	..	29·2	21·5	17·4	19·5	53	..	6·2	..	4·8	0	0	28	9	10	4	2	1	2	0	0	3	0
Belgaum	0830	781	1012·2	926·2	+0·8	22·0	20·8	20·1	23·8	89	+9	..	..	0·9	0	0	8	0	1	1	1	3	0	1	1	23	0
	1730	,,	1009·8	924·6	..	24·2	21·6	20·3	23·9	80	..	..	..	4·4	0	1	22	2	6	0	1	2	9	3	0	8	0
Belgaum (C.T.O.)	0830	753	1012·1	929·1	+0·6	23·0	21·3	20·3	24·2	86	+9	4·8	+0·9	4·0	0	0	27	3	6	7	2	1	2	5	1	4	0
	1730	,,	1008·4	926·3	..	24·7	21·8	20·4	24·0	78	..	7·0	..	8·3	0	0	31	2	5	4	0	1	5	12	2	0	0
Belgaum (Sambre Aerodrome)	0530	761	1010·5	926·3	..	20·5	19·9	19·5	22·9	94	..	4·7	..	1·3	0	0	9	0	3	2	1	0	1	2	0	22	0
	0830	,,	1011·9	927·9	..	22·8	21·0	20·9	23·5	85	..	5·5	..	4·5	0	0	21	0	6	5	4	0	2	4	0	10	0
	1130	,,	1010·3	927·9	..	26·9	22·0	19·6	22·7	65	..	5·1	..	10·1	0	4	24	1	2	11	4	3	0	4	3	3	0
	1730	,,	1008·1	925·3	..	24·9	21·4	19·7	22·9	75	..	6·2	..	9·0	0	1	29	5	3	3	1	2	7	8	1	1	0
Gadag	0830	650	1011·0	940·2	+0·9	24·0	21·9	20·9	24·5	83	+8	4·6	+0·5	6·6	0	0	30	3	4	9	0	0	2	9	3	1	0
	1730	,,	1007·3	936·8	..	27·9	22·3	19·6	22·7	62	..	5·9	..	5·7	0	0	29	3	6	10	2	1	1	4	2	2	0
Gadag (P.B.O.)	0530	661	1010·2	936·8	..	21·9	21·2	20·8	24·7	94	..	5·0	..	6·6	0	0	23	0	1	5	2	1	3	11	0	8	0
	0830	,,	1011·8	938·9	..	23·8	22·0	21·3	25·1	86	..	4·6	..	6·4	0	0	23	0	0	8	5	0	0	10	0	8	0
	1130	,,	1010·5	938·5	..	27·3	22·6	20·7	24·0	68	.	4·6	..	8·3	0	0	25	1	1	6	9	0	1	7	0	6	0
	1730	,,	1007·5	935·5	..	27·2	22·0	19·9	22·6	66	..	6·0	..	6·1	0	0	23	2	4	9	1	1	4	2	0	8	0
	2330	,,	1011·3	938·2	..	23·1	21·4	20·7	24·3	87	..	4·8	..	7·2	0	0	27	0	1	7	2	0	2	12	3	4	0
Raichur	0830	400	1011·9	967·4	+0·9	26·4	22·5	20·3	24·0	70	0	3·8	+1·1	7·0	0	0	28	3	4	2	2	2	2	7	6	3	0
	1730	,,	1007·5	963·7	..	30·6	22·2	17·1	20·0	47	..	4·8	..	8·6	0	1	28	6	11	6	2	1	0	1	2	2	0
Mysore South																											
Bellary	0830	449	1011·6	961·6	+0·6	25·5	23·8	23·1	28·2	86	+17	4·6	+0·5	3·5	0	0	21	0	1	0	13	0	0	0	7	10	0
	1730	,,	1006·7	957·7	..	30·0	24·9	22·5	27·6	66	..	6·1	..	2·8	0	0	22	0	5	0	10	0	2	0	5	9	0
Chitaldrug	0830	733	1011·7	931·0	+0·7	22·9	21·3	20·5	24·1	86	+11	6·8	+2·2	6·4	0	0	29	0	1	10	0	1	11	6	0	2	0
	1730	,,	1006·8	927·6	..	27·7	21·7	18·6	21·7	59	..	7·0	..	5·8	0	0	29	2	10	7	1	1	1	3	4	2	0
Shimoga	0830	571	1011·7	948·3	..	23·9	21·9	21·0	24·9	84	..	5·3	..	2·0	0	0	11	3	3	1	1	1	1	1	0	20	0
	1730	,,	1007·4	944·9	..	26·8	22·9	21·1	24·8	72	..	5·8	..	3·7	0	0	21	1	4	2	1	2	5	4	2	10	0
Balehonnur	0830	..	..	..	..	20·3	19·8	19·3	22·7	95	+3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1520·9	907·1	..	21·5	20·0	19·3	22·2	87	+7	6·3	+1·4	5·6	0	0	23	1	0	7	5	0	0	8	2	8	0
	1730	,,	1499·2	904·3	..	24·6	20·6	81·5	21·1	69	..	6·9	..	7·9	0	0	27	0	0	9	4	1	4	9	0	4	0
Mysore	0830	767	1012·1	927·5	+0·6	22·4	20·9	20·1	24·0	86	+5	4·2	−1·2	8·3	0	1	30	4	0	0	1	6	12	1	7	0	0
	1730	,,	1007·6	924·5	..	26·3	21·1	18·4	21·2	63	..	5·4	..	10·6	0	0	29	1	4	11	4	2	5	1	3	0	0
Bangalore (Central Observatory).	0230	921	1499·8	909·3	..	20·4	19·5	18·9	22·1	91	..	5·4	..	9·6	0	2	25	0	1	9	4	0	4	8	1	4	0
	0830	,,	1522·5	911·4	+0·9	21·9	20·2	19·2	22·6	86	+5	6·8	+1·5	10·1	0	1	28	1	2	7	5	0	2	7	5	2	0
	1130	,,	1525·1	910·8	..	25·8	21·0	18·5	21·9	64	..	6·5	..	10·8	0	0	30	1	3	7	9	2	1	3	4	1	0
	1730	,,	1498·5	908·3	..	24·7	20·4	18·1	20·8	68	..	6·8	..	9·2	0	0	28	0	5	7	9	1	1	4	1	3	0
Bangalore (Aerodrome)	0530	897	1501·8	912·1	..	20·4	19·6	19·0	22·2	93	..	6·1	..	5·5	0	0	17	0	0	6	1	1	0	8	1	14	0
	0830	,,	1524·6	914·0	..	22·6	20·4	19·3	22·4	82	..	6·3	..	9·5	0	0	26	0	2	10	2	0	0	9	3	5	0
	1130	,,	1527·6	913·4	..	26·7	21·3	18·4	21·4	61	..	6·1	..	12·3	0	3	24	2	2	11	4	0	1	5	2	4	0
	1730	,,	1500·8	910·8	..	25·5	20·9	18·4	21·5	67	..	6·7	..	10·8	0	0	26	0	3	12	6	0	1	4	0	5	0
	2330	,,	1517·9	913·5	..	21·8	20·3	19·4	22·6	87	..	6·1	..	5·9	0	0	17	0	0	8	3	0	0	4	2	14	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas)			Wind speed (Km. p.h.)			No. of observations										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal	Mean wind speed Kms. per hour	62 or more	20 to 61	1 to 19	Wind direction										
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives)																											
Kozhikode . .	0530	5	1010·2	1009·7	..	24·7	23·8	23·3	29·0	93	..	5·8	..	6·3	0	0	30	0	6	19	3	0	0	2	0	1	0
	0830	,,	1011·5	1011·0	+0·3	26·7	24·5	23·7	28·9	84	—2	5·1	-0·1	4·8	0	0	30	2	3	20	3	1	0	0	1	1	0
	1130	,,	1011·6	1011·1	..	29·8	25·9	24·1	30·3	72	..	5·9	..	9·1	0	0	31	0	0	0	1	5	18	7	0	0	0
	1730	,,	1009·2	1008·7	..	28·9	25·7	24·6	31·0	78	..	6·7	..	10·7	0	0	31	0	1	0	0	2	5	15	8	0	0
	2330	,,	1011·5	1011·0	..	25·6	24·3	23·7	29·4	90	..	6·5	..	6·8	0	0	27	5	10	6	3	0	0	0	3	4	0
Palghat . .	0830	97	1012·0	1000·9	..	26·5	24·2	23·0	28·2	82	..	5·9	..	10·4	0	0	29	0	0	9	3	0	1	14	2	2	0
	1730	,,	1008·6	997·7	..	28·4	24·8	23·1	28·8	70	..	6·8	..	10·4	0	0	30	0	1	2	2	3	6	10	6	1	0
Fort Cochin . .	0830	3	1012·1	1011·8	+0·4	27·0	24·7	23·6	29·4	82	0	6·9	+2·1	2·4	0	0	10	1	1	1	4	1	0	0	2	21	0
	1730	,,	1009·1	1008·8	..	27·7	25·3	24·3	30·8	82	..	7·2	..	7·5	0	1	26	1	0	0	1	1	8	9	7	4	0
Cochin (Naval Air station)	0230	3	1010·7	1010·4	..	24·7	23·9	23·6	29·0	93	..	6·6	..	3·4	0	0	23	3	2	9	7	1	0	0	1	8	0
	0530	,,	1010·7	1010·4	..	24·6	23·9	23·5	29·1	94	..	6·2	..	3·8	0	0	22	0	3	8	6	4	0	0	1	9	0
	0830	,,	1012·1	1011·8	..	26·9	24·5	23·6	28·7	83	..	6·1	..	6·1	0	0	26	2	3	7	11	3	1	1	1	2	0
	1130	,,	1011·8	1011·5	..	29·1	25·1	23·2	28·6	72	..	6·1	..	9·5	0	2	28	0	1	0	3	6	6	6	8	1	0
	1730	,,	1009·8	1009·5	..	27·9	25·0	23·6	29·3	78	..	6·8	..	11·8	0	3	28	0	0	1	2	0	10	10	7	0	0
	2330	,,	1011·9	1011·6	..	25·4	24·3	23·8	29·5	91	..	7·0	..	4·9	0	0	22	1	4	8	4	2	1	1	1	9	0
Alleppey . .	0830	4	1011·7	1011·3	..	27·5	25·2	24·4	30·1	86	..	6·3	..	6·2	0	0	30	2	2	6	8	2	3	1	6	1	0
	1730	,,	1009·1	1008·7	..	28·1	25·6	24·5	30·7	81	..	6·6	..	14·0	0	0	28	2	0	0	2	0	8	13	6	0	0
Punalur . . .	0830	34	1012·4	1008·1	..	24·9	23·6	23·0	28·0	89	..	3·9	..	0·7	0	0	6	0	1	3	0	0	0	1	1	25	0
	1730	,,	1008·1	1004·8	..	28·1	24·8	23·2	28·7	76	..	5·2	..	5·3	0	0	27	3	1	0	1	4	9	7	2	4	0
Trivandrum . .	0230	64	1009·9	1002·6	..	24·4	23·6	23·1	28·5	92	..	4·9	..	6·6	0	0	30	10	5	6	2	1	0	1	5	1	0
	0530	,,	1010·2	1002·9	..	24·0	23·2	22·8	27·5	94	..	5·1	..	6·0	0	0	27	11	4	5	2	1	0	0	4	4	0
	0830	,,	1012·1	1004·8	+0·6	26·6	24·3	23·3	28·8	82	—3	5·8	+0·3	5·9	0	0	30	3	4	3	8	2	0	0	10	1	0
	1130	,,	1011·3	1004·1	..	29·3	24·9	22·9	28·2	69	..	6·5	..	9·0	0	0	31	2	0	0	1	4	9	4	11	0	0
	1730	,,	1009·4	1002·1	..	27·7	24·6	23·1	28·7	76	..	6·6	..	10·5	0	1	30	0	0	0	1	4	7	7	12	0	0
	2330	,,	1011·7	1004·4	..	25·1	24·0	23·5	28·7	91	..	5·9	..	6·3	0	0	30	11	7	2	3	0	0	0	7	1	0
Trivandrum (Aerodrome)	0830	8	1012·0	1011·1	..	27·0	24·3	23·1	28·5	79	..	5·9	..	6·8	0	0	26	4	4	2	1	5	2	2	6	5	0
Hill Stations excluding Kashmir.																											
Walong (R)	0830																										
(R)	1730																										
Kohima . . .	0830	1406	1550·2	864·5	..	19·0	15·8	13·5	15·2	72	..	3·8	..	..	0	0	31	6	1	2	7	3	5	1	6	0	0
	1730	,,	1516·8	861·2	..	18·3	16·9	16·0	17·2	87	..	4·6	..	..	0	0	31	6	0	2	1	1	5	8	8	0	0
Aijal* . .	0830	1097																									
	1730	,,																									
Shillong . . .	0830	1500	1523·5	852·6	+0·5	18·6	15·0	12·2	14·4	67	—5	3·3	—0·1	0·2	0	0	1	0	0	0	0	0	0	1	0	30	0
	1730	,,	1495·6	849·8	..	17·7	16·3	15·3	17·4	86	..	6·4	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Cherrapunji. .	0830	1313	1519·3	870·7	0	19·8	17·6	16·1	18·3	79	+6	2·3	—1·5	3·4	0	0	31	1	2	9	1	0	18	0	0	0	0
	1730	,,	1489·0	867·6	..	19·5	18·0	16·5	19·8	83	..	1·5	..	3·0	0	0	31	0	4	4	2	2	19	0	0	0	0
Darjilling (Raj Bhawan)	0830	2127	1547·3	794·2	+3·1	14·1	12·3	11·0	13·1	83	+10	5·2	+0·9	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	1519·9	791·6	..	13·2	12·1	11·2	13·2	89	..	5·5	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Kalimpong . .	0830	1209	1478·4	877·3	—4·4	21·0	18·9	17·7	20·6	82	+3	1·6	—1·4	2·9	0	0	30	0	0	0	0	0	0	0	30	1	0
	1730	,,	1464·4	875·6	..	20·8	18·9	17·7	20·4	83	..	2·7	..	3·1	0	0	30	0	0	0	29	0	0	0	1	1	0
Katmandu	0830	1337	1539·2	870·4	..	17·4	15·2	13·8	15·7	80	—4	2·9	—1·7	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	1510·2	867·3	..	20·2	16·5	14·0	16·3	68	..	3·8	..	0·6	0	0	5	2	0	0	0	0	1	0	2	26	0
Mukteswar (Kumaon)	0830	2311	3163·9	775·4	+0·6	13·3	8·1	2·6	7·4	50	—7	0·7	—0·7	6·1	0	0	22	0	1	3	2	0	2	8	6	9	0
	1730	,,	3148·7	773·8	..	14·1	10·9	8·4	10·6	70	..	1·3	..	13·5	0	5	26	0	1	1	1	0	0	7	15	6	0
Nainital . . .	0830	1953	1509·9	806·7	..	15·5	9·9	4·3	8·7	49	..	0·9	..	2·0	0	0	8	4	0	1	1	0	0	1	1	23	0
	1730	,,	1495·3	805·4	..	14·6	11·3	8·5	11·3	68	..	1·8	..	4·4	0	0	25	1	1	2	1	4	2	14	0	6	0
Tapoban . . .	0830	..	..	..	..	11·1	7·4	4·4	8·3	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
Badrinath . . (R)	0830																										
Lokpal . . .	0830	..	..	..	..	—1·4	—3·1	—5·6	3·8	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mussooree . .	0830	2042	1505·3	798·5	—1·1	15·3	10·8	6·4	9·9	60	—4	1·2	—0·4	2·3	0	0	22	4	2	0	4	7	3	0	2	9	0
	1730	,,	1494·0	796·9	..	14·6	12·6	10·7	13·2	80	..	3·4	..	3·5	0	1	24	1	2	0	3	11	8	0	0	6	0
Simla . . .	0830	2202	1514·1	784·3	+0·5	14·1	7·8	1·1	5·8	43	—1	0·8	—0·3	2·6	0	0	27	4	7	5	5	3	0	1	2	4	0
	1730	,,	1501·5	783·2	..	14·5	9·7	5·3	8·7	55	..	1·1	..	3·0	0	0	31	6	6	2	3	6	3	0	5	0	0
Dalhousie . . .	0830	1959	1461·3	802·0	..	15·1	9·3	4·4	7·9	50	..	2·1	..	1·2	0	0	5	1	1	1	1	0	0	1	0	26	0
	1730	,,	1447·4	801·0	..	16·9	13·0	10·0	12·3	65	..	1·0	..	1·4	0	0	7	0	5	0	0	0	0	2	0	24	0
Dharamshala . .	0830	1211	1555·0	884·0	..	20·3	14·2	9·7	12·0	52	..	1·3	..	1·9	0	0	11	3	3	2	1	0	0	0	2	20	0
	1730	,,	1552·9	883·8	..	22·8	16·1	11·4	13·5	49	..	2·3	..	3·2	0	0	31	0	1	1	0	6	19	3	1	0	0

(R) Register not received. *Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in gpm. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas): Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Kms. Mean wind speed per hour.	Wind speed (Km. p. h.): 62 or more	Wind speed (Km. p. h.): 20 to 61	Wind speed (Km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations excluding Kashmir—*Contd.*																											
Abu	0830	1195	1533·5	883·8	+0·6	21·7	15·7	10·3	12·7	52	+4	0·6	—0·5	0·2	0	0	2	0	1	0	0	0	0	1	0	29	0
	1730		1518·0	882·1	..	25·0	17·1	11·2	13·4	41	..	1·4	..	0·9	0	0	4	2	0	0	0	1	1	0	0	27	0
Pachmarhi	0830	1075	1535·2	896·6	+1·1	21·5	16·8	13·6	14·7	62	+2	2·5	+0·3	1·4	0	0	12	1	3	2	1	2	0	1	2	19	0
	1730	,,	1528·3	894·3	..	25·7	18·1	13·2	14·6	48	..	2·1	..	2·3	0	0	22	5	6	2	2	0	0	3	4	9	0
Mahabaleshwar	0830	1382	1525·9	864·5	+0·9	19·8	16·4	14·0	16·3	72	—5	4·4	+0·6	12·1	0	0	31	0	13	13	3	0	1	0	1	0	0
	1730	,,	1506·4	862·5	..	21·3	19·1	17·9	20·5	82	..	5·1	..	10·0	0	0	31	0	9	2	3	0	2	0	15	0	0
Nandi Hills	0830	..	..	..	..	18·9	17·8	17·3	19·5	91	..	6·4	..	..	0	10	11	0	0	0	0	1	7	21	2	0	0
Mercara	0830	1152	1517·1	887·3	+1·4	19·5	18·8	18·3	21·1	93	+6	4·3	—1·1	5·4	0	0	31	0	7	8	0	0	0	8	8	0	0
	1730	,,	1498·3	884·8	..	21·4	20·0	19·2	22 4	87	..	5·4	..	5·2	0	0	31	0	6	6	0	0	0	10	9	0	0
Kodaikanal	0530	2343	3138·6	770·8	..	11·7	11·1	10·5	12 9	94	..	7·1	..	8·0	0	2	24	7	4	2	4	1	0	3	5	5	0
	0830	,,	3164·2	772·7	+1·5	13·3	12·4	11·7	13·8	91	+11	6·0	+1·2	7·8	0	3	21	6	5	2	7	1	0	0	3	7	0
	1130	,,	3168·5	772·5	..	15·6	13·7	12·2	14 4	82	..	6 9	..	7·2	0	0	23	6	5	1	9	1	0	1	0	8	0
	1730	,,	3144·2	770·8	..	13·4	12·8	12·3	14·5	93	..	7·2	..	5·3	0	1	20	5	1	3	5	2	2	0	3	10	0
	2330	,,	3151·5	772·4	..	12·2	11·9	11·8	13 7	97	..	7·5	..	10·1	0	3	25	5	6	2	3	3	0	2	7	3	0
Ootacamund	0830	2249	1517·1	780·6	+0·9	14·5	12·9	11·8	13·7	84	+5	5·1	+0·3	3·0	0	0	21	0	16	2	1	0	1	1	0	10	0
	1730	,,	1498·1	779·0	..	15·1	13·8	13·1	14·3	87	..	7·0	..	4·2	0	0	14	0	7	3	4	0	0	0	0	17	0
Coonoor	0830	1747	1522·7	828·5	..	17·8	15·5	14·1	16·1	80	+5	5·3	—0·3	0·8	0	0	8	0	2	4	8	0	0	0	6	23	0
Sikkim																											
Lachen	0830	..	..	..	..	8·7	8·3	8·1	10.6	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (chumbi)	0830	..	..	..	..	10·6	9·8	9·1	11·7	92	+9	0	—2.8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa (R)	0830	3685	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ceylon																											
Colombo	0830	7	1012·5	1011·6	+0·7	26·0	24·4	23·6	29·3	87	0	6·2	+0·5	13·7	0	0	28	1	3	5	4	4	5	6	0	3	0
	1730	,,	1009·7	1008·9	..	27·0	24·6	23.4	29·0	81	..	6·9	..	19·1	0	0	28	1	0	0	1	0	13	9	4	3	0
Trincomalee	0830	3	1011·4	1011·0	+1·3	27·2	24·2	22·7	27·8	78	—4	6·1	+2·2	14·8	0	11	20	3	0	1	0	4	19	3	1	0	0
	1730	,,	1008·4	1008·0	..	28·0	24·9	23·5	29·1	77	..	6·6	..	14·2	0	7	24	6	5	0	11	0	2	2	4	0	1
Batticoloa	0830	3	1011·7	1011·4	..	27·2	24·7	23·5	29 1	81	..	4·3	..	8·5	0	1	27	1	1	0	3	8	3	5	7	3	0
	1730	,,	1008·6	1008·3	..	28·1	25·5	24·3	29·9	81	..	6·0	..	17·1	0	12	19	2	5	4	13	3	0	0	4	0	0
Hambantota	0830	15	1012·1	1010·4	+1·4	27·0	24·8	23·8	29·5	83	—1	4·4	+0·6	18·4	0	15	15	2	3	1	0	1	14	6	3	1	0
	1730	,,	1009·0	1007·3	..	27·2	25·0	23·8	29·9	82	..	5·7	..	28·6	0	22	9	1	2	0	0	2	15	10	1	0	0
Mannar	0830	4	1012·0	1011·5	..	27·3	25·4	24·3	30·7	84	..	6·5	..	12·0	0	1	29	2	1	2	7	4	13	0	1	1	0
	1730	,,	1008·8	1008·4	..	28·4	25·4	24·0	29·8	78	..	6·8	..	12·2	0	5	26	3	3	1	1	4	13	4	2	0	0
HYDROMETEOROLOGICAL OBSERVATORIES																											
Damodar Catchment																											
Bokaro	0830	239	1012·3	985·3	..	25·5	21·3	18·9	22·0	67	..	2·3	..	2·5	0	0	23	1	1	0	1	2	5	5	8	8	0
	1730	,,	1008·3	981·6	..	28·2	22·3	18·8	22.2	58	..	4·2	..	3·6	0	0	27	7	3	4	4	0	1	1	7	4	0
Hazaribagh	0830	615	1016	943·0	.	24·5	18·7	15·1	17·3	56	..	0·5	..	4·3	0	0	25	0	6	7	1	0	2	3	6	6	0
	1730	,,	1006 6	939·2	..	25·8	18·8	14·6	16·7	50	..	0·6	..	11·8	0	1	26	0	4	2	3	1	3	4	10	4	0
Tilaiya	0830	..	..	..	..	26·3	20·3	16·5	18·9	56	..	1·9	..	6·0	0	0	21	1	0	2	0	0	2	13	2	10	1
	1730	..	..	..	..	27·8	19·8	15·6	16·4	50	..	2·3	..	2·8	0	0	24	5	0	0	0	0	0	7	12	7	0
Ramgarh	0830	..	..	..	..	25·8	21·6	19·3	22·7	68	..	2·3	..	3·1	0	0	28	0	0	0	0	0	4	22	2	3	0
	1730	..	..	..	..	26·6	21·8	19·1	22·4	64	..	4·1	..	0·3	0	0	3	0	0	0	0	0	0	0	3	28	0
Panchet Hills	0830	..	..	..	..	27·8	22·5	19·5	23·0	61	..	3·1	..	2 8	0	0	29	3	2	3	1	0	15	4	1	2	0
	1730	..	..	..	..	28·5	22·3	18·9	22·1	57	..	3·7	..	2·6	0	0	26	2	9	5	1	0	6	1	2	5	0
Durgapur	0830	..	..	..	..	28·3	23·6	22·4	25·2	65	..	1·7	..	15·7	0	7	24	1	0	4	2	3	3	18	0	0	0
	1730	..	..	..	..	28·4	23·7	21·2	25·4	66	..	1·8	..	10·9	0	3	23	0	0	8	1	0	1	15	1	5	0
Mahanadi Catchment																											
Baramul	0830	64	1011·7	1004·4	..	27·5	24·3	22·9	27·8	76	..	2·8	..	3·0	0	0	12	6	3	0	0	0	0	3	0	19	0
	1730	,,	1009·4	1002·1	..	26·9	23·9	22·5	27·2	78	..	2·9	..	1·1	0	0	5	3	0	0	0	0	0	1	1	26	0
Hirakud	0830	159	1012 7	994·7	..	27·4	23·8	22·1	26·5	73	..	3·0	..	2·6	0	0	23	5	0	8	0	3	2	0	4	8	1
	1730	,,	1008·9	991·1	..	30·1	23·7	20·3	24·0	57	..	2·6	..	1·3	0	0	8	3	0	2	0	0	0	1	2	23	0
Khijrawan	0830	..	..	..	..	24·6	21·8	19·7	24·0	75	..	3·2	..	..	..	..	..	2	14	2	3	0	0	2	2	6	0
	1730	..	..	..	..	28·2	21·8	18·3	21·1	55	..	3·6	..	..	..	..	..	0	14	0	0	0	1	1	6	9	0
Sonepur	0830	..	..	..	..	31·1	24·7	22·1	26·7	65	..	..	..	10·8	0	0	29	4	3	1	3	3	9	4	2	2	0
Gimabahar	0830	..	..	..	..	25·2	20·2	17·0	19·5	62	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhimkund	0830	..	..	..	..	26·2	23·2	21·8	25·9	76	..	3.8	..	2·7	0	0	24	2	0	0	1	0	0	1	20	7	0
	1730	..	..	..	..	26·3	23·2	21·8	25·9	77	..	6·6	..	0·9	0	0	8	1	1	0	2	0	1	0	3	23	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Wind speed (Km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal	Mean wind speed Kms. per hour	62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES— *Contd.*																											
Narbada Catchment																											
Punasa (R) . .	0830																										
(R)	1730																										
Bagra Tawa . .	0830	..	..	..	..	24·1	19·2	16·2	18·3	62	..	1.3	..	6·3	0	0	25	0	2	1	2	12	7	1	0	6	0
	1730	..	..	..	..	29·0	21·0	15·8	18·1	47	..	1·9	..	3·1	0	0	21	0	0	1	12	4	3	1	0	10	0
Thikri . . .	0830	..	..	..	..	25·8	21·3	18·9	21·6	68	..	3·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol . . .	0830	..	..	..	..	21·9	19·4	17·7	20·2	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..
Dharoi . . .	0830	..	..	..	..	23·9	17·8	13·1	15.4	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
	1730	..	..	..	..	32·7	20·8	12·6	14·8	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim . . .	0830	..	..	..	..	15·9	11·4	8·1	10·7	60	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	
	1730	..	..	..	..	16·4	12·0	8·7	11·2	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri . . .	0830	..	..	..	..	17·6	15·0	12.9	15·1	74	..	0.9	..	..	..	..		..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	25·7	18·0	12·7	15·0	47	..	1.5	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha . . .	0830	..	..	..	..	20·1	17·6	16·2	18·3	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·7	17·3	15·1	17·3	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara . .	0830	..	..	..	..	21·6	18·8	17·2	19·7	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·1	19·1	18·2	20·7	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot . .	0830	..	..	..	..	21·4	19·1	17·9	20·4	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	22·2	18·0	15·4	17·6	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
Jomosom . .	0830	..	..	..	..	11·7	7·3	3·5	7·8	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	11·9	8·2 (d)	5·1 (d)	8·8 (d)	63 (d)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timure . . .	0830	..	..	..	..	12·5	10·0	8·1	10·7	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	17·1	13·9	11·9	13·9	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh . .	0830	..	..	..	..	18·8	15·4	13·2	15·1	69	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·2	15·1	13·1	14·9	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura . .	0830	..	..	..	..	15·2	11·9	9·3	11·8	68	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	17·7	13·4	10·3	12·7	62	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari . .†	0830																										
†	1730																										
Sallyana . .	0830	..	..	..	..	20·1	16·3 (a)	13·7 (a)	15·8 (a)	67 (a)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·1	14·1	11·2	13·2	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal . . .	0830	..	..	..	..	25·1	21·8	19·5	22·9	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	26·4	23·5	22·2	26·6	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu . .	0830	1333	1522·7	870·3	..	16·6	14·9	13·6	15·8	83	..	3·0	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1130	,,	1514·4	868·9	..	23·5	16·9	12·3	14·6	51	..	3·1	..	1·3	0	0	13	2	1	2	1	2	2	1	2	18	0
	1730	,,	1495·3	866·9	..	19·6	16·0	13·5	15·6	68	..	3·9	..	0·7	0	0	6	2	0	0	0	1	1	0	2	25	0
Kosi Catchment																											
Chautara* . .	0830	..	..	..	..	17·0	15·2	14·0	16·1	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	18·7	15·5	13·4	15·5	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldhunga .	0830	..	..	..	..	16·4	14·8	13·8	15·9	85	..	5·5	..	0·8	0	0	8	0	2	0	1	3	1	0	1	23	0
	1130	..	..	..	..	18·9	16·3	14·8	16·8	77	..	5·9	..	1·9	0	0	19	2	0	0	0	3	6	8	0	12	0
	1730	..	..	..	..	15·8	14·0	12·9	14·8	83	..	6·3	..	2·7	0	0	22	0	0	0	0	1	4	12	5	9	0
Barahkshetra . .	0830	146	1013·0	996·6	..	22·7	20·6	19·5	22·6	82	..	2·8	..	4·8	0	0	21	1	2	3	0	1	6	4	4	10	0
	1130	,,	1011·3	995·1	..	27·4	22·7	20·2	23·7	65	..	3·4	..	10·3	0	1	27	0	1	0	0	1	11	14	1	3	0
	1730	,,	1009·4	992·8	..	24·2	22·5	21·3	25·9	84	..	4·0	..	2·8	0	0	14	1	0	6	5	2	0	0	0	17	0
Angbung . .	0830	..	..	..	..	22·5	20·6	19·8	22·9	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung . .	0830	..	..	..	..	16·4	14·2	12·7	14·8	79	..	5·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	19·4	15·8	13·7	15·7	71	..	5·3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·7	13·7	11·7	13·8	73	..	5·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok . .	0830	..	..	..	..	16·2	14·7	13·8	15·7	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Mean of 30 days. (R) Register not received. (d) Mean of 27 days. *Obsevation for 25 days. †Date not reliable.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed Kms. per hour	Wind speed (Km. p.h.)			No. of observations									
			At mean sea level or height in g. p. m. of nearest isabaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
HYDROMETEOROLOGICAL OBSERVATORIES— *Contd.* **Kosi Catchment—** *Contd.*																											
Wallangchung Gola (R)	0830																										
(R)	1730																										
Bhojpur . .	0830	..	..	..	..	17·9	15·8	14·8	16·6	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·4	15·2	14.6	16·5	88	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur . .	0830	..	..	..	..	19·0	17·0	15·4	17·9	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1730																										
Tista Catchment																											
Gangtok . .	0830	1812	1525·0	822·0	..	14·3	13·0	12·0	14·0	87	..	4·3	..	1·6	0	0	12	2	1	0	1	1	3	2	2	19	0
	1130	,,	1508·3	821·0	..	17·6	15·3	13·9	15·8	79	..	4·6	..	4·3	0	0	30	0	0	1	3	8	13	3	2	1	0
	1730	,,	1498·6	819·5	..	14·9	13·7	13·0	14·8	88	..	5·5	..	3·3	0	0	24	0	3	2	8	8	1	0	2	7	0
Geyzing . .	0830	..	..	..	..	16·8	15·2	14·1	16·1	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·8	15·7	15·2	17·2	89	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R) Register not received.

*Data not reliable.

MONTHLY MEANS OF UPPER WINDS, October 1957 (Asvina 9—Kartika 9, 1879 Saka)

During the month, observations of velocity and direction of upper winds were made at 55 stations in India. Out of these, at 43 stations all the observations were taken by means of pilot balloons and at 12 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a.m.s.l. are given under Table IV and data above 9.0 km. a.m.s.l. under Table V.

In Tables IV and V:

n—represents the number of observations,

V—represents the mean wind speed in knots irrespective of direction.

v—represents the resultant mean velocity in knots,

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights:

Surface, 0.15 km. a.g., 0.3, 0.6., 0.9, 1.5, 2.1, 3.6, 4.5, 5.4, 6.0, 7.2, 9.0. 10.5, 12.0, 14.1, 16.2, 18.0, 21.0, 24.0, 27.0, 30.0, 33.0, and 36.0 km. a.m.s.l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

Station	Lat. N	Long. E	Height of anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November, 1951	0530	1730	2330	
Ahmedabad	23°04′	72°38′	60	19th May, 1928	0530	1730	2330	
Amausi	26°45′	80°53′	132	20th November, 1950	0530	1730	2330	
Ambala	30°23′	76°46′	283	1st April, 1941	0530	1730	2330	
Amritsar	31°38′	74°52′	230	21st June, 1957	0530*	1730*		
Anantapur	14°41′	77°37′	364	12th February, 1946	0530	1730	2330	
Asansol	23°41′	86°59′	136	29th May, 1942	0530	1730	2330	
Baghdogra	26°38′	88°19′	140	7th June, 1953	0530	1730	2330	
Bairagarh	23°17′	77°21′	532	26th February, 1943	0530	1730	2330	
Bamrauli	25°27′	81°44′	103	28th February, 1930	0530*	1130	1730*	2330
Bangalore	12°58′	77°35′	936	19th May, 1915	0530	0730	2330	
Bareilly	28°22′	79°24′	180	12th January, 1943	0530	1730		
Begumpet	17°27′	78°28′	553	1st September, 1929	0530	1730	2330	
Bhagalpur	25°14′	86°57′	61	19th May, 1950	0530	1730		
Bhubaneshwar	20°15′	85°50′	55	5th December, 1942	0530	1730	2330	
Bhuj	23°15′	69°48′	111	14th September, 1937	0530	1730	2330	
Bikaner	28°00′	73°18′	229	18th October, 1946	0530	1730	2330	
Chikalthana	19°51′	75°24′	583	7th October, 1951	0530	1730	2330	
Cochin†	09°56′	76°14′	3	16th March, 1942	0530	1730	2330	
Darjeeling	27°03′	88°16′	2115	21st May, 1956	0530	1730		
Dum Dum	22°39′	88°27′	19	14th May, 1921	0530*	1730	1730*	2330
Gadag	15°25′	75°38′	650	3rd May, 1943	0530	1730	2330	
Gannavarm	16°32′	80°48′	24	8th April, 1942	0530	1730	2330	
Gauhati	26°05′	91°43′	51	12th March, 1955	0530*	1730	1730*	2330
Gaya	24°45′	84°57′	119	19th March, 1937	0530	1730	2330	
Gopalpur	19°16′	84°53′	24	15th February, 1946	0530	1730	2330	
Gorakhpur	26°45′	83°22′	83	5th January, 1943	0530	1730		
Gwalior	26°14′	78°15′	219	7th May, 1938	0530	1730	2330	
Imphal	24°51′	93°58′	805	8th March, 1952	0530	1730	2330	
Jabalpur	23°10′	79°57′	402	30th July, 1928	0530	1730	2330	
Jagdalpur	19°05′	82°02′	562	25th March, 1948	0530	1730	2330	
Jaipur	26°49′	75°48′	404	6th June, 1953	0530	1730		
Jamshedpur	22°49′	86°11′	147	23rd July, 1942	0530	1730		
Jharsuguda	21°55′	84°05′	234	1st May, 1944	0530	1730	2330	
Jodhpur	26°18′	73°01′	229	15th October, 1934	0530*	1130	1730*	2330
Madras	13°00′	80°11′	29	8th April, 1926	0530*	1130	1730*	2330
Mangalore	12°52′	74°51′	40	4th June, 1928	0530	1730	2330	
Minicoy	08°18′	73°00′	16	14th April, 1941	0530	1730	2330	
Mohanbari	27°29′	95°01′	110	1st June, 1948	0530	1730	2330	
Mussoorie	30°27′	78°05′	2050	3rd November, 1955	0530	1730		
Nagpur	21°06′	79°03′	316	23rd April, 1943	0530*	1130	1730*	2330
Nanpara	27°50′	81°30′	141	23rd April, 1957	0530	1730		
New Delhi	28°35′	77°12′	227	20th October, 1936	0530*	1130	1730*	2330
Poona	18°32′	73°51′	593	5th January, 1925	0530	1730	2330	
Port Blair	11°40′	92°43′	93	29th October, 1945	0530*	1130	1730*	2330
Raipur	21°14′	81°39′	308	15th July, 1944	0530	1730	2330	
Raxaul	26°59′	84°51′	83	28th October, 1957	0530			
Santa Cruz	19°07′	72°51′	12	14th May, 1933	0530*	1130	1730*	2330
Tezpur	26°37′	92°47′	79	12th August, 1932	0530	1730	2330	
Tiruchirapalli	10°46′	78°43′	96	22nd June, 1936	0530	1730	2330	
Trivandrum	08°29′	76°57′	73	8th December, 1928	0530*	1130	1730*	2330
Udaipur	24°35′	73°42′	587	24th June, 1947	0530	1730	2330	
Vengurla	15°52′	73°38′	8	22nd November, 1941	0530	1730	2330	
Veraval	20°54′	70°22′	17	13th October, 1941	0530*	1130	1730*	2330
Visakhapatnam	17°43′	83°14′	10	24th September, 1928	0530	1730	2330	

*Radiowind ascents.

†Naval Meteorological office.

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1.9	1.3	086	31	1.2	0.1	066	31	2.2	1.2	100	31	4.2	2.0	337	31	4.0	1.7	349	31	3.2	1.0	312
0.15 a.g.	30	6.5	2.7	066	31	4.8	2.1	347	30	6.2	0.6	053	31	15.8	9.3	355	31	6.8	2.7	329	31	12.1	3.3	316
0.3 a.m.s.l.	30	6.4	2.4	023	31	4.2	1.7	329	30	6.4	0.9	295	31	16.2	10.0	357	31	6.5	2.4	321	31	11.6	3.2	314
0.6 ,,	30	7.5	3.0	354	31	4.6	2.2	284	30	6.5	2.5	293	30	13.6	8.6	354	31	6.5	2.1	315	31	10.0	2.7	314
0.9 ,,	30	8.3	4.9	326	31	5.2	2.4	282	30	6.5	3.5	289	30	8.2	5.1	347	31	6.7	2.0	310	31	8.3	2.4	318
1.5 ,,	30	8.2	5.0	315	31	7.2	4.1	292	29	7.4	4.4	284	30	5.7	1.5	260	31	6.8	1.5	316	31	7.0	2.0	319
2.1 ,,	28	9.7	5.0	287	30	7.2	4.6	288	27	7.7	5.5	277	30	8.0	2.4	194	31	8.2	2.7	332	31	7.9	1.0	044
3.0 ,,	27	12.4	7.5	255	28	9.9	7.5	276	26	11.4	7.9	265	30	10.3	1.7	227	31	9.0	3.7	335	31	9.6	2.8	069
3.6 ,,	26	15.5	11.0	254	23	12.0	9.8	264	16	13.4	8.3	264	25	9.6	3.3	309	31	7.8	4.2	310	21	10.0	2.6	307
4.5 ,,	17	18.1	16.4	264	16	20.6	18.3	268	4	15.5	14.7	287	20	9.1	6.2	303	31	12.0	9.0	290	12	11.7	9.0	295
5.4 ,,	17	22.6	20.7	266	4	20.0	16.5	242	1	31.0	31.0	295	10	10.0	7.3	261	31	14.7	12.9	286	7	13.0	12.2	298
6.0 ,,	15	25.0	22.6	272	2	18.0	17.4	247	1	34.0	34.0	295	8	10.4	7.6	291	31	17.4	15.2	281	6	15.7	14.2	288
7.2 ,,	11	24.4	22.0	284									6	14.0	10.2	284	29	23.3	20.1	274				
9.0 ,,	8	27.5	25.1	278									3	22.0	21.0	264	15	32.3	30.7	264				

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.7	0.8	291	31	3.2	2.7	304	31	2.8	0.5	035	31	4.4	1.6	072	31	4.0	1.7	329	31	5.2	1.9	347
0.15 a.g.	31	10.5	1.7	298	31	7.7	5.8	306	31	7.4	3.1	330	31	13.3	4.5	065	31	11.8	5.6	337	31	15.5	8.6	355
0.3 a.m.s.l.	31	10.3	1.7	288	31	7.7	5.9	305	31	7.3	3.4	328	31	7.0	2.9	078	31	6.2	3.4	335	31	8.4	3.8	003
0.6 ,,	31	8.4	4.0	291	31	8.8	6.6	306	31	7.3	4.4	307	31	13.3	4.3	012	31	13.5	5.7	340	31	15.0	8.6	347
0.9 ,,	31	7.9	5.5	298	31	8.6	7.4	302	31	8.5	6.8	301	31	13.6	6.5	341	31	14.2	6.4	326	31	14.4	8.5	337
1.5 ,,	31	10.4	8.4	305	31	9.1	8.4	301	31	10.5	9.9	300	31	15.5	10.5	320	31	12.9	9.6	310	31	15.6	10.9	313
2.1 ,,	29	11.5	9.8	305	31	11.7	10.5	303	30	11.3	10.1	297	31	16.7	12.6	308	31	14.2	11.7	315	31	16.1	12.3	307
3.0 ,,	21	12.5	10.5	301	29	13.0	9.4	302	20	8.5	6.7	309	27	18.0	14.9	306	31	16.7	13.8	311	28	15.1	13.6	302
3.6 ,,	13	11.4	10.1	307	28	13.0	10.8	300	3	5.0	4.4	325	15	13.9	12.1	305	28	15.0	12.2	323	10	11.0	8.4	305
4.5 ,,	3	11.7	7.7	256	27	17.1	15.6	294	1	11.0	11.0	290	6	13.3	10.7	311	26	14.2	11.5	310	3	12.0	9.1	310
5.4 ,,	2	18.5	18.4	239	21	20.4	18.9	288					4	13.0	11.2	287	25	16.2	14.4	293	3	15.0	11.8	322
6.0 ,,					14	23.6	20.0	281					2	13·5	11.2	259	24	21.3	19.4	287	3	17.3	15.2	314
7.2 ,,					6	32.4	31.0	280					2	26.5	25.7	278	16	27.2	25.5	280				
9.0 ,,					3	44.0	43.7	290					1	39.0	39.0	275	7	47.0	43.7	270				

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea-level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	AMRITSAR								ANANTAPUR												ASANSOL			
Time in I.S.T	0530*				1730*				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3.3	0.7	070	31	4.4	1.6	048	31	2.7	0.7	122	31	6.5	4.1	063	31	4.9	2.7	106	31	1.2	0.7	271
0.15 a.g.	27	6.1	0.7	127	31	6.1	1.0	055	31	8.9	3.0	146	31	10.6	6.3	073	30	9.9	6.9	117	30	6.6	1.9	321
0.3 a.m.s.l.	28	4.9	0.6	098	31	5.4	1.8	052													30	6.5	2.0	330
0.6 ,,	27	8.8	0.7	322	31	8.7	1.1	042	31	9.3	3.5	152	31	10.4	6.8	077	30	10.8	7.0	111	30	6.6	3.3	323
0.9 ,,	27	9.5	3.0	305	31	8.5	0.9	237	31	10.5	5.2	120	31	10.1	7.8	074	30	13.5	10.2	107	30	7.3	4.2	323
1.5 ,,	27	11.8	5.8	284	31	9.7	4.0	260	30	10.7	6.2	102	30	10.6	8.1	068	27	11.9	9.9	093	29	8.6	5.5	326
2.1 ,,	26	14.5	7.3	296	30	12.2	6.3	262	30	10.2	8.1	073	30	12.0	9.4	060	27	12.0	7.9	073	29	10.2	7.1	319
3.0 ,,	28	14.1	9.6	301	30	12.8	9.1	284	29	12.2	7.7	054	27	11.4	7.5	060	27	12.7	7.7	055	21	11.0	6.2	297
3.6 ,,	28	14.1	10.0	295	30	14.7	11.1	284	29	10.9	6.5	064	24	10.3	6.4	049	24	12.1	5.9	064	16	11.7	6.1	284
4.5 ,,	30	16.7	11.7	291	30	17.0	13.8	280	24	15.2	4.3	092	18	9.8	5.4	075	15	9.3	5.4	115	11	11.6	10.0	291
5.4 ,,	31	20.3	15.9	272	30	20.6	17.3	278	18	12.3	7.7	110	17	11.7	8.4	082	8	11.1	5.5	086	5	10.8	8.9	320
6.0 ,,	31	28.1	18.7	270	30	25.1	22.2	279	17	13.7	9.0	116	11	12.8	10.8	074	7	10.7	6.5	130	3	11.3	10.2	328
7.2 ,,	30	33.7	27.6	270	30	34.1	31.2	276	8	13.7	6.6	110	8	13.0	10.4	080	3	12.0	10.6	087	1	29.0	29.0	310
9.0 ,,	27	45.5	43.0	268	28	48.9	46.2	271	6	11.7	10.3	118	4	16.3	13.5	088								

Station	ASANSOL								BAGHDOGRA												BAIRAGARH			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1.6	0.8	096	31	1.5	0.4	165	31	1.5	1.3	008	31	1.5	0.5	171	31	2.5	2.3	016	31	0.7	0.6	053
0.15 a.g.	31	7.3	2.0	089	31	7.6	3.1	169	28	7.0	6.3	053	31	5.0	1.9	205	31	5.7	4.6	064	31	9.4	1.9	087
0.3 a.m.s.l.	31	7.3	1.8	085	31	7.6	2.9	169	28	7.1	6.4	072	31	5.1	1.6	209	31	5.6	4.2	078				
0.6 ,,	31	6.7	0.9	316	31	7.5	3.0	181	28	6.4	5.2	078	31	5.9	2.2	226	31	5.3	2.7	086	31	9.3	1.5	095
0.9 ,,	31	5.9	2.5	304	30	7.1	1.6	291	28	6.7	3.6	088	31	6.0	2.7	240	31	6.3	1.1	081	31	8.7	1.6	066
1.5 ,,	30	6.9	5.1	318	30	7.0	4.5	288	26	7.4	2.3	090	31	7.4	3.6	251	31	7.6	3.5	265	31	8.0	2.6	335
2.1 ,,	30	10.2	8.1	311	27	9.7	7.3	293	25	9.8	2.4	260	28	8.2	4.3	255	30	9.1	6.5	270	31	9.1	4.0	347
3.0 ,,	23	13.6	10.9	308	19	10.5	7.5	293	23	11.4	3.3	270	25	10.0	7.4	281	27	11.2	7.1	272	30	8.8	4.9	338
3.6 ,,	16	14.2	10.8	301	10	12.2	11.2	299	23	10.9	5.7	280	22	12.0	9.4	290	18	12.3	6.1	280	24	9.2	4.5	348
4.5 ,,	8	12.8	9.6	288					20	16.1	12.7	280	14	19.5	17.8	274	8	17.0	11.8	292	6	8.3	4.0	217
5.4 ,,	3	7.7	5.1	334					15	20.4	17.7	279	7	14.7	13.6	263					2	13.5	13.5	229
6.0 ,,	3	9.0	5.9	326					14	24.3	22.2	275	5	16.2	15.3	272					2	12.5	12.4	241
7.2 ,,	2	21.0	18.7	330					7	27.6	23.8	293	3	20.3	17.3	295					1	14.0	14.0	245
9.0 ,,									5	37.8	33.7	297	3	41.6	38.5	314					1	17.0	17.0	241

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	BAIRAGARH								BAMRAULI															
Time in I. S. T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3.1	1.9	023	31	0.9	0.5	072	31	0.8	0.3	286	31	4.8	3.1	301	31	3.2	2.4	317	31	0.9	0.1	318
0.15 a.g.	31	8.2	4.8	019	31	10.5	5.3	051	31	4.5	2.0	293	30	6.2	4.1	305	31	5.1	4.0	316	31	7.7	3.6	314
0.3 a.m.s.l.									31	5.1	2.3	289	30	6.3	4.5	297	31	5.6	4.5	311	31	7.1	3.3	347
0.6 ,,	31	7.8	4.4	018	31	10.5	5.5	051	31	7.0	4.5	292	30	5.9	5.4	289	31	7.1	5.9	305	31	7.4	4.2	351
0.9 ,,	31	8.4	5.3	013	31	8.8	4.7	041	31	8.2	6.3	297	30	7.4	6.1	294	31	8.4	7.2	297	31	8.2	6.7	310
1.5 ,,	31	8.0	5.0	005	31	6.9	3.3	020	31	10.8	9.0	303	31	10.5	8.9	302	31	9.7	8.4	291	31	11.3	10.5	303
2.1 ,,	31	7.6	3.7	358	31	6.5	2.6	014	31	10.8	10.2	302	31	12.8	9.8	309	31	11.6	9.6	291	28	11.7	9.9	285
3.0 ,,	30	7.6	3.3	346	31	8.8	4.3	331	31	14.1	10.5	306	31	14.5	10.5	308	31	12.7	9.7	287	26	11.2	8.3	294
3.6 ,,	30	8.2	4.9	322	19	10.1	6.9	295	31	14.1	11.4	287	30	12·4	8.8	295	31	14.5	12·3	288	15	9.8	6.5	294
4.5 ,,	28	13.0	11.3	295					31	14.9	12.3	285	29	17.2	14.9	276	31	18.1	16.7	266	8	12.9	10.3	298
5.4 ,,	25	17.5	15.6	289					31	20.5	17.9	280	28	23.5	20.9	276	30	24.5	22.9	276	2	14.5	14.3	242
6.0 ,,	21	20.6	18.1	280					31	24.8	21.7	274	28	27.7	24.8	275	29	27.7	25.1	271				
7.2 ,,	15	22.1	19.7	277					30	33.7	30.6	269	19	32.8	28.5	276	29	33.5	30.5	265				
9.0 ,,	8	32.4	31.0	265					28	44.4	40.4	266	10	42.6	34.9	270	23	45.8	42.5	264				

Station	BANGALORE												BAREILLY								BEGUMPET			
Time in I. S. T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5.3	0.9	139	31	6.4	4.0	105	31	5.8	2.9	110	31	3.2	0.8	012	31	2.4	1.4	233	31	1.3	0.9	118
0.15 a.g.	26	10.0	3.4	102	31	9.0	5.8	082	28	11.4	7.6	105	31	10.7	2.7	282	31	6.6	4.5	318	31	8.0	5.3	234
0.3 a.m.s.l.													31	10.5	2.2	289	31	6.1	4.0	321				
0.6 ,,													31	9.7	5.7	294	31	8.8	6.5	313	31	5.9	3.6	122
0.9 ,,													31	10.3	7.7	305	31	9.6	7.9	302	31	10.5	7.8	116
1.5 ,,	19	10.7	6.9	086	31	10.8	7.5	072	27	12.9	8.4	088	31	12.6	10.4	315	31	12.6	11.6	298	29	10.9	7.0	014
2.1 ,,	17	11.2	8.8	061	29	10.2	7.1	063	25	11.7	8.2	061	31	16.0	14.4	313	30	14.6	13.9	301	29	11.3	7.3	040
3.0 ,,	15	13.7	10.7	061	25	10.6	6.4	047	19	11.7	7.6	040	21	18.5	10.8	320	30	13.1	11.3	303	29	10.8	6.2	009
3.6 ,,	11	12.5	8.2	062	17	9.8	3.9	071	16	11.8	5.7	066	14	10.1	8.7	310	29	14.5	12.3	300	27	8.8	2.8	356
4.5 ,,	5	11.0	10.5	074	13	8.8	3.1	072	8	12.4	9.9	068	5	12.8	9.8	282	28	18.5	17.0	296	26	9.1	4.9	043
5.4 ,,	4	13.3	13.1	084	10	11.3	7.9	077	3	14.7	14.7	070	4	26.7	24.7	280	27	21.2	19.6	287	24	10.5	6.4	041
6.0 ,,	2	18.0	17.9	096	7	13.6	10.8	096	3	22.3	22.3	069	3	27.3	21.4	261	24	26.6	24.5	281	23	10.9	6.4	041
7.2 ,,					4	20.7	19.2	068	1	24.0	4.0	090	3	41.7	37.4	258	15	38.6	36.0	272	18	13.5	01.1	055
9.0 ,,					2	35.5	35.5	056									6	55.2	47.3	272	11	12.3	5.8	089

TABLE IV— MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	BEGUMPET								BHAGALPUR								BHUBANESHWAR							
Time in I.S.T.	1730				2330				0530				1730				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4.3	2.7	065	31	1.4	1.2	094	31	2.8	0.8	119	31	2.5	0.4	287	31	1.9	1.6	325	31	4.6	1.9	144
0.15 a.g.	31	9.3	7.1	064	31	10.7	9.3	095	30	7.1	1.0	182	31	7.2	1.9	340	31	6.0	4.1	305	31	8.4	2.8	131
0.3 a.m.s.l.									30	6.7	1.1	226	31	7.3	2.4	339	31	5.5	2.6	305	31	8.8	2.3	105
0.6 ,,	31	8.1	6.0	060	31	7.0	5.9	092	29	6.4	1.8	294	31	6.6	3.0	316	31	5.5	1.9	313	31	8.2	2.4	062
0.9 ,,	31	9.9	7.7	064	31	12.5	11.2	095	28	7.0	3.6	305	31	7.0	4.0	294	31	6.0	2.7	007	31	7.0	3.5	015
1.5 ,,	31	9.6	7.1	063	28	11.6	9.7	084	27	9.5	6.4	311	30	8.6	6.0	285	31	8.7	5.1	016	30	8.5	6.0	359
2.1 ,,	30	8.2	5.3	050	28	9.6	6.2	058	26	10.8	7.0	307	30	10.7	7.9	286	31	9.8	5.5	006	25	10.6	7.3	352
3.0 ,,	27	8.3	3.2	021	26	10.0	5.1	347	25	12.8	7.3	291	23	12.0	7.4	300	31	9.7	3.3	307	21	9.6	5.2	324
3.6 ,,	27	8.4	2.6	355	19	10.5	5.6	342	21	11.9	8.3	287	17	11.6	8.2	290	27	8.6	4.8	279	13	8.3	5.9	270
4.5 ,,	22	8.7	2.1	005	5	10.0	2.5	348	17	15.4	13.6	279	11	8.6	7.1	290	22	9.7	7.1	266	5	11.0	8.7	294
5.4 ,,	17	9.8	6.7	049	3	14.6	12.1	049	14	18.3	16.7	283	10	11.9	10.6	284	19	12.4	6.3	284	4	18.0	16.1	279
6.0 ,,	15	10.9	7.3	057	2	19.0	15.7	070	7	12.7	9.8	275	10	16.1	14.2	289	19	14.6	8.1	287	3	19.3	18.9	272
7.2 ,,	13	11.2	4.4	058					5	16.0	11.1	285	5	24.8	23.6	282	13	18.0	9.4	284	1	10.0	10.0	250
9.0 ,,	6	13.7	5.1	318					2	42.0	38.1	303	1	26.0	26.0	255	11	25.1	16.6	293				

Station	BHUBANESHWAR				BHUJ								BIKANER							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.2	1.0	229	31	1.6	1.5	260	31	6.6	3.5	261	31	3.3	2.5	260	31	4.0	3.2	231	31	3.1	2.0	265
0.15 a.g.	31	7.6	4.6	196	31	12.1	8.3	292	31	9.3	5.3	269	31	12.4	8.2	279	31	16.2	11.6	246	31	8.2	5.5	268
0.3 a.m.s.l.	31	7.4	3.7	192	31	13.1	8.7	295	31	9.8	5.3	267	31	12.6	8.2	282	31	12.8	8.6	232	31	6.9	4.7	266
0.6 ,,	31	7.0	2.5	168	31	13.8	8.1	293	31	10.4	6.2	269	31	12.6	7.5	285	31	17.1	12.7	255	31	8.5	6.1	268
0.9 ,,	31	6.0	0.7	083	31	11.1	6.1	262	31	9.8	5.5	279	31	11.2	4.7	257	31	15.4	11.5	261	31	8.0	6.0	271
1.5 ,,	30	8.0	3.5	026	31	11.3	6.8	223	31	9.6	3.9	277	31	12.2	5.2	205	31	11.9	9.1	274	31	8.7	6.0	261
2.1 ,,	29	9.2	5.0	350	31	11.3	5.2	182	31	9.7	2.4	269	31	11.7	3.5	168	31	11.7	7.7	285	31	9.1	6.3	262
3.0 ,,	27	8.2	4.2	300	31	10.9	5.3	004	30	7.3	2.2	336	31	7.7	1.9	016	28	10.9	5.6	304	31	10.7	7.1	269
3.6 ,,	12	8.0	5.3	299	25	11.4	9.1	360	30	9.1	6.8	331	20	8.1	6.9	339	22	11.2	6.4	309	29	11.9	8.8	282
4.5 ,,	3	7.0	5.7	265	15	10.9	6.9	312	30	10.8	8.9	303	9	11.1	7.7	314	13	14.2	12.4	291	28	17.9	16.1	279
5.4 ,,	1	7.0	7.0	230	2	15.5	15.5	292	30	14.9	13.0	290	2	18.0	15.7	289	4	20.7	20.5	286	23	24.0	23.0	286
6.0 ,,	1	9.0	9.0	255	1	28.0	28.0	290	30	17.0	15.2	288	2	14.0	13.8	291	2	14.0	14.0	275	21	29.1	27.8	285
7.2 ,,									27	24.0	21.7	278	1	29.0	29.0	290	1	26.0	26.0	260	17	38.0	36.3	276
9.0 ,,									19	28.8	25.7	268									6	49.0	44.9	272

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	BIKANER				CHIKALTHANA												COCHIN							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3.6	2.4	235	31	3.4	1.3	014	31	6.7	4.8	051	31	3.7	1.7	061	31	2.7	1.4	100	31	6.1	4.1	250
0.15 a.g.	31	15.7	7.9	228	31	11.0	5.2	056	31	10.1	7.6	050	31	13.4	9.5	067	22	6.8	5.4	100	19	8.4	6.2	258
0.3 a.m.s.l.	31	13.2	6.9	225													22	7.5	4.3	125	19	10.1	7.4	256
0.6 ,,	31	14.9	7.9	243													22	8.1	2.4	157	19	10.7	6.6	251
0.9 ,,	31	11.5	7.3	249	30	12.8	5.7	075	31	10.1	7.9	052	31	14.1	9.7	071	22	8.7	1.9	169	19	9.7	5.1	255
1.5 ,,	31	10.6	8.1	254	29	10.6	7.0	068	30	9.5	7.5	040	29	13.3	9.5	068	22	9.2	2.7	148	19	8.6	1.2	161
2.1 ,,	30	10.7	7.6	263	29	8.3	6.1	050	30	9.2	7.2	042	28	10.9	8.6	063	22	10.4	4.8	121	18	10.8	3.7	098
3.0 ,,	27	13.2	8.1	267	27	8.6	5.2	002	23	7.0	4.7	021	27	8.7	4.4	030	17	11.7	4.1	129	11	8.9	2.0	185
3.6 ,,	24	12.6	8.5	299	25	8.8	5.3	344	17	8.2	3.4	343	16	8.6	3.9	342	13	10.5	3.5	147	11	8.2	3.3	232
4.5 ,,	17	13.7	13.0	297	15	9.2	4.5	339	11	9.7	6.0	337	6	7.8	3.7	301	7	13.0	6.0	135	4	6.0	3.2	103
5.4 ,,	11	19.8	18.5	286	8	8.5	5.6	358	10	11.5	6.6	317	2	11.0	9.8	292	3	10.3	2.1	132	1	8.0	8.0	095
6.0 ,,	3	14.7	14.4	280	6	10.0	8.1	344	10	9.8	4.8	314	2	12.5	9.2	294	2	0.5	6.3	079	1	6.0	6.0	095
7.2 ,,									3	15.3	12.2	306					1	20.0	20.0	115				
9.0 ,,									1	17.0	17.0	325												

Station	COCHIN				DARJEELING								DUM DUM											
Time in I. S. T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3.1	1.3	103	31	1.5	0.2	330	31	2.1	1.7	227	31	1.6	1.2	008	31	3.0	1.1	047	31	1.5	0.5	131
0.15 a.g.	9	5.5	2.7	103	14	2.2	0.4	105	6	5.3	5.0	218	31	7.3	3.0	299	31	5.3	2.3	055	31	6.0	1.3	129
0.3 a.m.s.l.	9	6.4	1.9	115									31	7.2	2.7	294	31	5.3	2.4	044	31	6.4	0.8	085
0.6 ,,	9	7.4	2.6	182									31	6.9	2.7	320	31	5.6	2.6	030	31	5.8	1.8	350
0.9 ,,	9	9.6	2.1	180									31	6.9	2.8	334	30	6.2	2.9	012	31	5.8	3.0	339
1.5 ,,	8	11.6	4.7	140									31	6.9	3.8	354	24	7.4	3.5	353	31	7.5	3.8	344
2.1 ,,	8	9.5	5.2	133									31	7.5	4.1	342	20	8.6	4.5	310	31	9.1	5.9	315
3.0 ,,	4	19.3	16.3	099	14	6.6	1.9	253	5	6.6	4.7	298	31	9.2	5.7	290	15	12.7	9.6	293	31	12.9	10.2	294
3.6 ,,	1	25.0	25.0	085	14	9.7	5.9	273	5	8.2	4.9	286					15	14.3	12.3	282				
4.5 ,,					11	9.5	6.4	276	2	10.5	5.7	317	31	16.0	13.4	270	10	17.8	17.5	279	31	17.5	15.8	279
5.4 ,,					9	16.6	11.9	274	2	25.0	23.8	271	30	17.7	15.1	276	9	18.7	18.2	282	31	18.4	16.2	278
6.0 ,,					9	19.0	16.2	282	1	9.0	9.0	245	30	20.0	16.5	280	7	22.9	22.2	277	31	19.5	16.8	278
7.2 ,,					7	25.0	22.8	293					30	21.1	17.4	280	3	28.3	28.1	271	31	24.0	20.6	279
9.0 ,,					4	37.5	36.5	300					30	29.6	25.5	274	1	29.0	29.0	280	31	31.1	27.4	275

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	DUM DUM				GADAG												GANNAVARAM							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1.4	0.8	177	31	5.1	1.1	196	31	4.6	1.9	095	31	4.8	1.6	264	31	3.6	2.1	032	31	5.0	4.4	113
0.15 a.g.	31	6.8	4.6	200	30	9.9	1.3	194	30	9.7	4.8	094	28	12.8	3.7	271	29	8.3	2.5	080	31	7.8	7.0	107
0.3 a.m.s.l.	31	6.5	3.7	201													29	9.1	3.8	104	31	8.5	7.6	104
0.6 ,,	31	5.5	2.2	209													29	8.2	5.0	110	31	8.8	7.3	091
0.9 ,,	31	4.8	0.7	244	28	10.2	1.2	050	30	9.4	5.5	091	28	11.6	1.7	357	28	7.5	5.3	094	31	9.3	7.3	073
1.5 ,,	31	6.3	3.4	331	23	10.1	8.1	094	30	8.2	5.9	074	28	10.0	8.2	078	28	9.2	7.2	068	31	10.5	7.9	053
2.1 ,,	29	7.3	6.3	313	21	10.9	8.5	083	28	10.3	6.7	070	25	12.5	10.6	077	28	10.2	7.4	055	31	10.8	7.8	043
3.0 ,,	28	8.2	7.2	302	16	11.3	10.0	046	21	11.5	7.7	054	21	11.3	9.3	051	27	9.6	5.3	041	31	10.0	5.8	030
3.6 ,,	12	16.0	13.8	287	12	10.0	5.2	082	14	9.7	5.7	062	19	9.7	6.9	051	25	10.4	4.1	051	26	8.8	2.3	039
4.5 ,,					3	11.0	10.7	069	6	13.8	9.1	104	7	7.1	5.3	070	21	10.2	4.0	080	22	7.9	0.3	223
5.4 ,,					1	9.0	9.0	115	3	11.0	6.9	125	2	8.5	8.3	131	16	8.1	3.4	068	18	8.3	2.4	075
6.0 ,,									2	12.5	11.9	119	1	12.0	12.0	185	13	8.8	3.1	117	18	9.9	3.4	079
7.2 ,,									1	14.0	14.0	180					9	8.9	4.2	125	13	14.1	6.1	056
9.0 ,,																	8	18.9	0.7	104	8	19.7	10.0	037

Station	GANNAVARAM				GAUHATI												GAYA			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3.3	1.8	090	31	1.4	1.0	091	31	4.5	2.8	018	31	2.1	1.0	040	31	2.1	0.5	188	31	1.2	0.8	205
0.15 a.g.	31	9.5	6.6	109	31	5.5	2.8	085	31	6.1	4.0	028	30	7.6	3.4	035	31	5.3	2.5	170	30	7.7	5.2	220
0.3 a.m.s.l.	31	10.0	1.7	104	31	5.3	1.6	094	31	5.7	3.5	040	30	6.9	2.4	033	31	5.7	1.1	157	30	7.4	4.6	237
0.6 ,,	31	10.6	8.9	102	31	7.1	1.9	111	31	6.1	2.6	069	30	7.3	1.6	045	31	6.7	0.2	160	30	7.7	3.2	290
0.9 ,,	29	10.5	9.1	086	31	8.1	1.1	113	30	7.2	1.7	115	30	7.4	1.2	215	31	7.3	1.7	265	30	7.9	4.9	304
1.5 ,,	29	10.3	8.6	065	31	8.7	1.5	279	28	8.2	1.4	188	30	9.4	4.6	249	30	9.5	3.9	274	30	9.9	9.2	299
2.1 ,,	27	9.1	7.5	049	31	10.2	3.5	275	28	9.6	2.4	247	30	11.5	6.4	244	26	12.6	6.4	250	29	12.3	9.5	302
3.0 ,,	27	8.0	3.9	037	31	11.6	5.3	289	26	12.5	5.4	258	30	12.5	8.1	259	26	14.2	8.5	265	25	14.0	9.9	305
3.6 ,,	20	7.5	1.8	038	31	13.1	8.3	267	19	12.9	5.1	260	30	13.6	9.8	271	12	15.1	9.5	257	18	12.3	7.2	305
4.5 ,,	12	5.7	2.8	071	31	16.9	13.4	265	17	19.2	15.8	268	30	20.1	18.3	274	4	11.7	6.5	258	13	19.9	4.0	276
5.4 ,,	9	6.2	2.8	082	31	23.3	20.7	270	15	23.9	22.2	271	28	27.5	26.2	274					10	15.1	11.4	293
6.0 ,,	7	8.6	4.4	071	30	29.0	27.5	272	12	29.2	26.3	280	27	30.2	28.8	277					8	20.9	16.5	298
7.2 ,,					30	36.2	36.0	274	6	43.7	42.3	283	26	41.9	40.3	277					4	21.7	18.3	292
9.0 ,,					16	50.9	46.3	273	2	48.5	27.7	299	17	56.5	54.8	273					1	42.0	42.0	290

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	GAYA								GOPALPUR												GORAKHPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.4	1.7	336	31	1.2	0.8	178	31	2.9	2.2	335	31	4.6	3.1	133	31	2.4	0.9	228	31	2.4	0.6	031
0.15 a.g.	31	8.8	6.8	343	31	7.8	0.6	233	31	8.7	8.0	332	31	6.9	4.4	122	31	6.9	2.6	197	31	9.4	0.5	041
0.3 a.m.s.l.	31	8.8	6.7	339	31	7.4	0.3	355	31	5.5	1.9	346	31	7.0	4.0	107	31	6.1	2.2	178	31	10.0	0.6	303
0.6 ,,	31	8.4	6.6	322	31	7.0	3.1	328	31	6.1	0.9	341	31	6.8	3.0	072	31	5.7	1.9	143	31	9.8	3.4	278
0.9 ,,	31	8.6	7.0	308	31	7.8	5.0	308	31	6.0	1.6	037	31	7.1	4.0	034	30	5.9	2.3	089	31	9.2	5.3	284
1.5 ,,	31	9.5	8.0	281	31	9.8	7.7	290	29	7.7	5.3	036	29	8.7	3.2	024	29	7.0	4.4	038	30	10.3	8.5	293
2.1 ,,	31	11.4	9.3	278	25	10.5	8.2	282	29	9.5	6.1	019	28	10.0	7.7	354	27	7.9	4.6	001	30	12.3	10.2	294
3.0 ,,	26	13.3	9.7	278	13	12.6	5.1	286	27	8.1	4.1	343	25	9.0	6.7	321	25	7.6	3.3	310	26	10.8	7.8	305
3.6 ,,	23	13.3	11.4	288	3	4.3	3.0	050	27	7.3	4.0	286	23	9.5	6.6	298	15	9.3	5.6	302	23	12.7	7.7	288
4.5 ,,	13	14.1	12.9	302	2	6.5	2.3	287	22	9.1	4.3	272	21	8.9	4.4	29	8	7.0	4.7	310	22	14.2	10.1	276
5.4 ,,	9	19.8	18.3	297					19	9.5	3.6	284	18	10.0	3.4	296	4	7.7	6.0	002	21	18.6	15.2	271
6.0 ,,	5	19.0	18.4	292					18	10.8	4.8	304	17	11.2	5.2	238	4	10.0	9.2	009	16	22.4	18.8	273
7.2 ,,	1	38.0	38.0	293					15	14.5	7.5	319	11	15.5	8.8	326	1	2.0	2.0	305	11	35.7	31.1	283
9.0 ,,									10	20.9	12.2	280	4	20.1	13.2	326					2	39.5	37.7	307

Station	GORAKHPUR				GWALIOR								IMPHAL							
Time in I.S.T.	1730				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2.4	1.5	275	31	2.7	1.5	267	31	2.4	1.9	329	31	3.0	1.8	263	31	0.3	0.1	262	31	2.8	1.1	241
0.15 a.g.	31	7.6	4.7	277	31	10.2	5.0	266	31	6.5	5.3	325	30	8.8	3.6	296	21	2.0	0.9	150	30	5.9	4.2	240
0.3 a.m.s.l.	31	8.2	5.2	276	31	8.8	4.8	251	31	5.2	4.2	327	30	7.4	3.0	284								
0.6 ,,	31	9.6	6.8	275	31	9.6	4.2	282	31	8.2	6.4	324	30	8.8	3.5	305								
0.9 ,,	31	9.5	7.2	275	31	8.9	5.7	303	31	8.7	6.4	319	30	8.2	3.7	301	21	1.8	0.7	189	30	5.5	3.7	242
1.5 ,,	31	10.3	9.2	279	31	12.1	7.7	304	31	9.4	7.1	311	30	9.5	7.0	303	21	5.3	1.1	089	30	5.6	3.1	224
2.1 ,,	30	12.9	11.9	288	31	15.0	11.3	313	31	10.9	7.9	310	30	12.9	10.0	312	16	7.7	2.9	225	28	7.0	2.9	225
3.0 ,,	29	13.2	10.3	297	29	16.2	13.9	324	30	12.5	8.8	312	30	13.3	10.4	312	12	11.6	6.3	250	20	10.7	7.5	272
3.6 ,,	28	14.4	11.6	299	21	14.9	12.6	332	29	12.9	10.4	312	15	14.9	13.1	325	12	12.8	10.3	253	14	13.9	11.1	269
4.5 ,,	26	16.3	13.6	293	5	10.4	9.7	291	25	15.9	14.6	297	4	16.3	15.9	281	12	21.5	20.6	261	11	20.5	18.6	265
5.4 ,,	17	19.6	17.5	294	1	18.0	18.0	300	24	22.3	20.9	289					7	24.9	24.0	273	6	20.8	19.1	285
6.0 ,,	13	24.9	22.8	285	1	28.0	28.0	295	24	25.8	24.3	285					6	28.0	27.4	277	1	9.0	9.0	265
7.2 ,,	8	32.8	27.6	277					21	32.9	29.8	275					2	30.0	30.0	298	1	19.0	19.0	320
9.0 ,,	5	37.4	32.8	277					15	40.8	37.4	273					1	16.0	16.0	270				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	IMPHAL				JABALPUR												JAGDALPUR							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	0.6	0.4	204	31	1.8	1.2	161	31	1.8	0.8	053	31	1.7	1.4	134	31	0.1	0.1	315	31	1.7	0.6	059
0.15 a.g. .	30	2.4	0.8	087	31	7.2	3.1	187	31	6.5	3.7	037	30	7.6	1.9	118	30	4.8	2.1	075	31	7.8	5.2	336
0.3 a.m.s.l. .																								
0.6 ,, .					31	7.6	2.5	193	31	6.9	3.9	031	30	8.2	1.9	114	30	3.4	1.3	045	31	5.1	3.1	040
0.9 ,, .	30	2.2	0.9	130	31	7.6	0.3	009	31	7.1	4.1	014	30	7.6	2.4	012	30	5.2	3.0	083	31	8.4	6.6	034
1.5 ,, .	30	5.1	2.6	219	31	8.0	3.5	353	31	7.5	5.6	351	30	7.6	3.8	014	28	6.9	5.2	045	31	7.5	6.7	029
2.1 ,, .	26	8.1	3.6	237	31	9.3	5.9	339	31	8.5	6.4	343	30	8.0	4.7	349	26	8.8	7.0	028	28	7.1	5.5	022
3.0 ,, .	22	10.8	7.2	257	31	9.9	7.4	332	30	9·6	6.8	319	30	9.2	7.4	322	20	8.3	4.7	348	23	7.7	1.9	311
3.6 ,, .	17	11.8	9.5	258	28	9.4	6.9	325	30	10.3	7.9	3 9	27	10.1	6.7	313	8	8.7	1·8	340	16	7.7	2.4	3.9
4.5 ,, .	4	11.0	11.0	268	22	10.5	7.5	294	28	14.3	12.5	286	12	12.3	7.7	320	3	9.7	8·0	225	12	8.9	4.9	3.9
5.4 ,, .	1	13.0	13.0	270	15	15.6	12.4	285	26	16.1	13.8	288	8	11.4	9.7	291	1	7.0	7·0	305	7	10.7	8.5	347
6.0 ,, .	1	12.0	12.0	245	14	19.0	14.8	277	26	19.5	16.9	289	5	13.6	10.5	287					6	13.3	8.3	167
7.2 ,, .					5	18.8	17.0	273	23	24.4	21.3	275	2	17.0	16.3	269					4	11.7	7.6	012
9.0 ,, .					4	24.7	22.9	264	12	31.3	28.1	273	1	4.0	4.0	290					2	14.5	14.3	354

Station	JAGDALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I.S.T.	2330				0530				1730				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	0.7	0.3	033	31	3.2	1.9	360	31	3.0	1.6	333	31	1.7	1.3	289	31	1.7	0.5	331	31	2.3	1.6	034
0.15 a.g. .	30	7.2	3.3	069	31	11.3	4.8	297	31	7.4	3.3	321	30	5.8	4.4	284	30	3.8	0.7	359	31	6.1	2.3	072
0.3 a.m.s.l. .													30	5.6	4.1	272	30	3.9	0.8	355	31	5.6	3.0	055
0·6 ,, .	30	5.0	1.6	068	31	12.5	2.5	313	31	8.0	3.6	323	30	6.8	3.5	309	30	4.0	1.1	357	31	6.6	1.3	053
0·9 ,, .	30	8.3	5.4	072	31	13.6	3.5	272	31	8.2	3.7	323	30	7.3	4.3	330	30	4.8	1.9	338	31	6.7	2.5	359
1·5 ,, .	30	8.1	5.8	059	31	10.1	5.1	278	31	8.5	4.0	311	30	8.5	6.0	343	30	7.6	5.0	330	30	7.6	4.9	349
2·1 ,, .	29	8.2	4.4	031	28	10.9	5.4	310	29	8.8	5.0	308	30	10.1	6.9	335	29	9.5	6.9	321	26	8.1	5.5	330
3·0 ,, .	23	8.4	3.3	315	25	13.2	8.0	330	28	11.0	7.5	320	25	9.0	3.9	318	26	10.8	8.0	299	21	8.9	4.7	306
3·6 ,, .	15	8.5	4.1	281	18	11.5	7.3	345	24	11.6	9.3	309	22	10.5	4.7	295	21	12.6	8.7	298	16	8.6	5.0	282
4·5 ,, .	3	7.0	1.4	205	12	12.8	6.1	318	22	16.2	14.9	295	16	13.6	9.2	272	14	16.5	13.4	283	2	12.0	7.3	227
5·4 ,, .	2	14.5	1.3	088	7	13.9	9.5	282	18	22.6	21.0	286	13	16.0	10.8	282	10	16.0	12.1	294				
6·0 ,, .	1	21.0	21.0	040	7	18.4	15.0	274	15	24.8	23.3	279	12	17.2	12.3	292	7	23.3	15.8	299				
7·2 ,, .					1	33.0	33.0	235	13	32.6	32.2	279	5	21.4	15.8	306	4	27.3	20.1	308				
9·0 ,, .					1	56.0	56.0	235	3	42.7	41.6	277	2	22.0	16.9	260								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	JHARSUGUDA								JODHPUR											
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	1.8	0.7	193	31	2.1	1.1	101	31	3.2	0.6	304	31	3.8	2.1	251	29	5.0	2.5	247	31	4.7	2.3	280
0.15 a.g. .	30	5.2	1.3	180	31	6.4	0.5	153	31	4.7	1.5	263	31	5.0	3.0	248	29	5.6	2.7	247	31	14.0	7.5	236
0.3 a.m.s.l. .	30	4.6	1.5	183	31	5.2	1.1	119	31	4.3	1.3	270	31	4.6	3.0	258	29	5.7	2.8	249	31	12.2	7.1	240
0.6 ,, .	30	4.6	0.9	317	31	6.4	0.9	255	31	7.0	3.7	261	31	5.8	2.8	259	29	6.6	3.1	245	31	12.8	6.7	227
0.9 ,, .	30	5.0	2.2	334	30	6.5	1.1	305	31	9.2	6.1	256	31	7.1	3.6	259	29	7.6	3.3	244	31	11.1	5.3	237
1.5 ,, .	28	7.3	4.6	346	30	6.4	2.8	353	31	9.3	4.1	248	31	8.4	2.6	224	29	7.4	3.6	260	31	9.1	4.3	237
2.1 ,, .	28	8.8	6.7	349	30	7.0	3.6	001	31	9.8	1.8	294	31	9.3	2.5	214	29	7.7	3.0	276	30	9.7	2.7	279
3.0 ,, .	25	9.8	6.4	336	24	8.0	3.1	314	31	11.3	2.8	309	31	11.2	2.5	243	29	10.5	4.5	301	26	12.0	2.7	341
3.6 ,,	23	10.8	7.4	315	20	9.0	5.5	320	31	11.6	5.3	295	31	11.4	4.0	270	28	11.3	6.7	298	5	14.5	8.6	235
4.5 ,, .	19	14.1	12.7	288					31	13.6	9.9	285	31	13.0	10.1	270	27	13.6	10.9	291	1	17.0	17.0	170
5.4 ,, .	12	15.9	13.3	299					31	18.8	17.0	278	31	19.2	17.6	266	27	21.7	19.9	281				
6.0 ,, .	8	19.0	17.6	290					30	22.8	21.1	275	30	22.7	21.7	273	26	26.9	25.6	275				
7.2 ,, .	3	29.7	29.2	300					30	32.4	31.6	269	24	31.0	29.5	271	25	36.5	35.5	266				
9.0 ,, .	1	41.0	41.0	290					26	49.5	47.3	263	14	46.0	44.7	270	22	51.2	49.7	265				

Station	MADRAS												MANGALORE							
Time in I.S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4.7	2.2	303	31	3.7	1.2	039	30	5.9	3.5	082	31	3.1	0.6	260	31	5.7	5.0	094	31	6.5	4.0	245
0.15 a.g. .	31	9.1	3.4	322	29	6.1	2.5	067	30	10.0	6.1	084	29	8.9	2.8	108	31	7.7	5.0	116	30	8.9	6.0	250
0.3 a. m.s.l. .	31	9.0	2.8	342	29	6.2	2.3	063	30	9.9	6.3	081	29	9.4	5.3	099	31	7.2	3.0	136	30	9.8	6.4	254
0.6 ,, .	31	9.3	2.6	033	29	7.0	3.1	056	30	9.6	6.3	065	29	9.6	6.2	097	31	7.5	2.3	138	29	9.7	5.2	244
0.9 ,, .	31	9.9	4.1	068	28	6.8	3.5	054	30	9.2	5.8	054	29	9.6	6.7	092	31	8.6	2.6	137	28	8.6	2.6	220
1.5 ,, .	31	10.9	6.3	067	28	8.3	5.8	058	30	9.6	6.9	052	29	10.4	7.9	065	30	10.2	6.1	115	24	9.7	4.1	106
2.1 ,, .	31	11.8	7.2	055	26	10.0	7.0	057	30	11.0	7.6	058	28	12.1	8.9	050	29	12.0	9.5	098	23	11.6	7.7	103
3.0 ,, .	31	12.9	7.3	050	22	10.8	4.6	047	30	11.9	5.7	072	26	12.2	7.7	054	27	12.0	8.1	098	20	11.7	6.7	094
3.6 ,,	30	12.4	7.4	064	20	9.8	3.4	067	30	11.8	6.0	083	19	11.5	6.6	091	20	9.7	6.4	092	15	11.7	6.1	087
4.5 ,, .	29	12.7	8.6	083	15	11.7	5.7	090	30	12.0	7.4	092	10	11.8	5.5	129	6	9.5	4.3	143	12	11.3	6.9	087
5.4 ,, .	29	14.3	11.3	083	14	12.4	8.7	093	30	13.5	9.5	086	4	15.0	5.1	159	2	5.0	4.3	210	9	10.7	6.9	072
6.0 ,, .	29	15.1	12.0	089	11	13.5	10.4	093	30	14.4	11.0	091	3	11.0	3.1	156					9	11.9	8.5	069
7.2 ,, .	29	16.8	13.7	089	7	18.6	17.4	081	30	15.5	12.1	087									6	10.8	7.7	070
9.0 ,, .	26	15.3	11.3	090	5	29.8	26.6	079	27	15.3	9.6	100									3	21.0	20.7	082

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	MANGALORE				MINICOY								MOHANBARI							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4.7	3.2	095	31	5.3	3.7	260	31	6.2	5.2	262	31	5.7	4.3	267	31	1.1	1.0	060	31	0.9	0.8	055
0.15 a.g. . .	31	7.3	2.3	121	29	8.7	6.1	259	29	9.6	7.9	262	28	10.0	7.1	267	28	8.6	7.0	054	31	5.8	3.9	053
0.3 a.m.s.l. .	31	7.1	1.4	170	29	8.9	6.4	255	29	11.1	9.0	260	28	9.9	7.0	265	28	8.8	7.1	051	31	5.9	4.1	058
0.6 ,, .	31	7.4	1.3	195	28	10.1	7.6	258	29	12.2	9.8	262	28	11.5	8.2	267	28	7.4	5.3	0.9	31	5.8	3.1	078
0.9 ,, .	31	8.0	1.2	168	28	9.7	7.0	262	29	12.0	9.2	265	28	11.3	7.5	267	28	7.2	4.7	054	30	6.5	3.4	175
1.5 ,, .	28	9.6	4.0	106	27	8.7	3.3	264	27	11.0	6.3	271	25	10.3	4.0	258	26	5.8	2.3	099	28	7.1	5.6	200
2.1 ,, .	26	12.8	8.8	096	26	9.5	2.5	265	26	11.4	4.5	278	22	10.2	2.0	274	26	6.4	1.8	189	22	8.7	4.1	206
3.0 ,, .	21	12.4	8.2	087	22	9.6	1.9	300	25	11.0	2.3	295	19	10.7	1.1	076	22	7.7	2.6	229	15	9.9	6.8	238
3.6 ,, .	17	8.2	3.4	116	19	8.3	1.7	315	22	10.4	1.3	358	13	9.4	3.5	103	20	8.4	2.2	296	6	14.8	13.3	234
4.5 ,, .	12	8.0	3.5	120	13	7.1	1.7	089	21	10.4	2.2	064	7	16.0	10.2	084	16	10.2	5.8	261	3	15.3	15.1	264
5.4 ,, .	10	10.9	4.1	088	10	8.0	3.9	085	17	9.5	4.1	098	4	12.7	7.6	086	11	18.8	11.5	274	1	23.0	23.0	265
6.0 ,, .	6	9.3	2.8	067	10	10.0	6.0	073	16	9.8	6.2	097	2	14.0	7.3	099	10	23.0	15.8	267				
7.2 ,, .	2	9.0	6.5	165	8	10.0	9.0	092	11	10.3	8.9	077					5	31.0	19.6	264				
9.0 ,, .					5	16.2	15.1	107	13	12.5	10.7	105					3	59.0	24.7	255				

Station	MOHANBARI				MUSSOORIE								NAGPUR											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	0.7	0.6	086	31	3.2	0.9	002	31	4.2	1.5	200	30	2.1	1.8	348	31	2.7	0.8	005	30	3.3	2.3	060
0.15 a.g. . .	31	8.2	7.5	018	28	9.3	6.7	327	19	5.2	4.3	260	30	3.3	1.9	007	31	5.0	1.8	012	30	4.0	2.2	076
0.3 a.m.s.l. .	31	8.0	7.2	049																				
0.6 ,, .	31	7.0	5.7	057									30	4.0	2.0	020	31	5.4	2.4	045	30	4.4	2.8	058
0.9 ,, .	31	6.8	4.9	068									30	5.9	2.5	059	30	5.2	3.2	070	30	5.4	3.3	049
1.5 ,,	30	6.6	1.2	120									30	7.6	4.1	044	30	6.8	4.0	045	30	6.2	4.0	034
2.1 ,, .	28	7.9	2.8	207	28	8.5	4.9	339	19	5.9	5.4	237	30	8.1	5.3	015	29	8.0	5.1	026	30	7.9	5.3	002
3.0 ,, .	21	10.1	6.9	217	27	12.2	10.2	298	19	6.8	4.2	308	29	9.2	5.2	335	29	8.7	4.7	335	30	10.0	7.3	330
3.6 ,, .	7	13.5	12.8	210	27	10.8	7.9	309	19	7.8	3.3	348	29	9.7	4.6	311	26	8.7	4.3	309	30	10.9	7.7	312
4.5 ,, .	3	19.0	18.8	252	24	11.0	8.2	305	18	9.5	5.6	333	29	10.7	6.5	298	24	9.4	6.2	297	29	12.3	8.6	281
5.4 ,, .					18	14.2	12.4	283	17	11.0	11.5	307	28	12.6	8.2	294	23	10.4	7.0	291	28	14.6	11.2	273
6.0 ,, .					12	13.0	11.4	277	16	20.9	18.2	299	28	14.0	9.3	290	21	11.3	7.0	290	27	15.7	12.2	270
7.2 ,, .					4	29.5	27.6	264	14	32.8	29.8	282	25	18.2	14.0	283	16	17.7	12.2	301	27	18.9	14.6	276
9.0 ,, .					3	61.7	60.0	271	8	50.0	45.4	272	20	24.8	21.4	265	12	21.6	16.4	289	24	24.4	21.1	267

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	NAGPUR				NANPARA								NEW DELHI											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1.8	1.4	349	31	3.4	1.2	094	31	2.7	2.1	292	31	5.2	2.0	305	31	7.1	3.6	299	31	5.1	3.2	347
0.15 a.g.	31	6.9	4.7	111	31	10.5	0.8	090	31	6.3	5.5	300	30	12.7	5.7	3.4	31	8.7	4.6	296	31	12.5	8.0	333
0.3 a.m.s.l.					31	10.4	1.0	191	31	6.3	5.3	295	30	11.4	5.1	3 5	31	9.3	5.0	298	31	10.5	6.0	336
0.6 ,,	31	7.3	5.2	106	31	8.3	0.7	265	31	6.9	6.1	294	30	11.4	5.4	3 3	31	10.0	5.6	289	31	11.1	7.2	327
0.9 ,,	30	7.2	4.9	095	31	8.0	4.4	298	31	6.9	6.2	292	30	11.3	6.2	299	31	11.8	7.0	289	31	10.2	7.1	322
1.5 ,,	30	8.2	5.6	053	31	9.9	7.4	292	31	10.6	9.3	298	30	14.0	9.5	3 4	31	14.5	1 .3	294	31	11.3	8.2	312
2.1 ,,	30	9.1	6.4	025	31	10.3	8.1	297	31	11.5	10.2	298	30	16.3	13.2	3 8	30	15.2	12.7	305	31	13.6	10.5	307
3.0 ,,	28	8.9	5.9	345	21	9.5	6.1	305	31	11.7	8.6	297	30	16.5	14.2	314	30	16.2	13.6	313	31	15.5	13.5	308
3.6 ,,	8	6.1	3.2	353	15	10.7	2.5	307	28	12.5	8.8	309	30	16.5	14.1	316	30	14.9	12.1	303	31	16.1	14.2	306
4.5 ,,	2	9.0	7.0	264	6	7.5	3.7	210	26	16.1	14.5	302	30	16.1	13.9	3 3	30	16.8	13.5	294	31	18.1	16.6	295
5.4 ,,	1	6.0	6.0	240	6	14.0	13.8	240	24	22.0	18.7	287	30	19.5	17.9	284	29	22.3	20.4	282	31	22.1	20.6	283
6.0 ,,	1	9.0	9.0	220	6	23.1	23.0	242	24	29.2	27.1	280	30	24.6	22.7	281	29	27.0	25.0	279	31	25.9	24.2	282
7.2 ,,	1	12.0	12.0	210	3	38.0	38.0	241	13	34.8	31.6	276	29	35.8	33.8	273	29	37.7	35.4	274	31	37.2	35.1	278
9.0 ,,									1	58.0	58.0	240	29	51.8	48.6	270	23	56.2	53.3	270	29	53.3	50.4	271

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1.4	0.3	152	31	1.1	1.0	218	31	3.3	1.5	313	31	0.8	0.7	220	31	4.0	2.2	269	31	5.7	0.7	157
0.15 a.g.	30	8.4	2.6	016	30	5.8	1.9	092	29	8.7	2.6	328	31	7.2	1.4	319	31	9.6	3.6	265	30	10.8	2.1	163
0.3 a.m.s.l.	30	7.5	1.3	007													31	10.5	4.2	265	30	10.8	2.0	163
0.6 ,,	30	9.7	3.8	350	30	3.6	1.5	201	29	5.8	1.2	332	31	3.5	1.4	230	31	11.4	4.4	259	30	11.4	1.7	201
0.9 ,,	30	11.4	6.2	325	30	8.2	4.1	070	29	9.1	2.2	340	31	9.6	3.4	110	31	11.9	4.3	250	29	11.3	1.8	175
1.5 ,,	30	14.2	11.0	3 2	30	12.4	9.6	092	29	7.1	3.6	050	30	10.6	7.0	060	31	11.3	2.6	249	21	10.6	1.8	182
2.1 ,,	30	16.8	13.1	3 2	28	9.6	7.9	083	29	7.9	4.9	060	27	9.5	7.5	076	31	10.9	1.3	220	17	10.8	2.5	163
3.0 ,,	27	16.7	15.4	310	25	5.2	1.5	069	25	8.3	5.5	069	22	8.0	5.1	097	31	11.0	0.5	134	12	8.8	3.9	105
3.6 ,,	23	14.6	13.0	314	21	6.1	1.8	021	23	8.4	4.2	069	18	7.5	2.1	117	29	11.7	0.6	057	7	11.3	7.6	072
4.5 ,,	10	14.0	11.6	301	8	7.0	1.9	337	19	6.4	1.5	040	6	7.8	2.3	105	28	11.9	2.1	058	6	8.5	8.0	084
5.4 ,,	1	19.0	19.0	230	6	10.5	4.8	038	15	5.7	0.7	230	4	7.0	2.9	223	27	12.1	3.2	094	6	9.0	7.8	094
6.0 ,,	1	31.0	31.0	245	6	12.0	5.5	046	13	8.2	0.3	165	3	4.7	2.9	264	26	11.5	4.7	101	6	9.7	7.6	085
7.2 ,,					3	7.3	4.3	005	10	9.9	2.1	258					24	11.0	7.0	084	5	9.8	6.8	110
9.0 ,,					1	3.0	3.0	295	7	11.4	7.7	196					19	12.3	9.4	104	1	7.0	7.0	120

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	PORT BLAIR								RAIPUR												RAXAUL			
Time in I.S.T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	5.1	1.2	276	31	4.1	1.4	272	31	1.3	0.4	029	31	2.7	1.7	050	31	2.7	1.0	132	4	CALM		
0.15 a.g. .	31	10.5	3.0	245	31	8.3	1.2	245	30	6.6	2.4	011	31	6.0	4.3	049	31	7.7	3.4	095	4	6.3	3.4	077
0.3 a.m.s.l. .	31	10.9	3.9	249	31	8.4	1.8	244													4	6.3	3.3	089
0.6 ,, .	30	11.8	4.8	258	31	10.4	2.7	243	30	7.1	2.1	042	31	6.7	5.0	051	31	7.3	3.9	083	4	5.3	4.4	260
0.9 ,, .	30	12.4	5.2	256	31	11.2	2.3	244	30	7.7	3.2	050	31	7.2	5.4	043	31	6.2	3.6	070	4	5.5	3.5	285
1.5 ,, .	28	11.4	4.3	240	26	9.7	1.4	202	30	7.9	5.1	041	30	7.0	4.5	020	31	7.5	4.4	039	4	4.0	2.0	347
2.1 ,, .	28	10.9	2.9	213	23	8.9	1.6	153	29	9.0	5.2	022	30	7.2	4.5	355	28	7.7	3.6	007	4	3.5	1.4	084
3.0 ,, .	29	11.3	0.7	237	18	8.0	1.1	097	20	10.0	6.7	342	27	9.7	6.3	319	25	8.9	3.5	334	3	6.7	6.5	310
3.6 ,, .	27	9.3	2.4	060	10	9.6	5.1	085	16	8.8	4.9	333	27	9.9	6.0	301	12	9.7	4.4	281	2	16.0	15.3	293
4.5 ,, .	27	9.5	4.3	072	10	9.0	5.7	097	10	9.1	4.9	323	24	11.0	7.7	296	2	18.5	17.2	277	1	31.0	31.0	285
5.4 ,, .	25	10.2	5.3	094	2	7.5	7.5	099	6	9.7	3.3	338	21	13.8	9.8	302					1	41.0	41.0	280
6.0 ,, .	25	10.5	6.5	105					4	8.3	3.0	318												
7.2 ,, .	21	10.4	4.9	094					3	10.0	5.2	244	17	14.1	10.8	301					1	40.0	40.0	280
9.0 ,, .	13	14.2	11.1	105					2	24.5	17.7	254	2	19.5	15.7	307								
													1	11.0	11.0	210								

Station	SANTA CRUZ												TEZPUR							
Time in I.S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3.5	2.6	056	31	4.9	1.3	012	31	6.6	5.1	317	31	1.8	1.1	022	31	1.1	0.8	068	31	0.9	0.6	088
0.15 a.g. .	28	10.6	6.4	044	31	5.9	1.9	046	27	9.6	6.6	325	31	6.7	4.8	011	29	8.0	6.7	069	31	8.8	6.3	073
0.3 a.m.s.l. .	28	10.4	6.5	053	31	6.2	3.3	066	27	9.3	6.3	336	31	7.9	6.1	012	29	8.6	7.3	075	31	8.8	6.4	074
0.6 ,, .	28	9.9	6.7	054	31	7.9	5.0	077	27	8.0	4.7	007	31	9.4	7.4	023	28	8.7	5.7	077	31	8.2	4.3	092
0.9 ,, .	28	9.2	6.7	053	31	10.3	7.1	081	27	6.8	4.2	038	31	9.8	8.0	026	28	8.9	3.8	085	31	7.5	1.7	149
1.5 ,, .	28	9.8	7.1	018	29	8.7	6.6	084	27	7.4	5.4	063	31	8.4	5.7	037	25	7.4	3.6	096	29	8.4	3.4	216
2.1 ,, .	28	9.6	5.8	050	28	7.5	4.9	084	27	8.8	5.4	061	31	7.7	5.1	082	24	7.7	2.5	129	27	9.4	5.5	217
3.0 ,, .	28	7.6	2.7	110	27	6.3	2.0	089	27	7.3	1.4	047	27	8.7	6.5	123	20	7.1	4.7	226	19	10.5	6.4	245
3.6 ,, .	28	7.2	0.5	121	23	6.9	2.3	010	27	8.1	0.5	172	22	7.6	3.6	137	15	7.3	5.0	226	11	12.3	7.2	261
4.5 ,, .	28	8.2	0.5	226	21	7.9	3.6	056	27	8.7	1.4	241	10	6.9	3.5	310	13	13.1	10.8	262	5	13.4	12.8	276
5.4 ,, .	28	9.0	1.6	349	19	8.3	2.3	075	27	8.1	2.6	224	4	6.9	4.6	227	10	19.2	17.2	245				
6.0 ,, .	28	9.4	2.7	015	19	10.3	1.6	078	27	8.1	2.6	226	4	9.5	7.1	208	7	16.0	14.0	270				
7.2 ,, .	28	10.3	0.8	212	17	12.2	1.8	210	27	9.6	2.8	238	1	23.0	23.0	220	5	28.4	25.2	280				
9.0 ,, .	26	11.8	4.8	249	13	13.3	9.2	284	23	12.0	6.1	243					2	34.0	32.1	275				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October, 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	TEZPUR				TIRUCHIRAPALLI												TRIVANDRUM							
Time in I.S.T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	0.8	0.7	061	31	4.1	2.0	291	31	4.8	2.3	070	31	2.9	0.9	087	31	3.4	1.7	352	31	4 5	2.7	297
0.15 a.g.	31	9.3	7.4	085	28	11.3	6.7	290	28	7.7	2.6	079	23	9.9	5.6	083	31	6.1	3.9	335	30	7.4	4.6	275
0.3 a.m.s.l.	31	8.9	6.3	088	28	12.5	7.2	291	28	7.5	2.3	077	23	10.9	5.9	082	31	7.0	4.4	327	30	7 2	4.1	271
0.6 ,,	31	7.8	4.7	104	28	12.6	6.0	297	28	8.3	2.7	082	23	11.6	5.9	084	31	7.9	4.8	312	30	8.1	3 9	284
0.9 ,,	31	7.1	2.4	136	28	10.5	3.1	309	28	8.5	2.4	082	23	10.9	5.4	078	31	9.3	5.3	302	27	9.4	4.2	299
1.5 ,,	27	7.9	2.6	260	27	9.1	2.9	049	27	9.4	3.2	039	23	9.3	4.0	062	30	10.7	3.3	290	18	12.8	3.2	318
2.1 ,,	22	3.7	2.8	239	27	10.5	5.1	056	26	11.0	5.1	029	23	10.8	4.7	058	26	9.4	3.1	257	12	14.1	2.9	058
3.0 ,,	14	8.0	4.1	214	25	11.0	3.8	041	26	13.0	6.1	029	19	13.1	7.3	059	25	9.3	3.1	268	8	14.1	1.9	329
3.6 ,,	11	7.2	4.1	241	21	10.9	2.5	025	24	12.0	4.0	027	15	12.9	7.0	082	24	8.7	2.5	38	7	14.4	1.6	353
4.5 ,,	1	20.0	20.0	250	15	10.9	3.3	050	22	10.7	4.8	057	10	13.6	10.1	103	24	7.9	0.3	195	5	15.4	7.1	122
5.4 ,,	1	23.0	23.0	255	12	11.0	4.4	081	19	11.5	6.6	058	4	10.5	7.3	127	24	9.1	2.6	109	4	15.7	9.0	135
6.0 ,,					8	11.9	8.5	065	16	12.6	7.5	066	4	10.7	6.2	125	23	9.8	3.2	120	2	12.0	10.3	080
7.2 ,,					4	11.5	8.5	076	12	15.8	12.3	063	1	5.0	5.0	045	22	10.6	3.9	090	1	5.0	5.0	095
9.0 ,,					3	17.7	17.2	096	8	18.5	16.3	074					16	11.9	6.1	112	1	12.0	12.0	100

Station	TRIVANDRUM								UDAIPUR												VENGURLA			
Time in I.S.T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	6.2	4.3	268	31	3.2	2.3	359	31	0.1	0.1	270	31	2.0	1.1	285	31	0.3	0.1	270	31	1.3	1.1	018
0.15 a.g.	29	8.7	6 3	268	28	8.1	4.4	310	31	5.6	3.6	319	31	7.5	0.8	340	31	6.2	2.9	316	30	6.5	2.8	043
0.3 a.m.s.l.	29	8.9	6.3	267	29	8.6	5.1	301													30	7.2	2.1	021
0.6 ,,	29	9.2	6.4	274	28	9.6	6.4	292													30	7.7	1.7	024
0.9 ,,	29	10.2	5.9	229	27	10.0	6.5	295	31	7.6	3.9	313	31	7.5	1.6	325	31	8.3	3.1	320	30	9.6	2.6	046
1.5 ,,	26	10.0	4.2	291	24	10.4	3.1	322	31	7.2	1.7	296	32	7.0	1.4	319	31	7.2	1.3	345	30	11.6	6.7	077
2.1 ,,	25	9.0	2.8	290	22	10.5	3.2	063	31	7.7	1.3	288	31	6.1	1.3	293	30	6.8	0.9	345	29	11.0	8.1	088
3.0 ,,	25	9.1	2.9	276	15	11.9	CALM		31	9.9	1.9	308	29	7.0	1.5	291	30	9.6	0.6	264	22	11.4	8.7	088
3.6 ,,	24	9.1	1.6	239	12	8.7	2.1	122	24	9.0	2.6	330	26	8.4	3.0	282	30	9.2	3.7	277	14	8.7	5.4	080
4.5 ,,	22	8.7	1.6	150	9	9.9	5.6	168	9	11.9	9.0	312	22	12.6	10.3	296	15	13.4	11.6	294	3	8.7	4.2	085
5.4 ,,	22	10.4	3.7	101	5	10.6	6.0	153					19	18.0	17.0	282	3	15.3	14.7	286				
6.0 ,,	22	10.8	4.8	095	3	11.7	5.9	142					18	21.4	19.6	283								
7.2 ,,	20	11.7	7.6	090									12	30.0	27.9	279								
9.0 ,,	17	15.0	11.9	088									7	39.6	37.6	272								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

October, 1957 (Asvina 9—Kartika 9, 1879 Saka)

Station	VENGURLA								VERAVAL													
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	4.3	1.8	245	31	1.2	0.7	040	31	9.8	8.4	343	31	8.5	3.3	314	31	11.5	7.7	274	31	5.7	4.8	327
0.15 a.g.	27	7.9	4.1	265	30	6.8	3.7	035	30	17.9	14.7	360	31	8.6	4.5	342	30	15.6	9.6	281	31	11.9	10.4	324
0.3 a.m.s.l.	27	8.7	4.1	278	30	7.6	3.0	357	30	16.6	13.5	004	31	9.9	6.6	009	30	14.5	7.3	286	31	13.1	11.2	325
0.6 „	26	8.0	2.8	262	30	8.0	1.3	027	30	13.1	9.6	015	31	9.8	5.9	020	30	11.3	3.2	316	30	11.0	6.0	328
0.9 „	22	6.7	2.0	095	29	8.2	2.0	088	30	10.0	5.7	027	31	9.7	5.2	054	30	8.1	2.1	005	30	9.5	2.8	010
1.5 „	21	8.8	5.4	086	27	9.1	4.9	092	30	9.2	4.9	089	31	8.5	4.6	099	30	8.8	4.8	035	30	8.4	4.4	077
2.1 „	19	11.8	7.8	082	25	12.8	9.3	088	30	10.5	4.3	124	31	9.1	3.8	115	30	10.7	6.0	035	30	9.4	6.1	092
3.0 „	16	9.5	7.4	060	20	10.7	9.2	082	30	10.1	2.8	063	31	9.5	3.0	124	30	9.5	3.2	044	28	9.7	3.2	119
3.6 „	15	8.9	6.1	064	8	9.1	8.4	100	30	10.6	3.7	019	31	6.9	2.4	044	30	9.9	2.8	004	13	8.8	3.8	352
4.5 „	12	11.3	8.3	074					30	12.0	6.1	326	30	7.7	2.4	322	30	11.4	6.3	324	4	11.2	9.2	292
5.4 „	10	14.4	10.9	084					30	13.4	6.7	304	28	9.2	4.5	276	30	13.1	8.3	303	1	7.0	7.0	230
6.0 „	7	15.1	12.5	080					30	14.1	7.1	280	27	10.9	6.2	274	30	14.3	10.0	291	1	12.0	12.0	235
7.2 „	3	14.0	12.6	032					29	20.5	10.8	273	22	13.9	10.0	275	30	18.1	14.5	275				
9.0 „									27	28.5	25.7	261	13	23.2	19.5	256	25	27.7	25.3	259				

Station	VISAKHAPATNAM											
Time in I.S.T.	0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	0.9	0.6	301	31	5.6	3.5	100	31	1.6	1.3	014
0 15 a.g.	30	3.8	2.3	351	30	8·1	5·9	104	30	4.3	1.3	039
0.3 a.m.s.l.	30	5.3	1.9	031	30	8.4	6.3	103	30	5.2	1.6	097
0.6 „	30	5.7	2.5	063	30	7.8	6.2	092	29	6.2	2.7	094
0.9 „	29	6.1	4.0	071	30	7.5	5.9	072	26	7.1	4.7	071
1.5 „	29	7.7	5.5	061	30	9.0	7.5	044	27	9.1	7.0	061
2.1 „	28	7.4	4 6	048	29	10.7	8.4	035	25	9.4	6.0	045
3.0 „	18	7.4	3.7	007	28	9.1	6·0	360	22	6.1	2.5	342
3.6 „	11	5.7	1.4	288	23	8.1	3.4	338	14	4.5	1.1	265
4.5 „	8	6.7	0.8	298	15	5.9	2.0	278	5	8.2	4.9	242
5.4 „	5	7 2	2.9	292	11	8.3	2.8	332	1	12.0	12.0	265
6.0 „	3	5.7	3.8	247	11	11.2	5.3	001				
7.2 „	1	8.0	8.0	225	3	12.0	11.4	016				
9.0 „					1	45.0	45.0	010				

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km above mean sea level

October, 1957 (Asvina 9—Kartika 9, 1879 Saka)

Ht. in Km.	n	V	v	D
	AGARTALA			
	0530 hrs.			
10·5	4	30.0	26.1	277
12.0	3	28.0	27.1	268
14.1	2	34.5	34.3	268
	AHMEDABAD			
	0530 hrs.			
10.5	2	38.5	38.5	255
12 0	1	37.0	37.0	255
	1730 hrs.			
10 5	10	38.2	36.5	257
12.0	6	42 2	40 5	252
14 1	3	22 7	22 2	248
	AMBALA			
	0530 hrs.			
10 5	1	47.0	47.0	280
12.0	1	62.0	62.0	285
14.1	1	54.0	54.0	275
	1730 hrs.			
10.5	3	62.3	56.5	262
12.0	2	70.5	61.3	274
	AMRITSAR			
	0530 hrs.*			
10·5	22	59.0	55.4	268
12·0	17	71.6	68.0	268
14·1	13	71.0	70.2	265
16·2	5	51.8	51.3	261
18.0	2	65.5	65.5	270
21.0	1	80.0	80.0	270
	1730 hrs *			
10·5	21	68.1	65.6	270
12·0	20	76.5	74.6	268
14·1	11	63.9	61.9	270
16·2	5	32.2	29.8	257
	ANANTAPUR			
	0530 hrs.			
10.5	5	17.6	13.7	118
	1730 hrs.			
10.5	4	10.7	8.2	088
12.0	1	8.0	8.0	230

Ht. in Km.	n	V	v	D
	BAGHDOGRA			
	0530 hrs.			
10·5	1	49.0	49.0	285
	1730 hrs.			
10·5	1	44.0	44.0	320
	BAIRAGARH			
	1730 hrs.			
10·5	1	47.0	47.0	260
	BAMRAULI			
	0530 hrs.*			
10·5	25	47.3	43.7	266
12·0	23	52.6	49.8	261
14·1	16	49.8	44.9	255
16·2	8	33.5	26.9	252
18 0	6	27.8	25.0	284
21·0	2	15.5	9.5	259
	1130 hrs.			
10·5	9	57.4	51.2	274
12·0	4	65.0	52.3	259
14·1	2	48.0	44.1	254
16·2	1	42.0	42.0	270
	1730 hrs.*			
10 5	20	49.0	44 2	264
12·0	18	52.8	48.9	257
14·1	12	47.9	45.2	255
16·2	4	23 5	22.8	264
18.0	1	11.0	11.0	065
	BANGALORE			
	1730 hrs.			
10·5	1	24.0	24.0	295
	BEGUMPET			
	0530 hrs.			
10.5	8	11.3	4.4	113
12.0	8	12.9	4.8	181
14·1	7	12.1	5.8	222
16·2	5	14.2	8.8	155
18·0	4	9.5	5.2	2 3
21·0	1	13.0	13.0	090
	1730 hrs.			
10 5	6	14.2	8.5	249
12·0	6	16.3	11.0	240

Ht. in Km.	n	V	v	D
	BEGUMPET			
	1730 hrs.			
14.1	5	17.4	6.6	254
16·2	5	13.0	3.0	172
18·0	2	10.0	10.0	092
21·0	1	31.0	31.0	045
24.0	1	43.0	43.0	060
	BHAGALPUR			
	0530 hrs.			
10.5	1	32.0	32.0	325
	BHUBANESHWAR			
	0530 hrs.			
10.5	8	24.1	18.1	263
12.0	3	61.3	20.3	269
14.1	2	35.1	34.9	255
16.2	1	10.0	10.0	280
18·0	1	4.0	4.0	315
21·0	1	13.0	13.0	345
24·0	1	24.0	24.0	335
	BHUJ			
	1730 hrs.			
10.5	17	35.5	32.5	264
12.0	13	38.2	35.9	253
14.1	7	28.9	26.7	254
16.2	4	23.2	18.2	253
18.0	1	60.0	60.0	260
	CHIKALTHANA			
	1730 hrs.			
10·5	1	17.0	17.0	320
12·0	1	10.0	10.0	300
	DUM DUM			
	0530 hrs.*			
10.5	30	36.0	30.6	267
12.0	30	35.6	29.9	265
14.1	22	32.6	25.6	262
16.2	12	23.6	20.2	265
18.0	7	34.0	25.9	281
	1730 hrs *			
10.5	31	34.7	32.3	266
12.0	30	39.2	35.3	269
14·1	24	33.8	28.3	257
16·2	16	33.1	26.8	255
18·0	5	21.0	12.8	295
21·0	2	30.5	30.0	265

Ht in Km.	n	V	v	D
	GANNAVARAM			
	0530 hrs.			
10.5	4	15.5	11.9	236
12.0	1	27.0	27.0	265
14·1	1	8.0	8.0	255
	1730 hrs.			
10·5	6	15.7	5.8	065
12·0	5	22.4	4.8	112
14.1	1	17.0	17.0	030
	GAUHATI			
	0530 hrs. *			
10·5	10	57.3	55.2	272
12.0	8	64.0	60.8	267
14·1	2	52.5	52.5	270
	1130 hrs.			
10.5	2	46.0	45.5	306
12.0	2	38.5	38.5	296
14·1	2	34.0	31.9	291
16·2	1	85.0	85.0	295
	1730 hrs.*			
10·5	9	63.1	61.6	276
12·0	7	67.0	65.1	282
	GOPALPUR			
	0530 hrs.			
10.5	7	17.7	8.4	283
12.0	5	16.4	6.7	236
14.1	2	4.5	3.9	277
	1730 hrs.			
10.5	2	10.0	9.6	158
	GWALIOR			
	1730 hrs.			
10·5	4	46.3	41.2	282
12·0	1	50.0	50.0	320
	JABALPUR			
	0530 hrs.			
10.5	4	31.7	27.1	254
12.0	3	34.7	29.9	221
	1730 hrs.*			
10·5	4	27.3	26.0	277
	JAGADALPUR			
	1730 hrs.			
10.5	1	15.0	15.0	345
12.0	1	18.0	18.0	340

Ht. in Km.	n	V	v	D
	JAIPUR			
	1730 hrs.			
10.5	1	44.0	44.0	250
	JODHPUR			
	0530 hrs.*			
10.5	25	60.8	58.3	256
12.0	22	66.1	62.8	254
14.1	15	55.0	51.7	251
16.2	6	31.5	28.5	255
18.0	1	32.0	32.0	270
	1130 hrs.			
10.5	5	47.2	46.7	265
12.0	2	59.5	59.0	257
	1730 hrs. *			
10.5	17	59.3	55.8	260
12.0	12	64.9	55.6	252
14·1	5	59·6	57·8	252
	MADRAS			
	0530 hrs. *			
10.5	25	15.9	9.7	097
12.0	21	18.1	13.1	121
14.1	14	22.8	16.2	112
16·2	6	26.8	24.0	106
18.0	1	6.0	6·0	015
	1130 hrs.			
10·5	4	23.0	20.1	08 4
12·0	3	20.3	20.0	085
14.1	3	29.3	28.9	096
16.2	2	18.5	18.5	078
18.0	1	10.0	10.0	360
	1730 hrs.*			
10.5	25	16.8	11.1	110
12.0	22	18.5	12.9	114
14.1	18	22.7	17.2	112
16.2	9	22.0	19.9	091
18.0	4	13.5	2.5	063
	MANGALORE			
	1730 hrs.			
10.5	1	8.0	8.0	170
12.0	1	13.0	13.0	180
	MINICOY			
	0530 hrs.			
10.5	5	28.4	28.1	102
12.0	3	18.3	15.7	117
14.1	1	11.0	11.0	075

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km above mean sea level.

October, 1957 (Asvina 9—Kartika 9, 1879 Saka)

Ht in Km.	n	V	v	D
		MINICOY		
		1730 hrs.*		
10.5	9	27.4	26.0	100
12.0	5	36.2	35.2	101
14.1	2	18.5	11.3	109
		MOHANBARI		
		0530 hrs.		
10.5	2	72.0	71.9	256
12.0	1	66.0	66.0	260
14.1	1	72.0	72.0	255
		MUSSOORIE		
		1730 hrs.		
10.5	3	72.0	69.5	269
		NAGPUR		
		0530 hrs.*		
10.5	13	29.8	25.4	257
12.0	12	32.4	27.2	252
14.1	5	36.0	28.6	240
16.2	2	51.5	51.5	240
		1130 hrs.		
10.5	8	25.5	20.4	275
12.0	3	28.3	22.3	257
14.1	2	30.0	23.7	196
		1730 hrs.*		
10.5	21	28.5	25.4	260
12.0	18	33.2	27.9	255
14.1	9	25.6	22.4	247
16.2	3	4.7	4.1	217
		NEW DELHI		
		0530 hrs.*		
10.5	29	61.8	58.7	270
12.0	26	68.4	65.1	266
14.1	20	53.6	50.9	264
16.2	16	34.0	32.3	266
18.0	10	18.9	15.8	283
21.0	4	10.7	7.8	035
		1130 hrs.		
10.5	11	67.1	64.5	273
12.0	9	85.0	83.2	273
14.1	3	82.0	80.5	268

Ht. in Km.	n	V	v	D
		NEW DELHI		
		1730 hrs.*		
10.5	28	63.0	60.3	267
12.0	25	66.6	63.6	264
14.1	17	50.8	48.2	263
16.2	10	22.8	19.8	253
18.0	4	12.5	6.9	280
		POONA		
		0530 hrs.		
10.5	1	3.0	3.0	155
		1730 hrs.		
10.5	4	9.5	7.4	226
12.0	4	18.0	17.0	200
14.1	2	25.0	24.5	162
16.2	2	12.0	11.9	116
		PORT BLAIR		
		0530 hrs.*		
10.5	14	14.6	10.9	092
12.0	10	14.9	10.8	099
14.1	5	13.2	13.0	103
16.2	1	11.0	11.0	120
		1130 hrs.		
10.5	1	9.0	9.0	185
		1730 hrs.*		
10.5	8	16.6	13.5	088
12.0	5	12.4	9.9	131
		RAIPUR		
		0530 hrs.		
10.5	1	47.0	47.0	255
		SANTA CRUZ		
		0530 hrs.*		
10.5	21	16.6	10.3	239
12.0	20	21.5	14.9	229
14.1	13	25.2	13.0	215
16.2	6	17.5	10.8	227
18.0	1	14.0	14.0	125
		1130 hrs.		
10.5	9	24.7	15.5	259
12.0	7	36.4	27.4	244
14.1	1	35.0	35.0	210
16.2	1	29.0	29.0	210
18.0	1	12.0	12.0	240
21.0	1	13.0	13.0	250

Ht. in Km.	n	V	v	D
		SANTA CRUZ		
		1730 hrs.*		
10.5	21	15.9	11.2	222
12.0	19	19.7	14.6	207
14.1	13	24.3	18.4	195
16.2	6	17.8	10.1	154
18.0	2	28.0	25.9	126
		TEZPUR		
		0530 hrs.		
10.5	2	43.5	42.5	275
12.0	1	29.0	29.0	300
		TIRUCHIRAPALLI		
		0530 hrs.		
10.5	2	26.0	25.7	102
12.0	2	15.5	14.9	123
14.1	2	23.0	22.6	085
		1730 hrs.		
10.5	8	19.5	16.2	088
12.0	4	22.3	21.3	102
14.1	2	53.5	53.5	102
		TRIVANDRUM		
		0530 hrs.*		
10.5	10	17.3	12.9	098
12.0	5	26.4	22.7	095
14.1	4	35.5	29.8	108
16.2	2	26.0	22.1	100
18.0	1	16.0	16.0	070
		1130 hrs.		
10.5	1	37.0	37.0	095
12.0	1	47.0	47.0	095
14.1	1	54.0	54.0	125
16.2	1	31.0	31.0	130
18.0	1	20.0	20.0	045
21.0	1	20.0	20.0	090
		1730 hrs.*		
10.5	13	19.2	17.1	086
12.0	10	26.5	24.8	089
14.1	4	28.7	27.9	099
16.2	2	17.5	17.3	077
18.0	1	19.0	19.0	100
21.0	1	23.0	23.0	100

Ht. in Km.	n	V	v	D
		UDAIPUR		
		1730 hrs.		
10.5	3	42.3	39.4	280
		VERAVAL		
		0530 hrs.*		
10.5	27	36.3	31.7	253
12.0	23	40.4	39.3	239
14.1	19	28.8	26.6	234
16.2	13	17.2	5.6	195
18.0	2	9.0	6.0	354
		1130 hrs.		
10.5	5	26.0	25.8	243
12.0	4	35.7	35.7	232
14.1	1	41.0	41.0	225
		1730 hrs.*		
10.5	24	34.0	31.9	249
12.0	21	40.0	37.6	245
14.1	17	35.5	31.5	230
16.2	10	16.0	5.1	233
18.0	4	14.5	5.0	157
		VISAKHAPATNAM		
		1730 hrs.		
10.5	1	32.0	32.0	025

RADIOSONDE DATA

October, 1957 (Asvina 9—Kartika 9, 1879 Saka)

During the month, observations of upper air temperature, pressure and humidity were made at 13 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I. M. D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

Serial No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad	Clock type	1st October, 1944	00 and 12	
2	Amritsar	Clock type	21st June, 1957	00 and 12	
3	Bombay	Clock type	7th September, 1954	00 and 12	
4	Calcutta	Clock type	13th December, 1946	00 and 12	Fan type used from 13th December, 1946 to 30th November, 1947.
5	Gauhati	Clock type	22nd July, 1955	00 and 12	
6	Jodhpur	Clock type	17th April, 1946	00 and 12	
7	Madras	Fan type	29th June, 1946	00 and 12	
8	Nagpur	Fan type	1st October, 1946	00 and 12	
9	New Delhi	Clock type	3rd December, 1943	00 and 12	
10	Port Blair	Fan type	4th December, 1949	00 and 12	
11	Trivandrum	Fan type	1st July, 1947	00 and 12	
12	Veraval	Fan type	3rd October, 1944	00 and 12	
13	Visakhapatnam	Fan type	8th December, 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

October, 1957 (Asvina 9—Kartika 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (999 mb.)						AMRITSAR (984 mb.)						BOMBAY (1008 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	293.4	216	288	289.6	31	230	292.4	296	285	287.6	31	13	299.0	302	297	295 8
1000	31	89	..	..	..	..	31	88	..	..	..	..	31	87	..	..	..	..
900	31	1011	291.5	300	286	282.2	31	1003	295.2	302	288	278.9	31	1015	296.5	301	294	287.0
850	31	1501	291.1	295	283	278.9	31	1497	292.1	299	285	276.0	31	1513	293.6	298	290	284.3
800	31	2018	287.9	294	282	275.7	31	2015	288.6	295	281	272.6	31	2034	290.2	295	286	281 8
700	31	3134	280.3	287	276	268.2	31	3131	280.5	287	273	262 8	31	3161	283.0	289	280	275.2
600	31	4389	274.8	280	270	251.8	31	4380	271.3	278	265	256.3	31	4428	277.1	282	272	264.2
500	31	5840	266.8	277	262	..	31	5805	261.6	268	255	..	31	5891	268.9	273	265	..
400	30	7545	255.2	263	249	..	30	7484	250.0	259	240	..	31	7618	258.3	263	253	..
300	29	9635	241.1	251	233	..	26	9539	236.8	244	228	..	30	9741	243.4	255	233	..
250	26	10992	233.0	243	226	..	24	10787	229.1	238	220	..	24	11017	234.0	243	226	..
200	25	12393	222.6	233	216	..	22	12254	220.8	229	214	..	23	12523	223.5	233	216	..
175	24	13259	218.5	235	209	..	21	13115	217.3	223	213	..	17	13376	217.4	228	211	..
150	22	14239	211.9	224	204	..	19	14053	213.2	218	211	..	14	14372	211.5	225	205	..
125	18	15367	205.7	214	199	..	18	15192	209.9	217	205	..	12	15478	2 4.3	220	198	..
100	15	16712	200.5	206	194	..	15	16539	207.5	211	203	..	9	16824	200.6	214	193	..
80	10	18128	199.3	205	193	..	10	17891	206.7	214	201	..						

	CALCUTTA (1010 mb.)						GAUHATI (1006 mb.)						JODHPUR (986 mb.)					
Surface	31	6	297.7	301	294	297.0	31	49	295.3	299	289	294.9	31	218	295 0	300	287	283.7
1000	31	93	..	..	..	..	31	101	..	..	..	..	31	96	..	..	..	..
900	31	1009	292.8	297	289	288.5	31	1013	291.5	296	287	288.0	31	1016	296.7	301	291	277.9
850	31	1500	289.7	296	285	284.7	31	1502	288.4	293	284	284.5	31	1512	293.1	299	287	275.8
800	31	2014	286.5	295	281	280 9	31	2014	285.3	290	281	280.6	31	2030	289.3	297	282	273.8
700	31	3127	280.5	289	276	273.1	31	3123	279.4	285	272	273.9	31	3148	280.5	291	276	268.5
600	31	4383	274.3	281	268	265.3	31	4373	272.7	278	264	268.2	31	4401	273.7	281	265	253.3
500	31	5834	266.9	274	261	260.4	31	5811	264.8	270	252	..	31	5844	265.4	275	258	..
400	31	7547	255.6	264	248	..	31	7509	254.0	262	239	..	31	7548	254.8	266	243	..
300	30	9647	241.2	249	231	..	19	9620	240.8	247	234	..	28	9643	240 8	251	228	..
250	28	10914	232 0	242	220	..	19	10898	232.2	240	219	..	28	10897	231.3	238	219	..
200	28	12398	220.9	228	202	..	17	12378	222.5	235	198	..	26	12390	222.0	227	213	..
175	22	13262	215.5	221	208	..	10	13243	216.0	227	204	..	24	13281	2.5 5	221	207	..
150	21	14217	209.5	215	202	..	10	14206	211.9	224	205	..	20	14228	209.7	217	203	..
125	13	15298	202.5	209	196	..	7	15323	207.9	217	199	..	15	15350	206.1	213	202	..
100	12	16599	197.2	203	192	..							9	16649	202.0	207	199	..
80	6	17912	194.5	198	191	..												

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M, T.

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf Pr. (1008 mb.)						NAGPUR (976 mb.)						NEW DELHI (987 mb.)				
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A		
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	15	298.4	300	297	296.4	31	311	296.1	302	292	290.3	31	210	291.7	297	285	287.4
1000	31	83	..	..	..	..	31	94	..	..	..	..	31	95	..	..	..	..
900	31	1006	294.7	298	290	288.8	31	1015	296.1	299	291	283.6	31	1011	295.4	300	289	280.8
850	31	1501	291.8	295	289	285.6	31	1509	292.7	296	288	280.9	31	1505	292.1	297	287	278.3
800	31	2019	288.5	291	285	283.0	31	2028	288.6	293	284	279.2	31	2023	288.2	294	283	275.3
700	31	3141	282.0	287	279	276.8	30	3144	280.2	288	275	272.1	31	3136	279.7	285	275	266.9
600	29	4404	275.6	280	273	268.6	30	4400	274.5	278	267	259.5	31	4381	271.4	279	266	253.9
500	29	5859	267.8	273	262	..	29	5848	265.5	271	259	..	31	5812	263.5	270	258	..
400	29	7581	258.0	263	251	..	25	7546	254.6	260	250	..	31	7500	252.6	261	247	..
300	25	9688	243.2	253	237	..	20	9627	239.0	249	233	..	31	9560	238.0	245	229	..
250	24	10964	233.7	245	225	..	17	10879	228.4	234	221	..	31	10818	229.5	238	221	..
200	18	12451	222.2	229	216	..	16	12345	218.0	224	210	..	31	12290	220.5	228	214	..
175	15	13316	216.2	223	211	..	11	13224	213.4	221	208	..	31	13142	215.3	221	209	..
150	14	14277	208.9	217	197	..	10	14176	208.1	218	201	..	30	14103	209.4	216	201	..
125	9	15350	201.1	208	193	..		..	..	..	..	..	26	15203	204.3	209	198	..
100	5	16536	196.0	202	193	.							21	16521	202.0	207	197	..
80													18	17858	203.6	211	197	..

	PORT BLAIR (1001 mb.)						TRIVANDRUM (1003 mb.)						VERAVAL (1009 mb.)				
Surface	31	79	297.4	300	296	296.5	30	64	297.4	299	296	295.8	30	8	297.2	301	294	292.5
1000	30	92	..	..	..	..	30	90	..	..	..	..	30	91	..	..	..	..
900	30	1014	293.5	296	289	290.6	30	1009	292.8	296	290	289.6	30	1015	296.0	299	289	282.2
850	30	1507	291.2	294	287	287.9	30	1501	290.4	296	288	286.3	30	1511	292.5	296	287	279.9
800	30	2025	288.4	293	283	284.9	30	2017	287.7	292	284	283.0	30	2029	288.7	293	284	277.8
700	30	3148	282.8	286	277	279.1	30	3138	282.5	287	279	275.0	30	3148	280.9	288	276	267.5
600	29	4414	275.6	282	268	272.4	30	4399	275.0	280	271	268.2	30	4408	275.1	280	268	256.7
500	28	5864	266.7	276	255	..	29	5848	266.4	271	263	..	30	5855	266.9	279	259	..
400	25	7581	256.9	269	246	..	27	7555	255.9	262	249	..	29	7554	254.0	261	243	..
300	18	9680	241.6	247	235	..	21	9656	240.9	248	232	..	28	9639	239.1	247	231	..
250	14	10940	231.1	240	224	..	13	10938	232.8	240	218	..	28	10891	229.3	238	218	..
200	10	12399	219.0	231	212	..	7	12393	221.7	238	205	..	24	12363	217.7	229	207	..
175	7	13203	210.7	215	207	..	6	13299	216.5	226	209	..	24	13200	211.3	227	199	..
150	5	14149	204.4	207	201	..	6	14265	210.7	221	203	..	22	14149	204.8	221	191	..
125													18	15259	200.1	218	192	..
100													13	16600	201.5	223	193	..
80													5	17899	203.0	214	192	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Standard Pressure mbs.	VISAKHAPATNAM Surf. Pr. (1005 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	30	48	300.4	303	298	295.8
1000	30	88	..	..	..	..
900	30	1015	295.3	299	292	288.7
850	30	1511	292.5	296	288	285.3
800	30	2032	289.3	294	286	282.4
700	30	3155	282.9	290	279	276.0
600	30	4421	276.8	285	269	265.6
500	30	5881	268.5	277	263	..
400	27	7601	257.1	265	252	..
300	23	9696	241.6	251	234	..
250	20	10958	231.3	243	225	..
200	18	12421	217.8	222	215	..
175	16	13249	211.3	215	208	..
150	15	14196	204.3	209	200	..
125	9	15229	197.9	204	189	..
100	7	16530	193.4	205	187	..
80						

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr (998 mb.)						AMRITSAR (983 mb.)						BOMBAY (1007 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	98	303.8	307	295	290.5	31	230	303.2	309	296	287.7	31	13	304.2	307	301	296.6
1000	31	78	..	..	..	..	31	80	..	..	..	..	31	76	..	..	..	..
900	31	1013	298.4	304	293	279.9	31	1012	297.6	305	291	277.7	31	1013	298.2	302	294	287.2
850	31	1511	294.7	304	289	277.2	31	1508	293.7	301	288	272.5	31	1512	294.5	298	290	284.2
800	31	2030	290.0	297	286	271.9	31	2028	289.9	297	284	269.9	31	2035	290.7	293	286	281.5
700	31	3152	282.0	287	277	259.2	31	3148	281.0	287	274	258.7	31	3163	283.2	290	280	274.5
600	31	4413	275.5	279	269	244.5	31	4397	271.3	278	265	252.6	31	4432	277.3	282	273	265.0
500	30	5869	267.8	273	258	..	31	5823	261.8	268	256	..	31	5896	269.5	275	264	..
400	30	7583	256.1	262	245	..	31	7497	249.9	258	243	..	31	7625	258.7	267	254	..
300	27	9689	241.5	248	234	..	29	9543	235.4	243	226	..	30	9744	243.2	250	234	..
250	24	10958	232.6	244	222	..	28	10770	227.3	237	217	..	28	11023	233.7	242	223	..
200	23	12447	222.8	229	213	..	28	12233	219.9	229	209	..	26	12508	222.5	232	210	..
175	20	13314	217.1	224	207	..	27	13097	216.0	224	205	..	21	13374	216.0	227	202	..
150	19	14289	211.5	219	200	..	26	14075	212.8	219	205	..	19	14326	208.9	222	196	..
125	14	15432	206.4	213	202	..	24	15213	208.0	214	201	..	13	15499	204.0	215	195	..
100	8	16770	202.0	206	197	..	20	16559	205.7	212	202	..	9	16878	200.7	208	195	..
80							13	17972	205.5	211	200	..						

	CALCUTTA (1008 mb.)						GAUHATI (1003 mb.)						JODHPUR (984 mb.)					
Surface	31	6	301.5	305	295	297.5	31	49	300.2	304	297	298.4	28	218	306.4	309	302	283.1
1000	31	76	..	..	..	..	31	79	..	..	..	..	28	76	..	..	..	..
900	31	1003	295.2	301	291	290.1	31	1004	294.2	297	291	291.4	28	1018	300.0	305	294	277.1
850	31	1497	291.7	297	287	286.2	31	1497	291.3	295	288	288.2	28	1519	295.4	301	289	274.6
800	31	2015	288.3	293	284	282.5	31	2014	288.3	291	284	284.3	28	2041	290.7	295	285	274.1
700	31	3136	282.0	287	277	273.2	31	3133	281.5	285	277	276.1	28	3163	282.0	287	277	266.6
600	31	4400	276.5	282	271	264.1	31	4392	274.7	281	271	268.7	28	4422	274.6	281	269	248.3
500	31	5861	268.7	275	260	..	31	5840	267.1	272	262	..	27	5873	266.6	273	261	..
400	31	7585	257.5	263	250	..	31	7551	255.5	262	247	..	26	7583	255.6	264	247	..
300	28	9700	242.7	249	235	..	22	9649	241.5	249	235	..	24	9711	242.3	253	234	..
250	28	10975	233.6	240	229	..	18	10909	232.4	238	227	..	22	10964	233.0	243	225	..
200	27	12469	222.4	229	216	..	17	12394	222.6	234	215	..	19	12436	221.9	232	212	..
175	24	13322	215.4	221	209	..	12	13248	215.4	221	206	..	19	13293	216.6	228	203	..
150	22	14299	208.1	212	200	..	7	14248	210.0	216	203	..	14	14293	211.6	221	200	..
125	17	15395	200.6	207	196	..	7	15343	204.7	211	199	..	13	15386	205.8	212	197	..
100	14	16703	195.9	206	291	..	7	16683	200.7	207	191	..	11	16719	202.3	207	196	..
80	5	18004	192.8	199	187	..							9	18018	200.9	207	193	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G.M.T.

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1007 mb.)						NAGPUR (974 mb.)						NEW DELHI (985 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Mix.	Min.	Dew Point
Surface	31	15	301.5	305	299	297.0	30	311	303.4	306	295	288.8	31	210	302.2	307	295	289.2
1000	31	74	..	..	..	..	30	77	..	..	..	..	31	79	..	..	..	..
900	31	1003	295.7	299	292	288.6	30	1012	298.0	302	291	284.5	31	1013	298.2	304	290	279.0
850	31	1498	292.8	296	289	285.4	30	1510	293.5	299	288	282.2	31	1510	293.8	300	287	275.1
800	31	2019	289.4	293	287	282.4	30	2030	288.9	294	284	279.4	31	2031	290.1	295	283	272.3
700	31	3144	283.3	290	280	276.3	30	3149	280.7	284	272	272.7	31	3152	281.5	285	275	263.6
600	31	4411	276.3	286	273	268.3	29	4407	275.5	281	270	260.8	31	4405	272.9	277	269	246.9
500	31	5869	268.3	280	265	..	27	5862	267.0	272	260	..	31	5842	264.4	271	260	..
400	31	7590	257.9	274	253	..	27	7577	255.6	262	251	..	31	7538	253.1	259	249	..
300	28	9687	242.0	253	237	..	24	9667	240.1	245	235	..	29	9610	238.8	245	232	..
250	26	10943	231.4	238	226	..	23	10931	230.6	237	225	..	29	10864	230.3	237	223	..
200	21	12420	219.7	226	213	..	21	12392	217.7	225	206	..	29	12340	220.7	229	215	..
175	20	13273	212.6	221	205	..	16	13273	212.3	221	202	..	28	13186	214.9	221	211	..
150	18	14215	204.8	215	197	..	11	14226	206.6	214	197	..	28	14145	209.7	214	205	..
125	11	15285	199.8	207	195	..						..	24	15251	204.0	208	199	..
100	7	16631	194.9	200	189	..						..	21	16581	200.9	205	195	..
80						..							17	17895	202.8	211	195	..

	PORT BLAIR (1000 mb.)						TRIVANDRUM (1002 mb.)						VERAVAL (1008 mb.)					
Surface	31	79	299.4	301	296	297.1	31	64	300.9	303	297	296.9	30	8	302.1	304	301	296.8
1000	31	83	..	..	..	..	31	81	..	..	..	..	30	83	..	..	..	..
900	31	1007	294.1	296	291	291.9	31	1007	294.2	297	290	289.8	30	1015	297.4	302	291	283.6
850	31	1502	291.6	293	289	288.6	31	1500	291.2	296	285	287.6	30	1512	294.0	299	285	281.0
800	31	2021	289.0	291	287	285.6	31	2018	288.3	293	283	284.3	30	2033	289.5	295	281	279.1
700	30	3146	283.4	287	281	279.4	31	3139	282.6	289	277	276.1	30	3156	282.0	289	277	267.7
600	30	4413	275.9	279	269	271.7	29	4399	275.2	281	269	270.3	30	4421	276.5	282	270	253.5
500	29	5868	268.2	272	265	..	28	5851	267.0	273	261	..	30	5877	268.2	277	259	..
400	25	7590	258.3	265	255	..	26	7567	256.7	263	251	..	30	7590	255.2	261	247	..
300	20	9700	242.8	254	236	..	20	9684	241.7	248	234	..	25	9678	239.6	247	233	..
250	12	10987	233.3	248	228	..	16	10961	232.7	239	224	..	24	10934	230.8	238	223	..
200	8	12480	223.1	232	213	..	12	12446	222.1	231	209	..	21	12420	221.1	228	215	..
175						..	9	13252	214.9	228	204	..	20	13272	214.8	223	210	..
150						..	6	14161	205.3	216	196	..	18	14213	208.1	216	201	..
125						..							14	15344	201.3	208	191	..
100						..							9	16628	196.1	203	188	..
80						..							8	17930	198.1	206	194	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 12 Hours G. M. T.

October 1957 (Asvina 9—Kartika 9, 1879 Saka)

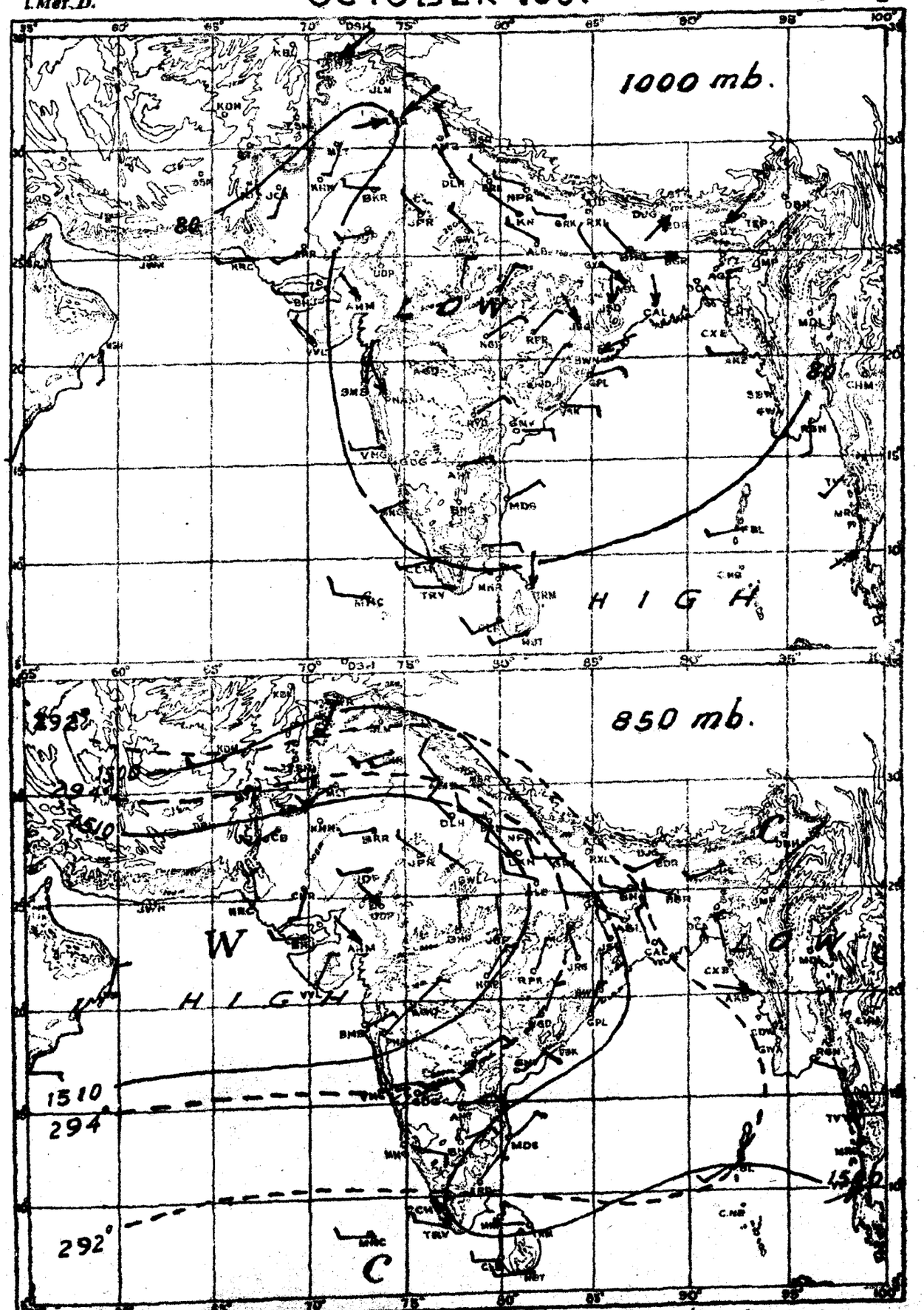
Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr.(1003 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	31	48	303.2	305	300	297.4
1000	31	76	..	..	..	..
900	31	1008	296.1	301	292	289.1
850	31	1505	292.7	297	289	285.1
800	31	2025	289.1	293	281	282.2
700	31	3146	281.9	286	269	276.5
600	31	4407	275.1	280	261	266.7
500	29	5857	266.7	273	250	..
400	27	7575	255.8	264	247	..
300	16	9675	239.6	250	233	..
250	12	10932	229.9	241	221	..
200	10	12411	220.6	233	209	..
175	6	13228	211.3	218	202	..
150	6	14183	202.2	211	193	..
125	6	15237	197.2	205	191	..
100						
80						

NOTE.—Number of observations refer to those of dynamic height.
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273°A
Means are not worked out for less than five observations at standard pressure surfaces.

GIPN -S4—341 D. D. G. Obs P./62—14-10-63—260

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I.Met.D. **OCTOBER 1957** Plate I



PDGC/903(i):5:62

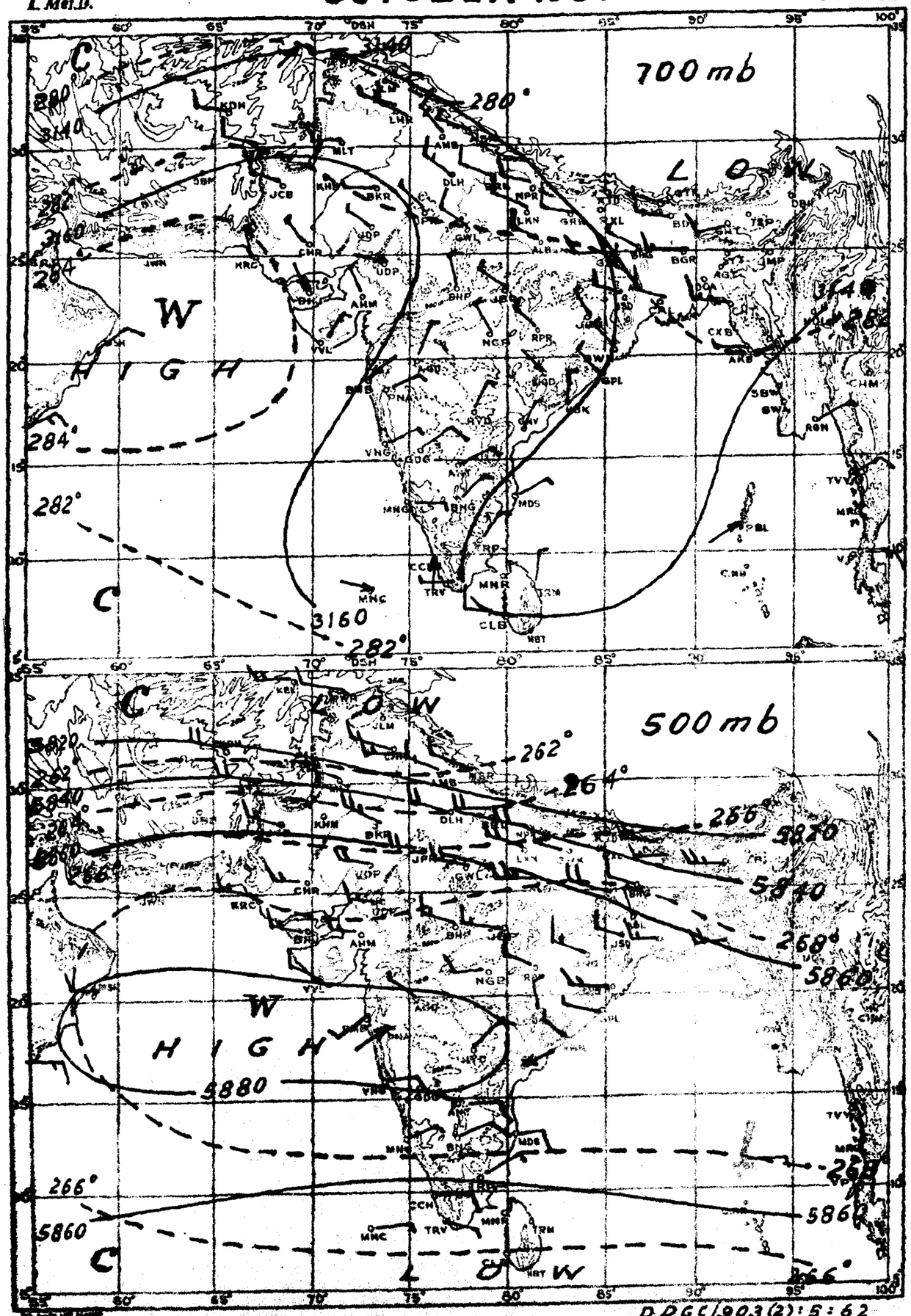
RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

OCTOBER 1957

I. Met.D. Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

-------- Isotherms in degrees absolute. ——— Contours in geopotential metres.

CENTRAL
AUG 13 1965
WEATHER BUREAU

Registered No. B-3097

INDIA WEATHER REVIEW, 1957.

Monthly Weather Report

November

2 • AUG 12
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Published by authority of the Government of India

SURPLUS
DUPLICATE

Chief features—

(1) A severe cyclonic storm in the Arabian Sea in the second week of the month and

(2) Normal or excess rainfall in the Punjab (I) and the southern parts of the Peninsula and deficient rains in northeast India.

With the arrival of a low pressure wave from the east, a trough of low pressure developed over the southwest Bay to the east of Ceylon on the 2nd. It shifted slightly northwards and became well marked on the next day, when it lay to the east of the Coromandel coast. Moving westwards across the southern parts of the Peninsula as a low pressure wave, it emerged into the southeast Arabian Sea on the 5th. In association with the formation of the trough and its movement westwards as a low pressure wave, strong northeast monsoon conditions prevailed over the southern parts of the Peninsula between the 4th and 6th. Locally heavy to very heavy rain occurred in south coastal Andhra Pradesh, the Madras and Kerala on some days. Madras recorded 21 cms of rain on the 4th and 10 cms on the 5th; Nellore 14 cms on the 5th and Trivandrum 10 cms on the 6th. According to press reports, there was dislocation of railway traffic between Gudur and Tada on the Madras—Vijayawada section of the Southern Railway on account of the rail track and bridges having been submerged in the floods, caused by heavy rains.

The low pressure wave, on emerging into the southeast Arabian Sea accentuated the seasonal 'low' over the area. A well marked trough of low pressure formed in the southeast Arabian Sea to the west of Laccadives on the 6th. It shifted northwards and concentrated into a depression on the morning of 8th with its centre near Lat. 11.5°N and Long. 69.0°E. Moving in a northerly direction, it became deep by the 9th morning and intensified further into a cyclonic storm by the same evening when its centre was near Lat. 14.5°N and Long. 67.0°E. Recurving to the northeast, it became severe by the morning of the 10th, when its centre lay near Lat. 15.0°N and Long. 67.5°E. The northeastward movement of the storm was maintained till the evening of 11th when the centre was near Lat. 16.5°N and Long. 69.5°E. By about 0200 hrs. IST of 12th, it weakened into a storm of moderate intensity and weakening further, lay at 0830 hrs. IST as a deep depression with its centre near Lat. 17.0°N and Long. 70.0°E. Moving thereafter, in a northerly direction and weakening at the same time, it became shallow by the morning of 13th with centre near Lat. 18.5°N and Long. 70.0°E. The shallow depression further weakened into an elongated trough of low pressure over the east central and adjoining southeast Arabian Sea on the 14th and became unimportant by the next day. An associated low pressure wave, however, moved northwards across west Saurashtra and Kutch on the 15th.

Under the influence of the cyclonic storm, fairly widespread or local rainfall occurred in the Konkan from the 10th to 15th, in Maharashtra on the 14th and 15th and in Saurashtra and Kutch on the 15th and 16th. The northeast monsoon also continued to be active over the southern parts of the Peninsula till the middle of the month; the rainfall being heavy on some days in association with the successive passage of two easterly waves. Some noteworthy amounts of rainfall recorded during this period were : Coimbatore 8 cms and Karwar and Ootacamund 7 cms each on the 7th, Cochin 8 cms on 13th, Coimbatore 7 cms on 14th, Ratnagiri 9 cms on the 15th, and Dwarka 10 cms on the 16th.

In association with the passage of a few easterly waves, local or scattered rainfall occurred in south Madras on most days during the latter half of the month. Kerala received scattered or local rainfall on some days during this period.

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Under the influence of two westerly waves which moved across the extreme north of the country, Jammu and Kashmir experienced local or scattered snowfall on the 8th, 9th and 13th, and fairly widespread rain on the 14th. Under the influence of another westerly wave which moved across the northern divisions of West Pakistan on the 17th, a feeble incursion of moist air took place into Rajasthan across Saurashtra and Kutch and west Gujarat, causing local or scattered thundershowers in west Rajasthan and Gujarat on the 17th and 18th.

Three western disturbances moved across the northern parts of the country during the latter half of the month. The first one moved into Baluchistan across Iran on the 19th and induced a shallow 'low' over west Rajasthan by the same evening. The western disturbances lay over the northern divisions of West Pakistan and the adjoining areas of the Punjab (I) on the 20th and moved away across the western Himalayas on the 21st. The induced 'low' over west Rajasthan and neighbourhood filled up on the same day. In association with these, local rain occurred in Jammu and Kashmir on the 20th and fairly wide-spread thundershowers in Jammu and Kashmir, Himachal Pradesh, the Punjab (I) and west Uttar Pradesh on the 21st. Dalhousie recorded 10 cms of rain on the 21st. The second western disturbance moved into the northern divisions of West Pakistan on the 22nd and moved away across Jammu and Kashmir by the 24th. An elongated trough of low pressure apparently induced by this western disturbance extended from the Mekran coast to west Rajasthan on the 24th. Following a north-easterly course and weakening at the same time, the trough moved away across the western Himalayas by the 27th. The two disturbances together caused local rain or snow in Jammu and Kashmir from the 23rd to 26th and scattered showers in Himachal Pradesh and the Punjab (I) on the 25th and 26th. The third western disturbance of the month which moved across Jammu and Kashmir between the 28th and 29th was feeble and did not cause any precipitation in the country.

Night temperatures were generally below normal in northeast India during the first two weeks of the month and nearly normal later. They were generally above normal in northwest India, west Uttar Pradesh, Gujarat, Saurashtra and Kutch and the central parts of the country almost throughout the month, being appreciably to markedly so in Saurashtra and Kutch, Gujarat, Maharashtra and west Madhya Pradesh during the second and third weeks.

The total rainfall during the month was in large excess in the Punjab (I), west Rajasthan, Saurashtra and Kutch and coastal Mysore, in moderate excess in the Konkan and south Mysore and in slight excess in the Madras State. It was normal in west Uttar Pradesh and Kerala, in slight defect in Jammu and Kashmir, Gujarat and north Mysore, in moderate defect in Assam, Maharashtra, coastal Andhra Pradesh and Rayalaseema and in large defect elsewhere over the country.

Mean maximum temperature was above normal in the Bay Islands, Assam, Gangetic West Bengal, Orissa, Chota Nagpur, Bihar, east Rajasthan, Madhya Pradesh, Gujarat and Vidarbha, below normal in Jammu and Kashmir and normal elsewhere. Mean minimum temperature was above normal in the Bay Islands, west Uttar Pradesh, northwest India, west Madhya Pradesh, the Bombay State, Telangana and Interior Mysore and normal over the rest of the country.

Mean relative humidity was in excess in the Punjab (I), west Rajasthan, Saurashtra and Kutch and south Mysore, in defect in Gangetic West Bengal, Chota Nagpur, Bihar and east Madhya Pradesh and normal elsewhere over the country.

Mean cloud amount was normal in the Bay Islands, east Uttar Pradesh, east Madhya Pradesh and Andhra Pradesh and in defect in northeast India. Over the rest of the country, it was in excess.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

POONA 5,
The 17th February, 1959.

S. S. LAL,
For *Director General of Observatories*.

Errata to M.W.R. November, 1957 (Kartika 10 - Agrahayana 9, 1879 Saka)

Page No.	Station	Hour	Column	For	Read
Table II					
550	Nandurbar		10	Blank	..
551	Masulipatam		12	+118.2	-118.2
551	Bidar		6	15,18,	15,18
552	(Foot Note)		-	Temporarily closed	*Temporarily closed
552	(Foot Note)		-	(R)Register not rec.ived	(R)Register not received
Table III					
557	Balasore	0830	13	7	17
558	Bolangir	1730	3	..	"
558	Purnia	0830	14	0.5	-0.5
558	(Foot Note)	-	-	(j) Mean of 22 days.	(j) Mean of 21 days.
560	Orai	1730	2[illegible]	11	1
560	Dehra Dun	0530	2[illegible]	Blank	0
561	Amritsar	0530	1[illegible]	7.7	1.7
561	Sri Ganganagar	0530	4	(Not clear)	1016.0
565	Bhuj (P.B.O.)	0830	8	17.6	17.5
565	Mandvi	0830	1[illegible]	2	0
566	Ratnagiri	0830	1	Ra nagiri	Ratnagiri
567	Kakinada	0830	12	+10	-10
568	(Heading)	-	13 and 14	C oud amount (Oktas)	Cloud amount (Oktas)
568	Ramagundam	0830	8	19.9	19.0
568	Anantapur	0530	20,21,22,23	0,3,14,4	3,14,4,0
569	Belgaum (C.T.O)	0830	5	193.4	931.4
571	Ootacamund	1730	5	780.5	780.0
573	Wallungchung Gola	1730	1[illegible]	+	..
572	Bagra Tawa	0830	2[illegible]	Blank	0

Page No.	Station	Time in I.S.T	Ht.in Km.	Entry under column	Existing entry	Correct entry
575	Anantapur	-	-	Date of opening	19 6	1946
575	Asansol	-	-	"	1912	1942
575	Bhubaneshwar	-	-	"	1912	1942
576	Amausi	0530	0.9	D[illegible]	30.	304
577	Anantapur	0530	3.6	V[illegible]	0.4	10.4
577	Asansol	1730	0.9	D[illegible]	20	320
577	"	"	3.6	V[illegible]	8.7	18.7
577	"	"	3.6	[illegible]	8.5	18.5
577	Beghdogra	2330	2.1	D[illegible]	2 3	243
578	Bairagarh	1730	Surface	D[illegible]	0	30
578	Bairagarh	2330	0.15 a.g.	V[illegible]	7.0	7.2
578	Bangalore	0530	3.6	V[illegible]	2 3	12.3
579	Begumpet	1730	1.5	V[illegible]	0.4	10.4
579	"	2330	0.9	V[illegible]	3.6	13.6
579	"	"	2.1	V[illegible]	1.2	11.2
579	Bhubaneshwar	1730	1.5	D[illegible]	374	347
580	Dum Dum	0530	4.5	D[illegible]	167	087
580	"	1130	0.15 a.g.	D[illegible]	3 6	346
581	Gannavaram	1730	6.0	V[illegible]	7.3	9.3
582	Gwalior	0530	0.15 a.g.	D[illegible]	3 0	340
585	Jamshedpur	1730	3.6	n[illegible]	3	13
585	Jharsuguda	0530	1.5	D[illegible]	3 7	347
584	"	1730	4.5	V[illegible]	6.3	16.3
584	"	2330	2.1	D[illegible]	3 8	348
584	"	"	3.6	V[illegible]	1.5	11.5
584	Jodhpur	0530	0.15 a.g.	D[illegible]	0 7	007
584	"	0530	5.4	D[illegible]	05	052

cont:2.

Page No.	Station	Time in I.S.T.	Ht.in Km.	Entry under column	Existing entry	Correct entry
584	Madras	1130	5.4	D	09	097
584	"	1130	7.2	D	96	096
584	"	2330	0.3 amsl	D	0 9	049
584	Madras	2330	3.0	D	88	088
584	Mangalore	0530	6.0	D	35	350
584	"	1730	2.1	V	4.3	14.3
584	"	1730	3.0	D	1 0	100
585	Mohanbari	0530	4.5	D	0 2	042
585	Mohanbari	0530	4.5	V	1.44	14.4
585	"	2330	0.15 a.g.	D	03	043
588	Tiruchirapalli	0530	0.15 a.g.	v	12.2	12.9
588	Trivandrum	0530	0.6	v	4.9	1.9
588	Udaipur	0530	Values of 1.5 and 2.1 km printed slightly below.			
589	Veraval	1130	2.1	v	.3	4.3
590	Amritsar	0530	21.0	V	50.0	50.5
590	Bamrauli	1130		Time of ascent	11 0	1130
590	Bangalore	1730		Ht. in km	1 .0	18.0
590.	Bhubaneshwar	0530		Ht. in km	0.5	10.5
590	Bhubaneshwar	0530	10.5	n	3	13
590	"	0530	10.5	V	38.0	38.9
590	"	0530		Ht. in km	14.8	14.1
590	Dum Dum	0530	14.1	V	15.7	51.7
590	"	0530	16.2	v	8.2	48.2
590	"	1130		Ht. in km	0 5	10.5
590	"	1130		Ht. in km	2.0	12.0
590	"	1730		Ht. in km	10 6	10.5
590	"	1730		Ht. in km	4 1	14.1
590	Gadag	1730	10.5	D	2 8	248
590	Dum Dum	1730	16.2	v	5 0	45.0
590	Gauhati	0530		Ht. in km	8.0	18.0
590	Gopalpur	Time of ascent			530	0530
590	Jodhpur	2330	Time of ascent		2330 hrs*	2330 hrs.
590	Nagpur	1130	Time of ascent		1130 hrs*	1130 hrs.
590	Nagpur	1730	Time of ascent		1730 hrs	1730 hrs*
590	New Delhi	0530	Ht. in km		21.1	21.0
590	New Delhi	1730	10.5	V	80.0	80.3
590	Poona	1730	Time of ascent		1730 hrs.*	1730 hrs.
591	Port Blair	0530	Time of ascent		0530 hrs.	0530 hrs.*
591	"	1130	12.0	n	4	1
591	Tiruchirapalli	0530	10.5	v	8.5	16.3
591	Veraval	0530	Time of ascent		053C hrs.	0530 hrs.*

Errata for RADIOSONDE DATA

594	Port Blair	00 GMT	500 mb	Max.	2 3	273
594	"	00 GMT	300 mb	Max.	2 9	249
594	"	00 GMT	250 mb	Max.	2 9	239
595	Visakhapatnam	00 GMT	250 mb	Ht.gpm.	1 953	10953
597	New Delhi	12 GMT	200 mb	Max.	222	223
597	Port Blair	12 GMT	3[illegible] mb	Ht.gpm	2 28	2028
597	"	12 GMT	7[illegible] mb	Ht.gpm	31 6	3146
597	Veraval	12 GMT	Surface	Mean	3 2.4	302.4
597	"	12 GMT	15 mb	Ht.gpm	14191	14194

TABLE I—DIVISIONAL AND SUB-DIVISIONAL MEANS—NOV., 1957 (KARTIKA 10—AGRAHAYANA 9, 1879 SAKA)

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity %		Cloud	
					0830 hrs. I.S.T.	1730 hrs. I.S.T.	0830 hrs. I.S.T.	1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur, Tripura)	15·3 —11·1	58	28·2 +1·3	16·9 +0·6	82 —2	75	2·1 —0·8	2·0
2. West Bengal	0 —18·6	0	29·4 +0·9	17·1 —0·1	64 —8	56	1·1 —0·7	1·1
3. Orissa	0·1 —50·1	0	30·2 +1·2	17·9 —0·4	67 —5	53	1·6 —0·8	2·6
4. Bihar	0 —11·2	0	29·6 +2·0	13·8 —0·8	60 —10	52	1·0 —0·5	1·3
5. Uttar Pradesh	2·4 —3·1	44	28·8 +0·6	13·1 +1·1	65 0	49	1·0 +0·2	1·3
6. Punjab (I) (including Himachal Pradesh and Delhi)†	13·5 +11·6	711	28·6 +0·1	11·9 +1·3	67 +11	47	1·1 +0·4	1·8
7. Jammu and Kashmir.	56·2 +49·8	88	14·3 —2·6	3·6 +1·5	62 —3	59	4·7 +2·8	4·5
8. Rajasthan	3·7 —0·4	90	31·0 +0·9	14·5 +2·0	56 +5	33	1·6 +0·8	2·0
Sub-Division								
1. Bay Islands	76·8 —190·4	29	30·9 +2·1	24·3 +1·2	75 —1	83	3·8 +0·2	4·9
2. Assam (Including Manipur, Tripura)	15·3 —11·1	58	28·2 +1·3	16·9 +0·6	82 —2	75	2·1 —0·8	2·0
3. Sub-Himalayan West Bengal.	0 —11·8	0	27·9 +0·1	16·3 +0·1	74 —2	57	0·6 —0·3	0·9
4. Gangetic West Bengal.	0 —21·2	0	29·8 +1·1	17·3 —0·2	62 —10	56	1·2 —0·7	1·2
5. Orissa	0·1 —50·0	0	30·2 +1·2	17·9 —0·4	67 —5	53	1·6 —0·8	2·6
6. Chota Nagpur	0 —14·2	0	29·4 +2·1	13·6 —0·6	57 —11	50	1·2 —0·6	1·1
7. Bihar	0 —9·8	0	29·9 +2·0	13·9 —0·9	62 —9	54	0·8 —0·3	1·1
8. Uttar Pradesh (East)	0 —6·2	0	29·3 +0·8	13·2 +0·7	64 —3	50	1·0 +0·1	1·1
9. Uttar Pradesh (West).	4·7 —0·1	98	28·3 +0·5	13·0 +1·6	66 +3	48	1·0 +0·3	1·5
10. Punjab(India) (Including Delhi).	13·5 +11·6	711	28·6 +0·1	11·9 +1·3	67 +11	47	1·1 +0·4	1·8
11. Himachal Pradesh	30·7 ..	..	24·9 ..	8·3 ..	91 ..	55	5·1 ..	2·9
12. Jammu and Kashmir.	56·2 +49·8	88	14·3 —2·6	3·6 +1·5	62 —3	59	4·7 +2·8	4·5
13. Rajasthan (West)	4·6 +3·5	418	31·0 +0·3	14·6 +2·4	54 +6	29	1·6 +0·7	1·7
14. Rajasthan (East)	2·9 —4·2	41	31·0 +1·4	14·3 +1·7	57 +5	35	1·7 +0·9	2·1
15. Madhya Pradesh (West)	1·2 —14·4	8	30·6 +1·7	15·1 +2·5	51 —5	35	2·4 +1·2	2·7

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity %		Cloud	
					0830 hrs. I.S.T.	1730 hrs. I.S.T.	0830 hrs. I.S.T.	1730 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division—*contd.*								
9. Madhya Pradesh	6·7 —14·7	5	30·3 +1·9	14·6 +1·8	54 —7	38	2·3 +0·8	2·8
10. Bombay	24·6 +1·3	106	32·2 +0·9	19·3 +2·0	63 +2	47	3·0 +1·3	3·4
11. Andhra Pradesh	45·0 —46·2	49	30·4 +0·7	20·2 +0·4	73 0	56	3·7 +0·3	4·1
12. Madras	286·3 +49·4	121	29·2 —0·5	22·8 +0·5	83 +1	74	5·6 +1·0	6·2
13. Mysore	71·5 +20·5	140	28·8 —0·2	19·3 +1·1	74 +5	53	4·6 +1·3	5·1
14. Kerala	166·3 +4·3	103	30·5 +0·3	24·0 +0·5	82 0	74	5·4 +1·0	6·5
Mean of India (Excluding Jammu & Kashmir and Himachal Pradesh).	30·7 —7·3	81	30·1 +0·9	16·7 +1·1	65 —1	49	2·5 +0·5	2·9
Sub-Division—*contd.*								
16. Madhya Pradesh (East).	0 —15·2	0	29·9 +2·3	14·0 +0·8	58 —11	42	2·1 +0·2	2·9
17. Gujarat	10·6 —1·5	88	34·3 +1·5	19·0 +3·2	58 —2	37	2·5 +1·3	2·4
18. Saurashtra & Kutch.	23·8 +20·1	643	32·6 +0·5	19·5 +2·4	61 +6	45	2·3 +1·2	2·3
19. Konkan	57·3 +15·1	136	32·3 +0·8	22·8 +1·3	69 +1	66	3·3 +1·0	4·1
20. Maharashtra	14·1 —14·3	50	30·7 +0·5	17·5 +1·9	65 +5	41	3·6 +1·5	4·3
21. Vidarbha	0 —17·7	0	31·5 +1·6	16·4 +1·1	58 —1	43	3·3 +1·3	4·1
22. Coastal Andhra Pradesh.	72·8 —67·1	52	30·2 +0·8	21·3 —0·1	75 0	65	4·0 +0·2	4·4
23. Telangana	0 —24·8	0	30·3 +0·9	17·7 +1·1	66 —1	41	3·2 +0·4	3·7
24. Rayalaseema	34·3 —25·7	57	31·3 +0·3	20·7 +0·7	76 +3	53	3·7 +0·3	3·9
25. Madras	286·3 +49·4	121	29·2 —0·5	22·8 +0·5	83 +1	74	5·6 +1·0	6·2
26. Coastal Mysore.	145·9 +85·0	240	32·1 +0·3	23·1 +0·7	77 +5	67	4·7 +0·9	4·9
27. Mysore (North).	29·6 —4·0	88	29·2 —0·2	19·0 +1·3	67 +3	45	4·1 +1·6	4·9
28. Mysore (South).	83·1 +17·0	126	27·3 —0·4	18·5 +1·1	82 +7	59	5·2 +1·1	5·5
29. Kerala(Including Laccadives).	166·3 +4·3	103	30·5 +0·3	24·0 +0·5	82 0	74	5·4 +1·0	6·5

NOTE.—The entries in the second line for each division and sub-division indicate departures from normal.

†Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																											
Maya Bandar	28·3	..	30·2	9	24·6	..	22·2	28	7·6	17·2	..	5·3	1	2	..	12·7	8·6	..	7	0	0	0	0	0	0	0	0	0
Long Island	30·9	..	31·7	12,13	23·6	..	22·5	23	16·8	63·5	..	28·9	1	5	..	2·4	1·4	..	6	0	0	0	0	0	0	0	0	0
Port Blair	30·9	+2·1	31·7	12	24·3	+1·2	22·2	23	35·2	76·8	—190·4	22·8	2	5	—8·6	11·1	9·2	—4·3	14	0	0	2	4	0	0	0	0	0
Car Nicobar	30·3	..	30·6	6	23·3	..	20·2	22	39·8	132·2	..	15·2	25	15	..	7·2	4·1	..	20	0	0	1	0	0	0	0	0	0
Nancowry	30·9	..	32·8	22	24·6	..	22·6	14	164·8	291·7	..	42·1	25	13	..	1·5	0·6	..	14	0	0	3	0	0	0	0	0	0
Kondul	29·3	..	30·6	3	24·4	..	23·3	15,25, 26	53·2	155·6	..	25·9	4	13	..	5·2	3·0	..	20	0	0	6	0	0	0	0	1	0
Assam (Including Manipur, Tripura)																												
Pasighat	26·7	..	28·9	18	16·7	..	14·3	24	10·2	17·0	..	6·3	30	4	..	6·8	11·3 (a)	..	5	0	0	0	0	0	0	0	0	0
Digboi	27 0	..	28·9	3	15·6	..	13·3	17	3·1	25·4	..	10·2	22,30	4	..	1·9 (a)	2·2 (a)	..	4	0	0	0	7	0	0	0	0	0
Dibrugarh	28·1	+1·7	29·9	3,11	16·5	+0·9	14·4	29	10·9	38·9	+5·4	23·9	30	2	—0·5	1·4	1·0	0	2	0	0	2	1	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	27·0	..	28·8	21	14·9	..	12·3	8	24·4	47·3	..	31·8	30	2	..	3·8	2·3	..	4	0	0	3	13	0	0	0	0	0
North Lakhimpur	27·3	..	28·9	3	14·7	..	12·0	28	17·5	49·1	..	45·7	30	1	..	..	..	..	5	0	0	1	0	0	0	0	0	0
Sibsagar	27·5	+1·9	31·1	13	16·4	+1·0	12·3	30	4·6	54·1	+23·1	25·9	22	3	+0·7	0·7	0·3	—1·5	5	0	0	0	0	0	0	0	0	0
Jorhat	26·9	..	28·8	3,21	15·9	..	14·4	11	7·1	38·6	..	18·5	22	3	..	..	..	..	6	0	1	3	22	0	0	0	0	0
Golaghat	27·2	..	28·9	4 days	..	..	..	..	5·1	13·0	..	5·1	23	3	..	..	..	..	4	0	0	0	0	0	0	0	0	0
Gohpur (R)																												
Tezpur	28·2	+1·0	30·2	21	17·3	+0·9	15·6	29	0	10·5	—12·4	7·4	22	1	—0·8	0·4	0·2	—2·2	4	0	0	0	0	0	0	0	0	0
Tezpur (P.B.O.)	27·4	..	29·3	22	16·6	..	14·6	29	0	8·9	..	6·1	22	1	..	4·0	1·9	..	4	0	0	0	3	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	6·3	12·5	..	10·7	6	1	..	4·6	2·9	..	2	0	0	0	0	0	0	0	0	0
Chaparmukh (R)																												
Tangla	28·2	..	31·3	15	15·6	..	13·7	24,25	12·7	3·1	..	3·1	6	1	..	5·0	2·8	..	1	0	0	0	0	0	0	0	0	0
Gauhati	28·1	+0·7	29·4	21	17·8	+1·5	15·7	25	0	3·8	—10·2	2·8	1	1	—0·2	3·9	1·8	0	2	0	0	0	4	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	28·2	..	32·5	3	16·2	..	14·2	25	0	0	..	0	..	0	..	5·0	2·6	..	0	0	0	2	16	0	0	0	0	0
Rangiya	29·5	..	32·8	10	..	..	..	..	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Goalpara	29·7	..	31·2	21	16·7	..	14·7	29	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Dhubri	27·4	+1·1	29·1	23	19·0	+1·2	17·1	28	0	0	—10·2	0	..	0	—0·7	4·3	4·1	—2·3	0	0	0	0	2	0	0	0	0	0
Dhubri (Rupsi Aerodrome)	28·6	..	29·8	1,15	16·3	..	14·9	29	0	3·8	..	3·8	30	1	..	4·4	2·6	..	1	0	0	0	3	0	0	0	0	0
Tura	21·3	..	29·2	20	16·7	..	15·4	28	0	0	..	0	..	0	..	2·6	3·2	..	0	0	0	0	0	0	0	0	0	0
Agartala	29·2	..	30·6	20	14·8	..	11·4	7	0	0	..	0	..	0	..	6·2	3·1	..	0	0	0	0	4	0	0	0	0	0
Silchar	29·5	+0·1	31·8	21	16·6	—0·9	14·3	29	0	0	—44·5	0	..	0	—2·1	1·1	0·9	—0·7	0	0	0	0	0	0	0	0	0	0
Silchar (Kumbhigram Aerodrome)	30·0	..	31·8	20,21	15·8	..	12·8	29	0	0	..	0	..	0	..	4·9	7·3	..	0	0	0	0	0	0	0	0	0	0
Imphal	24·7	..	26·3	4	8·4	..	5·6	29	0	0	..	0	..	0	..	5·5	3·0	..	0	0	0	0	9	0	0	0	0	0
Haflong	24·9	..	26·1	10,18, 21	14·3	..	12·9	29	0	0	..	0	..	0	..	..	..	..	0	0	0	0	1	0	0	0	0	0
Lumding	28·7	+2·5	29·9	6	14·7	—0·7	12·5	30	0	0	—29 2	0	..	0	—1·9	2·3	1·9	..	0	0	0	0	3	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar (C.W.O.)	28·8	..	30·2	19	15·4	..	13·6	29	0	0	—11·4	0	..	0	—0·8	4·0 (b)	1·8	..	0	0	0	0	15	0	0	0	0	0
Jalpaiguri	26·5	—1·3	28·3	19	16·9	+0·9	15·3	30	0	0	—12·5	0	..	0	—0·8	4·6	3·4	+1·8	0	0	0	0	0	0	0	0	0	0
Bagdogra	28·3	..	30·2	20	14·4	..	12·3	27	0	0	..	0	..	0	..	4·8	4·0	..	0	0	0	0	0	0	0	0	0	0
Malda	29·3	+1·4	31·1	3,5	15·6	—0·6	12·1	30	0	0	—11·4	0	..	0	—0·7	5·5	3·3	—0·6	0	0	0	0	0	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	30·3	..	31·3	5,23	16·7	..	13·2	29	0	0	..	0	..	0	..	5·3	2·9	..	0	0	0	0	0	0	0	0	0	0
Calcutta	30·6	+1·6	32·0	15	17·5	—0·1	14·7	29,30	0	0	—20·6	0	..	0	—1·1	4·3	2·1	—1·0	0	0	0	0	8	0	0	0	0	0
Barrackpore	29·7	..	30·8	4	16·3	..	12·8	29	0	0	..	0	..	0	..	..	..	..	0	0	0	0	1	0	0	0	0	0
Saugor Island	28·8	+0·9	30·3	5	21·1	+1·4	16·4	29	0	0	—32·5	0	..	0	—1·3	..	..	..	0	0	0	0	0	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	0	1·3	—68·6	1·3	1	0	—2·5	..	..	..	1	0	0	0	0	0	0	0	0	0
Contai	30·4	..	31·7	5,15	18·3	..	15·0	30	0	0	..	0	..	0	..	5·6	3·2	..	0	0	0	0	0	0	0	0	0	0
Midnapore	30·3	+1·2	32·3	4	16·6	—0·8	13·9	8,30	0	0	—22·1	0	..	0	—1·1	4·7	3·5	+1·4	0	0	0	0	0	0	0	0	0	0
Purulia	29·7	..	31·8	4	16·1	..	13·7	30	0	0	..	0	..	0	..	4·5	3·0	..	0	0	0	0	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	0	—16·5	0	..	0	—1·1	..	..	..	0	..	..	..	..	..	..	..	..	..
Burdwan	26·5	—2·3	32·7	2,3	17·1	—0·6	14·2	29,30	0	0	—21·8	0	..	0	—1·0	3·1	2·3	+0·4	0	0	0	0	0	0	0	0	0	0
Krishnagar	32·0	+2·9	34·0	5	16·0	—0·8	12·8	29,30	0	0	—24·9	0	..	0	—1·2	4·8	3·6	+1·7	0	0	0	0	0	0	0	0	0	0
Asansol	30·3	+1·5	32.2	3,4,5	15·6	0	13·3	30	0	0	—14·5	0	..	0	—1·0	7·3	5·2	+0·2	0	0	0	0	0	0	0	0	0	0
Suri	29·6	..	31·4	6	16·4	..	13·0	27	0	0	..	0	..	0	..	6·4	4·7	..	0	0	0	0	0	0	0	0	0	0

(a) Mean of 30 days. (b) Mean of 29 days, (R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with										
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Gangetic West Bengal—*Contd.*																												
Berhampore	30·4	+2·2	32·4	4	17·1	−0·5	13·9	30	0	0	−16·5	0	..	0	−0·7	0·3	0	−1·6	0	0	0	0	0	0	0	0	0	0
Orissa																												
Baripada	31·4	..	33·3	4	..	..	..	..	0	0	..	0	..	0	..	2·8	1·3	..	0	0	0	0	0	0	0	0	0	0
Balasore	30·0	+0·9	32·5	5	17·2	−0·1	14·5	30	0	0	−38·1	0	..	0	−1·5	6·6	5·4	+0·8	0	0	0	0	0	0	0	0	0	0
Chandbali	27·4	−1·5	31·1	5	17·5	−1·1	14·7	30	0	0	−41·9	0	..	0	−1·5	6·4	4·3	−0·8	0	0	0	0	0	0	0	0	0	0
Cuttack	31·8	+2·4	33·4	14,15	19·0	+0·2	16·1	29,30	0	0	−41·1	0	..	0	−1·6	3·5	2·7	+0·8	0	0	0	0	0	0	0	0	0	0
Bhubaneswar	31·0	..	32·8	15	18·4	..	16·1	29	0	0	..	0	..	0	..	6·4	6·3	..	0	0	0	0	1	0	0	0	0	0
Puri	30·7	+1·5	32·3	7,16	20·9	+0·2	18·3	29	0	0	−81·0	0	..	0	−2·4	11·3	10·0	+0·8	0	0	0	0	0	0	0	0	0	0
Gopalpur	31·1	+2·2	33·5	15	19·1	−0·5	16·9	28,30	0	0·5	−99·3	0·5	1	0	−2·8	..	..	..	1	0	0	0	0	0	0	0	0	0
Koraput	26·7	..	28·9	16	14·1	..	11·1	27,28	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Titilagarh	28·7	..	30·1	14, 16,23	16·1	..	13·3	29	0	0	..	0	..	0	..	3·3	1·6	..	0	0	0	0	3	0	0	0	0	0
Bolangir*	30·4	..	..	..	14·7	..	..	..	0	0	..	..	..	..	..	5·0	1·0	..	..	..	..	..	..	..	..	..	..	..
Angul	30·1	+1·3	32·2	16	16·4	−0·4	14·4	18	0	0	−28·2	0	..	0	−1·4	4·9	4·0	−0·8	0	0	0	0	1	0	0	0	0	0
Keonjhar	28·7	..	29·9	4,5,6	15·0	..	11·7	28	0	0	..	0	..	0	..	5·3	3·5	..	0	0	0	0	0	0	0	0	0	0
Sambalpur	30·1	+1·3	32·8	5	15·4	−0·9	11·8	30	0	0	−20·6	0	..	0	−1·0	1·0	0·2	−3·2	0	0	0	0	14	0	0	0	0	0
Jharsuguda	30·7	..	33·1	6	15·1	..	11·6	30	0	0	..	0	..	0	..	6·1	4·8	..	0	0	0	0	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	30·3	+0·9	32·7	5	14·8	−0·2	12·2	30	0	0	−9·4	0	..	0	−0·7	4·7	3·1	+0·5	0	0	0	0	0	0	0	0	0	0
Jamshedpur(P.B.O)	30·0	..	32·3	4	14·3	..	11·8	30	0	0	..	0	..	0	..	5·9	3·0	..	0	0	0	0	0	0	0	0	0	0
Chaibasa	30·2	+1·9	32·2	4,15	14·6	−0·8	10·1	28	0	0	−17·8	0	..	0	−1·0	2·4	1·6	−0·3	0	0	0	0	0	0	0	0	0	0
Ranchi	28·9	+3·6	30·6	3,4	13·5	−0·5	10·1	18	0	0	−15·5	0	..	0	−1·0	6·9	5·9	+1·6	0	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	26·6	..	28·6	3,4	13·5	..	11·2	30	0	0	..	0	..	0	..	(k) 11·4	8·8	..	0	0	0	0	0	0	0	0	0	0
Daltonganj	29·7	+1·7	33·1	3	12·2	−0·2	9·8	26,27	0	0	−14·2	0	..	0	0·8	3·7	2·2	−0·2	0	0	0	0	0	0	0	0	0	0
Hazaribagh	27·7	+2·4	30·0	3	12·9	−1·1	9·5	30	0	0	−14·2	0	..	0	0·9	9·9	5·8	−1·1	0	0	0	0	0	0	0	0	0	0
Dhanbad	29·7	..	32·2	5	16·8	..	14·3	7	0	0	..	0	..	0	..	6·5	4·8	..	0	0	0	0	18	0	0	0	0	0
Bihar																												
Purnea	30·1	+2·1	32·7	4	13·0	−1·8	9·2	24	0	0	−8·6	0	..	0	−0·5	4·2	1·8	+0·2	0	0	0	0	0	0	0	0	0	0
Forbesganj	30·9	..	32·3	5 days	13·5	.	10·6	7,30	0	0	..	0	..	0	..	4·1	2·7	..	0	0	0	0	17	0	0	0	0	0
Darbhanga	29·9	+1·6	32·2	4	15·2	−0·1	11·3	29	0	0	−6·9	0	..	0	−0·4	0·2	0	−1·4	0	0	0	0	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	0	−7·4	0	..	0	−0·5	..	.	..	0	..	..	..	..	..	..	.	..	..
Chapra	..	..	..	..	..	..	..	..	..	0	−9·1	0	..	0	−0·5	..	.	..	0	..	..	.	.	..	..	..	..	..
Arrah	..	..	..	..	.	..	..	..	..	0	−9·4	0	..	0	−0·6	..	.	..	0	..	..	..	.	..	..	..	..	..
Patna	29·7	+1·9	33·1	3	15·5	−0·6	12·8	30	0	0	−8·6	0	..	0	−0·5	3·8	3·6	+1·2	0	0	0	0	0	0	0	0	0	0
Patna (Aerodrome)	29·4	..	31·9	3	13·6	..	10·8	7	0	0	..	0	..	0	..	6·2	2·7	.	0	0	0	0	0	0	0	0	0	0
Dehri	29·7	..	32·8	3	14·8	..	12·1	24	0	0	−11·7	0	..	0	0·7	5·4	3·3	..	0	0	0	0	0	0	0	0	0	0
Gaya	29·6	+2·2	32·6	3	12·9	−1·0	9·9	30	0	0	−12·5	0	..	0	−0·7	4·3	1·7	−3·0	0	0	0	0	0	0	0	0	0	0
Jamui	30·3	..	33·8	3	14·1	..	11·5	30	0	0	..	0	..	0	..	4·9	2·4	..	0	0	0	0	0	0	0	0	0	0
Dumka	29·6	+1·6	32·3	4	14·1	−1·2	11·3	30	0	0	−13·7	0	..	0	−0·8	0·2	0·1	−1·7	0	0	0	0	0	0	0	0	0	0
Bhagalpur	30·7	..	33·0	4	16·4	..	13·6	30	0	0	..	0	..	0	..	4·8	3·1	..	0	0	0	0	0	0	0	0	0	0
Sabour	30·3	+2·4	33·4	4	12·9	−0·9	9·4	30	0	0	−9·7	0	..	0	−0·7	6·2	3·0	−1·0	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh(East)																												
Gonda	28·8	+0·1	31·0	2,3	12·0	−0·7	8·0	29	0	0	−5·1	0	..	0	−0·5	3·3	2·5	−0·2	0	0	0	0	0	0	0	0	0	0
Nautanwa	30·1	..	32·3	4, 20	13·6	..	11·1	6	0	0	..	0	..	0	..	2·9	1·6	..	0	0	0	0	0	0	0	0	0	0
Gorakhpur	29·2	+1·4	32·2	4	14·6	+0·5	11·2	7	0	0	−4·8	0	..	0	−0·3	2·5	1·1	−0·2	0	0	0	0	0	0	0	0	0	0
Azamgarh	30·1	..	33·5	3	13·3	..	10·1	29	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ballia	29·9	..	32·8	3,4	..	..	..	..	0	0	..	0	..	0	..	4·7	2·2	..	0	0	0	0	0	0	0	0	0	0
Varanasi (Banaras)	29·3	+1·0	32·9	3	13·7	+0·4	10·6	25	0	0	−9·4	0	..	0	−0·6	4·9	2·6	0	0	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome)	29·1	..	32·7	4	13·2	..	10·3	24,25	0	0	..	0	..	0	..	9·8	5·6	..	0	0	0	0	0	0	0	0	0	0
Allahabad (Bamrauli)	30·2	+1·6	34·1	2,4	13·9	+1·5	10·7	20	0	0	−7·9	0	..	0	−0·5	4·9	2·4	−0·3	0	0	0	0	0	0	0	0	0	0
Banda	30·8	..	35·0	3,4	14·0	..	11·1	24	0	0	..	0	..	0	..	0·3	0	..	0	0	0	0	0	0	0	0	0	0
Fatehpur	28·5	−0·9	32·3	2,10	13·1	+0·5	9·6	23	0	0	−2·3	0	..	0	−0·4	5·8	2·5	+0·1	0	0	0	0	0	0	0	0	0	0
Kanpur	29·6	+1·4	33·8	2	13·5	+1·3	10·2	18	0	0	−8·9	0	..	0	−0·4	11·4	5·8	+1·8	0	0	0	0	0	0	0	0	0	0
Lucknow	29·2	+0·4	32·8	3	13·2	+0·9	9·1	29	0	0	−5·6	0	..	0	−0·4	..	..	..	0	0	0	0	0	0	0	0	0	0

*Observations for 18 days.

(k) Mean of 20 days.

(R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (East)—*Contd.*																												
Lucknow (Amausi Aerodrome)	29·2	+1·1	33·1	2	11·3	+0·9	8·0	29	0	0	—5·6	0	..	0	—0·4	8·7	4·9	..	0	0	0	0	0	0	0	0	0	0
Hardoi	29·1	..	33·3	2	13·0	..	9·9	30	0	0	..	0	..	0	..	6·1	3·7	..	0	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri	28.4	..	35.3	27	12.9	..	10 6	30	0	1·0	..	1·0	21	0	..	3·2	1·6	..	1	0	0	1	0	0	0	0	0	0
Bahraich	25.4	−2.9	30.3	1	12.8	−0.6	9.1	30	0	0	—7.1	0	..	0	—0·5	3·5	1·8	—0·1	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh (West)																												
Orai	30·0	..	33·9	2,3,4	..	..	..	..	0	0	..	0	..	0	..	5·4	3·9	..	0	0	0	0	0	0	0	0	0	0
Jhansi	30·6	+0·9	35·6	3	14.8	+2·1	11·1	23	0	0	—7·4	0	..	0	—0·5	3·1	2·1	—0·6	0	0	0	0	0	0	0	0	0	0
Agra	29·4	+0·3	33·9	1	13·6	+2·5	10·4	17	0	4·3	+0·7	4·3	21	1	+0·7	4·1	2·3	—1·1	1	0	0	1	0	0	0	0	0	0
Agra (Aerodrome) (R)																												
Mainpuri	30·6	+1·4	35·0	3	13·5	+1·7	9·6	28	0	0	—3·3	0	..	0	—0·3	1·2	0·8	—0·6	0	0	0	0	0	0	0	0	0	0
Aligarh	29·0	+0·3	33·7	3	12·9	+0·6	8·7	28	0	0	−0·8	0	..	0	—0·1	6·4	5 1	+0·4	0	0	0	1	0	0	0	0	0	0
Bareilly	28·1	+0·5	30·9	3	13·5	+1·6	10·6	29,30	0	2·5	—2·1	2·5	21	1	+0·7	6·3	3·6	+2·3	1	0	0	1	3	0	0	0	0	0
Meerut	28.0	+0·4	32·2	3	12·4	+1·9	9·1	29	..	5·1	+1·8	5·1	21	1	+0·7	..	3 9	..	1	0	0	0	0	0	0	0	0	0
Najibabad	27·1	..	30·1	4	11·3	..	8·1	30	0	9·7	..	9·7	21	1	..	2·0	1·1	..	1	0	0	1	1	0	0	0	0	0
Roorkee	26·4	0	30.0	4	11.7	+1.9	8.9	28	0.5	8 1	+2 3	7.6	21	1	+0·5	4.5	2·7	+1.1	2	0	0	2	0	0	0	0	0	0
Dehra Dun	24·5	+0·4	28·2	3	11·4	+0·8	9·3	22,30	0	17·8	+8·9	17·8	21	1	+0·3	2·5	2·7	−0·2	1	0	0	2	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
New Delhi	28·4	−0·4	32·3	3	13·3	+1·9	8·4	30	8·9	10·2	+7·7	10·2	21	1	+0·7	10·4	7·2	+0·1	1	0	0	1	2	0	0	0	0	0
Hissar	29·2	+0·1	33·6	8	11·2	+1·3	6·7	29	1·0	6·9	+5·4	5·6	21	1	+0·8	4·9	4·6	+0·3	2	0	0	1	1	0	0	0	0	0
Karnal	27·0	..	33·4	12	11·8	..	7·2	30	0	7·9	..	7·9	21	1	..	0.4	0·2	..	1	0	0	2	0	0	0	0	0	0
Patiala	27·7	..	31·1	1,14	11·6	..	7·6	29	4·6	11·4	+11·1	11·4	21	1	+1·0	8·6	6·7	..	1	0	0	0	0	0	0	0	0	0
Ambala	25·6	−2·2	35·2	12	12·1	+2·2	8·8	30	0	15·2	+10·4	15·2	21	1	+0·6	5·8	6·2	+3·3	1	0	0	0	0	0	0	0	0	0
Ambala (Aerodrome) (R)																												
Chandigarh	27·9	..	32·0	5	12·5	..	4·4	30	0	13·5	..	13·5	21	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Ludhiana	28.1	+0.7	32.3	14	11·2	+0·6	7·7	30	25·4	25·4	+22·1	25·4	21	1	+0 6	3·4	2·3	+1·0	1	0	0	0	0	0	0	0	0	0
Ferozepur	26·7	..	31·6	8	11·0	..	6·2	29	2·5	2·5	..	2·5	21	1	..	2·4	1 6	..	1	0	0	0	2	0	0	0	0	0
Amritsar	25·6	..	30·2	1	9·3	..	4·2	29,30	2·8	3·3	..	2·8	21	1	..	7·6	5·3	..	2	0	0	2	3	0	0	0	1	0
Pathankot	25·7	..	30·6	14	12·2	..	9.4	30	14·7	28·6	..	19·5	21	2	..	3·2	2·7	..	3	0	0	0	0	0	0	0	0	0
Pathankot (Aerodrome) (R)																												
Himachal Pradesh																												
Bilaspur	25·7	..	29·0	9,14	9·2	..	7 0	5 days	1·3	34·8	..	34·8	21	1	..	3·1	2·4	..	1	0	0	1	23	0	0	0	0	0
Mandi	24·2	..	27·3	10	7·5	..	4·7	30	4·8	26·7	.	26·4	21	1	..	2·4	2·2	..	2	0	0	2	12	0	0	0	0	0
Jammu and Kashmir.																												
Srinagar	10·5	−6·4	15·1	5	3·3	+3·9	0·6	25	44·5	102·1	+90·9	39·8	25	7	+5·9	5·1	4·6	+1·7	11	0	0	0	2	0	1	0	0	0
Gulmarg	3·0	..	7·3	20	−3·7	..	−7·2	28	115·2	309·6	..	76·2	25	13	..	..	..	..	13	10	0	4	13	0	11	0	0	0
Sonamarg*																												
Dras	..	..	..	..	..	..	..	..	..	318·8	+306·3	76·2	15	11	+9·5	..	..	..	11	..	..	..	..	..	..	..	..	..	..
Kargil	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..	..
Leh	6·6	−1·6	10·1	21	−5·8	+0·6	−11·3	30	1·3	2·1	+1·1	1·3	26	0	−0·2	(b) 8·3	(b) 4·7	+1·6	2	2	0	0	0	0	0	0	0	0
Skardu (R)																												
Gurez (R)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	25·7	+0·1	30·1	10	13·4	0	10·0	25,30	..	64·4	+57·3	31·5	25	5	+4·4	..	..	..	5	0	0	0	0	0	0	0	0	0
Gund*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pandras	..	..	..	..	..	..	..	..	..	32·3	..	7·6	25	5	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Khangral	..	..	..	..	..	..	..	..	..	5·4	..	0·8	15,25	0	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	7·4	..	2·5	17	1	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Khalatse	..	..	..	..	..	..	..	..	..	10·9	..	4·6	18	1	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Mulbik	..	..	..	..	..	..	..	..	..	12·8	..	4·5	4	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	28·7	−0·5	34·6	1	12·5	+3·7	7·7	29,30	1·5	1·5	+1·2	1·5	21	0	0	2·6	1·6	−4·0	1	0	0	0	3	0	0	0	0	0
Churu	29·5	..	35·1	2	11·4	..	5·2	28,30	7·6	7·6	..	7·6	21	1	..	7·3	4·4	..	1	0	0	1	1	0	0	0	0	0

(R) Register not received. (b) Mean of 29 days. *Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (West)—*Contd.*																												
Bikaner	30·3	−0·6	34·9	1	11·9	+1·2	4·4	28	0	0.8	−0·5	0·8	20	0	−0·1	5·1	3·8	−0·2	1	0	0	1	2	0	0	0	0	0
Jaisalmer	31·5	..	36.7	1	15.5	..	9.5	29	0	22·1	..	22.1	18	1	..	9·6	7.3	..	1	0	0	0	0	0	0	0	0	0
Phalodi	29·7	..	35·3	1	15·4	..	8·4	30	0	13·5	+13·0	13·5	18	1	+0·9	9·6	7·6	..	1	0	0	0	0	0	0	0	0	0
Jodhpur	32·4	+1·5	37·2	2	16·6	+3·4	11·0	30	0	5·1	+2·3	5·1	18	1	+0·8	7·3	7·0	−0.2	1	0	0	1	0	0	0	0	0	0
Barmer	32·7	+0·8	38·2	2	17·5	+1·4	12·8	30	0	2.3	+1·5	2·3	18	0	−0·2	8·3	7.0	+1·2	1	0	0	2	0	0	0	0	0	0
Rajasthan (East)																												
Alwar	29.5	..	35·0	2	..	..	..	..	0	3·1	..	3·1	21	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Sikar	29·6	..	34·2	2	11·6	..	4·4	30	0	0	..	0	..	0	..	4·7	3·3	..	0	0	0	0	0	0	0	0	0	0
Jaipur	30·5	+0·8	34·3	2	13·9	+1·8	10·0	30	0	0	−3·6	0	..	0	−0·3	5·4	3·6	−0·9	0	0	0	1	0	0	0	0	0	0
Jaipur (Sanganer Aerodrome)	29.9	..	34.0	2	14·1	..	10·0	30	6.9	6.9	..	6.9	21	1	..	..	..	..	1	0	0	1	0	0	0	0	0	0
Dholpur	30·9	..	35.0	2,28	12.7	..	9·4	11	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Ajmer	29·8	+1·1	34.1	2	12·4	+0.9	9.4	23	0	0	−4·8	0	..	0	−0·4	5.4	3·6	+1·7	0	0	0	0	0	0	0	0	0	0
Kotah	32·4	+2·0	36·4	2	16·9	+1·8	12·9	24	0	0	−5·8	0	..	0	−0·6	3·1	2·0	+0·4	0	0	0	0	0	0	0	0	0	0
Chambal	31·8	..	37·2	6	13·5	..	8.7	23	1·0	1·0	..	1·0	14	0	..	5·9	3·5	.	1	0	0	0	0	0	0	0	0	0
Jhalawar	31·8	+2·5	35·2	3	15·1	+3·0	11·4	24	0	0.8	−17·7	0·8	13	3	−1·1	4·7	2·6	+0·7	1	0	0	0	0	0	0	0	0	0
Udaipur	30·4	+0·7	34·4	2	13·3	+1·0	9·3	30	2.5	13·5	+10·7	9·7	13	2	+1·7	2·1	1·2	..	3	0	0	0	0	0	0	0	0	0
Erinpura (Jawai Dam)	31·2	..	34·7	1	17·3	..	10·1	30	0	1·3	..	0·8	17	0	..	4·2	3·9	..	2	0	0	0	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	30·2	+0·6	34·8	2	12·4	+1·8	8·3	23	0	0	−3·6	0	..	0	−0·4	6·4	4·1	..	0	0	0	0	0	0	0	0	0	0
Sheopur Kalan	31·5	..	37·3	3	13·2	..	9·9	23	0	10.4	..	10·4	21	1	..	6·0	4·6	.	1	0	0	0	0	0	0	0	0	0
Guna	29·8	+1·0	32·9	4	13·5	+2·9	7.6	23	0	0	−22·1	0	..	0	−0·8	7·4	4·1	..	0	0	0	0	1	0	0	0	0	0
Rajgarh	31·8	..	34·6	21	14·4	..	9.7	23	0	0	..	0	..	0	..	6·7	4·6	..	0	0	0	0	0	0	0	0	0	0
Neemuch	30·9	+1·7	33·9	3	16·0	+3·2	11·6	23	0	0	−7·9	0	..	0	−0·4	6·1	4·6	−0·7	0	0	0	0	0	0	0	0	0	0
Ratlam	31·9	..	34·1	2	17·1	..	13·9	29	0	0	..	0	..	0	..	4·3	3·4	..	0	0	0	0	0	0	0	0	0	0
Alirajpur	32·9	..	35·4	17,18	16·9	..	12·8	30	0	6·2	..	3·1	18	1	..	5·6	3·0	..	3	0	0	1	0	0	0	0	0	0
Indore	30·2	+1·1	32·7	21	15·6	+3·6	11·7	30	0	10·6	−4·9	10·0	14	1	+0·1	8·2	5·6	..	2	0	0	0	0	0	0	0	0	0
Bhopal (Bairagarh)	30·1	+1·7	32·2	2,3,4	15·9	+3·2	12·3	23	0	0	−25·7	0	..	0	−1·2	5·3	3·5	−2·5	0	0	0	0	0	0	0	0	0	0
Khandwa	33·7	+2·7	35·8	17	17·5	+3·9	13·4	28	0·3	1·0	−18·3	0·5	13,14	0	−1·0	5·2	3·2	−0·5	2	0	0	0	0	0	0	0	0	0
Hoshangabad	31.4	+2·2	33·3	1,4	18·2	+3·5	13·9	2	0	0	−17·0	0	..	0	−0·9	1·3	(b) 0·7	−1·9	0	0	0	0	0	0	0	0	0	0
Betul	29·7	..	31·3	17	14·5	..	10·9	27	0	0	..	0	..	0	..	6·6	4·4	..	0	0	0	0	0	0	0	0	0	0
Chhindwara	29·1	..	31·1	18	13·4	..	9·9	27	0	0	..	0	..	0	..	5·7	3·5	..	0	0	0	0	0	0	0	0	0	0
Seoni	29·6	+2·2	31·7	22	14·9	+2·0	11·2	28	0	0	−17·3	0	..	0	−1·0	4·2	2·1	−1·4	0	0	0	0	0	0	0	0	0	0
Sagar	29·8	+1·7	32·7	3	17·2	+2·2	13·8	23,30	0	0	−16·0	0	..	0	−0·9	6·4	5·2	..	0	0	0	0	0	0	0	0	0	0
Nowgong	30·2	+2·0	34·5	3	..	..	..	..	0	0	−10·9	0	..	0	−0·7	4·0	2·0	+0·7	0	0	0	0	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	30·5	+2·8	35·5	2	12·8	+0·5	9·3	25	0	0	−8·9	0	..	0	−0·7	5·1	2·8	+0·1	0	0	0	0	0	0	0	0	0	0
Umaria	29·9	+2·4	32·9	3	11·7	+0·5	8·2	24	0	0	−16·3	0	..	0	−0·7	4·1	2·4	0	0	0	0	0	0	0	0	0	0	0
Jabalpur	31·2	+3·3	33·7	3,4	13·4	+2·1	9·4	26	0	0	−10·9	0	..	0	−0·9	4·9	2·8	+0·9	0	0	0	0	0	0	0	0	0	0
Mandla	29·8	..	32·2	4	11·9	..	7·4	26	0	0	..	0	..	0	..	3·6	1·6	..	0	0	0	0	0	0	0	0	0	0
Pendra	27·9	+2·6	30·5	3	14·3	+1·4	10·5	24	0	0	−18·3	0	..	0	−1	7·7	4·8	..	0	0	0	0	0	0	0	0	0	0
Ambikapur	27·2	..	29·6	3	10·5	..	8·1	24	0	0	..	0	..	0	..	9·1	5·9	..	0	0	0	0	0	0	0	0	0	0
Champa	30·6	..	32·9	16	16·4	..	13·8	30	0	0	..	0	..	0	..	4·0	3·3	..	0	0	0	0	0	0	0	0	0	0
Raigarh	31·3	..	33·1	5	16·2	..	12·8	30	0	0	..	0	..	0	..	4·1	3·2	..	0	0	0	0	0	0	0	0	0	0
Raipur	30·4	+1·7	32·2	14	16·9	+1·0	13·9	27	0	0	−13·5	0	..	0	−1·1	4·8	3·3	+0·1	0	0	0	0	0	0	0	0	0	0
Kanker	29·5	+1·2	31·6	15,16	14·1	+0·2	11·1	28	0	0	−9·7	0	..	0	−0·8	1·7	0·8	−2·3	0	0	0	0	0	0	0	0	0	0
Jagdalpur (P.B.O.)	29·6	+1·9	31·4	17	14·7	−0·3	11·6	28	0	0	−29·0	0	..	0	−1·9	5·4	2·5	..	0	0	0	0	1	0	0	0	0	0
Gujarat																												
Deesa.	33·7	..	37·6	2	17·0	..	13·2	8	0	6·9	..	4·1	17	2	..	9·0	7·2	..	2	0	0	1	0	0	0	0	0	0
Idar	33·6	..	36·7	2	20·4	..	15·2	1,2	0	1·3	..	1·3	18	0	..	8·0	7·2	..	1	0	0	1	0	0	0	0	0	0
Ahmedabad	34·2	+0·9	36·9	2	18·7	+2·6	13·3	30	4·3	17·3	+13·7	6·9	18	3	+2·6	7·6	5·0	+1.1	3	0	0	3	0	0	0	0	2	0
Dohad	32·1	+0·4	34·4	18	18·4	+3·8	15·6	24	0	13·0	−3·5	10·2	18	2	+1·1	8·1	7·0	+2·8	2	0	0	1	0	1	0	0	0	0
Baroda	34·9	+1.8	37·8	18	17·6	+3·5	13.4	30	0	11·7	−8·6	11·7	18	1	−0·5	3·1	2·4	−0·3	1	0	0	2	0	1	0	0	0	0
Baroda (Aerodrome)	34·7	..	37 4	18	19·1	..	14·6	30	0	16·8	..	16·8	18	1	..	7·8	5·7	..	1	0	0	2	0	0	0	0	0	0
Broach	36·4	..	38·9	18,20	19·8	..	14·5	23	0	0	..	0	..	0	..	5·5	4·1	..	0	0	0	0	0	0	0	0	0	0
Surat	36.2	+2·9	39·3	20	21·3	+3·0	17·4	23	0	0·3	−7·8	0·3	11	0	−0·5	8·0	6·8	+2.3	1	0	0	0	0	0	0	0	0	0

(b)—Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Saurashtra & Kutch																												
Bhuj (P.B.O.)	33·0	+0·9	37·9	2	18·3	+1·6	12·4	30	4·1	9·0	+7·0	4·6	15	2	+1·8	7·9	4·5	—1·0	3	0	0	2	0	0	0	0	0	0
Bhuj (Aerodrome)	32·9	..	37·2	1	18·0	..	11·7	30	2·9	4·7	..	2·0	16	0	..	11·6	7·4	..	5	0	0	2	0	0	0	0	0	0
Kandla	32·4	..	37·2	2	20·8	..	16·6	30	3·3	7·1	..	3·8	16	2	..	10·4	9·4	..	2	0	0	2	0	0	0	0	0	0
Mandvi	31·0	..	34·4	4	20·6	..	17·8	30	2·8	6·6	..	2·8	15	2	..	14·0	12·6	..	3	0	0	1	0	0	0	0	0	0
Dwarka	30·9	+0·3	35·1	4,6	21·8	+1·4	19·6	4	100·1	100·1	+98·1	100·1	16	1	+0·9	18·7	13·7	+2·0	1	0	0	0	0	0	0	0	0	0
Porbander	33·8	..	38·2	5	21·8	..	19·3	28	0	9·9	..	6·1	13	1	..	7·8	5·6	..	4	0	0	0	0	0	0	0	0	0
Porbander (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	0	0	0
Jamnagar	..	..	..	..	18·6	+3·5	12·0	30	4·8	15·4	+13·9	8·1	15	3	+2·8	..	..	..	3	0	0	2	0	0	0	0	0	0
Rajkot (Aerodrome)	32·3	—0·5	35·8	2	18·3	+2·4	13·6	24	0·8	18·3	+12·5	13·2	15	2	+1·7	14·7	11·3	+5·5	3	0	0	3	1	1	0	0	0	0
Surendranagar	34·2	..	37·0	1,2	20·5	..	15·1	30	0	8·1	..	7·6	16	1	..	8·8	7·7	..	2	0	0	3	0	0	0	0	0	0
Bhavnagar	34·1	+1·5	36·3	18	20·3	+3·3	15·7	30	0	0	—6·6	0	..	0	—0·3	8·0	5·1	+0·3	0	0	0	1	0	0	0	0	0	0
Bhavnagar (Aerodrome)	32·9	..	35·2	9,1	21·0	..	16·3	23	..	0·5	..	0·5	16	0	..	..	11·1	..	1	0	0	1	0	0	0	0	0	0
Mahuva	33·8	..	36·2	18	21·2	..	17·3	23	0	0	..	0	..	0	..	(b) 14·2	8·0	..	0	0	0	0	0	0	0	0	0	0
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15·7	13·0	..	..	0	0	2	0	0	0	0	0	0
Veraval	33·6	..	36·9	3	20·9	..	16·7	22	0	0	—4·3	0	..	0	—0·2	16·1	12·5	..	0	0	0	0	0	0	0	0	0	0
Konkan																												
Dahanu	32·7	+1·6	36·4	3	21·6	+1·3	19·1	28,29	0·8	5·6	—86·9	4·8	11	1	—0·6	14·0	9·3	—1·0	2	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	33·0	+1·1	36·2	21	23·6	+1·1	19·7	12	11·4	24·2	+10·7	14·6	12	2	+1·2	3·7	2·7	—7·4	6	0	0	2	0	0	0	0	0	0
Bombay (Santacruz Aerodrome)	33·5	+1·2	36·3	20	21·5	+2·8	18·4	25	10·9	32·5	+19·0	23·1	12	2	+1·2	10·5	6·9	..	4	0	0	0	0	0	0	0	0	0
Alibag	31·7	+0·4	35·4	6	21·8	+0·9	16·9	11	..	34·4	—5·0	13·7	14	5	+3·6	..	7·5	+0·3	6	0	0	2	0	0	0	0	0	0
Harnai	30·9	+0·2	33·3	9	24·8	+1·5	22·5	12	36·3	91·7	+37·3	30·2	12	6	+3·6	12·5	11·2	+0·6	6	0	0	0	0	0	0	0	0	0
Ratnagiri	31·8	..	34·4	20	22·7	..	20·1	28,30	106·6	158·5	+132·8	91·9	15	6	+4·7	..	..	..	6	0	0	1	0	0	0	0	0	0
Devgad	31·8	+0·1	34·4	20	23·4	+0·1	20·6	2	12·7	54·1	—2·3	15·7	11	6	+3·4	11·5	10·4	+0·9	7	0	0	4	0	0	0	0	0	0
Vengurla	32·3	..	34·9	21	21·7	..	18·7	23	4·1	40·2	..	15·3	14	4	..	8·5	5·5	..	9	0	0	4	0	0	0	0	0	0
Maharashtra																												
Nandurbar	34·4	..	37·2	19	..	..	..	..		2·8	..	1·0	13,18	0	..	7·6	4·7	..	3	0	0	0	0	0	0	0	0	0
Jalgaon	33·2	..	36·5	17	16·6	..	12·6	28	0·5	3·1	—16·7	2·3	14	0	—0·9	10·8	8·9	..	3	0	0	1	0	0	0	0	0	0
Malegaon	31·9	+1·0	34·1	18	16·9	+2·6	12·6	28	0	65·3	+43·2	61·2	14	1	—0·2	6·8	5·0	—0·1	3	0	0	1	0	0	0	0	0	0
Deolali	30·3	..	32·8	18	16·0	..	11·1	27,30	2·8	41·6	..	27·4	14	3	..	10·2	6·0	..	3	0	0	1	1	0	0	0	0	0
Aurangabad	30·9	+0·8	33·7	18	18·0	+2·3	13·4	27	2·5	6·9	—17·2	6·9	14	1	—0·3	9·1	6·8	—0·6	1	0	0	2	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	30·4	..	33·4	19	14·3	..	8·1	28	0	2·5	..	2·5	14	1	..	9·4	4·3	..	1	0	0	2	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	3·6	—15·7	1·8	12	0	—1·7	..	.	..	3	..	..	..	..	..	..	..	..	..
Ahmednagar	30·3	+0·8	33·9	15	16·0	+1·4	10·7	30	2·5	8·6	—19·6	6·1	19	2	+0·6	9·2	5·5	—1·1	2	0	0	0	0	0	0	0	0	0
Parbhani	31·4	..	33·6	17	16·0	..	11·7	28	0	0	—34·5	0	..	0	—1·8	8·8	5·7	..	0	0	0	0	0	0	0	0	0	0
Poona	30·3	0	32·9	19	17·0	+2·3	11·9	30	10·4	23·6	—3·8	10·9	14	3	+1·4	5·5	2·6	—3·4	5	0	0	0	1	0	0	0	0	0
Poona (Lohagaon Aerodrome)	30·0	..	32·3	19,20	17·5	..	11·8	29	10·9	26·4	..	14·7	14	2	..	..	..	..	4	0	0	0	1	0	0	0	0	0
Baramati	30·5	..	32·6	19	17·3	..	11·8	30	23·1	26·9	..	24·4	15	2	..	9·1	7·2	..	2	0	0	0	1	0	0	0	0	0
Jeur	31·1	..	33·7	18	17·0	..	10·9	28	1·8	2·6	..	2·3	15	0	..	11·8	7·1	..	2	0	0	0	0	0	0	0	0	0
Sholapur	31·0	+0·2	32·9	19	18·6	+1·5	13·9	30	5·1	5·6	—28·2	5·6	15	1	—0·7	13·6	10·3	+0·5	1	0	0	1	0	0	0	0	0	0
Miraj	29·6	0	31·7	19	18·4	+1·4	14·5	29	4·1	9·9	—36·3	6·6	15	2	—0·5	16·1	10·1	+2·1	2	0	0	1	1	0	0	0	0	0
Kolhapur	29·8	..	31·8	19	17·7	..	13·1	29	51·4	70·1	..	54·9	15	3	..	16·7	9·7	..	5	0	0	1	1	0	0	0	0	0
Vidarbha																												
Buldhana	28·9	..	32·2	17	18·5	..	14·9	28	0	0	..	0	..	0	..	7·5	6·2	..	0	0	0	0	0	0	0	0	0	0
Akola	32·9	+1·8	35·4	17	17·4	+2·7	11·4	27	0	0	—18·5	0	..	0	—1·0	(b) 6·7	5·0	+0·8	0	0	0	0	0	0	0	0	0	0
Amravati	32·0	+1·7	33·9	16,17	18·7	+1·7	14·9	30	0	0	—16·8	0	..	0	—1·0	7·6	6·9	+1·6	0	0	0	0	0	0	0	0	0	0
Yeotmal	30·7	..	32·8	15	17·5	..	14·3	28	0	0	..	0	..	0	..	8·8	7·2	..	0	0	0	0	0	0	0	0	0	0
Nagpur	31·6	+1·7	33·4	15	15·5	+1·6	11·9	27,30	0	0	—19·6	0	..	0	—1·1	10·2	7·6	..	0	0	0	0	0	0	0	0	0	0
Gondia	30·9	..	33·9	6	16·2	..	13·1	27	0	0	..	0	..	0	..	3·9	1·7	..	0	0	0	0	0	0	0	0	0	0
Brahmapuri	31·2	..	33·1	15	..	..	..	..	0	0	..	0	..	0	..	5·8	3·1	..	0	0	0	0	0	0	0	0	0	0
Chanda	31·0	+1·4	32·9	16	15·1	+0·1	10·8	27	0	0	—16·8	0	..	0	—1·3	5·8	3·1	+0·8	0	0	0	0	0	0	0	0	0	0
Sironcha	31·5	..	33·9	16	17·8	..	11·7	28	0	0	..	0	..	0	..	5·0	2·7	..	0	0	0	0	0	0	0	0	0	0

(b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Coastal Andhra Pradesh.																												
Nellore	29·5	—0·1	31·3	1	22·6	+0·4	20·4	29	196·8	376·0	+78·8	141·0	5	9	+0·2	9·5	6·0	+1·2	10	0	0	2	0	0	0	0	0	0
Ongole	27·9	..	29·6	16	22·3	..	20·1	29	13·8	148·7	..	110·3	4	3	..	7·6	4·6	..	4	0	0	1	1	0	0	0	0	0
Rentachintala	32·4	+1·8	34·0	16	19·6	—0·2	16·2	28,29	0	0	—48·3	0	..	0	—3·6	5·0	2·9	—2·4	0	0	0	0	0	0	0	0	0	0
Gannavaram	30·7	..	32·3	16	22·0	..	19·0	28	24·9	47·2	..	21·6	2	3	..	11·7	9·9	..	4	0	0	2	0	0	0	0	0	0
Masulipatam	29·6	+0·3	30·7	1	22·4	+0·6	19·8	28	3·8	28·6	+118·2	24·3	2	1	—3·7	11·6	8·6	+1·8	3	0	0	2	0	0	0	0	0	0
Nidadavolu	30·8	..	33·2	15	20·8	..	18·4	28	0·6	57·0	..	47·5	1	2	..	9·3	7·0	..	4	0	0	1	0	0	0	0	0	0
Kakinada	29·7	+1·3	30·7	7	21·7	—0·3	19·4	30	0	16·5	—125·5	12·7	1	2	—2·5	12·7	10·5	—0·8	2	0	0	0	0	0	0	0	0	0
Visakhapatnam	30·9	+0·6	32·3	16	20·9	—0·7	18·2	28	0	15·5	—103·1	14·2	1	1	—2·9	12·0	6·4	+0·3	2	0	0	1	0	0	0	0	0	0
Calingapatam	29·3	+0·7	30·8	13	20·4	—0·3	17·8	28	0	0	—86·1	0	..	0	—2·7	13·0	9·7	0	0	0	0	0	0	0	0	0	0	0
Telangana																												
Ramagundam	31·9	..	34·0	15,17	18·3	..	14·8	27	0	0	..	0	..	0	..	12·4	3·9	..	0	0	0	0	0	0	0	0	0	0
Nizamabad	30·5	+0·7	32·7	17	17·3	+1·5	13·1	28	0	0	—17·5	0	..	0	—1·1	5·4	3·8	+0·3	0	0	0	0	0	0	0	0	0	0
Mahbubnagar	30·3	..	32·7	18	19·2	..	16·0	28	0	0	..	0	..	0	..	15·2	10·9	..	0	0	0	0	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome).	29·4	+0·6	31·2	18	16·7	+0·6	12·9	30	0	0	—29·0	0	..	0	—2·1	12·0	7·2	—0·5	0	0	0	0	0	0	0	0	0	0
Hakimpet	..	..	..	..	18·5	..	16·1	30	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Hanamkonda	30·9	+1·3	33·2	17	19·1	+1·3	15·2	30	0	0	—27·9	0	..	0	—1·7	7·0	4·5	—0·2	0	0	0	0	0	0	0	0	0	0
Bhadrachallam	32·2	..	34·1	16	19·2	..	15·2	28	0	0	..	0	..	0	..	7·8	4·2	..	0	0	0	1	0	0	0	0	0	0
Khammameth	32·0	..	33·6	16,17	19·2	..	15·5	29,30	0	0	..	0	..	0	..	5·8	4·1	..	0	0	0	0	0	0	0	0	0	0
Rayalaseema																												
Arogyavaram	26·6	..	29·7	1	17·7	..	15·1	23	40·2	68·9	..	29·2	3	5	..	9·0	5·4	..	8	0	0	0	0	0	0	0	0	0
Cuddapah	30·3	—0·6	33·9	1	21·4	+0·3	18·6	23	13·5	84·4	—5·3	44·7	4	4	—1·2	6·9	4·3	—1·2	6	0	0	0	0	0	0	0	0	0
Anantapur	30·5	..	32·7	15	20·1	..	16·2	24,30	5·6	10·2	—50·0	5·6	3	2	—1·7	13·3	10·5	..	2	0	0	1	0	0	0	0	0	0
Kurnool	32·4	+1·3	34·5	16	20·0	+1·2	16·2	22	4·6	8·4	—21·8	4·6	3	2	—0·1	9·7	7·1	+3·2	2	0	0	0	0	0	0	0	0	0
Madras																												
Palayamcottai	29·2	..	31·9	2	23·8	..	22·4	5	70·3	210·9	+22·2	54·9	5	13	+3·5	10·4	8·0	..	21	0	0	0	0	0	0	0	0	0
Tuticorin	28·5	..	30·0	1,16	24·1	..	22·9	26	21·8	120·1	..	19·1	12	15	..	18·0	15·7	..	17	0	0	0	0	0	0	0	0	0
Pamban	28·2	—1·3	30·0	1	24·2	—0·4	21·6	4	195·9	548·5	+250·8	87·4	6	19	+6·0	7·6	7·9	—6·4	23	0	0	0	0	0	0	0	0	0
Mathurai	30·4	0	32·6	2	22·8	0	21·5	9	19·6	138·3	—7·2	67·3	9	8	0	8·1	6·1	—0·5	10	0	0	0	0	0	0	0	0	0
Nagapattinam	29·0	—0·1	31·1	2	24·3	+0·7	22·3	21	177·3	397·1	—48·4	69·4	28	18	+5·0	15·7	15·5	+5·7	22	0	0	4	0	0	0	0	0	0
Tiruchirapalli	29·8	—0·5	32·3	1	23·0	+0·8	21·3	21	39·7	108·2	—40·1	24·1	6	10	+1·5	12·7	9·9	+3·8	15	0	0	4	0	0	0	0	0	0
Coimbatore	28·0	—1·7	30·4	5	21·4	+0·8	19·4	9,30	84·4	436·5	+334·1	104·7	5	11	+4·2	9·5	6·5	+3·0	14	0	0	6	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome)	29·0	..	31·1	1,2,3	21·1	..	18·7	26	48·5	379·3	..	81·3	7	10	..	15·4	10·5	..	12	0	0	6	0	0	0	0	0	0
Salem	30·8	+0·2	33·3	2	21·4	+0·7	18·8	26	24·2	93·9	—2·9	17·3	6	9	+2·8	6·8	7·8	+3·6	10	0	0	2	0	0	0	0	0	0
Kallakurichi	29·3	..	31·1	15	22·7	..	21·7	26,30	61·6	107·8	..	26·7	11	9	..	12·1	8·6	..	16	0	0	2	0	0	0	0	0	0
Cuddalore	28·8	—0·3	31·6	2	23·2	+0·6	21·1	30	137·4	303·8	—90·4	38·9	13	14	+2·4	11·0	7·7	+1·6	16	0	0	3	0	0	0	0	0	0
Vellore	28·8	—0·3	31·5	1	21·4	+0·8	17·3	30	70·7	168·4	—26·7	41·5	14	9	+0·5	10·9	7·2	+4·0	14	0	0	2	0	0	0	0	0	0
Madras	28·9	—0·8	31·2	1	23·1	+0·9	20·6	30	67·6	157·3	+102·7	205·7	4	11	—0·1	15·9	10·5	—4·5	13	0	0	8	0	0	0	0	0	0
Madras (Nungambakkam).	23·9	..	31·1	1	23·3	..	20·7	30	..	122·5	..	111·3	5	10	..	..	5·3	..	13	0	0	5	0	0	0	0	0	0
Coastal Mysore																												
Karwar	31·9	..	34·5	4	22·3	..	18·3	30	29·1	172·5	+123·7	70·9	7	7	+4·2	8·6	5·4	..	8	0	0	0	0	0	0	0	0	0
Honavar	32·4	—0·3	34·0	23,29	22·8	+0·9	20·0	23	33·5	131·8	+70·3	65·8	9	7	+4·1	7·6	6·7	+2·5	7	0	0	7	0	0	0	0	0	0
Mangalore	31·8	+0·8	33·7	29	23·5	+0·4	21·2	24	10·4	133·4	+61·0	62·7	9	9	+4·6	10·5	8·2	+1·8	10	0	0	6	0	0	0	0	0	0
Mangalore (Bajpe Aerodrome).	31·9	..	33·6	24,30	22·2	..	19·0	24	15·2	159·1	..	51·0	9	7	..	..	..	..	11	0	0	5	1	0	0	0	0	0
Mysore (North)																												
Bidar	23·5	+0·4	30·4	15,18, 24	18·9	+0·8	15·8	29	0	0	—21·8	0	..	0	—1·7	14·3	10·2	+1·3	0	0	0	0	0	0	0	0	0	0
Gulbarga	31·1	+0·4	33·1	15	18·9	+1·6	15·0	30	0·5	1·3	—26·6	1·3	15	0	—1·7	13·0	11·0	+1·5	1	0	0	0	0	0	0	0	0	0
Bijapur	30·3	+0·5	31·8	17,18,	18·8	+1·7	14·0	28	7·4	10·5	—21·8	8·9	15	1	—0·8	8·5	5·1	+1·2	3	0	0	0	0	0	0	0	0	0
Belgaum	27·5	—0·7	29·6	15	18·2	+1·8	14·9	30	26·7	89·0	+49·6	60·5	8	4	+1·6	10·8	7·1	+2·0	6	0	0	0	0	0	0	0	0	0
Belgaum (C.T.O.)	26·0	—3·4	28·2	17	17·4	+0·6	13·4	30	28·4	53·6	+14·2	44·2	8	2	—0·4	14·9	8·4	+2·3	7	0	0	1	0	0	0	0	0	0
Belgaum (Sambre Aerodrome).	28·1	..	30·0	19	17·5	..	13·6	30	16·5	50·1	..	40·4	8	3	..	22·6	15·7	..	3	0	0	0	1	0	0	0	0	0
Gadag	29·8	+0·5	32·2	13	19·5	+1·3	15·6	28	0	52·8	+7·6	52·8	13	1	—2·0	12·6	8·5	+1·6	1	0	0	2	0	0	0	0	0	0
Raichur	30·9	+0·6	32·8	19	21·1	+1·3	17·7	28	0	0	—295	0	1	0	—1·8	9·4	7·4	—1·3	0	0	0	0	0	0	0	0	0	0

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation(0.3 mm. or more)	Snow or sleet	Hail	Thunder	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	25	27	28	29
Mysore (South)																												
Bellary	30·3	—0·3	37·6	19	20·6	+1·6	17·4	28	4·1	22·9	—27·1	12·7	2	3	—0·1	8·6	4·6	+0·7	4	0	0	0	0	0	0	0	0	0
Chitaldrug	27·3	—1·1	30·2	12,13	18·9	+0·6	15·7	28	1·0	39·4	—20·8	23·4	13	3	—0·4	10·5	7·8	+1·8	6	0	0	0	0	0	0	0	0	0
Shimoga	28·5	..	30·8	2	18·7	..	15·1	22,30	18·1	130·4	..	46·5	9	7	..	10·4	5·2	..	9	0	0	13	0	0	0	0	0	0
Balehonnur	26·2	+0·1	27·5	13,17	17·2	+0·8	13·6	30	..	184·6	+112·5	41·9	7	9	+4·3	..	..	..	9	0	0	0	0	0	0	0	0	0
Hassan	26·6	—0·5	28·8	13	17·6	+1·3	14·2	24	5·8	144·6	+67·6	58·4	7	7	+2·4	8·2	5·5	+1·0	7	0	0	0	0	0	0	0	0	0
Mysore	27·2	—0·7	29·4	12	19·1	+1·1	15·8	30	21·8	76·0	+6·4	26·2	12	6	+1·8	15·4	11·2	+3·2	7	0	0	2	0	0	0	0	0	0
Bangalore (Central Observatory)	26·4	+0·1	27·8	1,19	17·7	+1·2	14·5	26	16·1	31·1	—36·7	18·8	8	2	—2·5	12·1	10·1	+3·0	12	0	0	1	2	0	0	0	0	0
Bangalore (Aerodrome)	27·8	..	29·6	1	17·9	..	14·7	30	18·2	40·4	..	23·6	8	5	..	..	..	..	7	0	0	0	3	0	0	0	1	0
Kerala (including Laccadives).																												
Kozhikode	31·2	+0·5	34·1	27	24·1	+0·8	22·4	27	0	111·0	—27·7	32·5	13	6	—0·2	9·9	8·5	+2·4	8	0	0	12	0	0	0	0	0	0
Palghat	32·0	..	33·9	1	23·7	..	21·0	25	12·5	153·4	..	40·6	14	9	..	11·6	8·9	..	12	0	0	5	0	0	0	0	0	0
Fort Cochin	29·3	—0·5	32·6	24	24·4	+0·3	23·2	25	21·3	217·5	+47·6	84·3	13	10	+1·6	6·1	3·8	—1·5	11	0	0	6	0	0	0	0	0	0
Cochin (Naval Air Station).	31·5	..	32·8	26	24·0	..	22·9	13	38·1	224·2	..	69·9	13	11	..	6·9	4·8	..	14	0	0	14	0	0	0	0	0	0
Alleppey	31·1	..	33·4	29	24·1	..	22·2	3	13·2	185·7	..	46·7	6	9	..	12·1	8·7	..	11	0	0	12	0	0	0	0	0	0
Punalur	32·2	..	34·0	4,18	22·7	..	17·4	3	50·9	183·9	..	63·5	15	10	..	5·4	3·3	..	10	0	0	0	0	0	0	0	0	0
Trivandrum	30·9	+0·8	33·3	30	23·5	+0·4	22·3	12	45·8	170·4	—6·9	97·8	6	9	—0·5	6·1	4·9	+0·7	16	0	0	13	0	0	0	0	0	0
Trivandrum (Aerodrome)	30·4	..	31·7	19	23.7	..	21·9	16	..	145·8	..	50·0	6	9	..	..	6·0	..	13	0	0	13	0	0	0	0	0	0
Hill Stations excluding Kashmir																												
Walong (R).																												
Kohima	18·8	..	24·5	2	11·8	..	9·9	29,30	0	1·5	..	1·5	22	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Aijal*																												
Shillong	18·5	—0·4	20·6	19	7·8	—0·1	5·7	27	8·4	11·2	—29·7	6·9	21	1	—1·7	1·0	0·4	—1·5	3	0	0	0	0	0	0	0	0	0
Cherrapunji	19·6	—0·1	22·1	20	11·3	—0·9	9·3	30	0	2·0	—66·6	2·0	22	0	—1·8	5·9	4·6	+0·3	1	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan)	15·2	+0·8	17·8	17	7·3	+0·1	5·6	30	0	1·6	—19·0	0·8	1,22	0	—1·2	0	0	—1·4	2	0	0	0	7	0	0	0	0	0
Kalimpong	19·5	+0·2	22·4	23	11·9	0	9·7	7	0	20·3	+2·3	20·3	22	1	—0·4	..	..	..	1	0	0	0	1	0	0	0	0	0
Katmandu	23·5	+0·8	25·0	4	7·9	+0·3	5·4	22	0	0	—1·5	0	..	0	—0·2	2·2	1·1	—0·3	0	0	0	0	15	0	0	0	0	0
Mukteswar (Kumaon).	17·2	+2·3	19·1	4 days	7·3	+1·2	2·4	21	0	6·1	—4·6	6·1	21	1	+0·3	11·5	11·8	+4·4	1	0	0	0	0	0	0	0	0	0
Nainital	16·8	..	18·9	30	6·6	..	3·3	29	0	15·2	..	15·2	21	1	..	7·3	6·4	..	1	0	0	0	0	0	0	0	0	0
Tapoban	19·0	..	20·6	3,13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath	Closed during winter months																											
Lokpal	—6·2	..	1·1	1	—9·3	..	—12·2	29,30	..	56·6	..	22·9	22	7	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Jamuna Chetty	..	..	..	..	..	..	..	..	..	33·0	..	33·0	5	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Mussooree	17·3	+2·0	20·4	14	8·3	+1·0	2·1	21	0·8	24·7	+20·4	24·7	21	1	+0·1	6·8	6·7	—0·5	1	0	1	1	0	0	0	0	0	0
Kharsali (R)																												
Rana (R)																												
Simla	15·7	+1·1	19·1	16	8·0	+1·2	3·5	21	0·3	7·4	—5·8	6·9	21	1	—0·1	3·8	3·0	—1·3	2	0	0	0	0	0	0	0	0	0
Dharampore	..	..	..	..	..	..	..	..	..	16·0	+7·9	16·0	21	1	+0·2	..	..	..	1	..	..	..	..	..	..	..	..	..
Kyelang	..	..	..	..	..	..	..	..	..	68·3	..	38·1	12	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Gondla	..	..	..	..	..	..	..	..	..	69·1	..	38·1	15	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Kothi	..	..	..	..	..	..	..	..	..	136·7	..	28·5	10	7	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Koksar	..	..	..	..	..	..	..	..	..	163·9	..	46·2	12	6	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Dalhousie	17·9	..	22·9	15	8·3	..	3·1	21	82·5	123·9	+104·6	97·8	21	5	+4·1	3·5	4·0	..	5	0	0	0	0	0	0	0	0	0
Dharamshala	20·6	..	23·2	11,14	11·4	..	8·8	29,30	17·0	43·9	..	38·1	21	2	..	6·4	5·0	..	3	0	0	2	0	0	0	0	0	0
Abu	25·0	+1·8	28·3	5	15·2	+0·9	11·2	30	10·5	20·9	+15·3	12·5	14	2	+1·6	7·8	5·3	+0·6	3	0	0	1	0	0	0	0	0	0
Pachmarhi	26·0	+2·4	28·3	16	10·8	+0·4	7·8	24,27, 28	0	0	—18·8	0	..	0	—1·2	4·7	2·3	—0·8	0	0	0	0	0	0	0	0	0	0
Mahabaleshwar	23·5	+0·2	26·2	19,23	14·8	—0·1	12·0	11	33·1	67·7	+28·1	25·6	15	6	+3·6	13·6	14·3	+2·2	7	0	0	2	5	0	0	0	0	0
Nandi Hills	23·7	..	23·9	18days	18·7	..	15·6	5	..	98·2	..	16·8	8	9	..	..	..	..	9	0	0	1	0	0	0	0	0	0
Mercara	23·8	—0·1	26·0	13	16·7	+0·9	13·3	30	59·0	108·5	+32·3	38·1	9	5	—0·3	13·8	11·4	+4·8	6	0	0	0	0	0	0	0	0	0
Kodaikanal	16·4	+0·3	19·3	5	10·1	+0·4	7·7	26	151·1	349·2	+90·4	92·2	7	14	+1·2	12·4	12·3	+0·2	20	0	0	2	23	0	0	0	0	0
Ootacamund	19·5	+1·9	21·2	5 days	9·0	+0·1	3·3	26	30·7	234·6	+73·8	79·3	5	10	—0·5	5·0	3·6	—0·7	13	0	0	0	0	0	0	0	0	0
Coonoor	19·6	+0·2	21·6	12	12·7	+0·9	5·7	26	..	459·9	+174·7	91·4	8	17	+4·3	..	2·3	—2·7	19	0	0	1	0	0	0	0	0	0

Temporarily closed

(R) Register not received

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	38·3	..	15·2	16	5	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	3·1	..	3·1	22	1	..	..	..	..	1	..	..	..	..	..	..	..	..	
Lachen	13·3	..	17·2	1	−3·6	..	−5·6	28,29	..	8·4	..	3·8	21	1	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung (Chumbi)	11·5	+0·3	14·6	17	−4·9	−2·5	−8·3	24,27	..	5·0	−6·2	2·5	22,23	2	+1·1	..	..	..	2	0	0	0	0	0	0	0	0	0
Lhasa (R)																												
Ceylon																												
Colombo	29·7	−0·3	32·0	28	23·3	+0·1	22·0	5,25	115·1	442·9	+116·5	63·7	5,18	20	+6·4	..	..	..	26	0	0	9	0	0	0	0	0	0
Trincomalee	29·0	−0·5	31·0	2,14,15	24·3	+0·6	23·0	8days	201·1	942·7	+595·7	180·3	21	20	+6·1	..	..	..	23	0	0	3	0	0	0	0	0	0
Batticoloa	28·8	..	30·0	9 days	23·6	..	23·0	15days	99·0	510·8	..	82·5	20	19	..	..	..	..	26	0	0	4	0	0	0	0	0	0
Hambantota	29·4	−0·3	30·0	21 days	23·6	+0·3	22·0	9	98·5	365·2	+187·1	59·9	18	16	+6·0	..	..	..	21	0	0	5	0	0	0	0	0	0
Mannar	29·1	..	32·0	1	24·6	..	23·0	27,30	254·2	398·2	..	75·9	30	20	..	..	..	..	25	0	0	12	0	0	0	0	0	0
Hydrometeorological Observatories																												
Damodar Catchment																												
Bokaro	29·6	..	32·5	4	10·8	..	7·7	30	0	0	..	0	..	0	..	6·0	3·8	..	0	0	0	0	0	0	0	0	0	0
Hazaribagh	26·4	..	28·9	4	12·4	..	9·3	30	0	0	..	0	..	0	..	5·4	2·7	..	0	0	0	0	0	0	0	0	0	0
Tilaiya	27·7	..	30·6	4	13·6	..	11·2	24,30	0	0	..	0	..	0	..	9·8	5·3	..	0	0	0	0	0	0	0	0	0	0
Ramgarh	31·4	..	34·2	4,8	10·7	..	7·3	30	0	0	..	0	..	0	..	3·6	1·4	..	0	0	0	0	0	0	0	0	0	0
Panchet Hills	30·8	..	33·3	3,4	14·2	..	9·9	26	0	0	..	0	..	0	..	7·6	5·2	..	0	0	0	0	0	0	0	0	0	0
Durgapur	30·3	..	33·3	5	17·1	..	13·3	8,30	0	0	..	0	...	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bishungarh	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Palganj (Giridih)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Mahanadi Catchment																												
Baramul	31·6	..	33·3	15,16	14·1	..	11·2	30	0	0	..	0	..	0	..	2·8	1·3	..	0	0	0	0	0	0	0	0	0	0
Hirakud	30·3	..	32·3	15	17·4	..	13·6	30	0	0	..	0	..	0	..	4·0	2·5	..	0	0	0	0	0	0	0	0	0	0
Khijrawan	29·6	..	30·8	17	13·7	..	10·0	26	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sonepur	31·2	..	32·8	11	17·1	..	13·9	28	..	0	..	0	..	0	..	..	2·1	..	0	..	..	..	..	..	..	..	..	..
Ginabahar	30·9	..	32·6	3	11·7 (b)	..	9·0	30	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bhimkund	29·6	..	31·1	5	14·0	..	11·3	30	0	0	..	0	..	0	..	4·2	2·9	..	0	0	0	0	5	0	0	0	0	0
Narbada Catchment																												
Punasa (R)																												
Bagra Tawa	31·3	..	33·4	15	13·6	..	10·1	30	0	0	..	0	..	0	..	3·2	1·8	..	0	0	0	0	0	0	0	0	0	0
Thikri	34·2	..	36·7	17	17·6	..	13·5	4	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sabarmati Catchment																												
Jhadol	32·1	..	33·6	3,4	11·5	..	6·2	10	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	22·1	..	14·0	12	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Tarpal (R)																												
Kotra Cantonment	..	..	..	..	..	..	..	..	..	6·3	..	6·3	17	1	..	..	..	..	1	.	..	..	..	..	..	..	..	..
Dharoi	34·0	..	37·2	3	18·4	..	15·6	9	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Ganga Catchment																												
Mukhim	18·3	..	20·0	3,6,16	8·4	..	5·9	29	0	30·5	..	30·5	21	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Tehri	25·1	..	27·8	1	..	..	..	..	0	14·5	..	14·5	21	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..

(b) Mean of 29 days.

(R)—Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Hydrometeorological Observatories—(Contd.)																												
Gandak Catchment																												
Gorkha	22·5	..	23·7	17	13·9	..	11·8	30	0	0·8	..	0·8	22	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Pokhara	24·4	..	26·2	17	(b) 12·9	..	11·0	30	0	2·0	..	2·0	30	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Nawakot	(b) 24·8	..	26·0	21	13·5	..	12.2	2	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Jomosom	15·5	..	19·6	16	2·4	..	—0·1	28	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Timure	(d) 19·9	..	22·2	17	7·1	..	4·4	27	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh	(l) 20·1	..	21.9	6	..	..	..	..	0	2·3	..	2·3	21	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Gogra Catchment																												
Dandeldhura	(f) 18·4	..	19·9	12,18	(b) 9·3	..	5·6	21	0	8·6	..	8·6	21	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Munsiyari	..	..	..	..	..	..	..	..	0	19·6	..	14·5	21	2	..	..		..	2	..	..	..	..	..	..	..	..	..
Sallyana	(b) 21·5	..	24·4	5,6	..	..	..	..	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Butwal	28·0	..	29·5	4	17·7	..	14·0	3	0	0	..	0	..	0	..	..	..	..	0	..	..	•	..	..	..	..	..	..
Bagmati Catchment																												
Katmandu	23·1	..	25·6	17	7 6	..	5·1	6	0	0	..	0	..	0	..	2·1	1·1	..	0	0	0	0	16	0	0	0	0	0
Kosi Catchment																												
Chautara	(c) 22·7	..	24·1	6	11·8	..	10·1	30	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Okhaldunga	18·8	..	21·1	7,17, 19	8·9	..	7·2	27	0	0	..	0	..	0	..	2·9	1·6	..	0	0	0	0	0	0	0	0	0	0
Barahkshetra	27·2	..	28·4	19	15·4	..	13·5	23	0	0	..	0	.	0	..	5·5	4·1	..	0	0	0	0	0	0	0	0	0	0
Angbung	23·0	..	24·3	3,8	12·9	..	11·3	30	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Taplejung	18·6	..	20·7	17	9·8	..	8·4	22,29	0	13·7	..	13·7	22	1	..	..	..	..	1	0	0	0	1	0	0	0	0	0
Taplethok	23·0	..	26·1	14	11·6	..	9·5	14,15	0	0·8	..	0·8	22	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)																												
Bhojpur	(b) 19·6	..	21·7	19	10·6	..	8·1	30	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Chainpur	22·1	..	23·7	19	12·7	..	11·1	30	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Tista Catchment																												
Gangtok	17·0	..	20·5	17	8·6	..	6·7	30	0·8	37·7	..	19·0	1	5	..	2·1	1·7	..	9	0	0	0	9	0	0	0	0	0
Geyzing	21·0	..	22·8	17,19, 20	10·7	..	9·1	22	0	26·7	..	16·0	1	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..

(R) Register not received.

(c) Mean of 28 days.

(b) Mean of 29 days.

(d) Mean of 27 days.

(f) Mean of 25 days.

(l) Mean of 19 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km. p. h.): 62 or more	Wind speed (km. p. h.): 20 to 61	Wind speed (km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar . .	0830	23	1013·8	1011·2	..	28·6	25·3	23·8	29·5	75	..	4·0	..	6·6	0	2	16	0	15	2	0	0	0	0	1	12	0
	1730	"	1011·3	1008·6	..	27·5	24·7	23·7	28·8	78	..	5·0	..	6·8	0	0	24	1	19	3	0	0	0	0	1	6	0
Long Island . .	0830	33	1014·7	1011·0	..	27·9	25·3	24·1	30·1	80	..	4·0	..	2·2	0	0	17	0	3	0	2	2	6	2	2	13	0
	1730	"	1012·0	1008·3	..	27·0	24·7	23·7	29·2	83	..	3·9	..	0·6	0	0	6	0	1	0	1	1	1	1	1	24	0
Port Blair .	0530	79	1012·1	1003·1	..	24·7	23·6	23·0	28·3	91	..	4·7	..	7·1	0	3	16	2	11	5	0	0	1	0	0	11	0
	0830	"	1013·7	1004·9	+1·8	29·3	25·8	24·4	31·3	75	—1	4·8	+0·2	11·0	0	1	29	3	12	15	0	0	0	0	0	0	0
	1130	"	1012·0	1003·2	..	29·6	26·1	24·5	30·7	74	..	5·4	..	11·6	0	2	28	0	15	14	1	0	0	0	0	0	0
	1730	"	1011·3	1002·4	..	26·5	24·4	23·5	29·1	83	..	4·9	..	9·7	0	1	26	0	14	11	0	0	0	0	2	3	0
	2330	"	1012·6	1003·6	..	25·4	24·1	23·5	28·8	89	..	3·7	..	8·8	0	3	17	1	7	9	0	0	0	1	2	10	0
Car Nicobar . .	0830	10	1013·3	1012·0	..	28·7	25·7	24·3	30·5	77	..	4·1	..	6·0	0	0	29	0	9	10	7	0	1	0	2	1	0
	1730	"	1010·6	1009·4	..	26·8	24·9	24·1	29·9	86	..	4·7	..	1·7	0	0	12	0	3	6	3	0	0	0	0	18	0
Nancowry . .	0830	26	1013·3	1010·4	..	26·3	26·0	25·1	32·0	83	..	4·7	..	0·3	0	0	3	0	0	0	2	0	0	1	0	27	0
	1730	"	1010·7	1007·8	..	26·4	24·7	24·0	29·9	86	..	3·9	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Kondul . .	0830	8	1013·4	1012·4	..	27·9	25·8	24·9	31·2	84	..	3·9	..	2·9	0	0	10	0	8	2	0	0	0	0	0	20	0
	1730	"	1010·7	1009·8	..	26·4	25·2	24·7	31·5	91	..	4·7	..	2·2	0	0	8	1	6	0	1	0	0	0	0	22	0
Assam (Including Manipur, Tripura)																											
Pasighat . .	0830	..	..	..	..	20·7	17·2	14 7	16·9	69	..	3·8	..	15·2	0	6	24	13	2	0	0	0	1	0	14	0	0
	1730	..	..	..	..	19·9	18·5	17·6	20·2	87	..	3·6	..	3·9	0	1	20	2	0	0	0	0	0	0	19	9	0
Digboi . .	0830	..	..	..	..	20·2	18·3	17·5	19·4	82	..	3·7	..	3·0	0	0	30	6	2	5	1	9	3	0	4	0	0
	1730	..	..	..	..	23·5	20·5	18·6	22·0	74	..	4·2	..	3·0	0	0	30	9	4	5	0	1	2	7	2	0	0
Dibrugarh . .	0830	106	1017·4	1005·2	+0·8	21·8	19·1	17·5	19·8	77	—5	2·8	+0·2	1·8	0	0	16	2	3	10	1	0	0	0	0	14	0
	1730	"	1013·6	1001·4	..	22·0	19·4	17·9	20·8	78	..	3·0	..	0·2	0	0	2	0	1	1	0	0	0	0	0	28	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1015·1	1002·0	..	15·9	15·7	15·4	17·6	97	..	3·3	..	0·1	0	0	1	0	1	0	0	0	0	0	0	29	0
	0530	"	1016·1	1003·0	..	15·4	15·1	14·9	16·9	98	..	4·0	..	1·1	0	0	2	0	1	1	0	0	0	0	0	28	0
	0830	"	1017·9	1005·0	..	21·0	18·6	17·2	19·3	80	..	3·4	..	3·6	0	0	23	0	16	7	0	0	0	0	0	7	0
	1130	"	1015·1	1002·4	..	24·8	20·0	16·8	19·4	61	..	3·7	..	3·4	0	0	22	4	6	6	0	1	2	1	2	8	0
	1730	"	1014·1	1001·2	..	20·5	18·9	17·9	20·8	85	..	3·7	..	0·2	0	0	2	0	2	0	0	0	0	0	0	28	0
	2330	"	1015·5	1002·5	..	16·6	16·3	15·9	18·3	97	..	3·4	..	0·2	0	0	1	0	1	0	0	0	0	0	0	29	0
North Lakhimpur .	0830	102	1017·4	1005·5	..	21·1	18·8	17·4	19·9	79	..	4·0	..	..	0	0	28	5	15	8	0	0	0	0	0	2	0
	1130	"	1014·8	1003·2	..	25·4	20·3	17·2	19·7	61	..	4·2	..	..	0	0	30	5	11	14	0	0	0	0	0	0	0
	1730	"	1013·2	1001·4	..	21·3	19·7	18·9	21·6	86	..	4·5	..	..	0	0	8	8	0	0	0	0	0	0	0	22	0
Sibsagar . . .	0830	97	1018·2	1007·0	+1·6	22·0	19·9	18·5	21·4	82	—7	3·9	—1·5	0·7	0	0	6	0	1	0	0	2	0	0	3	24	0
	1730	"	1013·7	1002·6	..	22·6	20·6	19·2	22·6	83	..	3·8	..	0·3	0	0	2	0	1	0	0	0	1	0	0	28	0
Jorhat . . .	0530	90	1015·4	1004·8	..	16·3	16·3	16·2	18·5	100	..	5·1	..	0·4	0	0	2	0	1	1	0	0	0	0	0	28	0
	0830	"	1017·3	1006·9	..	20·4	19·2	18·4	21·3	89	..	5·3	..	1·2	0	0	9	3	3	0	1	1	0	0	1	21	0
	1130	"	1014·9	1004·7	..	25·3	21·1	18·8	21·6	68	..	4·3	..	3·4	0	0	23	11	8	1	0	0	0	0	3	7	0
	1730	"	1013·0	1002·6	..	21·3	19·9	19·1	22·1	88	..	2·3	..	0·4	0	0	2	1	1	0	0	0	0	0	0	28	0
Golaghat . .	0830	..	..	..	..	21·2	19·1	17·3	20·5	81	..	5·4	..	..	0	0	4	0	1	0	3	0	0	0	0	26	0
	1730	..	..	..	..	24·5	21·3	19·0	22·8	74	..	5·2	..	..	0	0	1	0	1	0	0	0	0	0	0	29	0
Gohpur (R) .	0830	..																									
(R) .	1730	..																									
Tezpur . . .	0830	79	1017·8	1008·6	+0·7	19·9	18·6	17·7	20·2	88	+7	2·6	+0·3	1.8	0	0	16	0	6	9	0	1	0	0	0	14	0
	1730	"	1013·3	1004·2	..	22·9	20·3	18·7	21·6	78	..	1·7	..	0.4	0	0	4	0	2	2	0	0	0	0	0	26	0
Tezpur (P.B.O.) .	0230	78	1014·8	1005·5	..	17.8	17·3	16·7	19·3	94	..	1·8	..	0·2	0	0	2	0	1	1	0	0	0	0	0	28	0
	0530	"	1015·9	1006·6	..	17·0	16·5	16·0	18·6	94	..	3·4	..	1·3	0	0	7	1	4	1	0	0	1	0	0	23	0
	0830	"	1017·7	1008·5	..	21·7	19·2	18·0	20·2	79	..	2·9	..	3·9	0	0	28	4	10	8	6	0	0	0	0	2	0
	1130	"	1015·7	1006·7	..	25·1	20·7	18·1	20·8	65	..	2·8	..	3·0	0	0	30	2	8	11	4	1	1	0	0	0	3
	1730	"	1013·7	1004·6	..	22·2	20·0	18·5	21·6	80	..	2·3	..	0·8	0	0	3	0	1	2	0	0	0	0	0	27	0
	2330	"	1015·4	1006·2	..	18·7	18·0	17·4	20·1	92	..	2·2	..	1·7	0	0	10	2	5	3	0	0	0	0	0	20	0
Majbat . . .	0830	..	..	..	..	..	..	..	..	..	..	3·3	..	4·9	0	0	30	1	7	13	7	2	0	0	0	0	0
	1730	..	..	..	..	..	..	..	..	..	..	3·5	..	1·8	0	0	16	10	5	1	0	0	0	0	0	14	0
Chaparmukh (R) .	0830	66																									
(R)	1730	"																									
Tangla . . .	0830	78	1017·1	1008·1	..	22·8	19·4	17·4	19·9	72	..	1·7	..	5·4	0	0	29	5	6	12	5	1	0	0	0	1	0
	1730	"	1012·9	1003·9	..	21·9	20·1	19·1	22·2	84	..	1·2	..	0·8	0	0	6	2	2	1	1	0	0	0	0	24	0

(R)— Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed km. per hour	Wind speed (km. p. h.): 62 or more	Wind speed (km. p. h.): 20 to 61	Wind speed (km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur, Tripura)—*Contd.*																											
Gauhati	0830	55	1017·3	1010·8	+1·1	20·6	19·5	18·7	21·8	90	+4	1·2	—1·4	2·6	0	0	26	10	9	0	2	1	0	0	4	4	0
	1730	"	1012·9	1006·6	..	24·6	21·2	19·2	22·5	73	..	2·1	..	1·4	0	0	12	2	6	1	0	0	2	0	1	18	0
Gauhati (Kalluchi Aerodrome)	0230	49	1014·5	1008·7	..	17·5	17·1	16·6	19·2	95	..	1·6	..	0·4	0	0	3	0	1	0	1	0	1	0	0	27	0
	0530	"	1015·3	1009·5	..	16·7	16·4	15·9	18·4	96	..	2·5	..	0·3	0	0	3	0	2	0	0	0	1	0	0	27	0
	0830	"	1017 2	1011·4	..	22·2	19·7	18·3	21·0	78	..	2·5	..	1·8	0	0	10	2	6	2	0	0	0	0	0	20	0
	1130	"	1014·7	1009·0	..	26·1	21·1	18·2	21·0	62	..	2·8	..	4·7	0	0	28	7	18	1	0	0	0	0	2	2	0
	1730	"	1013·1	1007·4	..	22·7	20·5	19·3	22·3	82	..	2·9	..	1·2	0	0	7	0	6	0	0	0	1	0	0	23	0
	2330	"	1015·1	1009·3	..	18·7	18·1	17·5	20·3	94	..	2·9	..	1·2	0	0	6	0	3	0	0	1	2	0	0	24	0
Rangiya	0830	..	..	..	..	22·8	19·9	17·7	20·9	73	..	1·0	..	..	0	0	28	2	6	10	4	6	0	1	0	0	0
	1730	..	..	..	..	24·1	21·8	20·2	24·3	79	..	(c) 0·4	..	..	0	0	16	4	4	6	0	1	0	1	0	0	0
Goalpara	0830	38	1015·8	1011·3	..	20·5	19·0	17·7	20·8	83	..	2·9	..	..	0	0	15	0	11	2	2	0	0	0	0	15	0
	1730	"	1011·1	1007·1	..	27·0	21·9	19·3	22·1	62	..	0·3	..	..	0	0	5	0	2	3	0	0	0	0	0	25	0
Dhubri	0830	35	1017·3	1013·2	+1·3	22·7	20·5	19·2	22·3	81	+2	1·1	—0·6	5·2	0	0	30	0	24	2	2	0	2	0	0	0	0
	1730	"	1013·1	1010·4	..	23·7	20·4	18·5	21·3	73	..	0·6	..	2·6	0	0	24	1	10	0	0	2	10	0	1	6	0
Dhubri (Rupsi Aerodrome)	0830	..	..	..	..	22·6	20·1	18·7	21·5	79	..	1·5	..	8·5	0	0	30	3	7	9	10	0	1	0	0	0	0
	1130	..	..	..	..	26·7	21·4	18·4	21·2	60	..	2·4	..	5·7	0	0	28	1	6	8	9	2	2	0	0	2	0
	1730	..	..	..	..	21·8	19·8	18·6	21·6	82	..	0·8	..	0·5 (l)	0	0	4	0	0	2	2	0	0	0	0	26	0
Tura	0830	370	1018·4	975·8	..	19·1	17·5	16·4	18·9	84	..	1·8	..	1·6 (l)	0	0	9	0	4	5	0	0	0	0	0	10	0
	1730	"	1014·1	972·3	..	24·6	22·1	20·4	24·5	79	..	3·0	..	0·8	0	0	5	0	1	2	0	0	2	0	0	14	0
Agartala	0230	16	1013·5	1011·6	..	16·2	15·7	15·2	17·3	94	..	0·9	..	1·2	0	0	9	1	1	1	3	3	0	0	0	21	0
	0530	"	1014·2	1012·3	..	15·3	14·8	14·3	16·4	95	..	2·1	..	0·6	0	0	6	0	0	0	4	2	0	0	0	24	0
	0830	"	1015·9	1014·1	..	23·9	20·5	18·4	21·3	72	..	1·4	..	3·3	0	0	19	3	6	2	2	4	0	0	2	11	0
	1130	"	1014·0	1012·2	..	28·1	20·4	15·5	17·9	47	..	3·5	..	7·0	0	0	29	9	4	5	2	0	1	3	5	1	0
	1730	"	1012·3	1010·5	..	23·7	19·9	17·5	20·2	69	..	2·3	..	1·2	0	0	10	1	1	0	1	1	1	0	5	20	0
	2330	"	1014·2	1012·3	..	17·3	16·6	16·0	18·4	92	..	0·5	..	1·3	0	0	11	2	2	0	4	3	0	0	0	19	0
Silchar	0830	29	1016·9	1013·5	+1·2	22·8	19·5	17·4	20·0	72	—8	0·9	—1·6	1·1	0	0	11	1	4	4	2	0	0	0	0	19	0
	1730	"	1012·5	1009·0	..	25·4	21·2	18·9	22·0	67	..	0·7	..	0·1	0	0	1	0	1	0	0	0	0	0	0	29	0
Silchar (Kumbhigram Aerodrome)	0530	97	1014·2	1002·8	..	15·9	15·3	14·8	16·9	93	..	1·5	..	7·8	0	0	30	0	5	24	1	0	0	0	0	0	0
	0830	"	1015·6	1004·4	..	22·2	18·8	16·6	19·0	71	..	0·9	..	9·5	0	0	30	0	2	21	7	0	0	0	0	0	0
	1130	"	1013·1	1002·1	..	27·1	21·0	17·5	19·9	56	..	1·3	..	6·5	0	0	28	2	2	9	8	1	2	4	0	2	0
	1730	"	1011·6	1000·4	..	22·1	19·5	17·9	20·6	77	..	0·2	..	4·5	0	0	25	11	10	3	0	0	0	0	1	5	0
Imphal	0530	801	1020·2	927·6	..	9·1	8·9	8·7	11·3	98	..	3·6	..	0·3	0	0	3	0	2	0	0	0	0	0	1	27	0
	0830	"	1019·0	928·9	..	17·0	14·4	12·3	14·5	74	..	2·0	..	2·2	0	0	19	0	2	2	8	4	3	0	0	11	0
	1130	"	1014·3	926·3	..	23·0	16·6	12·3	14·2	51	..	2·1	..	10·6	0	0	30	0	0	1	4	19	6	0	0	0	0
	1730	"	1014·6	925·0	..	18·1	14·5	11·9	13 9	62	..	1·6	..	4·3	0	0	26	2	5	0	2	0	3	4	10	4	0
	2330	"	1018·7	927·0	..	11·8	11·3	10·8	12·9	94	..	1·5	..	1·0	0	0	9	0	1	0	1	4	1	1	1	21	0
Haflong	0830	682	1016·4	940·0	..	20·3	17·0	15·0	17·0	72	..	1·6	..	..	0	0	30	3	23	1	0	2	1	0	0	0	0
	1730	"	1012·6	936·4	..	20·4	16·9	14·7	17·1	70	..	2·5	..	..	0	0	30	10	4	0	1	2	2	0	11	0	0
Lumding	0830	149	1017·9	1000·5	..	20·7	18·6	17·5	19·8	81	—8	2·6	..	0·8	0	0	6	1	1	2	1	0	0	0	1	24	0
	1730	"	1012·6	995·6	..	24·3	21·1	19·5	22·5	74	..	2·8	..	0·5	0	0	4	0	0	2	2	0	0	0	0	26	0
Sub-Himalayan West Bengal																											
Cooch-Behar (C.W.O.)	0830	43	1017·4	1012·3	..	22·1	19·4	17·8	20·2	77	..	0·9	..	8·9	0	0	30	0	14	13	2	0	1	0	0	0	0
	1130	"	1015·4	1010·4	..	26·7	21·1	17·9	20·6	59	..	2·2	..	7·6	0	0	29	1	7	13	2	0	1	0	0	1	5
	1730	"	1013·4	1008·3	..	22·2	19·8	18·4	21·0	79	..	1·9	..	(b) 0·2	0	0	1	0	0	1	0	0	0	0	0	28	0
Jalpaiguri	0830	83	1017·4	1007·6	+1·3	19·3	17·6	16·5	18·9	84	+4	0·2	—0·9	3·6	0	0	27	16	6	2	0	0	0	0	3	3	0
	1730	"	1013·1 (g)	1003·6 (g)	..	26·0 (g)	20·5 (g)	17·0 (g)	19·5 (g)	58 (g)	..	0·5	..	0·8	0	0	6	1	0	0	0	0	2	1	2	24	0
Bagdogra	0230	131	1013·7	998·8	..	17·4	16·8	16·3	18·8	94	..	1·4	..	1·7	0	0	13	9	0	0	0	0	0	0	4	17	0
	0530	"	1014·9	999·5	..	15·4	14·9	14·5	16·4	95	..	2·0	..	2·6	0	0	23	21	1	0	0	0	0	0	1	7	0
	0830	"	1016·7	1001·6	..	21·7	18·7	16·9	19·1	74	..	1·6	..	1·8	0	0	16	4	9	3	0	0	0	0	0	14	0
	1130	"	1014·7	999·8	..	26·5	20·5	16·8	19·0	55	..	2·3	..	4·3	0	0	24	0	1	8	4	5	5	1	0	6	0
	1730	"	1012·9 (h)	997·8 (h)	..	21·3 (h)	19·7 (h)	18·9 (h)	21·6 (h)	86 (h)	..	2·6	..	1·0	0	0	8	2	0	0	1	0	2	2	1	22	0
	2330	"	1014·4	999·5	..	18·2	17·3	16·8	19·2	92	..	1·5	..	4·5	0	0	26	24	0	1	0	0	0	0	1	4	0
Malda	0830	31	1016·9	1013·2	+1·2	22·7	18·4	15·5	18·0	64	—8	1·0	+0·2	5·8	0	0	28	7	4	2	1	1	3	2	8	2	0
	1730	"	1013·0	1009·4	..	25·3	19·6	15·9	18·0	56	..	1·2	..	3·0	0	0	22	2	0	1	2	1	1	5	10	8	0

(b) Mean of 29 days. (g) Mean of 24 days. (h) Mean of 23 days. (c) Mean of 28 days. (l) Mean of 19 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed km. per hour	Wind speed (km. p. h.): 62 or more	20 to 61	1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal																											
Dum Dum	0230	6	1013·9	1013·1	..	17·9	17·4	17·1	19·4	95	..	0·5	..	0·3	0	0	3	2	1	0	0	0	0	0	0	27	0
	0530	"	1014·5	1013·7	..	17·1	16·8	16·6	19·0	97	..	1·3	..	0·6	0	0	6	3	1	0	0	0	0	1	1	24	0
	0830	"	1016·6	1015·8	..	23·3	19·5	17·3	20·1	69	..	1·1	..	3·5	0	0	24	13	5	0	0	1	1	1	3	6	0
	1130	"	1015·0	1014·3	..	28·3	21·2	16·6	19·2	49	..	2·2	..	5·9	0	0	29	19	2	1	1	0	1	3	2	1	0
	1730	"	1012·9	1012·1	..	25·1	21·2	18·9	22·1	69	..	1·7	..	0·4	0	0	4	3	1	0	0	0	0	0	0	26	0
	2330	"	1014·6	1013·8	..	18·8	18·1	17·7	19·9	93	..	0·5	..	0·9	0	0	7	4	1	0	1	0	0	0	1	23	0
Calcutta	0830	6	1016·5	1015·8	+1·3	24·3	19·3	16·1	18·4	61	—15	1·0	—0·8	1·9	0	0	17	7	4	0	0	0	1	2	3	13	0
	1130	"	1014·8	1014·1	..	29·0	20·3	14·5	17·0	42	..	1·7	..	4·6	0	0	29	9	3	3	0	0	1	3	10	1	0
	1730	"	1013·0	1012·3	..	24·5	19·3	15·8	18·0	59	..	1·4	..	0·9	0	0	9	3	1	0	0	0	0	1	4	21	0
Barrackpore	0530	7	1014·6	1013·8	..	16·8	15·9	15·2	17·5	91	..	1·0	..	0·8	0	0	5	2	0	0	0	0	0	1	2	25	0
	0830	"	1016·7	1015·9	..	23·8	19·3	16·4	18·9	64	..	1·2	..	2·8	0	0	15	4	1	1	0	0	1	1	7	15	0
	1130	"	1015·1	1014·3	..	28·2	19·8	13·9	16·4	42	..	1·7	..	8·0	0	0	28	8	5	3	0	0	1	2	9	2	0
	1730	"	1013·1	1012·3	..	23·3	18·8	15·9	18·2	63	..	1·7	..	1·7	0	0	9	0	0	0	0	1	0	0	8	21	0
	2330	"	1014·7	1013·9	..	18·1	17·1	16·3	18·5	90	..	0·6	..	0·3	0	0	2	1	0	0	0	1	0	0	0	28	0
Saugor Island	0830	3	1015·9	1015·6	+1·1	24·6	20·3	17·8	20·4	66	—9	3·2	+0·6	12·7	0	3	26	14	12	0	0	0	0	1	2	1	0
	1730	"	1010·1	1009·8	..	25·7	20·5	17·5	19·9	60	..	3·1	..	4·9	0	0	25	10	6	0	0	2	3	2	2	5	0
Sandheads	0530	10	1014·3	1013 2	..	26·4	21·0	17·7	20·2	60	..	0·9	..	..	0	1	26	8	7	0	0	0	0	0	12	3	0
	0830	"	1016·4	1015·3	+1·9	27·6	22·1	18·9	22·0	60	—2	1·3	—1·5	..	0	0	29	8	11	0	0	0	2	2	6	1	0
	1130	"	1015·3	1014·2	..	28·3	22·0	18·4	21·1	56	..	1·4	..	..	0	0	29	12	9	0	1	0	1	1	5	1	0
	1730	"	1013·6	1012·5	..	28·1	21·8	17·7	20·1	53	..	1·2	..	..	0	0	24	7	2	0	0	1	0	3	11	6	0
	2330	"	1014·9	1013·8	..	26·6	21·1	17·9	21·3	59	..	—	..	..	0	0	21	4	3	2	0	3	3	2	4	9	0
Contai	0830	11	1016·1	1014·9	..	24.1	20·4	17·3	21·2	66	..	0·6	..	1·5	0	0	15	11	1	0	0	0	0	0	3	15	0
	1730	,,	1013·3	1012·1	..	25·6	21·5	19·2	22·2	67	..	0·7	..	0·2	0	0	2	2	0	0	0	0	0	0	0	28	0
Midnapore	0830	45	1016·7	1011·5	+1·5	25·5	18·2	12·6	14·9	45	—21	0·6	—1·2	3·2	0	0	27	11	13	0	0	0	1	0	2	3	0
	1730	,,	1012·7	1007·6	..	27·6	19·7	13·4	16·6	46	..	0·7	..	1·2	0	0	11	4	4	0	0	0	1	1	1	19	0
Purulia	0830	255	1017·2	988·2	..	22·4	15·6	11·3	12·0	51	..	1·2	..	1·8	0	0	17	8	1	0	0	1	0	5	2	13	0
	1730	,,	1013·1	984·4	..	25·0	17·5	12.5	12·6	46	..	0·8	..	0·2	0	0	2	0	1	0	0	0	0	0	1	28	0
Burdwan	0830	32	1016·5	1012·8	+1·1	23·2	18·7	14·9	18·1	66	—3	1·3	—0·4	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1013·5	1009·5	..	26·3	20·6	17·7	19·4	64	..	0·9	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Krishnagar	0830	15	1016·9	1015·2	+1·5	24·1	19·0	15·9	17·9	60	—9	0·4	—1·3	1·0	0	0	10	4	2	1	1	0	0	2	0	20	0
	1730	,,	1013·2	1011·5	..	25·0	19·3	16·0	17·7	57	..	0·4	..	0·1	0	0	1	0	0	0	0	1	0	0	0	29	0
Asansol	0230	126	1014·4	999·7	..	17·6	14·7	12·3	14·6	71	..	0·9	..	1·2	0	0	8	2	0	0	0	0	0	2	4	22	0
	0530	,,	1015·1	1000·3	..	15·9	13·9	12·2	14·4	79	..	1·3	..	2·1	0	0	13	0	0	0	0	0	0	4	9	17	0
	0830	,,	1016·9	1002·3	+1·3	21·6	16·8	13·3	15·4	60	—9	1·2	-0·9	4·9	0	0	28	3	0	0	1	0	0	7	17	2	0
	1130	,,	1015·0	1000·8	..	28·1	18·2	10·4	13·4	34	..	1·8	..	5·1	0	0	24	5	1	0	1	0	1	6	10	6	0
	1730	,,	1012·8	998·5	..	25 2	17·9	12·5	14·8	45	..	1·5	..	3·3	0	0	15	2	0	0	0	0	0	2	11	15	0
	2330	,,	1015·1	1000·4	..	18·8	15·2	12·4	14·4	66	..	1·0	..	1·3	0	0	10	3	0	0	0	1	0	2	4	20	0
Suri	0830	77	1017·0	1008·1	..	22·6	17·5	13·7	16·1	57	..	1·3	..	5·1	0	0	27	5	0	0	0	0	1	10	11	3	0
	1730	,,	1013·7	1004·9	..	25·2	18·5	14·1	16·0	51	..	1·4	..	2·6	0	0	21	4	3	3	3	1	1	2	4	9	0
Berhampore	0830	19	1016·3	1014·1	+0·7	21·0	17·9	16·3	18·1	73	—2	0·6	—1·2	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1012·5	1010·3	..	25.6	20·1	16·8	19·0	58	..	0·3	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Orissa																											
Baripada	0830	54	1017·3	1011·0	..	22·4	17·0	13·1	14·8	56	..	1·6	..	1·8	0	0	21	12	3	0	0	0	0	0	6	9	0
	1730	,,	1013·2	1007·0	..	25·3	18·7	14·1	16·1	50	..	0·8	..	0·1	0	0	1	1	0	0	0	0	0	0	0	29	0
Balasore	0830	20	1016·7	1014·4	+1·4	23·4	18·1	14·4	16·6	58	—13	1·9	—0·3	4·8	0	0	29	7	5	0	0	0	0	0	7	1	0
	1730	,,	1012·9	1010·7	..	25·8	20·0	16·4	18·7	57	..	2·3	..	0·2	0	0	2	0	0	0	0	1	1	0	0	28	0
Chandbali	0830	6	1016·7	1016·0	+1·7	24·5	20·7	18·7	21·2	70	—7	1·1	—1·6	3·2	0	0	30	0	0	0	0	0	1	0	29	0	0
	1730	,,	1013·3	1012·6	..	25·9	21·0	18·0	20·7	62	..	1·7	..	3·1	0	0	30	0	2	17	11	0	0	0	0	0	0
Cuttack	0830	27	1016·3	1013·2	+0·8	22·1	19·3	17·3	20·2	75	+1	0·9	—1·6	0·2	0	0	1	0	0	0	0	0	0	0	1	29	0
	1730	,,	1012·7	1009·7	..	28·3	21·0	16·5	19·2	49	..	1·3	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Bhubaneswar	0230	46	1014·2	1008·8	..	20·4	18·3	16·7	19·2	80	..	0·8	..	2·7	0	0	20	8	0	0	0	0	0	2	10	10	0
	0530	,,	1014·8	1009·3	..	19·0	17·3	16·2	18·4	84	..	2·0	..	3·6	0	0	26	10	1	1	0	1	0	1	12	4	0
	0830	,,	1016·9	1011·5	..	24·7	20·1	17·2	19·5	64	..	1·7	..	4·8	0	0	25	11	1	1	0	0	0	0	12	5	0
	1130	,,	1015·4	1010·1	..	29·3	20·4	14·1	16·8	40	..	2·1	..	6·8	0	0	28	9	11	2	1	0	0	0	5	2	0
	1730	,,	1013·3	1008·1	..	27·0	19·5	14·3	16·6	47	..	2·6	..	3·8	0	0	27	3	4	13	2	2	0	0	3	3	0
	2330	,,	1015·2	1009·8	..	21·5	18·7	16·8	19·4	75	..	0·8	..	2·8	0	0	22	4	3	0	0	1	0	4	10	8	0
Puri	0830	6	1016·7	1016·0	+1·8	24·5	20·6	18·7	21·2	69	—3	2·0	—0·4	10·3	0	1	29	23	6	0	0	0	0	0	1	6	0
	1730	,,	1013·4	1012·7	..	27·3	21·7	18·8	21·6	60	..	5·8	..	12·2	0	1	28	0	0	2	12	8	6	1	0	1	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed km. per hour	Wind speed (km. p. h.)			No. of observations									
			At mean sea level or height in g.p.m of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—*Contd.*																											
Gopalpur . .	0530	17	1014·7	1012·7	..	19·7	18·0	16·8	19·3	84	..	2·3	..	4·4	0	0	28	12	0	0	0	0	0	0	16	2	0
	0830	,,	1016·8	1014·8	+1·9	23·8	19·9	17·4	20·1	67	—5	2·2	0	7·8	0	0	30	17	0	0	0	0	0	0	13	0	0
	1130	,,	1015·4	1013 5	..	29·7	22·0	17·5	20·1	49	..	2·2	..	4·9	0	0	28	13	4	6	4	0	0	0	1	2	0
	1730	,,	1013·5	1011·5	..	27·4	21·4	17·8	21·8	57	..	2·9	..	5·4	0	0	26	0	0	5	20	1	0	0	0	4	0
	2330	,,	1015·3	1013·3	..	22·4	19·9	18·4	21·3	79	..	1·0	..	2·0	0	0	17	3	0	0	0	0	0	1	13	13	0
Koraput . . .	0830	913	1547·1	915·3	..	19·0	15·5	12·9	14·8	68	..	1·5	..	..	0	0	30	0	0	7	0	14	9	0	0	0	0
	1730	,,	1533·2	913·1	..	22·3	15·7	11·2	13·0	49	..	2·2	..	..	0	0	30	24	0	4	1	0	0	0	1	0	0
Titilagarh . .	0830	211	1017·2	993·0	..	21·6	17·4	14·8	16·5	65	..	1·8	..	1·6	0	0	16	0	1	1	5	5	3	1	0	14	0
	1730	,,	1012·6	988·9	..	28·3	19·1	13·2	14·8	40	..	1·5	..	2·1	0	0	20	6	9	4	0	1	0	0	0	10	0
Bolangir* . .	0830	190	1018·1	996·3	..	24·2	18·3	14·3	16·4	54	..	..	..	2·5	0	0	12	5	4	0	1	1	0	1	0	6	0
. .	1730	..	1014·2	992·7	..	26·8	19.3	14·5	16·3	47	..	..	..	2·4	0	0	11	2	5	0	0	1	3	0	0	7	0
Angul . . .	0830	139	1017·2	1001·1	+1·8	21·3	17·4	14·7	16·8	66	—6	2·0	— 0·7	3·0	0	0	24	1	1	0	0	0	3	10	9	6	0
	1730	,,	1012·9	997·3	..	27·9	18·7	11·8	14·2	37	..	2·6	..	1·9	0	0	18	3	11	0	0	0	0	2	2	12	0
Keonjhar . .	0830	463	1014·4	962·2	..	21·5	16·3	12·0	14·6	56	..	1·5	..	2·9	0	0	25	10	1	2	0	1	1	3	7	5	0
	1730	,,	1010·3	958·8	..	24·1	16·9	10·9	14·0	40	..	2·3	..	3·2	0	0	25	7	3	1	0	0	2	5	7	5	0
Sambalpur . .	0830	148	1017·7	1000·5	+1·8	21·6	17·9	15·3	17·7	67	—5	1·4	—0·7	0·4	0	0	4	1	2	0	1	0	0	0	26	0
	1730	,,	1013·5	996·7	..	26·7	19·8	14·7	17·4	48	..	1·8	..	0	0	0	0	0	0	0	0	0	0	0	30	0	0
Jharsuguda . .	0230	230	1014·8	988·0	..	16·9	15·5	14·3	16·5	85	..	1·3	..	2·8	0	0	17	5	4	0	0	0	0	0	8	13	0
	0530	,,	1015·6	988·7	..	15·5	14·5	13·6	15·5	89	..	1·0	..	3·9	0	0	23	9	13	0	0	0	0	1	0	7	0
	0830	,,	1017·3	990·8	..	20·5	16·0	12·4	14·6	61	..	1·2	..	5·7	0	0	29	13	10	0	0	0	0	0	6	1	0
	1130	,,	1015·4	989·5	..	27·5	18·1	10·5	13·2	36	..	1·7	..	5·6	0	0	26	2	13	2	0	1	1	3	4	4	0
	1730	,,	1013·0	987·0	..	25·1	18·2	13·4	15·2	48	..	1·9	..	2·0	0	0	16	0	1	3	0	8	2	0	2	14	0
	2330	,,	1015·4	988·8	..	18·7	16·5	14·9	17·0	79	..	1·1	..	2·6	0	0	19	4	7	3	0	0	0	1	4	11	0
Chota Nagpur																											
Jamshedpur . .	0830	129	1017·5	1002·5	+1·9	19·4	16·0	13·3	15·6	68	—3	1·3	—0·9	4·7	0	0	28	2	0	0	0	0	1	20	5	2	0
	1730	,,	1013·0	998·3	..	25·2	19·0	14·7	17·2	53	..	1·3	..	0·5	0	0	5	0	0	0	0	0	0	5	0	25	0
Jamshedpur (P.B.O.)	0530	145	1015·6	998·5	..	14·9	13·7	12·6	14·9	85	..	1·9	..	1·8	0	0	15	0	0	0	1	1	2	5	6	15	0
	0830	,,	1017·2	1000·4	..	20·1	15·9	12·6	14·7	63	..	1·7	..	4·0	0	0	29	0	0	0	0	0	5	15	9	1	0
	1130	,,	1015·3	998·8	..	27·1	17·9	10·7	13·9	36	..	1·8	..	5·0	0	0	29	1	2	1	1	1	1	6	16	1	0
	1730	,,	1012·9	996·4	..	26·4	18·3	12·5	14·5	43	..	2·1	..	1·1	0	0	8	4	0	0	1	0	0	0	3	22	0
	2330	,,	1015·2	998·3	..	17·8	15·5	13·8	16 0	78	..	1·4	..	1 6	0	0	14	1	0	0	0	0	3	2	8	16	0
Chaibasa	0830	226	1017·2	991·2	+1·6	21·5	16·8	13·2	15·3	60	—14	1·4	—0·6	1·2	0	0	12	0	0	0	0	1	10	1	0	18	0
	1730	,,	1012·8	987·2	..	25·0	18·9	14·6	16·9	54	..	1·8	..	0·1	0	0	1	0	0	0	0	0	1	0	0	29	0
Ranchi . .	0830	655	1015·5	942·1	+0·4	20·9	14·8	9·6	12·4	50	—8	0·7	—1·1	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1013·8	941·0	..	22·4	15·3	9·6	12·0	45	..	0·4	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Ranchi (C.W.O.) .	0530	652	1016·1	941·7	..	14·7	11·3	8·0	10·9	65	..	1·5	..	1·5	0	0	14	0	0	0	0	1	1	7	5	16	0
	0830	,,	1016·7	943·7	..	21·4	14·3	8·4	11·0	44	..	1·4	..	4·1	0	0	28	4	4	1	0	1	2	8	8	2	0
	1130	,,	1014·5	942·5	..	24·8	15·1	6·9	10·1	33	..	1·5	..	9·6	0	1	28	8	3	1	0	0	0	9	8	1	0
	1730	,,	1012·7	940·4	..	23·3	15·0	8·3	11·0	39	..	(j) 1·0	..	(j) 0·3	0	0	12	3	1	0	0	0	0	2	6	9	0
Daltonganj .	0830	221	1017·8	992·2	+1·3	19·7	15·8	11·7	13·8	60	—16	1·0	—0·2	0·2	0	0	2	0	0	0	1	1	0	0	0	28	0
.	1730	,,	1013·3	988·2	..	24·0	18·3	14·1	16·7	55	..	1·9	..	0·1	0	0	1	0	0	0	0	0	0	0	1	29	0
Hazaribagh . .	0830	611	1016·9	948·2	+1·8	21·3	14·3	8·7	11·3	45	—12	1·4	—0·1	2·0	0	0	15	2	1	0	0	0	2	3	7	15	0
	1730	,,	1013·4	945·2	..	22·2	14·8	8·9	11·3	43	..	1·7	..	2·7	0	0	24	5	0	0	0	0	0	0	19	6	0
Dhanbad . .	0830	257	1016·8	987·5	..	23·6	16·0	9·3	12·2	41	..	1·4	..	4·8	0	0	30	4	2	1	1	1	3	16	2	0	0
	1730	,,	1013·3	984·2	..	24·5	16·3	8·9	12·2	38	..	1·9	..	3·0	0	0	27	6	0	0	0	0	1	12	8	3	0
Bihar																											
Purnea . . .	0830	38	1017·3	1012·9	+1·3	22·1	17·9	15·1	17·2	65	—16	0·5	- 0·5	2·1	0	0	19	1	2	4	1	0	5	6	0	11	0
	1730	,,	1012·8	1008·5	..	23·7	18·8	15·6	18·3	61	..	0·8	..	0·5	0	0	4	0	0	1	0	0	0	3	0	26	0
Forbesganj . .	0830	61	1016·8	1009·8	..	21·1	18·4	16·6	18·8	75	..	1·0	..	3·4	0	0	22	0	4	12	2	1	0	2	1	8	0
	1730	,,	1012·7	1005·8	..	24·8	19·9	16·8	19·1	62	..	1·2	..	1·0	0	0	10	0	1	0	0	0	1	7	1	20	0
Darbhanga . .	0830	49	1017·2	1011·4	+1·3	19·7	17·3	15·6	17·6	77	+2	0·7	—0·3	0·6	0	0	6	0	0	3	0	0	0	3	0	24	0
	1730	,,	1013·0	1007·4	..	25·3	20·5	17·7	20·4	62	..	0·5	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Motihari (R) . .	0830	66																									
(R) . .	1730	,,																									
Patna . . .	0830	53	1017·0	1010·9	+0·9	22·1	16·6	12·5	14·4	55	—10	0·7	—0·4	4·2	0	0	23	0	0	0	2	3	12	3	3	7	0
	1730	,,	1013·2	1007·1	..	25·0	17·8	12·5	14·5	46	..	1·2	..	1·7	0	0	13	0	0	0	0	0	3	8	2	17	0

*Observations for 18 days. (j)—Mean of 22 days. (R)—Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above meanseal evel in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations										
																		Wind direction										
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more.	20 to 61.	1 to 19.	N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*Contd.*																											
Patna (Aerodrome)	0530	60	1014·6	1007·4	..	14·2	13·1	12·2	14·2	89	..	0·9	..	1·5	0	0	8	0	0	0	0	0	2	5	1	22	0
	0830	,,	1016·4	1009·5	..	20·7	16·0	12·2	14·4	59	..	0·8	..	7·0	0	0	27	0	0	1	1	2	9	11	3	3	0
	1130	,,	1015·2	1008·4	..	26·7	18·5	12·0	14·4	39	..	0·8	..	9·7	0	1	29	1	0	0	0	2	3	15	9	0	0
	1730	,,	1012·7	1005·9	..	25·4	18·0	12·7	14·5	46	..	1·1	..	1·6	0	0	8	0	0	0	0	0	0	1	7	22	0
	2330	52	1015·1	1009·1	..	20·4	18·4	17·3	19·7	83	..	1·0	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Dehri	0830	107	1017·1	1004·6	..	21·4	16·5	12·9	14·7	59	..	1·2	..	2·9	0	0	29	0	0	0	1	5	22	1	0	1	0
	1730	,,	1012·8	1000·6	..	26·0	18·7	13·7	15·6	47	..	1·6	..	2·2	0	0	22	3	1	0	0	0	1	5	12	8	0
Gaya	0230	116	1015·4	1001·6	..	15·1	13·2	11·5	13·6	79	..	1·1	..	0·9	0	0	9	0	0	0	1	5	3	0	0	21	0
	0530	,,	1015·9	1002·1	..	13·7	12·0	10·7	12·7	82	..	1·4	..	0·1	0	0	1	0	0	0	0	1	0	0	0	29	0
	0830	,,	1017·7	1004·2	+1·7	21·0	16·4	12·8	15·3	60	—4	1·1	—0·1	1·8	0	0	13	0	0	0	0	1	9	2	1	17	0
	1130	,,	1016·1	1002·9	..	27·8	18·6	11·7	14·1	38	..	0·8	..	5·4	0	1	16	2	0	0	0	0	1	1	13	13	0
	1730	,,	1013·9	1000·3	..	25·1	17·5	11·7	14·0	44	..	1·5	..	2·4	0	0	14	3	2	0	0	0	0	0	9	16	0
	2330	,,	1015·9	1002·2	..	16·8	13·8	11·2	13·3	70	..	0·9	..	1·1	0	0	7	0	0	0	1	3	3	0	0	23	0
Jamui	0830	82	1016·7	1007·0	..	19·7	16·3	14·0	15·9	69	..	0·9	..	1·0	0	0	10	0	0	3	2	0	0	0	5	20	0
	1730	,,	1012·7	1003·3	..	24·9	19·0	15·0	17·4	55	..	1·6	..	0·5	0	0	7	0	0	0	0	0	0	0	7	23	0
Dumka	0830	149	1016·6	999·4	+0·8	23·2	17·1	12·8	14·6	52	—15	0·8	—0·4	..	0	0	26	2	1	2	1	0	4	6	10	4	0
	1730	,,	1013·0	996·1	..	25·3	18·0	13·0	14·9	47	..	1·3	..	..	0	0	27	3	2	3	3	1	0	5	10	3	0
Bhagalpur	0530	49	1015·1	1000·3	..	16·9	14·8	13·2	15·0	79	..	1·0	..	2·1	0	0	17	1	0	0	0	3	10	2	1	13	0
	0830	,,	1017·0	1011·3	..	20·6	16·6	13·5	15·9	65	..	0·7	..	1·8	0	0	13	1	0	0	2	2	3	4	1	17	0
	1130	,,	1015·9	1010·3	..	26·0	18·8	13·6	15·8	47	..	0·7	..	3·8	0	0	27	2	3	0	1	0	3	11	7	3	0
	1730	,,	1013·1	1007·5	..	24·9	18·8	14·6	16·8	53	..	1·0	..	2·0	0	0	13	0	1	0	0	0	2	9	1	17	0
	2330	,,	1015·4	1009·7	..	19·7	16·5	14·2	16·1	71	..	0·8	..	1·3	0	0	10	0	1	1	0	2	4	2	0	20	0
Sabour	0830	37	1017·0	1012·7	+1·7	21·8	17·5	14·2	16·3	63	—13	1·0	—0·4	2·7	0	0	21	1	1	0	2	0	8	7	2	9	0
	1730	,,	1012·9	1008·6	..	23·9	19·3	16·1	18·5	66	..	1·4	..	0·8	0	0	7	0	0	0	0	0	0	0	7	23	0
Uttar Pradesh (East)																											
Gonda	0830	110	1017·1	1004·3	..	17·8	15·1	12·9	14·8	74	—1	0·4	—0·5	0·9	0	0	9	0	0	0	0	0	0	3	6	21	0
	1730	,,	1012·9	1000·4	..	23·3	18·1	14·1	16·1	75	..	0·6	..	0·1	0	0	1	0	0	0	0	0	0	0	1	29	0
Nautanwa	0830	..	..	..	..	18·2	16·4	15·1	17·6	82	..	0·4	..	1·3	0	0	13	0	1	5	4	0	3	0	0	17	0
	1730	..	..	..	..	24·3	18·5	13·9	15·3	54	..	0·5	..	1·0	0	0	10	0	0	0	2	1	4	3	0	20	0
Gorakhpur	0830	77	1016·3	1007·4	+0·7	19·5	16·1	13·4	15·6	70	—3	0·3	—0·3	0·3	0	0	4	0	0	0	0	0	1	2	1	26	0
	1730	,,	1011·9	1003·3	..	24·5	19·0	14·5	17·3	55	..	0·6	..	0·1	0	0	1	0	0	0	0	0	0	1	0	29	0
Gorakhpur (P.B.O.)	0230	73	1014·2	1005·1	..	16·9	15·0	13·5	15·5	81	..	0·7	..	1·3	0	0	11	4	1	0	0	0	3	2	1	19	0
	0530	,,	1014·7	1005·5	..	15·2	14·1	12·7	15·2	85	..	0·8	..	1·8	0	0	14	5	2	0	0	0	2	2	3	16	0
	1130	,,	1015·8	1006·9	..	26·4	18·7	13·3	15·5	45	..	1·1	..	5·0	0	0	28	0	0	1	2	9	8	8	0	2	0
	2330	,,	1014·9	1005·8	..	18·4	16·0	14·0	16·1	76	..	0·7	..	2·0	0	0	15	1	1	0	0	1	8	3	1	15	0
Azamgarh	0830	78	1016·6	1007·6	..	18·6	15·1	12·8	14·4	69	..	0·6	..	..	0	0	19	1	0	3	0	0	0	14	1	11	0
	1730	,,	1013·0	1004·1	..	24·2	19·0	15·0	17·2	59	..	0·5	..	..	0	0	0	0	0	0	0	0	0	0	0	30	0
Ballia	0830	64	1016·2	1008·9	..	19·9	15·4	11·5	14·1	60	..	1·4	..	2·8	0	0	27	1	3	0	3	2	18	0	0	3	0
	1730	,,	1012·6	1005·3	..	27.4	17·9	10.3	12.7	35	..	1·8	..	2·9	0	0	22	0	1	0	0	0	10	9	2	8	0
Varanasi (Banaras)	0830	76	1017·1	1008·9	+1·7	21.2	16.9	12.6	15·4	59	—9	1·1	+0·1	2·3	0	0	15	0	0	0	0	1	13	1	0	15	0
	1730	,,	1013·1	1004·4	..	26.0	19·6	14.5	17·8	50	..	1·6	..	1·6	0	0	10	1	0	0	0	0	5	3	1	20	0
Varanasi (Banaras) (Babatpur Aerodrome)	0530	85	1016·3	1006·0	..	13·9	12·8	11·8	13·9	88	..	0·8	..	2·7	0	0	17	0	0	0	0	1	14	2	0	13	0
	0830	,,	1018·1	1008·1	..	20·5	16·5	13·5	15·8	64	..	0·8	..	6·4	0	1	26	0	0	0	0	3	18	6	0	3	0
	1130	,,	1017·1	1006·6	..	27·2	19·2	13·7	15·7	45	..	1·1	..	8·8	0	3	25	2	0	0	0	2	8	12	3	2	1
	1730	,,	1014·3	1004·5	..	24·8	18·3	14·3	16·3	53	..	1·4	..	3·9	0	0	26	1	0	0	1	0	6	12	6	4	0
	2330	,,	1016·3	1005·9	..	16·1	14·6	13·5	15·1	81	..	1·2	..	1·9	0	0	12	0	0	0	0	3	5	1	3	18	0
Allahabad (Bamrauli)	0230	98	1015·1	1003·5	..	15·8	13·2	11·0	13·1	74	..	1·1	..	1·1	0	0	10	0	0	0	0	1	1	6	2	20	0
	0530	,,	1015·6	1004·0	..	14·7	12·6	10·7	12·7	77	..	0·9	..	1·1	0	0	10	1	0	0	0	0	5	4	0	20	0
	0830	,,	1017·5	1006·1	+1·4	21·0	15·5	10·7	12·2	53	—14	1·5	+0·4	3·2	0	0	21	0	0	0	1	1	6	12	1	9	0
	1130	,,	1016·5	1005·3	..	28·2	17·6	9·1	11·7	31	..	1·7	..	6·1	0	0	29	3	2	1	2	0	2	12	7	1	0
	1730	,,	1013·7	1002·5	..	25·4	17·7	12·2	14·6	44	..	1·5	..	0·7	0	0	7	2	0	0	0	0	0	1	4	23	0
	2330	,,	1015·6	1004·1	..	17·6	14·1	11·1	13·3	66	..	0·9	..	1·1	0	0	10	0	0	0	0	0	4	4	2	20	0
Banda	0830	121	1017·8	1003·7	..	21·0	15·3	10·0	12·7	51	..	1·5	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1013·5	999·7	..	26·3	18·9	13·5	15·4	45	..	0·9	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Fatehpur	0830	114	1017·3	1004·0	..	19·2	14·8	11·4	13·2	59	—1	1·6	+0·6	0·6	0	0	6	0	1	0	0	0	1	2	2	24	0
	1730	,,	1013·6	1001·5	..	26·2	18·4	13·3	14·8	45	..	1·3	..	0·3	0	0	3	0	0	0	0	0	0	1	2	27	0
Kanpur	0830	126	1017·8	1003·1	+1·8	19·5	14·7	10·6	12·6	57	—10	1·5	+1·0	4·9	0	0	23	1	2	2	1	1	5	8	3	7	0
	1730	,,	1014·0	999·6	..	25·3	17·4	11·3	13·4	42	..	1·7	..	3·5	0	0	24	7	2	1	0	0	2	7	5	6	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (East) —*Contd.*																											
Lucknow	0830	113	1018·0	1004·7	+2·0	16·2	14·3	12·8	14·6	80	+10	0·5	—0·3	..	0	0	28	0	0	7	0	0	0	21	0	2	0
	1730	"	1014·1	1001·2	..	24·4	18·9	14·4	17·3	57	..	0·6	..	..	0	0	21	0	0	2	0	0	0	19	0	9	0
Lucknow (Amausi Aerodrome)	0230	123	1015·0	999·8	..	13·4	12·0	10·6	12·9	84	..	0·6	..	2·8	0	0	15	2	1	2	0	0	1	3	6	15	0
	0530	"	1015·3	1000·1	..	12·2	11·0	9·9	12·5	86	..	0·5	..	3·0	0	0	17	1	0	2	1	0	0	6	7	13	0
	0830	"	1017·2	1002·2	+1·1	18·9	14·8	11·4	13·6	63	+5	1·0	+0·2	5·7	0	0	24	4	2	1	0	1	1	2	13	6	0
	1130	"	1016·2	1001·6	..	26·0	17·4	10·3	13·7	37	..	0·9	..	10·3	0	2	28	7	3	1	1	1	1	2	14	0	0
	1730	"	1013·5	998·8	..	23·3	17·2	12·3	14·7	51	..	1·1	..	5·4	0	0	26	3	3	1	0	1	1	6	11	4	0
	2330	"	1015·6	1000·4	..	14·8	12·9	11·3	13·3	81	..	0·6	..	3·1	0	0	16	2	0	2	0	1	1	4	6	14	0
Hardoi	0830	142	1017·1	1000·3	..	17·5	14·7	12·5	14·5	72	..	0·6	..	3·2	0	0	24	3	1	3	1	0	1	9	6	6	0
	1730	"	1013·3	997·0	..	24·2	18·5	14·5	16·9	55	..	1·0	..	1·2	0	0	11	2	0	0	0	0	0	6	3	19	0
Lakhimpur Kheri	0830	147	1016·9	999·7	..	17·3	14·9	13·1	14·7	77	..	0·2	..	1·2	0	0	12	2	0	1	1	0	0	5	3	18	0
	1730	"	1013·0	996·2	..	23·1	18·3	15·0	17·3	61	..	0·7	..	0.5	0	0	5	1	0	0	0	0	0	3	1	25	0
Bahraich	0830	124	1017·2	1002·7	+1·6	20·2	16·3	13·9	15·2	68	—5	0·5	—0·1	1·6	0	0	17	3	0	3	1	0	1	4	2	13	0
	1730	"	1013·0	998·7	..	23.7	18·2	14·2	16·6	57	..	0·5	..	0·6	0	0	6	1	0	1	1	0	0	1	2	24	0
Uttar Pradesh (West)																											
Orai	0830	141	1018·7	1002·4	..	21·6	15·7	10·8	13·3	51	..	0·8	..	4·4	0	0	30	1	1	1	5	3	7	5	7	0	0
	1730	"	1015·8	998·0	..	27·1	18·1	10·6	13·9	36	..	0·4	..	3·3	0	0	29	5	2	0	1	1	0	1	19	11	0
Jhansi	0830	251	1017·7	988·5	+0·8	19·4	14·3	11·0	12·9	59	+8	1·9	+1·1	1·0	0	0	9	0	1	0	1	0	2	0	5	21	0
	1730	"	1015·3	985·1	..	28·3	19·2	11·8	14·8	37	..	1·7	..	1·0	0	0	10	1	1	1	0	0	0	0	7	20	0
Agra	0830	169	1017·7	998·1	+1·5	19·2	14·7	10·8	13·5	59	+5	0·5	—0·3	0·6	0	0	6	1	0	0	0	2	1	2	0	24	0
	1730	"	1013·7	994·6	..	27·7	18·6	11·8	14·0	41	..	1·0	..	1·5	0	0	12	0	0	0	0	0	0	1	11	18	0
Agra (Aerodrome) (R)	0530	169																									
(R)	0830	"																									
(R)	1130	"																									
(R)	1730	"																									
(R)	2330	"																									
Mainpuri	0830	157	1017·7	999·4	+1·7	18·1	14·2	11·2	13·0	65	+4	0·3	—0·5	0·7	0	0	7	0	0	0	0	0	0	6	1	23	0
	1730	"	1014·1	996·4	..	26·4	18·2	11·4	13·6	41	..	0·1	..	0·7	0	0	7	0	0	0	0	0	0	5	2	23	0
Aligarh	0830	187	1017·6	994·9	..	17·5	13·9	10·3	12·9	63	+13	1·4	+0·8	1·8	0	0	12	0	0	2	0	0	0	8	2	18	0
	1730	"	1014·1	992·7	..	25·0	18·1	13·0	15·1	48	..	2·0	..	2·7	0	0	12	3	0	1	0	0	0	6	2	18	0
Bareilly	0830	173	1016·6	996·4	+0·7	18·1	14·8	12·0	14·4	68	—6	0·6	—0·1	3·1	0	0	19	1	1	4	1	1	0	8	3	11	0
	1730	"	1012·8	993·0	..	23·7	16·8	11·0	14·3	47	..	1·4	..	0·7	0	0	7	0	0	0	0	0	1	6	0	23	0
Bareilly (P.B.O.)	0230	172	1014·7	994·6	..	16·6	14·2	12·6	14·4	78	..	0·6	..	2·1	0	0	11	1	0	5	0	0	0	3	2	19	0
	0530	"	1015·1	994·8	..	15·1	13·5	12·3	14·0	84	..	0·4	..	2·9	0	0	17	1	2	3	1	0	0	7	3	13	0
	1130	"	1016·4	996·6	..	23·6	17·9	14·4	15·9	57	..	1·2	..	7·9	0	0	27	0	2	2	4	1	0	1	17	3	0
	2330	"	1015·4	995·2	..	17·9	15·1	13·1	14·8	75	..	0·6	..	3·6	0	0	16	2	0	4	0	0	0	4	6	14	0
Meerut	0830	222	1017·5	991·7	+1·6	18·7	14·8	11·7	13·7	63	—6	0·2	—0·4	1·7	0	0	13	0	1	1	0	0	0	10	1	17	0
Najibabad	0830	270	1017·3	985·5	..	13·7	12·4	11·0	13·6	85	..	0·7	..	2·4	0	0	11	2	4	0	0	0	0	0	5	19	0
	1730	"	1014·2	983·5	..	24·1	17·9	13·3	15·4	52	..	0·8	..	2·0	0	0	11	1	0	0	0	0	0	1	9	19	0
Roorkee	0830	274	1017·4	985·3	+1·1	15·7	13·6	11·6	13·5	78	+2	2·1	+1·4	0·3	0	0	3	0	0	0	0	0	0	0	3	27	0
	1730	"	1013·5	982·2	..	22·6	17·1	12·7	14·8	55	..	2·7	..	0·4	0	0	4	0	0	0	0	0	0	0	4	26	0
Dehra Dun	0530	682	1016·1	937·5	..	12·4	10·7	9·0	11·5	81	..	0·4	..	1·5	0	0	12	5	7	0	0	0	0		0	18	0
	0830	"	1017·5	939·6	+1·3	15·3	12·6	10·2	12·4	73	+1	1·3	+0·2	0·6	0	0	6	1	4	0	0	0	0	1	0	24	0
	1130	"	1015·6	939·6	..	22·3	15·4	10·2	12·3	47	..	1·4	..	2·0	0	0	20	0	0	0	1	7	7	4	1	10	0
	1730	"	1013·7	937·2	..	20·1	16·1	13·3	15·5	65	..	1·6	..	0·2	0	0	2	0	0	0	0	0	0	1	1	28	0
	2330	"	1016·1	938·2	..	14·9	12·6	10·6	12·9	76	..	0·7	..	1·9	0	0	19	9	9	0	1	0	0	0	0	11	0
Punjab (India) (Including Delhi)																											
New Delhi	0230	216	1015·7	990·3	..	15·5	12·6	9·9	12·0	70	..	0·3	..	4·3	0	0	23	2	1	3	1	0	2	7	7	7	0
	0530	"	1016·0	990·3	..	14·1	11·7	9·3	11·5	74	..	0·6	..	3·7	0	0	19	1	1	1	1	0	2	8	5	11	0
	0830	"	1017·7	992·3	+1·5	17·0	13·2	9·6	11·9	63	+13	1·1	+0·5	6·3	0	0	28	0	2	2	2	1	4	13	4	2	0
	1130	"	1017·0	992·3	..	24·9	16·8	9·7	12·2	39	..	1·3	..	9·6	0	3	25	2	0	2	4	1	0	7	12	2	0
	1730	"	1014·0	989·3	..	24·3	16·4	9·6	12·6	42	..	1·9	..	5·7	0	0	24	2	2	0	0	0	0	5	15	6	0
	2330	"	1016·2	990·8	..	16·8	13·4	10·6	12·6	67	..	0·5	..	4·2	0	0	18	2	0	0	1	0	0	7	8	12	0
Hissar	0530	221	1016·1	989·9	..	12·7	10·8	9·0	11·4	76	..	0·6	..	4·4	0	0	24	3	3	1	3	1	3	5	5	6	0
	0830	"	1017·9	991·9	+1·3	16·2	12·8	9·8	12·1	67	+13	0·7	+0·1	3·0	0	0	21	1	1	0	3	3	6	5	2	9	0
	1130	"	1017·2	992·1	..	25·3	17·1	10·4	12·5	42	..	1·2	..	2·5	0	0	16	1	0	1	2	1	2	3	6	14	0
	1730	"	1014·2	989·0	..	25·4	17·0	10·3	12·7	41	..	1·1	..	3·6	0	0	21	8	0	1	1	0	0	1	10	9	0
	2330	"	1016·2	990·2	..	15·3	12·4	9·5	12·2	69	..	0·5	..	1·7	0	0	13	2	0	1	4	0	0	4	2	17	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal		62 or more	29 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) (Including Delhi)— *Contd.*																											
Karnal	0830	249	1016·9	987·6	..	15·7	13·1	10·6	12·5	73	..	0·7	..	0·3	0	0	2	0	0	0	1	0	0	0	1	28	0
	1730	,,	1014·0	985·6	..	24·7	16·9	10·2	13·4	42	..	1·4	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Patiala	0830	251	1017·3	988·0	..	16·7	13·4	10·2	12·6	68	..	1·7	..	3·3	0	0	20	7	0	1	5	0	0	1	6	10	0
	1730	,,	1013·8	985·8	..	22·4	16·4	12·0	13·4	53	..	0·4	..	1·3	0	0	10	0	0	0	2	1	4	3	0	20	0
Ambala	0830	272	1016·1	984·3	+0·1	14·9	12·5	10·6	12·5	77	+14	1·2	+0·2	2·4	0	0	16	0	1	0	11	0	0	0	4	14	0
	1730	,,	1012·7	981·7	..	22·9	16·1	11·8	12·4	47	..	1·3	..	1·4	0	0	8	0	0	0	2	0	0	0	6	22	0
Ambala (P.B.O.)	0230	278	1014·9	982·7	..	15·7	12·6	10·0	12·0	70	..	0·5	..	6·1	0	0	24	1	4	2	4	0	1	3	9	6	0
	0530	,,	1015·0	982·6	..	14·4	12·0	10·0	12·0	76	..	0·8	..	5·6	0	0	20	2	1	2	3	0	1	3	8	10	0
	1130	,,	1016·4	984·9	..	23·1	15·9	10·9	13·1	47	..	1·5	..	8·9	0	0	26	1	0	0	3	0	0	5	12	4	0
	2330	,,	1015·2	983·2	..	17·5	13·3	10·1	12·2	63	..	0·8	..	9·8	0	0	26	3	2	1	1	1	2	4	12	4	0
Ambala (R)	0530	273																									
(Aerodrome) (R)	0830	,,																									
(R)	1130	,,																									
(R)	1730	,,																									
(R)	2330	,,																									
Chandigarh	0830	347	1016·6	975·6	..	16·0	12·8	9·5	12·1	66	..	0·6	..	..	0	0	8	0	1	1	2	1	0	0	3	22	0
	1730	,,	1013·4	974·2	..	23·4	15·6	8·5	11·4	40	..	0·9	..	..	0	0	16	0	0	0	3	0	2	0	11	14	0
Ludhiana	0830	247	1017·6	988·6	+1·3	17·2	13·9	11·0	13·2	71	+7	1·6	+0·6	2·1	0	0	17	0	0	2	3	1	1	7	2	13	0
	1730	,,	1014·6	986·3	..	22·7	17·2	13·9	15·2	59	..	2·4	..	1·3	0	0	14	1	1	1	0	0	0	10	1	16	0
Ferozepur	0830	200	1017·6	990·9	.	14·1	12·4	10·4	12·9	81	..	1·3	..	0·7	0	0	6	1	1	0	0	0	1	0	3	24	0
	1730	,,	1014·3	991·5	..	24·4	17·8	12·6	15·0	50	..	1·7	..	0·7	0	0	7	0	1	0	1	0	0	1	4	23	0
Amritsar	0530	234	1016·4	988·5	..	10·7	9·9	9·2	11·8	90	..	7·7	..	4·5	0	0	22	3	2	2	1	1	2	5	6	8	0
	0830	,,	1017·9	990·2	..	13·7	12·0	10·5	12·9	82	..	2·8	..	4·4	0	0	21	3	2	4	1	0	1	5	5	9	0
	1130	,,	1017·7	990·8	..	21·8	15·8	10·2	12·7	50	..	3·0	..	8·1	0	1	25	3	4	3	1	1	0	2	12	4	0
	1730	,,	1014·9	988·0	..	21·7	15·9	11·0	13·3	53	..	2·3	..	4·9	0	0	25	4	1	0	0	0	0	8	12	5	0
Pathankot	0830	344	1017·6	977·4	..	15·6	12·4	9·4	12·0	68	..	3·7	..	2·0	0	0	19	0	4	6	6	0	0	1	0	11	0
	1730	,,	1014·9	976·0	..	21·4	16·3	12·5	14·9	58	..	3·4	..	1·3	0	0	11	0	1	2	1	0	3	4	0	19	0
Pathankot (R)	0830	312																									
(Aerodrome) (R)	1130	,,																									
(R)	1730	,,																									
Himachal Pradesh																											
Bilaspur	0830	493	1019·3	961·6	..	11·4	10·8	10·2	12·8	94	..	6·6	..	1·5	0	0	13	2	3	2	1	3	1	0	1	17	0
	1730	,,	1013·5	957·1	..	22·3	15·8	10·6	12·3	48	..	3·1	..	3·7	0	0	25	1	2	0	1	6	7	2	6	5	0
Mandi	0830	761	1020·1	931·9	..	10·1	9·1	8·3	10·5	89	..	3·5	..	0·3	0	0	3	0	0	0	0	0	0	2	1	27	0
	1730	,,	1013·7	928·5	..	18·4	14·1	11·0	12·3	63	..	2·7	..	0·7	0	0	7	0	0	0	4	3	0	0	0	23	0
Jammu and Kashmir																											
Srinagar	0830	1587	1573·0	848·3	+2·0	4·6	4·0	3·4	7·7	92	+8	6·5	+4·3	2·4	0	0	18	1	0	1	3	1	1	4	7	12	0
	1130	,,	1576·5	849·1	..	7·8	5·9	3·8	8·0	77	..	5·8	..	3·7	0	0	26	2	4	0	2	1	2	1	14	4	0
	1730	,,	1553·3	846·8	..	8·6	6·3	4·1	8·0	74	..	5·2	..	2·7	0	0	20	3	3	2	2	0	3	3	4	10	0
Gulmarg	0830	2655	3101·6	740·5	•	−1·1	..	..	..	..	..	5·8	..	0·6	0	0	15	0	1	6	4	1	0	3	0	15	0
	1730	,,	3095·0	739·8	..	−0·1	..	..	..	..	..	4·5	..	1·0	0	0	19	0	0	6	2	0	0	5	6	11	0
Leh (a)	0530	3514	3150·8	669·1	..	−5·9	−8·9	−17·1	1·3	38	..	2·3	..	3·4	0	0	15	8	7	0	0	0	0	0	0	14	0
	0830	,,	3164·5	669·9	+1·1	−1·3	−5·5	−14.5	1·3	32	−24	3·3	+0·7	0·4	0	0	2	1	0	0	0	1	0	0	0	28	0
	1730	,,	3110·8	667·1	..	3·1	−1·2	−7·8	2·5	43	..	3·7	..	(b) 6·0	0	0	24	0	0	0	1	6	12	2	3	5	0
Skardu (R)	0830	2288																									
(R)	1730	,,																									
Gilgit (R)	0830	1491																									
(R)	1730																										
Misgar (R)	0830	3106																									
(R)	1730	,,																									
Jammu	0830	..	..	..	..	15·5	11·9	8·3	11·1	63	+7	4·3	+3·3	10.3	0	0	30	0	30	0	0	0	0	0	0	0	0
Rajasthan (West)																											
Sri Ganganagar	0530	177	1017·0	995 0	..	13·4	11·3	9·3	11·4	77	..	0·8	..	1·7	0	0	13	2	1	3	2	0	1	0	4	17	0
	0830	,,	1017 6	996·7	..	14·9	12·1	9·2	12·0	71	+16	1·6	+1·0	1·0	0	0	9	0	1	2	3	1	1	0	1	21	0
	1130	,,	1017·2	996·6	..	24·7	16·4	8·7	12·2	39	..	2·0	..	2·7	0	0	22	3	2	0	2	4	4	1	6	8	0
	1730	,,	1014·2	994 0	..	25·2	16·9	10·0	12·2	40	..	1·6	..	1·1	0	0	7	4	0	0	1	0	1	0	1	23	0
	2330	,,	1016·3	995·5	..	16·6	13·2	10·0	12.6	66	..	0·7	..	1·1	0	0	7	3	3	1	0	0	0	0	0	23	0
Churu	0830	291	1018·2	984·0	..	15·0	11·7	8·5	11·1	65	..	1·1	..	2·2	0	0	17	2	1	1	4	3	5	1	0	13	0
	1730	,,	1014·0	981·2	..	27·1	18·2	11·7	13·9	39	..	2·0	..	6·5	0	0	30	17	2	1	2	0	3	1	4	0	0

(a)—Observations for 29 days.

(R) Register not received.

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (West)—*Contd.*																											
Bikaner	0830	224	1017·9	991·5	+1·6	16·0	11·2	5·5	9·7	52	+7	1·4	+0·4	2·7	0	0	18	0	1	1	11	0	3	0	2	12	0
	1730	,,	1013·8	988·5	..	28·1	17·0	5·2	10·7	24	..	1·1	..	4·7	0	0	24	4	2	0	0	0	2	1	15	6	0
Bikaner (P.B.O.)	0530	224	1016·2	989·7	..	13·5	11·0	8·3	11·0	72	..	1·0	..	2·1	0	0	10	1	1	0	4	2	1	0	1	20	0
	1130	,,	1016·9	991·5	..	26·7	19·4	14·4	16·7	48	..	1·0	..	4·9	0	0	25	2	8	1	2	7	3	1	1	5	0
	2330	,,	1016·3	990·1	..	18·1	14·1	10·8	13·3	64	..	0·4	..	2·8	0	0	13	7	3	1	0	1	0	1	0	17	0
Jaisalmer	0830	242	1016·7	988·4	..	19·7	..	..	..	..	..	0·7	..	9·2	0	3	15	0	14	0	1	1	1	0	1	12	0
	1730	,,	1013·0	985·9	..	28·6	..	..	..	..	..	0·5	..	1·6	0	7	22	0	11	0	1	3	7	0	7	1	0
Phalodi	0830	234	1017·2	990·2	..	18·2	13·3	8·7	11·3	56	..	1·3	..	5·9	0	0	26	4	1	3	8	8	2	0	0	4	0
	1730	,,	1013·9	987·6	..	29·0	18·3	8·6	12·5	29	..	1·4	..	8·8	0	1	27	0	4	0	4	0	6	5	9	2	0
Jodhpur	0230	224	1015·7	989·5	..	19·5	13·1	6·3	9·9	44	..	0·8	..	9·0	0	1	25	7	15	1	0	1	1	1	0	4	0
	0530	,,	1015·1	989·5	..	18·1	12·5	6·3	10·3	49	..	0·9	..	9·2	0	1	27	5	21	0	0	1	0	0	1	2	0
	0830	,,	1017·6	991·5	+2·8	19·6	13·0	6·2	9·4	43	+1	1·8	+0·8	7·1	0	0	24	1	23	0	0	0	0	0	0	6	0
	1130	,,	1017·1	991·6	..	27·4	16·8	7·3	10·4	30	..	1·8	..	8·4	0	0	27	1	12	4	3	4	1	2	0	3	0
	1730	,,	1013·5	988·3	..	29·7	17·9	7·6	10·9	27	..	2·1	..	5·0	0	0	23	7	6	1	0	1	4	1	3	7	0
	2330	,,	1016·0	990·1	..	21·5	14·3	7·0	10·6	41	..	0·8	..	8·8	0	0	25	8	15	0	1	0	0	1	0	5	0
Barmer	0530	194	1015·3	992·7	..	18·9	13·4	7·9	10·8	51	..	0·6	..	7·9	0	0	24	1	1	0	0	1	1	2	18	6	0
	0830	,,	1017·1	994·5	+1·9	20·3	14·1	8·3	11·5	49	0	1·5	+0·4	6·1	0	0	24	7	1	1	2	0	0	0	13	6	0
	1130	,,	1016·6	994·6	..	28·6	17·7	8·2	11·2	29	..	1·4	..	9·9	0	0	29	3	9	5	6	1	2	0	3	1	0
	1730	,,	1013·0	991·3	..	29·8	17·9	7·6	11·0	27	..	2·2	..	7·9	0	0	29	5	10	1	2	2	2	2	5	1	0
	2330	,,	1015·7	993·4	..	23·0	14·9	7·1	10·3	38	..	0·6	..	9·0	0	0	29	2	0	0	1	4	7	1	14	1	0
Rajasthan (East)																											
Alwar	0830	271	1017·7	986·3	..	16·9	14·2	11·9	13·9	73	.	1·4	..	..	0	0	3	0	0	3	0	0	0	0	0	27	0
	1730	,,	1013·4	983·2	..	26·1	18·2	12·6	14·8	46	.	1·9	..	..	0	0	3	0	2	1	0	0	0	0	0	27	0
Sikar	0830	433	1017·9	967·8	..	17·3	..	..	..	..	..	1·4	..	1·6	0	0	15	0	0	5	5	1	1	0	3	15	0
	1730	,,	1013·8	965·2	..	25·9	..	..	..	..	..	1·4	..	1·5	0	0	15	3	1	1	1	0	0	3	6	15	0
Jaipur	0830	436	1017·8	967·9	+1·1	20·3	14·7	9·9	12·6	52	+6	1·4	+0·7	3·7	0	0	22	4	7	6	3	2	0	0	0	8	0
	1130	,,	1016·3	967·8	..	27·8	16·7	6·7	10·0	28	..	1·0	..	4·9	0	0	29	2	2	4	1	4	5	4	7	1	0
	1730	,,	1013·5	964·9	..	26·8	17·9	11·0	13·2	38	..	1·7	..	2·8	0	0	23	1	1	0	2	3	2	3	11	7	0
Jaipur (Sanganer Aerodrome)	0230	390	1015·6	970·3	..	16·5	12·6	8·7	11·6	61	..	0·6	..	..	0	0	16	6	2	6	2	0	0	0	0	14	0
	0530	,,	1016·2	970·7	..	15·0	11·9	8·8	11·5	68	..	1·0	..	..	0	0	15	3	5	4	1	1	0	0	1	15	0
	0830	,,	1017·3	972·4	..	20·1	14·7	10·3	12·5	55	..	1·7	..	..	0	0	15	4	1	9	0	0	0	0	1	15	0
	1130	,,	1016·3	972·5	..	26·7	17·1	9·5	11·4	34	..	1·4	..	..	0	0	22	1	0	5	3	5	2	1	5	8	0
	1730	,,	1013·2	969·5	..	26·3	17·1	9·5	11·9	36	..	2·2	..	..	0	0	14	2	0	1	0	0	0	2	9	16	0
	2330	,,	1015·9	971·0	..	18·3	13·6	9·5	11·8	57	..	0·5	..	..	0	0	22	8	4	5	1	1	1	0	2	8	0
Dholpur	0830	176	1017·1	997·0	..	20·9	17·2	..	..	65	..	3·6	..	1·3 (d)	0	0	21	1	1	0	4	3	1	3	8	9	0
	1730	,,	1013·1	993·6	..	25·1	19·2	15·4	18·2	54	..	2·1	..	2·0	0	0	13	3	0	0	1	0	0	1	8	14	0
Ajmer	0830	486	1018·2	962·4	+1·2	17·5	13·1	9·5	11·5	61	+10	1·8	+1·0	1·6	0	0	13	3	0	2	0	1	0	2	5	17	0
	1730	,,	1013·3	959·4	..	27·1	15·9	6·4	10·2	28	..	2·4	..	6·5	0	0	25	4	3	3	2	1	2	2	8	5	0
Kotah	0530	257	1015·7	985·8	..	17·7	14·0	11·0	13·3	65	..	0·7	..	0·6	0	0	4	2	0	0	0	0	1	1	0	25	0
	0830	,,	1017·3	987·7	+1·0	21·1	15·4	10·4	13·2	51	+2	1·9	+0·9	0·8	0	0	6	0	0	3	0	0	0	1	2	24	0
	1130	,,	1016·3	987·1	..	28·4	18·0	9·6	11·8	32	..	1·5	..	1·9	0	0	15	4	1	5	2	0	1	2	0	15	0
	1730	,,	1013·0	984·3	..	29·2	18·7	10·7	13·3	32	..	1·7	..	0·6	0	0	4	0	3	0	1	0	0	0	0	26	0
	2330	,,	1015·5	986·0	..	21·4	16·0	11·6	13·8	55	..	1·5	..	0·5	0	0	4	0	0	1	0	0	3	0	0	26	0
Chambal	0830	351	1018·0	977·5	..	19·3	15·2	12·0	14·0	63	..	1·8	..	1·5	0	0	11	4	2	1	1	0	3	0	0	11	0
	1730	,,	1012·8	973·8	..	28·4	18·0	9·8	11·8	32	..	2·6	..	5·0	0	0	26	5	3	1	2	1	3	6	5	4	0
Jhalawar	0830	321	1017·4	980·3	+1·6	19·0	14·7	11·2	13·4	60	+1	1·7	+0·7	1·1	0	0	10	2	2	1	1	0	1	0	3	20	0
	1730	,,	1012·6	976·9	..	29·2	18·5	10·4	12·7	31	..	1·7	..	2·5	0	0	18	5	7	2	0	0	0	1	3	12	0
Udaipur	0230	582	1016·7	949·9	..	15·5	13·3	11·7	13·5	79	..	1·8	..	0·4	0	0	1	0	0	1	0	0	0	0	0	29	0
	0530	,,	1017·1	949·9	..	14·2	12·7	11·3	14·0	84	..	1·4	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	0830	,,	1017·6	951·7	+1·2	20·1	15·5	11·9	13·9	61	+5	1·7	+1·2	0·3	0	0	2	1	0	0	0	0	0	0	1	29	0
	1130	,,	1015·9	951·6	..	27·2	17·8	11·1	13·5	39	..	2·0	..	0·9	0	0	7	2	2	2	0	1	0	0	0	27	0
	1730	,,	1013·0	948·7	..	26·3	18·5	13·4	15·4	46	..	3·1	..	0·8	0	0	4	0	1	1	0	0	0	2	0	26	0
	2330	,,	1017·2	950·6	..	16·6	14·2	12·3	14·1	77	..	1·4	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Erinpura (Jawai Dam)	0830	295	1017·2	983·1	..	19·4	15·4	12·1	14·5	65	..	1·9	..	3·0	0	0	12	1	0	0	2	7	2	0	0	18	0
	1730	,,	1012·8	979·9	..	28·8	19·6	13·0	15·5	38	..	2·5	..	3·0	0	0	15	8	3	1	0	1	0	1	1	15	0

(d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km. p.h.)			No. of observations										
																		Wind direction										
			Atmean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (West)																											
Gwalior (P.B.O.)	0230	210	1015·4	990·7	..	14·8	12·5	10·5	12·6	77	..	0·8	..	0·6	0	0	8	1	0	0	0	4	1	0	2	22	0
	0530	"	1016·0	991·2	..	13·6	11·7	9·9	12·2	79	..	0·8	..	1·1	0	0	7	1	0	0	0	2	1	0	3	23	0
	0830	"	1017·4	993·1	+1·6	20·6	15·1	10·1	12·7	54	+4	0·9	+0·1	1·5	0	0	8	2	0	0	0	3	1	0	2	22	0
	1130	"	1016·4	992·8	..	27·5	16·9	7·6	10·8	29	..	0·7	..	5·1	0	0	27	6	3	1	3	0	5	0	9	3	0
	1730	"	1013·6	989·8	..	25·3	17·5	11·4	13·7	43	..	1·6	..	0·7	0	0	7	3	0	0	1	0	0	0	3	23	0
	2330	"	1016·2	991·6	..	16·1	13·5	11·4	13·4	75	..	1·1	..	1·4	0	0	8	1	2	0	0	3	1	0	1	22	0
Sheopur Kalan	0830	235	1017·7	990·5	..	19·8	15·3	11·5	13·8	60	..	2·1	..	2·7	0	0	15	2	3	0	4	4	1	1	0	15	0
	1730	"	1012·9	986·4	..	27·2	19·3	13·8	16·2	45	..	2·6	..	3·2	0	0	22	3	7	1	1	0	2	2	6	8	0
Guna	0530	478	1016·6	961·1	..	14·6	12·0	9·4	12·2	72	..	1·8	..	1·3	0	0	9	0	0	0	9	0	0	0	0	21	0
	0830	"	1017·3	962·8	+1·3	20·4	14·6	9·7	12·4	51	−9	2·3	+1·6	1·5	0	0	13	2	0	3	1	6	0	1	0	17	0
	1130	"	1016·1	962·9	..	27·1	16·6	8·4	11·3	31	..	2·0	..	6·5	0	0	28	3	6	4	4	4	1	3	3	2	0
	1730	"	1013·1	959·9	..	27·0	17·3	10·1	12·6	35	..	2·0	..	2·8	0	0	16	4	3	1	0	1	1	1	5	14	0
	2330	"	1016·7	961·6	..	17·3	13·4	10·2	12·6	63	..	1·4	..	1·6	0	0	9	0	0	0	5	2	0	1	1	21	0
Rajgarh	0830	382	1017·5	973·6	..	19·4	14·2	9·5	12·0	53	..	2·1	..	4·2	0	0	19	1	1	2	4	7	2	2	0	11	0
	1730	"	1012·6	970·3	..	29·1	17·6	8·3	10·8	28	..	2·4	..	6·9	0	0	26	18	1	1	1	1	1	1	2	4	0
Neemuch	0830	496	1018·1	961·7	+1·7	20·8	14·3	9·0	11·1	48	0	2·6	+1·6	3·1	0	0	21	1	15	4	1	0	0	0	0	9	0
	1730	"	1013·3	958·6	..	28·6	16·8	7·6	9·6	27	..	3·1	..	3·9	0	0	25	3	14	1	2	0	3	0	2	5	0
Ratlam	0830	486	1017·0	961·7	..	20·7	15·1	10·5	13·1	54	..	2·6	..	4·4	0	0	17	2	7	6	0	1	1	0	0	13	0
	1730	"	1011·9	958·5	..	29·7	18·5	10·7	13·1	32	..	3·0	..	3·7	0	0	19	2	4	6	2	0	1	0	4	11	0
Alirajpur	0830	293	1017·0	983·4	..	20·9	16·2	12·4	14·6	59	..	2·9	..	2·6	0	0	20	1	1	13	5	0	0	0	0	10	0
	1730	"	1012·1	979·6	..	30·7	19·1	10·3	12·6	29	..	2·7	..	3·4	0	0	23	7	4	4	0	0	0	3	5	7	0
Indore	0530	567	1015·6	950·8	..	16·8	13·3	10·3	12·8	66	..	2·2	..	5·0	0	0	23	1	2	5	4	7	1	2	1	7	0
	0830	"	1016·9	952·9	+1·2	21·0	15·3	11·0	13·2	54	+2	3·2	+2·0	5·3	0	0	24	0	3	5	6	8	2	0	0	6	0
	1130	"	1014·9	952·5	..	28·3	17·2	8·9	11·6	31	..	2·8	..	11·7	0	0	30	0	3	4	6	13	4	0	0	0	0
	1730	"	1012·0	949·7	..	27·9	17·5	10·0	12·4	33	..	3·5	..	5·1	0	0	24	4	7	3	4	3	0	0	3	6	0
	2330	"	1015·7	951·5	..	19·8	14·6	10·4	12·7	56	..	2·4	..	5·7	0	0	21	2	3	5	2	7	1	0	1	9	0
Bhopal (Bairagarh)	0230	523	1015·0	955·6	..	19·0	13·1	8·1	10·8	50	..	1·8	..	1·6	0	0	9	1	2	1	4	0	0	1	0	21	0
	0530	"	1015·7	955·9	..	17·6	12·7	8·3	11·2	55	..	2·2	..	1·7	0	0	9	0	3	3	2	0	0	0	1	21	0
	0830	"	1017·1	958·0	+1·3	21·7	14·4	8·5	11·2	43	−12	2·5	+1·1	3·9	0	0	17	2	4	0	8	2	1	0	0	13	0
	1130	"	1015·1	957·4	..	28·0	16·7	8·1	10·7	30	..	2·3	..	7·7	0	0	26	2	1	6	8	7	1	0	1	4	0
	1730	"	1012·6	954·9	..	27·3	16·7	8·5	10·6	31	..	2·5	..	4·2	0	0	20	9	4	2	2	1	0	0	2	10	0
	2330	"	1015·8	956·5	..	20·2	14·0	8·9	10·9	49	..	1·5	..	2·1	0	0	11	0	6	0	3	2	0	0	0	19	0
Khandwa	0830	318	1016·9	980·5	+1·4	22·0	17·2	13·7	15·7	59	+1	4·0	+2·6	1·8	0	0	14	0	3	8	2	0	0	0	1	16	0
	1730	"	1012·3	977·0	..	29·8	20·5	14·5	16·5	40	..	4·1	..	5·7	0	0	28	4	11	7	1	1	1	0	3	2	0
Hoshangabad	0830	302	1017·6	982·8	+1·1	20·8	15·2	10·7	12·8	52	−9	2·5	+1·1	0·5	0	0	4	0	1	2	0	1	0	0	0	26	0
	1730	"	1012·7	979·0	..	28·9	18·9	11·4	13·7	34	..	2·9	..	0·2	0	0	2	1	0	0	0	0	0	0	1	28	0
Betul	0830	653	1017·4	944·1	..	21·2	15·2	10·6	12·9	51	..	2·8	..	2·7	0	0	22	0	2	13	5	1	1	0	0	8	0
	1730	"	1012·4	940·6	..	25·9	16·9	10·4	12·8	38	..	4·1	..	8·4	0	0	30	7	20	3	0	0	0	0	0	0	0
Chhindwara	0830	685	1016·2	938·9	..	18·6	14·6	11·6	13·7	64	..	1·5	..	2·5	0	0	24	3	5	1	4	1	3	1	6	6	0
	1730	"	1011·7	936·7	..	26·6	16·6	8·6	11·6	32	..	2·5	..	3·1	0	0	30	1	4	2	7	1	1	5	9	0	0
Seoni	0830	619	1016·8	947·5	+1·6	21·9	15·5	10·6	12·9	49	−8	2·7	+1·2	0·3	0	0	3	0	2	1	0	0	0	0	0	27	0
	1730	"	1012·2	944·0	..	25·9	17·1	11·0	13·1	39	..	3·8	..	1·6	0	0	16	3	5	5	2	1	0	0	0	14	0
Sagar	0830	551	1016·8	954·7	+1·3	22·1	14·3	7·8	10·7	41	−6	1·8	+0·5	3·3	0	0	21	0	3	6	2	1	6	3	0	9	0
	1730	"	1012·8	951·7	..	26·7	16·4	8·4	11·3	32	..	2·4	..	3·9	0	0	30	2	12	3	1	0	0	4	8	0	0
Nowgong	0830	229	1018·1	991·5	+1·6	18·3	14·4	11·1	13·3	63	−8	1·4	+0·2	2·0	0	0	17	0	0	1	0	6	8	2	0	13	0
	1730	"	1013·8	987·9	..	26·6	18·0	11·4	13·6	40	..	1·5	..	0·4	0	0	4	0	1	0	0	0	0	2	1	26	0
Madhya Pradesh (East)																											
Sutna	0530	317	1016·3	979·0	..	13·7	10·9	8·1	10·9	69	..	1·6	..	1·3	0	0	12	0	0	0	1	0	5	4	2	18	0
	0830	"	1017·5	981·0	+1·4	20·3	14·1	8·7	11·1	47	−15	2·0	+0·8	1·5	0	0	15	0	0	0	0	1	10	2	2	15	0
	1130	"	1015·7	980·1	..	27·7	16·8	7·1	10·3	28	..	1·7	..	4·0	0	0	26	3	0	1	2	2	3	8	7	4	0
	1730	"	1013·1	977·6	..	26·5	16·9	8·4	11·9	32	..	2·1	..	2·2	0	0	22	0	0	0	0	0	0	2	20	8	0
	2330	"	1016·1	979·3	..	18·0	13·0	8·4	10·9	54	..	1·6	..	0·6	0	0	6	0	0	0	1	0	3	2	0	24	0
Umaria	0830	459	1017·2	965·0	..	19·0	14·5	10·7	13·2	58	−4	1·3	−0·7	0·9	0	0	8	0	0	0	6	1	0	0	1	22	0
	1730	"	1013·5	961·9	..	25·4	18·3	13·9	16·1	49	..	2·1	..	0·2	0	0	2	0	0	0	1	0	0	0	1	28	0
Jabalpur	0530	393	1016·6	970·7	..	13·9	12·2	10·6	12·9	81	..	2·0	..	3·2	0	0	24	0	0	2	19	3	0	0	0	6	0
	0830	"	1017·9	972·8	+1·9	19·5	14·7	10·8	14·0	58	−14	2·1	+0·8	4·1	0	0	29	0	0	0	22	6	1	0	0	1	0
	1130	"	1015·5	971·8	..	28·2	17·8	9·5	12·1	31	..	1·8	..	4·4	0	0	29	3	6	3	6	3	4	4	0	1	0
	1730	"	1012·8	969·0	..	27·0	18·5	12·3	14·4	40	..	3·0	..	2·9	0	0	25	8	6	7	2	0	0	0	2	5	0
	2330	"	1016·4	971·0	..	17·2	14·2	11·8	13·7	71	..	2·2	..	1·9	0	0	15	1	1	1	10	2	0	0	0	15	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km per hour	Wind speed (km.p.h.)			No. of observations									
			A mean sea level or height in g.p.m. of nearest standard isobaric level	A station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (East)—*Contd.*																											
Mandla	0830	443	1018·6	967·4	..	16·2	13·8	11·3	14·0	73	..	2·4	..	0·6	0	0	6	2	0	1	1	1	0	0	1	24	0
	1730	"	1012·9	963·6	..	25·7	17·5	11·1	13·4	41	..	3·2	..	2·0	0	0	14	6	1	0	1	0	0	0	6	16	0
Pendra	0530	625	1016·6	945·2	..	15·1	11·5	8·3	11·0	64	..	1·7	..	4·1	0	0	28	8	1	0	0	0	2	9	8	2	0
	0830	"	1017·4	947·1	+1·4	20·7	14·7	8·7	12·4	47	−15	1·8	−0·2	3·7	0	0	23	12	1	0	0	2	2	0	6	7	0
	1130	"	1015·3	946·4	..	25·8	15·3	6·5	9·8	29	..	1·6	..	8·0	0	0	29	12	5	1	4	0	2	0	5	1	0
	1730	"	1013·2	943·9	..	23·7	15·3	8·7	11·3	39	..	2·9	..	4·8	0	0	29	14	4	1	1	0	1	1	7	1	0
	2330	"	1016·6	945·6	..	17·3	12·6	8·7	11·2	57	..	1·6	..	4·2	0	0	27	3	0	1	0	2	8	6	7	3	0
Ambikapur	0830	611	1017·9	948·6	..	18·6	14·0	10·4	12·3	59	..	1·2	..	1·4	0	0	11	0	3	0	0	3	5	0	0	19	0
	1730	"	1013·3	945·5	..	23·9	15·8	9·5	11·5	40	..	1·2	..	7·2	0	0	29	27	1	0	0	0	0	0	1	1	0
Champa	0830	245	1017·7	989·4	..	19·9	15·7	12·3	14·4	62	..	2·4	..	4·4	0	0	26	18	0	0	0	0	0	0	8	4	0
	1730	"	1013·2	985·6	..	27·3	18·4	11·7	14·0	38	..	2·7	..	2·5	0	0	16	13	0	0	0	0	0	0	3	14	0
Raigarh	0830	220	1017·4	992·0	..	20·9	16·2	12·5	14·2	58	..	2·3	..	2·6	0	0	22	0	19	1	1	0	0	0	1	8	0
	1730	"	1012·9	988·1	..	28·0	18·4	10·9	14·2	35	..	2·8	..	1·3	0	0	13	7	3	0	1	0	0	1	1	17	0
Raipur	0530	298	1015·4	980·8	..	17·6	14·2	11·4	13·6	67	..	2·3	..	0·7	0	0	7	3	1	2	1	0	0	0	3	23	0
	0830	"	1017·0	982·9	+1·4	21·6	16·1	11·7	13·7	53	−12	2·4	+0·7	2·7	0	0	23	9	8	2	2	1	0	1	0	7	0
	1130	"	1015·6	982·2	..	27·9	17·5	9·0	11·5	31	..	2·2	..	4·2	0	0	25	9	10	3	1	1	0	0	1	5	0
	1730	"	1012·7	979·4	..	27·5	17·5	9·5	11·9	33	..	3·5	..	3·3	0	0	23	10	4	6	3	0	0	0	0	7	0
	2330	"	1015·2	981·1	..	21·5	15·4	10·2	12·5	49	..	1·9	..	2·9	0	0	18	2	3	4	3	6	0	0	0	12	0
Kanker	0830	402	1017·5	971·5	+2·0	19·8	16·3	13·6	15·8	68	−8	2·5	+0·2	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	"	1012·9	968·1	..	26·6	19·5	14·6	16·9	50	..	3·3	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Jagdalpur (P.B.O.)	0530	553	1015·9	952·4	..	15·0	14·3	13·7	16·0	91	..	2·3	..	0·1	0	0	1	1	0	0	0	0	0	0	0	29	0
	0830	"	1017·2	954·5	+2·1	19·3	16·2	14·2	15·8	72	−7	2·5	−0·3	1·1	0	0	10	4	3	1	0	0	0	1	1	20	0
	1130	"	1014·3	953·4	..	27·0	18·1	12·3	14·3	40	..	2·6	..	4·9	0	0	22	3	17	1	0	0	0	0	1	8	0
	1730	"	1012·5	951·3	..	24·9	18·1	13·8	15·8	50	..	3·6	..	1·7	0	0	12	3	6	3	0	0	0	0	18	0	
	2330	"	1016·1	953·1	..	17·8	15·7	14·3	16·3	80	..	1·8	..	0	0	-	0	0	0	0	0	0	0	0	30	0	
Gujarat																											
Deesa	0830	136	1016·5	1000·7	+1·2	21·5	16·3	11·8	14·3	56	..	2·4	..	6·0	0	0	29	7	13	6	1	0	0	0	2	1	0
	1730	"	1012·7	997·4	..	30·8	19·6	10·9	13·7	32	..	2·7	..	7·0	0	0	29	6	8	3	1	1	2	2	6	1	0
Idar	0830	219	1015·8	990·9	..	24·8	16·2	9·2	11·4	39	..	2·1	..	6·7	0	0	29	7	16	3	1	0	1	1	0	1	0
	1730	"	1011·8	987·6	..	31·1	19·5	10·5	13·2	29	..	2·3	..	4·2	0	0	29	1	5	2	4	0	3	6	8	1	0
Ahmedabad	0230	55	1013·6	1007·3	..	21·3	16·6	12·8	15·1	60	..	1·6	..	6·3	0	1	24	7	10	4	0	1	0	0	3	5	0
	0530	"	1013·8	1007·5	..	19·8	15·7	12·3	14·4	63	..	1·6	..	7·3	0	0	28	7	14	5	0	1	0	0	1	2	0
	0830	"	1015·8	1009·4	+0·7	23·0	17·0	12·2	14·5	51	−4	2·8	+1·8	10·0	0	0	29	0	9	14	5	1	0	0	0	1	0
	1130	"	1015·7	1009·5	..	30·3	20·1	12·9	15·0	36	..	2·3	..	12·2	0	3	26	1	9	13	2	3	0	0	1	1	0
	1730	"	1012·2	1006·1	..	32·5	20·5	12·3	14·4	29	..	2·9	..	7·6	0	0	26	7	2	6	3	0	0	2	6	4	0
	2330	"	1014·6	1008·3	..	22·9	17·5	13·1	15·7	56	..	1·6	..	5·8	0	1	20	9	4	2	0	1	3	0	2	9	0
Dohad	0830	333	1016·0	978·0	..	21·6	16·1	11·6	13·7	54	−10	2·0	+0·5	5·9	0	0	28	1	5	13	4	5	0	0	0	2	0
	1730	"	1012·5	975·6	..	30·3	18·9	9·8	12·6	29	..	1·9	..	8·7	0	1	27	3	2	3	2	2	11	2	3	2	0
Baroda	0530	35	1013·7	1009·6	..	18·6	16·5	15·1	17·1	80	..	2·1	..	1·2	0	0	8	0	5	0	3	0	0	0	0	22	0
	0830	"	1015·6	1011·5	..	22·2	18·5	15·9	18·3	68	+4	2·5	+1·4	1·5	0	0	12	0	4	4	3	1	0	0	0	18	0
	1130	"	1015·5	1011·5	..	31·5	21·1	14·2	16·6	36	..	2·2	..	3·0	0	0	20	0	5	4	7	2	1	1	0	10	0
	1730	"	1012·0	1008·1	..	30·1	22·5	18·2	21·0	50	..	2·0	..	2·1	0	0	15	1	5	4	1	0	1	1	2	15	0
	2330	"	1014·5	1010·4	..	21·3	18·1	15·7	18·1	71	..	1·8	..	2·5	0	0	14	3	6	3	0	0	1	0	1	16	0
Baroda (Aerodrome)	0830	38	1015·9	1011·5	..	24·0	18·3	14·2	16·3	55	..	2·6	..	4·9	0	0	28	7	9	5	4	0	1	1	1	2	0
	1130	"	1015·5	1011·3	..	31·9	20·6	12·9	14·9	33	..	2·4	..	6·0	0	0	30	3	2	9	9	3	0	2	2	0	0
	1730	"	1012·2	1008·0	..	32·0	21·0	13·4	15·9	34	..	2·5	..	5·5	0	0	28	3	3	4	0	1	2	2	13	2	0
Broach	0830	17	1015·3	1013·2	..	22·3	18·0	14·6	17·2	62	..	2·6	..	4·0	0	0	30	0	11	4	12	2	0	0	1	0	0
	1730	"	1011·5	1009·5	..	33·6	21·5	13·6	15·8	31	..	2·0	..	5·1	0	0	30	2	10	0	14	1	1	1	1	0	0
Surat	0530	12	1013·4	1012·0	..	22·1	18·4	15·8	18·3	68	..	2·3	..	4·6	0	0	19	3	9	6	0	0	0	0	1	11	0
	0830	"	1015·4	1014·0	+1·3	24·4	19·1	15·0	17·8	59	+1	2·9	+1·5	6·1	0	0	26	1	9	14	2	0	0	0	0	4	0
	1130	"	1015·0	1013·7	..	32·2	21·9	15·4	18·0	37	..	3·3	..	8·5	0	0	28	4	12	10	2	0	0	0	0	2	0
	1730	"	1011·5	1010·2	..	32·9	22·6	16·7	19·1	40	..	2·9	..	7·4	0	0	30	0	4	4	1	1	4	8	8	0	0
	2330	"	1013·9	1012·5	..	25·1	20·1	16·9	19·4	61	..	2·4	..	6·3	0	0	29	17	6	2	0	0	0	0	4	1	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in f.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Saurashtra & Kutch																											
Bhuj (P.B.O.)	0230	106	1014·5	1002·3	..	21·6	17·4	14·1	16·5	64	..	0·9	..	1·3	0	0	8	0	3	1	0	1	1	0	0	22	0
	0530	,,	1014·7	1002·4	..	19·8	16·3	13·3	15·7	69	..	1·6	..	1·6	0	0	9	1	3	1	1	2	1	0	0	21	0
	0830	,,	1016·3	1004·1	+1·2	22·0	17·6	13·7	16·4	62	+14	2·2	+1·3	1·2	0	0	7	2	4	1	0	0	0	0	0	23	0
	1130	,,	1016·1	1004·2	..	28·3	19·6	12·4	15·4	40	..	2·3	..	9·5	0	1	27	10	11	2	3	0	0	0	2	2	0
	1730	,,	1012·8	1001·0	..	31·2	19·9	11·3	14·1	32	..	2·6	..	7·7	0	0	25	7	11	2	0	0	2	0	3	5	0
	2330	,,	1015·1	1003·0	..	22·9	17·3	12·7	15·3	54	..	0·9	..	3·0	0	0	11	1	1	3	1	2	2	1	0	19	0
Bhuj (Aerodrome)	0830	80	1016·4	1007·0	..	21·9	18·4	15·7	18·3	71	..	2·2	..	3·9	0	1	15	3	3	0	1	1	3	0	3	16	0
	1130	,,	1016·2	1007·1	..	28·7	21·7	17·1	20·2	53	..	2·0	..	13·5	0	4	26	10	10	1	4	0	0	0	4	0	1
	1730	,,	1012·8	1003·8	..	31·2	22·3	16·3	19·7	46	..	2·6	..	14·2	0	7	20	10	9	2	1	1	0	0	4	3	0
Kandla . . .	0830	5	1016·4	1015·8	..	22·3	18·1	14·7	17·4	65	..	2·4	..	8·2	0	0	30	6	4	1	0	0	0	0	19	0	0
	1730	,,	1013·2	1012·6	..	30·4	20·9	14·2	17·1	40	..	2·7	..	11·3	0	1	27	5	6	3	5	1	3	1	2	2	0
Mandvi . . .	0830	9	1015·8	1014·8	..	22·8	18·7	15·6	18·2	66	..	2·0	..	10·4	2	2	25	13	12	1	0	0	0	0	1	3	0
	1730	,,	1012·8	1011·8	..	27·4	23·6	21·4	25·9	76	..	2·2	..	13·1	0	10	20	0	2	3	4	1	7	10	0	0	3
Dwarka . . .	0830	11	1016·0	1014·7	+1·2	23·9	21·0	19·1	22·5	76	+9	2·6	+1·3	10·7	0	0	29	9	17	3	0	0	0	0	0	1	0
	1730	,,	1013·0	1011·7	..	28·3	21·3	17·8	20·3	57	..	2·3	..	17·4	0	5	25	8	6	1	1	0	0	0	14	0	0
Porbander .	0830	7	1015·1	1014·3	..	23·1	19·6	16·3	19·9	69	..	2·1	..	2·7	0	0	19	8	8	1	0	0	0	0	2	11	0
	1730	,,	1012·2	1011·4	..	30·3	24·7	21·5	26·6	62	..	2·5	..	10·5	0	0	29	3	3	1	1	3	0	11	7	1	0
Porbander (Aerodrome)	0830	7	1015·2	1014·4	..	25·8	21·5	19·2	22·2	68	..	2·3	..	11·6	0	6	18	8	6	7	0	2	0	1	0	6	0
	1130	,,	1015·5	1014·7	..	32·7	24·3	20·5	23·6	50	..	2·5	..	19·3	0	15	12	5	8	11	2	1	0	0	0	3	0
Jamnagar . .	0530	23	1014·0	1014·3	..	20·1	17·1	14·6	16·9	73	..	2·0	..	6·2	0	0	25	2	6	6	4	2	2	1	2	5	0
	0830	,,	1015·8	1013·2	+1·1	25·5	18·9	15·4	18·2	61	0	3·9	+2·1	7·9	0	1	25	3	12	7	2	1	0	0	1	4	0
	1130	,,	1016·0	1013·4	.	28·9	20·8	15·5	18·1	46	..	2·7	..	14·6	0	5	24	6	18	5	0	0	0	0	0	1	0
	1730	,,	1012·6	1010·0	..	29·9	20·4	13·5	16·5	49	..	2·7	..	12·7	0	4	25	13	9	2	0	0	0	2	3	1	0
Rajkot (Aerodrome) .	0830	134	1015·9	1000·5	+1·3	23·1	16·9	11·2	14·3	52	+1	1·6	+0·5	7·7	0	0	24	5	9	7	1	1	0	0	1	6	0
	1130	,,	1015·3	1009·4	..	30·8	19·3	9·8	13·2	30	..	1·5	..	15·8	0	10	19	8	13	7	1	0	0	0	0	1	0
	1730	,,	1012·0	997·2	..	31·6	19·5	9·6	12·9	29	..	1·7	..	13·7	0	2	28	7	10	3	0	0	1	2	7	0	0
Surendranagar	0830	74	1015·6	1007·1	..	22·9	17·9	14·3	16·4	61	..	2·0	..	7·6	0	0	28	10	10	0	3	0	0	0	5	2	0
	1730	,,	1012·0	1003·7	..	32·6	22·5	15·7	19·1	40	..	2·4	..	7·9	0	0	27	6	9	1	4	0	0	0	7	3	0
Bhavnagar .	0830	17	1015·9	1014·0	+1·4	23·2	17·7	13·4	15·8	55	+6	1·8	+0·3	2·2	0	0	21	0	2	1	4	0	2	0	12	9	0
	1730	,,	1012·3	1010·4	..	32·3	22·0	15·5	18·1	38	..	1·8	..	3·3	0	0	26	0	17	2	6	1	0	0	0	4	0
Bhavnagar (Aerodrome)	0830	11	1015·5	1014·3	..	24·3	18·1	13·4	15·9	52	..	2·6	..	12·3	0	1	25	7	0	5	1	0	0	3	10	4	0
	1130	,,	1015·6	1014·4	..	29·5	21·1	15·6	18·3	44	..	2·3	..	15·9	0	5	25	5	12	9	4	0	0	0	0	0	0
Mahuva .	0830	16	1015·0	1013·2	..	24·6	20·7	18·4	21·3	69	..	2·7 (b)	..	6·7 (b)	0	1	24	1	21	3	0	0	0	0	0	4	0
	1730	,,	1012·1	1010·3	..	30·5	25·4	23·0	28·4	66	..	2·3 (b)	..	12·7 (b)	0	1	28	0	3	14	10	2	0	0	0	0	0
Keshod . .	0830	51	1015·3	1009·4	..	23·7	18·3	14·9	16·6	59	..	3·9	..	14·3	0	3	27	0	12	18	0	0	0	0	0	0	0
	1130	,,	1015·2	1009·4	..	30·8	21·8	17·2	18·9	46	..	2·7	..	16·8	0	9	20	0	13	12	0	1	0	0	3	1	0
	1730	,,	1012·1	1006·4	..	32·3	22·8	17·9	20·1	44	..	3·2	..	21·0	0	14	16	0	10	3	1	0	7	2	7	0	0
Veraval . .	0230	8	1013·2	1012·3	..	22·4	19·3	16·8	19·9	71	..	1·7	..	6·6	0	0	25	14	7	3	0	0	0	0	1	5	0
	0530	,,	1013·0	1012·1	..	21·9	18·3	15·5	18·1	69	..	1·7	..	10·0	0	2	27	12	12	4	0	0	0	0	1	1	0
	0830	,,	1014·9	1013·6	+1·0	25·1	19·6	15·7	18·4	58	+6	2·8	+1·7	14·1	0	3	25	7	18	3	0	0	0	0	0	2	0
	1130	,,	1014·9	1014·0	..	31·8	23·1	17·7	21·1	47	..	2·3	..	16·2	0	9	21	3	9	3	4	4	4	2	1	0	0
	1730	,,	1012·0	1011·2	..	28·8	25·0	23·2	28·8	72	..	2·6	..	15·1	0	6	24	0	0	2	7	7	3	8	3	0	0
	2330	,,	1014·3	1013·4	..	23·9	21·1	19·3	22·8	76	..	1·7	..	7·1	0	0	25	7	8	3	1	0	0	0	6	5	0
Konkan																											
Dahanu .	0830	5	1014·2	1013·7	+1·5	24·6	20·3	17·9	20·3	66	−19	1·8	−0·8	8·1	0	0	30	0	2	14	14	0	0	0	0	0	0
	1730	,,	1011·3	1010·8	..	28·6	24·1	21·8	26·4	67	..	3·5	..	14·6	0	0	30	23	1	1	1	0	0	3	1	0	0
Bombay (Colaba) .	0830	11	1014·3	1013·1	+1·0	25·4	22·4	20·7	24·6	76	+3	3·4	+1·6	5·7	0	0	25	0	15	8	2	0	0	0	0	5	0
	1130	,,	1014·3	1013·1	..	29·9	23·6	20·3	23·8	58	..	3·1	..	4·3	0	0	24	0	10	11	3	0	0	0	0	6	0
	1730	,,	1011·3	1010·1	..	28·6	24·5	21·6	27·4	70	..	3·9	..	7·5	0	0	27	5	0	0	0	1	2	1	18	3	0
Bombay (Santacruz Aerodrome)	0230	8	1012·6	1011·7	..	22·9	20·5	18·9	22·2	80	..	2·4	..	1·4	0	0	8	0	4	3	1	0	0	0	0	22	0
	0530	,,	1012·6	1011·7	..	22·2	20·0	18·3	21·6	81	..	2·0	..	1·8	0	0	7	2	2	3	0	0	0	0	0	23	0
	0830	,,	1014·6	1013·7	+1·3	25·7	21·2	18·4	21·5	66	+6	3·6	+1·8	4·0	0	0	16	0	7	6	2	1	0	0	0	14	0
	1130	,,	1014·6	1013·7	..	31·0	22·1	16·7	19·4	44	..	3·5	..	9·4	0	1	27	0	6	10	11	1	0	0	0	2	0
	1730	,,	1011·5	1010·6	..	29·8	23·4	20·0	23·5	57	..	4·0	..	12·9	0	0	28	4	0	1	0	1	1	2	19	2	0
	2330	,,	1014·0	1013·1	..	23·9	21·2	19·4	22·9	78	..	2·4	..	1·5	0	1	2	0	0	2	1	0	0	0	0	27	0
Alibag . . .	0830	7	1014·2	1013·4	+1·2	25·2	22·1	20·4	24·2	75	+8	2·8	+0·5	4·2	0	0	27	0	6	13	7	1	0	0	0	3	0

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour.	Wind speed (km. p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level.	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Konkan—*Contd.*																											
Harnai	0830	20	1013·5	1011·2	+1·4	26·4	21·2	18·2	20·8	61	0	3·8	..	14·5	0	7	23	1	8	15	5	0	1	0	0	0	0
	1730	"	1010·8	1008·5	..	28·8	24·1	21·7	26·2	67	..	4·1	..	14·8	0	6	24	2	0	1	2	2	0	8	15	0	0
Ratnagiri	0830	35	1014·0	1010·0	+1·4	25·3	21·3	18·9	22·2	69	..	3·6	..	..	0	3	27	0	0	29	0	0	0	1	0	0	0
	1730	"	1011·6	1007·6	..	28·9	24·2	21·9	26·3	67	..	4·3	..	..	0	3	27	0	0	2	3	0	0	24	1	0	0
Devgad	0830	36	1013·9	1009·8	+1·7	25·4	21·8	19·6	23·1	71	−4	4·9	+1·7	9·9	0	0	30	0	9	17	3	1	0	0	0	0	0
	1730	"	1010·5	1006·5	..	29·3	24·7	22·5	27·5	67	..	5·1	..	17·1	0	7	23	1	0	2	2	2	2	12	9	0	0
Vengurla	0230	9	1011·9	1010·9	..	23·0	21·9	21·3	25·4	90	..	3·3	..	1·0	0	0	6	3	0	0	3	0	0	0	0	24	0
	0530	"	1012·0	1011·0	..	22·2	20·9	20·2	23·7	88	..	2·8	..	3·6	0	0	13	8	1	2	0	1	0	0	1	17	0
	0830	"	1014·0	1013·0	..	24·8	21·6	19·8	23·2	74	..	4·0	..	2·8	0	0	14	3	6	3	1	0	0	0	1	16	0
	1130	"	1013·6	1012·6	..	30·6	23·3	19·2	22·8	53	..	4·0	..	9·1	0	1	25	0	9	4	6	2	4	0	1	4	0
	1730	"	1010·8	1009·8	..	29·3	24·5	22·3	26·9	67	..	5·2	..	4·0	0	1	20	0	3	0	0	3	6	8	1	9	0
	2330	"	1013·2	1012·2	..	24·1	22·6	21·9	26·3	88	..	3·3	..	3·0	0	0	15	11	2	0	1	0	0	0	1	15	0
Maharashtra																											
Nandurbar	0830	206	1016·2	992·7	..	25·8	18·0	12·1	14·4	44	..	3·8	..	8·7	0	0	30	0	3	22	4	1	0	0	0	0	0
	1730	"	1011·7	988·8	..	31·8	20·1	11·2	14·1	30	..	4·0	..	3·8	0	0	25	2	2	17	3	0	0	1	0	5	0
Jalgaon	0830	201	1016·7	993·5	..	21·7	16·2	11·2	13·9	53	..	3·6	..	10·1	0	0	30	0	2	18	7	1	2	0	0	0	0
	1730	"	1011·8	989·4	..	31·4	19·4	10·7	12·9	28	..	4·1	..	8·1	0	0	29	0	4	12	7	2	1	2	1	1	0
Malegaon	0830	437	1016·6	967·1	+1·6	22·1	17·2	13·4	15·6	59	+1	3·3	+1·4	1·3	0	0	13	2	0	2	1	0	2	5	1	17	0
	1730	"	1011·7	963·5	..	29·2	19·1	11·4	14·0	36	..	4·2	..	4·5	0	0	23	1	10	8	2	2	0	0	0	7	0
Deolali	0830	571	1016·9	952·2	..	19·8	16·0	13·3	15·5	67	..	3·9	..	5·3	0	0	28	17	6	3	1	0	1	0	0	2	0
	1730	"	1011·7	949·1	..	28·5	19·2	13·2	15·4	41	..	5·0	..	7·7	0	0	28	4	2	17	4	0	0	0	1	2	0
Aurangabad	0830	581	1016·9	951·6	+1·3	21·8	16·7	13·9	15·4	59	+5	3·6	+1·4	6·6	0	1	28	0	2	23	4	0	0	0	0	1	0
	1730	"	1011·7	948·2	..	28·5	18·8	12·0	14·5	38	..	4·6	..	8·5	0	0	29	1	3	15	8	0	1	1	0	1	0
Aurangabad (Chikalthana Aerodrome).	0230	579	1015·0	949·0	..	16·5	13·4	10·9	13·2	70	..	2·4	..	0·6	0	0	3	0	0	0	2	0	0	1	0	27	0
	0530	"	1015·5	949·1	..	15·5	13·0	10·9	13·1	75	..	2·2	..	0·8	0	0	4	0	1	1	1	1	0	0	0	26	0
	0830	"	1016·1	951·1	..	22·1	16·8	13·1	15·3	57	..	3·6	..	1·4	0	0	7	0	2	5	0	0	0	0	0	23	0
	1130	"	1014·4	950·8	..	27·8	19·2	13·7	15·9	43	..	3·2	..	10·5	0	0	27	0	1	14	12	0	0	0	0	3	0
	1730	"	1011·2	947·7	..	27·8	19·1	13·4	15·8	43	..	4·3	..	4·6	0	0	17	0	2	14	1	0	0	0	0	13	0
	2330	"	1015·7	949·9	..	18·2	14·3	11·6	13·5	65	..	3·0	..	0·8	0	0	4	0	1	2	0	0	0	0	1	26	0
Ahmednagar	0830	657	1016·1	942·4	+1·0	20·7	16·6	13·8	15·8	65	+6	3·3	+1·5	2·6	0	0	20	0	0	0	8	0	2	0	10	10	0
	1730	"	1011·2	939·5	..	27·4	19·0	13·8	15·8	44	..	3·1	..	3·4	0	0	30	0	10	0	13	0	2	0	5	0	0
Parbhani	0830	423	1016·9	968·9	..	22·3	16·8	12·4	14·6	54	..	3·8	..	4·4	0	0	27	4	9	9	3	2	0	0	0	3	0
	1730	"	1012·0	965·2	..	28·7	18·7	10·7	13·5	34	..	4·5	..	5·7	0	0	28	1	13	10	4	0	0	0	0	2	0
Poona	0530	559	1014·5	950·9	..	17·8	16·5	15·6	17·8	87	..	2·2	..	0·8	0	0	2	0	0	2	0	0	0	0	0	28	0
	0830	"	1016·1	952·8	+1·0	20·2	17·6	15·8	18·3	77	+4	3·3	+1·4	0·4	0	0	3	0	1	2	0	0	0	0	0	27	0
	1130	"	1014·0	952·3	..	27·4	19·9	15·3	17·7	49	..	3·5	..	6·0	0	0	24	2	6	10	6	0	0	0	0	6	0
	1730	"	1010·7	949·4	..	27·8	19·8	14·8	17·5	47	..	4·2	..	3·3	0	0	18	3	2	7	4	2	0	0	0	12	0
	2330	"	1014·7	951·7	..	20·6	18·0	16·4	18·8	77	..	2·9	..	0·4	0	0	3	0	0	1	0	2	0	0	0	27	0
Poona (Lohagaon Aerodrome).	0230	593	1013·8	946·9	..	19·8	16·4	14·0	16·3	71	..	2·7	..	3·4	0	0	15	1	0	9	2	0	0	1	2	15	0
	0530	"	1014·3	947·1	..	18·7	15·9	13·8	16·1	75	..	2·7	..	4·4	0	0	19	0	2	10	2	0	0	4	1	11	0
	0830	"	1015·7	949·1	..	21·3	17·0	14·1	16·2	64	..	4·1	..	5·6	0	1	18	2	2	10	3	0	0	2	0	11	0
	1130	"	1014·0	948·7	..	27·4	18·9	13·9	15·6	43	..	4·0	..	14·8	0	6	24	0	2	16	10	2	0	0	0	0	0
	1730	"	1010·7	945·8	..	27·7	18·6	12·3	14·7	41	..	4·8	..	11·5	0	2	28	0	2	14	13	1	0	0	0	0	0
	2330	"	1014·5	948·0	..	21·2	16·9	13·8	16·3	64	..	3·0	..	5·2	0	0	24	1	3	11	1	0	0	4	4	6	0
Baramati	0830	551	1016·0	954·0	..	21·3	17·5	15·7	17·2	67	..	3·5	..	5·0	0	0	21	1	3	11	5	0	0	1	0	9	0
	1730	"	1010·9	950·5	..	28·4	20·2	15·0	17·6	46	..	4·3	..	7·8	0	0	30	0	6	13	7	3	1	0	0	0	0
Jeur	0830	521	1015·5	956·8	..	21·3	16·6	13·5	15·5	61	..	3·1	..	2·7	0	0	14	0	2	8	4	0	0	0	0	16	0
	1730	"	1010·5	953·5	..	29·3	19·2	12·9	14·9	39	..	3·3	..	3·6	0	0	28	1	5	15	5	0	0	2	0	2	0
Sholapur	0530	479	1014·2	959·8	..	19·8	15·9	12·9	15·3	65	..	2·7	..	8·9	0	0	25	1	8	9	7	0	0	0	0	5	0
	0830	"	1015·9	961·9	+1·5	22·5	17·4	13·9	16·3	59	+2	4·2	+2·0	6·5	0	0	28	1	8	2	17	0	0	0	0	2	0
	1130	"	1014·5	961·5	..	28·3	19·4	13·6	16·1	42	..	3·5	..	13·5	0	1	29	0	3	9	15	1	2	0	0	0	0
	1730	"	1010·7	958·2	..	29·4	19·1	11·9	14·6	36	..	4·6	..	9·6	0	0	30	2	9	1	17	1	0	0	0	0	0
	2330	"	1014·6	960·7	..	22·6	16·7	12·5	14·8	53	..	2·5	..	10·1	0	1	28	2	13	11	2	1	0	0	0	1	0
Miraj	0830	554	1015·2	953·0	+1·1	21·7	18·4	16·4	18·8	72	+10	4·1	+1·3	7·6	0	0	24	1	5	11	6	1	0	0	0	0	0
	1730	"	1010·1	949·5	..	27·9	19·9	15·0	17·4	47	..	4·9	..	13·0	0	2	28	1	11	12	4	2	0	0	0	0	0
Kolhapur	0530	570	1013·6	949·1	..	18·7	16·7	15·4	17·6	81	..	2·4	..	5·3	0	1	22	0	5	15	2	0	1	0	0	7	0
	0830	"	1015·1	951·2	..	21·9	18·2	15·8	18·2	69	..	4·0	..	8·7	0	3	23	0	8	17	1	0	0	0	0	4	0
	1130	"	1013·6	950·8	..	27·0	20·0	16·0	18·3	52	..	4·1	..	20·2	0	11	18	0	5	21	2	1	0	0	0	1	0
	1730	"	1010·3	947·8	..	27·3	19·7	15·1	17·5	50	..	4·7	..	11·8	0	0	30	0	11	15	3	0	0	0	1	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Vidarbha																											
Buldhana	0830	650	1015·7	943·1	..	22·2	15·9	11·3	13·4	51	..	3·6	..	2·2	0	0	18	0	2	0	6	0	8	0	2	12	0
	1730	"	1011·2	940·3	..	27·9	17·5	10·1	12·4	34	..	3·6	..	1·2	0	0	12	0	10	0	0	0	0	0	2	18	0
Akola	0830	282	1016·7	984·4	+1·4	22·3	15·9	10·7	12·8	48	−9	2·6	+0·8	2·8	0	0	28	0	4	12	7	3	0	1	1	2	0
	1130	"	1014·7	983·4	..	30·2	19·2	10·8	13·4	31	..	3·3	..	4·9	0	0	29	2	6	15	3	1	1	1	0	1	0
	1730	"	1011·4	980·2	..	30·9	18·8	9·3	11·8	27	..	3·6	..	2·7	0	0	27	0	6	11	3	0	0	3	4	3	0
Akola (Aerodrome)	0530	309	1015·3	979·5	..	18·1	13·7	9·7	12·1	60	..	2·2	..	3·8	0	0	25	0	4	12	8	1	0	0	0	5	0
	2330	"	1015·1	979·8	..	22·3	15·7	10·3	12·5	47	..	2·4	..	2·8	0	0	23	0	2	7	9	4	0	1	0	7	0
Amravati	0830	370	1016.7	974·9	+1·6	23·7	17·1	12·0	14·1	48	−2	3·2	+1·4	5·3	0	0	30	0	23	7	0	0	0	0	0	0	0
	1730	"	1011·9	971·0	..	29·5	19·7	12·9	15·1	37	..	4·6	..	3·7	0	0	25	2	9	1	10	2	0	0	1	5	0
Yeotmal	0830	451	1016·4	965·6	..	23·7	17·3	12·5	14·5	50	..	2·6	..	3·3	0	0	21	1	11	7	1	0	0	0	1	9	0
	1730	"	1012·3	962·4	..	27·9	18·6	11·8	13·9	37	..	2·9	..	4·2	0	0	25	1	7	15	2	0	0	0	0	5	0
Nagpur	0230	310	1014·9	978·9	..	17·9	14·7	12·0	14·2	69	..	2·3	..	5·5	0	0	26	13	3	0	0	0	0	2	8	4	0
	0530	"	1015·7	979·5	..	16·2	13·8	11·7	13·9	75	..	2·1	..	4·3	0	0	23	10	1	1	0	0	0	1	10	7	0
	0830	"	1017·4	981·8	+1·6	21·8	16·7	12·9	14·9	58	+2	3·0	+1·0	5·0	0	0	29	10	11	2	0	0	0	0	6	1	0
	1130	"	1015·1	980·8	..	23·3	19·8	13·4	15·4	38	..	2·9	..	6·6	0	0	29	1	8	13	6	0	0	0	1	1	0
	1730	"	1013·0	978·0	..	27·8	19·1	12·9	15·1	41	..	4·0	..	6·7	0	2	28	0	10	14	6	0	0	0	0	0	0
	2330	"	1015·8	980.0	..	19·3	15·2	12·0	14·0	63	..	1·8	..	3·8	0	0	25	11	1	1	0	0	0	4	8	5	0
Gondia	0830	313	1017·7	981·7	..	20·6	16·1	12·8	14·7	61	..	1·7	..	2·4	0	0	21	5	12	0	3	0	0	0	1	9	0
	1730	"	1013·0	978·1	..	23·1	17·9	9·9	12·4	32	..	3·1	..	1·3	0	0	11	3	2	2	1	0	1	0	2	19	0
Brahmapuri	0830	229	1017·3	990·9	..	20·0	16·7	14·3	16·3	69	..	2·6	..	2·8	0	0	21	7	6	3	1	0	1	1	2	9	0
	1730	"	1012 8	987·1	..	23·9	13·8	11·7	13·6	35	..	3·2	..	5·1	0	0	24	6	11	6	1	0	0	0	0	6	0
Chanda	0830	193	1017·0	994·7	+1·6	21·0	17·4	14·8	17·0	68	−2	3·6	+1·5	2·3	0	0	20	4	2	2	2	1	4	2	3	10	0
	1730	"	1012·7	991·0	..	27·1	20·4	16·3	18·6	52	..	3·6	..	0·8	0	0	8	0	1	4	3	0	0	0	0	22	0
Sironcha	0830	123	1016·9	1002·7	..	21·8	18·9	17·5	19·6	74	..	3·3	..	1·9	0	0	18	7	4	2	1	2	1	1	0	12	0
	1730	"	1013·0	998·9	..	23·6	20·9	16·3	18·6	48	..	3·4	..	2·6	0	0	21	4	9	6	1	1	0	0	0	9	0
Coastal Andhra Pradesh																											
Nellore	0530	20	1012·8	1010·5	..	23·0	22·5	22·1	26·8	95	..	5·0	..	2·0	0	0	17	1	3	0	0	0	0	3	10	13	0
	0830	"	1015·3	1013·0	+2·1	25·3	23·7	23·0	27·8	87	+4	5·5	+0·5	3·6	0	0	23	4	5	0	1	0	0	1	12	7	0
	1130	"	1014·4	1012·1	..	23·4	24·1	22·0	26·4	70	..	6·7	..	7·6	0	0	28	6	18	3	0	0	0	1	0	2	0
	1730	"	1012·3	1010·0	..	25·6	23·7	22·3	27·4	77	..	6·0	..	4·0	0	0	28	1	23	3	1	0	0	0	0	2	0
	2330	"	1014·2	1011·9	..	21·9	22·9	22·4	27·2	92	..	3·0	..	1·4	0	0	9	1	7	0	0	0	0	0	1	21	0
Ongole	0830	12	1015·5	1014·2	..	26·0	23·1	21·6	25·9	77	..	4·0	..	3·0	0	0	20	3	15	1	1	0	0	0	0	10	0
	1730	"	1012·1	1010·8	..	27·5	23·2	21·1	25·1	69	..	3·6	..	5·8	0	0	26	0	9	6	11	0	0	0	0	4	0
Rentachintala	0830	106	1015·7	1003·9	..	25·3	21·2	19·5	21·9	73	+1	4·2	−0·5	0·7	0	0	6	1	0	5	0	0	0	0	0	24	0
	1730	"	1011·9	1000·1	..	20·8	21·0	15·6	17·9	42	..	4·4	..	3·7	0	0	29	4	5	17	3	0	0	0	0	1	0
Gannavaram	0230	23	1013·1	1010·4	..	22·9	21·7	20·8	24·8	90	..	2·1	..	3·6	0	0	16	1	9	5	1	0	0	0	0	14	0
	0530	"	1013·4	1010·7	..	22·4	21·1	20·5	24·0	89	..	2·3	..	3·4	0	0	14	1	8	5	0	0	0	0	0	16	0
	0830	"	1015·6	1013·0	..	23·5	22·1	20·2	24·0	73	..	3·2	..	8·9	0	0	25	2	18	3	2	0	0	0	0	5	0
	1130	"	1014·7	1012·1	..	23·1	23·1	20·1	23·2	59	..	4·0	..	13·4	0	3	25	0	8	15	5	0	0	0	0	2	0
	1730	"	1012·2	1009·6	..	27·9	22·9	20·2	23·9	65	..	4·0	..	6·2	0	0	24	0	6	11	7	0	0	0	0	6	0
	2330	"	1014·5	1011·9	..	23·7	22·0	21·0	25·0	85	..	2·4	..	4·9	0	0	20	1	6	11	2	0	0	0	0	10	0
Masulipatam	0530	3	1013·5	1013·2	..	22·7	21·7	21·0	24·9	91	..	4·3	..	10·2	0	2	26	17	8	1	1	0	1	0	0	2	0
	0830	"	1015·7	1015·4	+1·9	25·3	22·8	21·3	25·8	79	+1	3·8	+0·7	8·1	0	1	28	11	15	2	0	0	0	0	0	1	1
	1130	"	1015·0	1014·7	..	28·5	23·7	21·4	25·5	66	..	6·0	..	12·8	0	1	29	1	10	15	4	0	0	0	0	0	0
	1730	"	1012·7	1012·4	..	27·0	23·5	21·9	26·1	73	..	5·6 (g)	..	9·5	0	0	29	0	3	13	11	2	0	0	0	1	0
	2330	"	1014·6	1014·3	..	24·8	22·7	21·6	25·9	83	..	4·2	..	7·4	0	2	21	1	7	5	8	1	0	0	0	7	1
Nidadavolu	0830	12	1016·1	1014·6	..	24·1	21·5	20·0	23·8	78	..	3·7	..	8·2	0	0	30	21	7	2	0	0	0	0	0	0	0
	1730	"	1012·6	1011·2	..	27·1	22·0	19·1	22·7	62	..	4·7	..	10·5	0	1	28	1	0	26	2	0	0	0	0	1	0
Kakinada	0830	8	1016·0	1015·1	+2·1	28·3	23·1	20·4	23·9	69	+10	3·5	−0·1	10·3	0	0	30	0	30	0	0	0	0	0	0	0	0
	1730	"	1012·9	1012·0	..	27·6	22·9	20·5	24·0	66	..	3·2	..	10·0	0	0	30	0	13	2	15	0	0	0	0	0	0
Visakhapatnam	0230	3	1013·6	1013·2	..	22·3	20·9	20·1	23·7	88	..	1·6	..	1·9	0	0	9	2	2	2	0	0	0	0	3	21	0
	0530	"	1014·2	1013·8	..	21·4	20·1	19·4	22·5	89	..	2·8	..	2·0	0	0	10	1	1	1	0	0	2	0	5	20	0
	0830	"	1016·3	1015·9	+2·1	26·3	22·1	19·7	23·3	68	+2	3·1	−0·6	4·0	0	0	16	6	3	2	0	0	1	0	4	14	0
	1130	"	1015·2	1014·8	..	29·9	22·9	19·1	21·6	53	..	3·6	..	8·6	0	0	27	3	5	13	2	0	2	0	2	3	0
	1730	"	1013·3	1012·9	..	26·6	22·4	20·2	23·8	68	..	3·0	..	6·9	0	0	29	1	1	22	4	1	0	0	0	1	0
	2330	"	1015·1	1014·7	..	23·0	21·2	20·2	23·7	85	..	1·6	..	2·2	0	0	10	3	1	1	0	0	0	1	4	20	0

(g) Mean of 24 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh—*Contd.*																											
Calingapatam	0830	6	1015·6	1014·9	+1·3	22·1	20·2	19·1	22·0	83	+4	3·9	+1·0	6·0	0	0	30	15	0	0	0	0	0	0	15	0	0
	1730	,,	1013·0	1012·3	..	27·7	22·6	19·8	23·3	63	..	4·1	..	7·0	0	0	30	1	2	14	13	0	0	0	0	0	0
Telangana																											
Ramagundam	0830	156	1016·1	998·2	..	23·4	19·9	16·2	18·3	64	..	3·1	..	4·3	0	0	29	16	3	1	2	0	1	0	6	1	0
	1730	,,	1012·4	994·9	..	29·4	19·8	13·2	15·3	37	..	3·1	..	4·2	0	0	30	7	18	4	1	0	0	0	0	0	0
Nizamabad	0830	381	1016·3	973·2	+2·0	23·2	18·5	15·5	17·4	62	−6	3·6	+1·4	0·4	0	0	3	1	0	0	0	1	0	0	1	27	0
	1730	,,	1011·9	969·7	..	28·3	18·9	11·9	14·2	37	..	3·9	..	2·7	0	0	26	1	17	8	0	0	0	0	0	4	0
Mahbubnagar	0830	505	1015·3	958·8	..	23·6	19·2	16·7	18·9	66	..	4·0	..	7·2	0	0	30	0	10	16	3	1	0	0	0	0	0
	1730	,,	1011·0	955·4	..	27·9	19·2	13·8	15 8	43	..	3·5	..	9·2	0	0	30	0	6	19	5	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	0230	545	1014·2	952·6	..	19·4	16·8	15·1	17·3	77	..	2·7	..	2·2	0	0	9	0	0	5	4	0	0	0	0	21	0
	0530	,,	1014·9	953·0	..	18·0	16·4	15·3	17·5	84	..	2·7	..	0·7	0	0	3	0	0	2	1	0	0	0	0	27	0
	0830	,,	1016·0	955·1	+2·1	23·3	18·9	16·3	18·6	65	0	3·7	+0·7	4·9	0	0	17	0	0	4	12	1	0	0	13	0
	1130	,,	1014·3	954·3	..	27·4	19·4	14·4	16·7	46	..	4·0	..	12 4	0	1	29	1	9	11	9	0	0	0	0	0	0
	1730	,,	1011·8	951·8	..	26·9	18·8	13·6	16·6	44	..	4·6	..	6·3	0	0	28	0	8	16	4	0	0	0	0	2	0
	2330	,,	1015·4	953·9	..	20·6	17·2	15·0	17·2	71	..	2·5		3·4	0	0	13	0	4	5	4	0	0	0	0	17	0
Hakimpet	0530	613	1014·3	945·2	..	19·1	16·8	15·4	17.6	79	..	2·8	..	6·0	0	0	24	0	5	10	8	1	0	0	0	6	0
	0830	,,	1015·2	947·1	..	23·4	18·9	16·3	18·7	65	..	3·3	..	9·1	0	1	28	0	5	10	12	2	0	0	0	1	0
	1130	,,	1014·0	946·7	..	26·9	19·8	15·7	16·2	51	..	3·7	..	15·0	0	6	24	0	9	10	9	2	0	0	0	0	0
	1730	,,	1011·7	944·4	..	26 6	19 4	15·1	17·2	50	..	3·9	..	12·8	0	1	29	0	11	14	5	0	0	0	0	0	0
Hanamkonda	0830	269	1016·5	985·9	+1·7	23·5	19·9	17·9	20·3	71	+2	2·3	−0·8	3·8	0	0	23	5	2	1	2	7	3	1	2	7	0
	1730	,,	1012·9	982·9	..	28·4	20·1	14·7	16·8	43	..	2·7	..	5·8	0	0	30	8	16	4	1	1	0	0	0	0	0
Bhadrachallam	0830	111	1016·5	1003.7	..	23·4	20·5	18·8	21·8	75	..	3·0	..	3·4	0	0	15	3	6	3	3	0	0	0	0	15	0
	1730	,,	1012·3	999·8	..	29·5	21·5	16·5	19·1	46	..	3·4	..	5·5	0	0	28	0	15	10	3	0	0	0	0	2	0
Khammameth	0830	112	1016.2	1003.3	..	24.5	21.2	19.3	22.5	73	..	3•0	..	1.5	0	0	13	7	0	6	0	0	0	0	0	17	0
	1730	,,	1012.2	999.7	..	29.9	20.6	14.4	16.7	40	..	3·8	..	3.4	0	0	26	1	2	23	0	0	0	0	0	4	0
Rayalaseema																											
Arogyavaram	0830	701	1015·3	937·2	..	21·3	19·4	18·4	20·9	84	..	5·6	..	3·2	0	0	25	7	7	5	4	1	0	0	1	5	0
	1730	,,	1011·4	934·4	..	23·9	19·9	17·7	20·2	69	..	5·8	..	5·0	0	0	30	1	17	9	2	1	0	0	0	0	0
Cuddapah	0830	130	1015·7	1000 9	+2·2	26·5	22·7	20·8	24·6	71	−5	3·4	−0·4	2·3	0	0	11	0	2	5	4	0	0	0	0	19	0
	1730	,,	1011·6	997·0	..	28·5	22·6	19·4	22·6	59	..	3·8	..	7·0	0	0	27	0	3	16	8	0	0	0	0	3	0
Anantapur	0530	350	1012·9	973·1	..	20·7	19·1	18·2	20·7	85	..	3·4	..	4·4	0	0	21	0	0	3	14	4	0	0	0	9	0
	0830	,,	1014·8	975·3	..	23·9	20·5	18·5	21·4	72	..	4·3	..	5 8	0	0	22	0	4	16	2	0	0	0	0	8	0
	1130	,,	1013·6	974·6	..	27·7	21·2	17·2	19·9	54	..	4·4	..	13·1	0	8	21	0	7	20	2	0	0	0	0	1	0
	1730	,,	1010·1	971·4	..	28·6	21·0	16·1	18·7	48	..	5·2	..	12·9	0	2	28	0	4	26	0	0	0	0	0	0	0
	2330	,,	1013·7	974·2	..	23·9	20·1	17·6	20·3	69	..	3.6	..	11·5	0	1	27	0	1	20	7	0	0	0	0	2	0
Kurnool	0830	281	1015·5	983·3	+1·5	22·0	19 9	18·6	21.6	81	+10	3·9	+0·9	0·2	0	0	1	0	0	1	0	0	0	0	0	29	0
	1730	,,	1011·0	979·8	..	30·2	22·0	17·2	19·7	46	..	4·1	..	8·8	0	0	22	0	3	13	6	0	0	0	0	8	0
Madras																											
Palayamcottai	0830	51	1013·8	1008·0	..	25·7	23·3	22·2	26·8	81	..	7·0	..	4·2	0	0	30	19	2	0	0	0	0	2	7	0	0
	1730	,,	1010·4	1004.7	..	27·4	23·9	22·2	26·9	74	..	7·2	..	7·6	0	0	30	8	9	3	1	2	5	1	1	0	0
Tuticorin	0830	4	1013·9	1013·5	..	25·8	23·8	22·8	27·8	84	..	6·6	..	14·0	0	8	22	18	6	0	0	0	0	2	4	0	0
	1730	,,	1010·6	1010·2	..	27·6	24·7	23·4	28·8	78	..	6·1	..	17·6	0	11	19	7	10	6	3	2	0	1	1	0	0
Pamban	0830	11	1013·5	1012·2	+1·7	26·4	24·9	24.3	30·2	88	+5	6·4	+2·4	10·0	0	1	26	9	4	2	1	0	0	0	11	3	0
	1730	,,	1010·6	1009·3	..	26·8	24·7	23·8	29·3	83	..	6·7	..	10·5	0	2	23	11	10	3	0	0	0	0	1	5	0
Mathurai	0830	133	1013·4	998·3	+1·0	26·1	23·2	21·7	26·1	75	−5	5·6	+0·5	3·0	0	0	30	23	4	1	0	0	0	0	2	0	0
	1730	,,	1010·4	995·4	..	27·7	23·9	22·1	26·7	72	..	3·7	..	3·0	0	0	30	6	15	7	1	0	1	0	0	0	0
Nagapattinam	0830	9	1014·0	1012·9	+1·9	25·7	23·9	23·1	28·3	85	+3	5·8	+0·4	10·0	0	4	26	12	6	0	0	0	0	1	11	0	0
	1730	,,	1011·1	1010·0	..	27·1	24·4	23·1	28·5	79	..	6·0	..	16·8	0	11	19	6	22	1	1	0	0	0	0	0	0
Tiruchirapalli	0230	88	1011·8	1001·7	..	24·1	22·7	21·9	26·5	88	..	2·8	..	5·8	0	0	16	5	9	2	0	0	0	0	0	14	0
	0530	,,	1012·1	1001·9	..	23·5	22·3	21·7	26·0	89	..	4·5	..	4·5	0	0	14	4	8	1	0	0	0	1	0	16	0
	0830	,,	1014·1	1004·1	+1·4	25·3	23·0	21·9	26·2	81	0	6·1	+1·6	11·1	0	4	20	9	12	0	0	0	1	0	2	6	0
	1130	,,	1013·3	1003·3	..	27·9	23·7	21·7	25·9	69	..	6·5	..	15·4	0	8	20	7	18	2	0	0	0	1	0	2	0
	1730	,,	1010·9	1000·9	..	27·0	23·9	22·4	27·3	76	..	6·6	..	9·1	0	0	24	1	15	7	0	1	0	0	0	6	0
	2330	,,	1013·4	1003·3	..	24·6	23·0	22·2	26·8	87	..	3·8	..	9·5	0	0	25	1	20	4	0	0	0	0	0	5	0
Coimbatore	0830	409	1014·1	968·3	+1·5	23·9	21·5	20·1	22·7	80	−2	5·9	+1·6	12·0	0	0	30	0	13	14	2	1	0	0	0	0	0
	1730	,,	1010·3	965·5	..	26·9	22·3	19·7	22·5	67	..	6·7	..	7·6	0	0	30	2	12	12	3	1	0	0	0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—*Contd.*																											
Coimbatore (Peelamedu Aerodrome)	0530	398	1012.4	967·3	..	21·7	20·9	20·5	24·1	93	..	5·4	..	5·4	0	0	26	5	11	6	0	0	0	1	3	4	0
	0830	,,	1014·1	969·2	..	23·9	21·5	20·2	23·7	80	..	5·2	..	11·1	0	1	27	1	23	4	0	0	0	0	0	2	0
	1130	,,	1013·0	968·6	..	26·7	22·1	19·3	22·9	65	..	5·7	..	14·6	0	6	24	0	25	4	0	0	1	0	0	0	0
	1730	,,	1009·9	965·6	..	26·9	21·8	19·1	22·0	63	..	5·8	..	9·3	0	1	27	2	11	15	0	0	0	0	0	2	0
	2330	,,	1013·5	968·5	..	22·9	21·3	20·5	24·1	87	..	4·7	..	5·3	0	0	22	3	6	8	0	4	0	1	0	8	0
Salem	0530	278	1012·3	980·7	..	22·5	20·7	20·0	23·0	88	..	5·0	..	3·2	0	0	21	1	5	11	3	0	0	1	0	9	0
	0830	,,	1014·0	982·6	+1·4	24·5	21·7	20·2	23·8	78	0	4·9	+0·7	3·7	0	0	21	1	9	8	1	0	0	2	0	9	0
	1130	,,	1013·0	982·0	..	28·6	23·0	20·1	23·6	60	..	5·5	..	5·8	0	0	25	0	11	11	3	0	0	0	0	5	0
	1730	,,	1010·2	979·2	..	27·6	22·8	20·2	23·9	65	..	6·0	..	4·4	0	0	27	0	5	19	0	2	0	1	0	3	0
	2330	,,	1013·5	982·0	..	24·1	21·6	20·2	23·8	80	..	4·6	..	5·4	0	0	21	0	6	11	4	0	0	0	0	9	0
Kallakurichi	0830	127	1014·4	1000·0	..	25·4	23·0	21·8	26·2	81	..	4·2	..	9·4	0	0	30	17	1	1	1	0	0	0	10	0	0
	1730	,,	1011·1	996·8	..	26·7	23·3	21·6	26·0	74	..	5·7	..	8·7	0	0	29	5	23	1	0	0	0	0	0	1	0
Cuddalore	0530	12	1011·9	1010·5	..	23·4	22·6	22·2	26·8	93	..	4·9	..	1·5	0	0	12	6	2	0	0	0	0	0	4	18	0
	0830	,,	1014·3	1012·9	+1·7	25·3	23·6	22·6	27·5	86	+2	5·1	+0·2	4·4	0	0	26	6	17	0	1	0	0	0	2	4	0
	1130	,,	1013·5	1012·1	..	27·7	24·3	22·8	27·7	75	..	6·0	..	8·2	0	0	29	5	21	1	0	0	0	1	1	1	0
	1730	,,	1011·3	1010·0	..	26·7	23·8	22·4	27·7	78	..	6·7	..	5·7	0	0	24	6	16	0	1	0	0	0	1	6	0
	2330	,,	1013·4	1012·0	..	25·1	23·3	22·4	27·8	86	..	4·8	..	2·6	0	0	16	7	6	0	0	0	0	0	3	14	0
Vellore	0530	214	1013·1	988·5	..	21·5	20·9	20·4	24·3	94	..	5·8	..	0·6	0	0	4	1	2	0	0	0	0	0	1	26	0
	0830	,,	1015·0	990·6	+2·2	23·7	22·1	21·0	25·2	85	+1	5·4	+1·3	2·2	0	0	16	3	7	1	0	0	0	1	4	14	0
	1130	,,	1013·8	989·7	..	27·3	23·0	20·7	24·9	67	..	6·6	..	10·1	0	0	28	4	18	6	0	0	0	0	0	2	0
	1730	,,	1011·4	987·3	..	26·5	22·3	20·0	23·6	69	..	6·2	..	10·8	0	0	30	1	20	7	1	0	1	0	0	0	0
	2330	,,	1014·4	989·9	..	23·1	21·7	21·0	24·8	88	..	4·3	..	3·3	0	0	14	3	9	0	0	0	1	0	1	16	0
Madras	0230	16	1012·1	1010·3	..	23·9	23·2	22·8	28·0	94	..	3·6	..	6·2	0	0	26	7	3	1	0	0	0	3	12	4	0
	0530	,,	1012·5	1010·7	..	23·5	23·0	22·7	27·6	95	..	4·2	..	7·3	0	1	25	5	1	0	0	0	0	8	12	4	0
	0830	,,	1014·9	1013·1	+1·9	25·5	24·1	23·5	29·0	88	+5	5·0	+0·2	8·6	0	0	30	0	9	20	1	0	0	0	0	0	0
	1130	,,	1014·1	1012·3	..	28·1	24·5	22·8	27·6	74	..	5·8	..	15·3	0	6	24	16	9	4	0	0	0	0	1	0	0
	1730	,,	1012·0	1010·3	..	26·8	23·8	22·4	27·1	77	..	5·2	..	13·9	0	3	26	7	17	5	0	0	0	0	0	1	0
	2330	,,	1013·9	1012·1	..	24·6	23·4	22·7	27·6	89	..	4·0	..	6·1	0	0	27	12	5	2	0	0	0	1	7	3	0
Madras (Nungambakkam)	0830	6	1014·2	1013·5	..	26·4	24·0	22·9	27·9	82	..	6·3	..	5·3	0	0	24	9	9	2	1	0	0	1	2	6	0
Coastal Mysore																											
Karwar	0830	4	1013·3	1012·8	+1·0	24·9	21·8	20·0	23·9	75	..	4·0	..	3·4	0	0	14	0	3	7	3	0	0	0	0	16	1
	1730	,,	1010·4	1009·9	..	29·8	24·6	22·2	26·1	69	..	3·9	..	5·3	0	0	21	2	1	1	2	1	1	5	7	9	1
Honavar	0830	26	1013·3	1010·4	+1·0	25·1	22·4	20·9	24·9	79	+9	5·4	+1·3	4·9	0	0	30	2	10	18	0	0	0	0	0	0	0
	1730	,,	1010·6	1007·7	..	29·9	25·2	22·8	28·1	67	..	4·9	..	3·6	0	0	28	0	5	7	2	2	7	4	1	2	0
Mangalore	0230	22	1010·9	1008·4	..	24·6	23·5	23·0	28·1	90	..	3·0	..	8·2	0	0	28	2	2	20	4	0	0	0	0	2	0
	0530	,,	1011·1	1008·6	..	23·9	22·8	22·1	26·8	90	..	3·4	..	9·6	0	0	30	0	2	24	4	0	0	0	0	0	0
	0830	,,	1013·1	1010·6	+0·9	26·4	23·1	21·5	25·5	75	0	4·0	+0·6	9·6	0	2	28	1	0	22	7	0	0	0	0	0	0
	1130	,,	1012·5	1010·0	..	30·1	24·0	20·7	24·9	59	..	4·0	..	11·9	0	4	26	1	1	14	4	5	3	2	0	0	0
	1730	,,	1009·9	1007·4	..	28·9	24·3	22·1	26·7	67	..	5·0	..	10·9	0	2	25	3	0	0	0	6	3	4	11	3	0
	2330	,,	1012·3	1009·8	..	25·4	23·9	23·2	28·6	88	..	3·5	..	8·2	0	0	30	2	6	17	4	1	0	0	0	0	0
Mangalore (Bajpe Aerodrome)	0530	103	1011·6	999·8	..	22·6	21·7	21·0	25·3	92	..	4·2	..	6·0	0	0	16	0	0	15	1	0	0	0	0	14	0
	0830	,,	1013·4	1001·7	..	25·5	22·9	21·6	26·0	80	..	4·1	..	11·6	0	0	28	0	1	18	9	0	0	0	0	2	0
	1730	,,	1010·3	998·7	..	27·4	24·2	22·7	27·6	77	..	4·6	..	11·7	0	2	22	1	0	0	0	6	2	12	3	6	0
Mysore (North)																											
Bidar	0830	664	1015·7	941·8	..	22·6	17·4	13·9	16·1	59	−1	4·3	+1·8	10·4	0	0	30	0	7	13	8	2	0	0	0	0	0
	1730	,,	1011·3	938·7	..	26·6	17·7	11·3	13·8	39	..	4·8	..	13·0	0	0	30	0	23	7	0	0	0	0	0	0	0
Gulbarga	0830	458	1015·9	964·4	+1·7	23·7	18·3	14·9	17·2	58	−3	4·6	+2·5	10·3	0	1	29	0	11	15	4	0	0	0	0	0	0
	1730	,,	1010·8	960·4	..	29·0	18·6	11·4	13·7	35	..	6·2	..	13·0	0	1	29	0	13	13	2	2	0	0	0	0	0
Bijapur	0830	594	1015·5	949·0	+1·5	21·8	17·9	15·4	17·5	68	+6	4·9	+2·2	6·6	0	0	27	0	6	5	8	6	1	0	1	3	0
	1730	,,	1009·9	945·3	..	27·8	19·8	15·0	17·0	46	..	4·8	..	5·3	0	0	29	4	5	12	5	1	1	0	1	1	0
Belgaum	0830	781	1014·4	928·0	+1·1	20·9	18·0	16·1	18·6	75	+9	..	..	2·0	0	0	13	0	1	0	4	4	2	2	0	17	0
	1730	,,	1011·1	926·2	..	25·2	19·0	15·0	17·5	56	..	..	..	3·8	0	0	25	2	6	10	2	3	1	1	0	5	0
Belgaum (C.T.O.)	0830	753	1014·7	193·4	+1·4	21·9	18·9	16·9	19·8	75	+9	3·9	+1·1	6·8	0	0	28	0	5	15	5	3	0	0	0	2	0
	1730	,,	1010·3	928·0	..	25·6	19·5	15·7	17·5	57	..	5·3	..	9·9	0	0	30	1	11	10	2	2	2	2	0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (North)—Contd.																											
Belgaum (Sambre Aerodrome)	0530	761	1013·4	928·4	..	18·8	16·6	15·0	17·9	79	..	3·4	..	5·8	0	0	22	0	5	13	3	1	0	0	0	8	0
	0830	"	1014·5	930·3	..	21·7	18·3	16·3	18·2	72	..	4·4	..	12·7	0	4	25	0	3	16	9	1	0	0	0	1	0
	1130	"	1013·1	930·1	..	25·8	19·5	15·7	17·2	55	..	4·2	..	20·4	0	12	18	0	2	18	10	0	0	0	0	0	0
	1730	"	1010·0	927·3	..	25·8	19·1	14·9	17·5	53	..	4·6	..	14·5	0	6	22	0	6	16	4	0	1	1	0	2	0
Gadag	0830	650	1014·6	942·6	+1·6	23·4	19·5	17·3	19·8	69	+4	3·8	+1·0	10·0	0	0	30	2	8	14	4	2	0	0	0	0	0
	1730	"	1010·3	939·4	..	27·5	19·6	14·8	17·1	47	..	4·3	..	9·6	0	0	30	0	12	17	0	1	0	0	0	0	0
Gadag (P.B.O.)	0530	661	1013·2	939·2	..	19·6	17·6	16·5	18·7	83	..	2·8	..	8·9	0	2	21	0	0	18	5	0	0	0	0	7	0
	0830	"	1014·8	941·3	..	22·5	19·3	17·8	20·2	76	..	3·3	..	13·2	0	2	28	0	2	19	8	1	0	0	0	0	0
	1130	"	1013·4	941·0	..	26·3	20·0	17·2	18·7	57	..	3·9	..	18·7	0	7	22	0	1	18	8	2	0	0	0	1	0
	1730	"	1010·1	938·0	..	26·8	19·4	15·5	17·2	51	..	4·0	..	12·8	0	0	30	0	3	17	10	0	0	0	0	0	0
	2330	"	1013·8	940·3	..	21·8	17·9	16·1	17·6	70	..	2·9	..	11·0	0	1	27	0	1	21	4	0	1	1	0	2	0
Raichur	0830	400	1015·5	970·5	+1·7	24·5	19·7	16·6	19·1	62	−3	3·2	+0·8	7·5	0	0	29	1	7	7	8	4	1	0	1	1	0
	1730	"	1010·8	966·8	..	29·5	19·6	12·5	14·5	36	..	3·8	..	8·4	0	0	30	2	11	11	5	1	0	0	0	0	0
Mysore (South)																											
Bellary	0830	449	1015·1	964·5	+1·4	23·7	20·9	19·6	22·8	79	+11	4·4	+0·9	4·2	0	0	26	0	2	0	24	0	0	0	0	4	0
	1730	"	1010·2	960·7	..	28·5	22·4	18·9	22·7	58	..	4·8	..	2·0	0	0	25	0	1	0	23	0	0	0	1	5	0
Chitaldrug	0830	733	1014·7	933·2	+1·8	21·4	18·9	17·4	20·1	79	+9	6·5	+2·6	10·0	0	0	30	0	0	28	2	0	0	0	0	0	0
	1730	"	1009·8	929·9	..	25·9	19·2	15·0	17·4	53	..	6·6	..	8·7	0	0	29	0	0	29	0	0	0	0	0	1	0
Shimoga	0830	571	1014·2	950·3	..	22·0	19·6	18·3	21·1	80	..	4·2	..	2·4	0	0	12	1	5	5	1	0	0	0	0	18	0
	1730	"	1009·7	946·9	..	25·9	20·9	18·5	21·1	65	..	4·7	..	5·3	0	0	27	2	9	12	1	0	1	1	1	3	0
Balehonnur	0830	..	..	..	..	19·9	17·9	17·1	19·2	89	+4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1536·3	909·1	..	20·1	18·2	17·2	19·6	83	+7	5·6	+1·6	7·0	0	0	27	0	2	14	11	0	0	0	0	3	0
	1730	"	1516·0	906·0	..	24·4	19·2	16·2	18·4	62	..	5·7	..	6·2	0	0	29	2	3	13	9	0	0	2	0	1	0
Mysore	0830	767	1014·5	929·4	+1·5	21·3	19·4	18·3	21·1	83	+6	3·7	−0·9	12·9	0	3	26	1	1	0	1	5	14	0	7	1	0
	1730	"	1009·8	926·3	..	25·6	19·8	16·4	18·8	57	..	4·7	..	12·6	0	1	29	0	13	12	3	1	0	1	0	0	0
Bangalore (Central Observatory)	0230	921	1514·4	911·2	..	18·8	17·9	17·5	19·9	92	..	4·8	..	10·8	0	0	30	0	4	21	5	0	0	0	0	0	0
	0330	"	1537·5	913·3	+1·6	20·4	18·2	17·0	19·1	81	+3	5·6	+1·1	14·2	0	0	30	1	6	18	5	0	0	0	0	0	0
	1130	"	1540·3	912·8	..	24·1	18·9	15·8	18·0	61	..	5·6	..	15·7	0	1	29	0	6	15	8	1	0	0	0	0	0
	1730	"	1517·1	910·5	..	23·5	18·7	15·7	17·9	63	..	5·9	..	14·4	0	1	29	0	3	16	11	0	0	0	0	0	0
Bangalore (Aerodrome)	0530	897	1515·6	913·9	..	18·5	17·9	17·5	20·2	94	..	4·5	..	5·7	0	0	17	1	3	12	1	0	0	0	0	13	0
	0830	"	1538·9	915·9	..	21·1	18·7	17·3	19·7	80	..	5·9	..	12·0	0	0	27	0	5	21	1	0	0	0	0	3	0
	1130	"	1544·1	915·4	..	25·5	19·6	16·1	20·1	57	..	5·9	..	16·6	0	7	23	0	4	24	2	0	0	0	0	0	0
	1730	"	1520·4	913·1	..	24·6	19·8	17·2	19·7	64	..	6·0	..	13·9	0	4	23	0	2	21	4	0	0	0	0	3	0
	2330	"	1533·1	915·5	..	20·1	18·9	18·3	21·0	89	..	4·5	..	8·3	0	0	22	0	3	17	1	1	0	0	0	8	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1011·3	1010·8	..	24·4	23·5	23·0	28·1	92	..	4·9	..	5·5	0	0	29	1	6	20	2	0	0	0	0	1	0
	0830	"	1012·7	1012·2	+0·5	26·4	23·9	22·8	27·8	80	−2	4·1	−0·1	5·4	0	0	30	0	2	25	2	0	0	1	0	0	0
	1130	"	1012·6	1012·1	..	30·3	25·4	23·1	28·3	66	..	5·1	..	7·9	0	0	30	0	1	1	2	3	13	8	2	0	0
	1730	"	1010·0	1009·5	..	29·7	25·5	23·6	29·3	70	..	6·0	..	12·1	0	0	30	0	0	0	0	1	3	14	12	0	0
	2330	"	1012·5	1012·0	..	26·1	24·3	23·5	29·0	86	..	4·6	..	6·9	0	0	30	6	15	5	0	0	0	0	4	0	0
Palghat	0830	97	1013·5	1002·5	..	26·4	23·2	21·6	26·4	75	..	4·7	..	12·2	0	0	29	0	0	22	6	0	0	1	0	1	0
	1730	"	1010·0	999·0	..	28·7	23·8	21·3	24·8	66	..	6·1	..	6·7	0	0	27	0	0	19	3	1	1	3	0	3	0
Fort Cochin	0830	3	1012·9	1012·6	+0·9	27·0	24·2	22·5	28·0	78	−1	6·1	+2·1	2·7	0	0	14	0	7	6	1	0	0	0	0	16	0
	1730	"	1009·8	1009·5	..	28·6	24·9	23·3	29·0	73	..	6·6	..	3·1	0	0	17	1	1	0	1	0	3	7	4	13	0
Cochin (Naval Air Station)	0230	3	1011·4	1011·1	..	25·0	24·0	23·5	29·0	92	..	5·8	..	2·7	0	0	17	2	3	9	3	0	0	0	0	13	0
	0530	"	1011·3	1011·0	..	24·3	23·5	23·1	28·3	93	..	4·9	..	2·1	0	0	17	1	4	10	2	0	0	0	0	13	0
	0830	"	1012·9	1012·6	..	26·8	24·1	22·8	27·7	79	..	4·8	..	2·8	0	0	24	3	7	10	3	1	0	0	0	6	0
	1130	"	1012·7	1012·4	..	29·8	24·8	22·4	27·3	65	..	4·9	..	6·1	0	0	26	3	5	1	8	4	2	3	4	0	0
	1730	"	1010·3	1010·0	..	29·0	24·7	22·6	27·7	69	..	6·2	..	7·6	0	1	28	1	0	1	0	2	6	17	2	1	0
	2330	"	1012·6	1012·3	..	25·8	24·4	23·8	29·5	89	..	5·6	..	2·7	0	0	17	2	2	5	4	1	2	0	1	13	0
Alleppey	0830	4	1012·6	1012·2	..	27·9	25·3	24·1	30·0	80	..	5·2	..	5·0	0	0	30	1	3	12	10	1	1	0	2	0	0
	1730	"	1009·7	1009·3	..	28·7	25·4	23·8	29·8	75	..	6·4	..	13·1	0	0	30	0	0	1	2	0	3	13	11	0	0
Trivandrum	0830	34	1012·9	1008·6	..	24·6	23·0	22·2	26·8	87	..	3·6	..	0·8	0	0	7	1	2	0	1	0	0	0	3	23	0
	1730	"	1009·8	1005·5	..	28·6	24·4	22·4	27·2	70	..	4·9	..	4·3	0	0	26	1	2	2	12	5	1	1	2	4	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives)—*Contd.*																											
Trivandrum	0230	64	1010·6	1003·3	..	24·3	23·4	23·0	28·2	93	..	5·0	..	3·3	0	0	25	8	8	4	0	2	1	0	2	5	0
	0530	,,	1010·8	1003·5	..	23·8	23·0	22·5	27·5	93	..	5·6	..	3·7	0	0	26	4	11	6	2	0	0	1	2	4	0
	0830	,,	1012·8	1005·5	+1·0	25·8	24·3	23·6	29·1	88	+3	5·9	+0·9	3·9	0	0	24	2	7	2	8	0	1	0	4	6	0
	1130	,,	1012·1	1004·9	..	29·6	24·9	22·7	27·5	67	..	6·3	..	5·2	0	0	25	4	0	0	6	1	7	4	3	5	0
	1730	,,	1010·1	1002·9	..	27·5	24·7	23·3	28·9	79	..	6·8	..	4·6	0	0	25	0	3	0	2	4	9	3	4	5	0
	2330	,,	1012·4	1005·1	..	24·9	23·7	23·1	28·7	91	..	5·7	..	5·3	0	0	28	4	11	6	1	2	1	1	2	2	0
Trivandrum (Aerodrome)	0830	8	1012·5	1011·6	..	26·3	24·3	23·4	28·8	85	..	6·1	..	3·7	0	0	17	2	6	3	1	0	3	0	2	13	0
Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1567·1	866·3	..	16·5	12·6	9·3	11·2	63	..	1·4	..	.	0	0	30	5	1	4	4	5	6	3	2	0	0
	1730	,,	1533·6	863·1	..	15·3	13·7	13·1	14·1	85	..	3·9	..	..	0	0	30	1	0	1	0	2	5	13	8	0	0
Aijal*	0830	1097																									
	1730	,,																									
Shillong	0830	1500	1511·5	854·3	+1·2	15·7	11·8	8·3	11·0	62	—6	1·9	—0·2	0·6	0	0	3	0	0	0	0	2	1	0	0	27	0
	1730	,,	1512·5	851·5	..	14·7	13·3	12·2	14·3	84	..	7·4	..	0·1	0	0	1	0	0	0	0	0	0	0	1	29	0
Cherrapunji	0830	1313	1537·4	872·7	+0·8	17·1	15·0	12·9	15·4	77	+16	0	—2·3	3·3	0	0	30	0	7	15	4	0	4	0	0	0	0
	1730	,,	1517·3	870·7	..	16·3	14·5	13·0	15·1	81	..	0	..	3·1	0	0	30	0	1	5	4	2	18	0	0	0	0
Darjiling (Raj-Bhawan).	0830	2127	1562·2	795·2	+3·8	11·2	9·3	7·7	10·5	81	+20	4·1	+1·2	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1537·3	792·7	..	10·5	9·3	8·2	11·1	87	..	4·9	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
Kalimpong	0830	1209	1504·2	880·3	—2·9	15·3	13·5	12·3	14·0	82	+8	1·8	—0·4	3·3	0	0	27	0	0	0	1	0	0	0	26	3	0
	1730	,,	1490·3	878·7	..	15·8	13·8	12·4	14·5	80	..	3·1	..	3·8	0	0	30	0	0	0	29	0	1	0	0	0	0
Katmandu	0830	1337	1558·3	872·8	..	12·0	10·8	9·8	12·2	87	0	3·5	—2·6	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	1526·2	868·8	..	16·4	13·4	11·1	13·1	71	..	2·0	..	0·7	0	0	6	3	0	0	0	0	0	0	3	24	0
Mukteswar (Kumaon)	0830	2311	3166·6	776·5	+1·5	10·5	4·7	—3·6	4·9	39	—5	0·7	—0·6	8·3	0	1	26	0	3	2	0	0	2	12	8	3	0
	1730	,,	3150·8	774·6	..	11·7	6·9	1·3	7·0	51	..	0·9	..	9·1	0	0	24	0	0	0	0	0	0	14	10	6	0
Nainital	0830	1953	1531·6	808·6	..	10·7	5·8	0·2	5·1	49	..	1·0	..	1·8	0	0	8	2	1	1	1	0	0	2	1	22	0
	1730	,,	1510·8	806·6	..	10·9	7·5	2·5	7·9	62	..	1·5	..	4·6	0	0	26	4	0	1	1	1	1	18	0	4	0
Tapoban †	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath	0830								closed during winter months																		
Lokpal	0830	..	..	..	..	-8·2	-9·9	-14·4	1·8	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mussooree	0830	2042	1526·7	799·8	+0·2	12·0	7·6	3·9	7·5	54	+7	2·0	+0·8	2·2	0	0	21	7	2	0	3	5	2	0	2	9	0
	1730	,,	1512·8	798·4	..	11·4	8·6	6·9	9·4	76	..	2·3	..	2·0	0	0	20	4	1	1	1	5	4	1	3	10	0
Simla	0830	2202	1531·1	785·2	+1·2	11·3	4·3	—7·5	3·8	30	—4	2·3	+1·0	1·7	0	0	17	2	0	1	4	6	2	1	1	13	0
	1730	,,	1518·7	784·0	..	10·9	6·6	1·5	7·0	54	..	2·7	..	2·6	0	0	26	2	8	4	4	3	3	1	1	4	0
Dalhousie	0830	1959	1471·3	802·5	..	12·2	6·4	1·2	5·9	40	..	1·5	..	1·1	0	0	4	0	2	2	0	0	0	0	0	26	0
	1730	,,	1466·0	802·1	..	12·5	8·1	3·7	7·9	58	..	1·5	..	1·4	0	0	6	0	6	0	0	0	0	0	0	24	0
Dharamshala	0830	1212	1573.6	887·1	..	15·4	10·4	5·1	8·7	50	..	2·7	..	2·0	0	0	17	4	7	1	0	0	1	0	4	13	0
	1730	,,	1566·8	886·1	..	18·1	12·9	7·8	11·3	54	..	3·4	..	2·2	0	0	28	0	0	1	2	1	21	3	0	2	0
Abu	0830	1195	1551.9	886·1	+1·2	17·6	12·8	8.5	11·6	56	+11	1·6	+0·6	1·1	0	0	4	2	0	0	0	0	0	0	2	26	0
	1730	,,	1532·9	884·5	..	21·3	14·4	8·2	11·1	46	..	2·4	..	3·1	0	0	10	7	0	0	0	0	1	2	0	20	0
Pachmarhi	0830	1075	1558·7	899·6	+2·0	18·2	13·9	10·5	12·9	62	+5	2·2	+0·7	0·5	0	0	5	0	2	1	0	0	1	1	0	25	0
	1730	,,	1542.6	897·1	..	23·1	16.1	11·0	13·3	47	..	3·1	..	2·1	0	0	18	5	7	3	0	0	0	0	3	12	0
Mahabaleshwar	0830	1382	1541·9	866·2	+1·5	18·2	14·5	11·5	13·8	68	+2	4·3	+2·1	14·6	0	3	27	0	5	18	5	2	0	0	0	0	0
	1730	,,	1522·9	864·2	..	19·5	15·6	12·8	15·0	66	..	3·6	..	10·1	0	0	30	0	17	7	6	0	0	0	0	0	0
Nandi Hills	0830	..	..	..	..	18·7	17·7	17·1	19·4	90	..	7·2	..	..	..	..	..	0	0	0	0	0	9	21	0	0	0
Mercara	0830	1152	1529·0	888·4	+1·6	18·0	17·1	16·5	18·8	91	+8	4·2	—0·6	9·7	0	0	29	0	13	14	0	0	0	1	1	1	0
	1730	,,	1510·6	886·1	..	21·7	18·5	16·7	19·0	74	..	4·0	..	5·7	0	0	29	0	13	13	1	1	0	0	1	1	0
Kodaikanal	0530	2343	3146·2	771·7	..	10·8	10·0	9·1	11·8	90	..	6·5	..	8·8	0	3	22	6	5	5	7	0	0	0	1	5	1
	0830	,,	3171·7	773·5	+2·0	12·9	12·0	11·2	13·4	90	+11	6·0	+1·1	9·2	0	1	23	0	6	5	13	0	0	0	0	6	0
	1130	,,	3176·5	773·4	..	14·9	13·2	12·0	14·0	84	..	6·3	..	9·2	0	2	25	0	6	6	14	1	0	0	0	3	0
	1730	,,	3151·7	771·6	..	12·9	12·5	12·1	14·1	95	..	7·2	..	5·4	0	1	20	0	7	4	6	1	0	0	3	9	0
	2330	,,	3163·1	773·1	..	11·3	10·9	10·5	12·7	95	..	7·0	..	8·6	0	1	25	6	8	4	5	1	0	0	2	4	0
Ootacamund	0830	2249	1526·3	781·4	+1·5	14·0	11·7	10·2	12·4	79	+3	3·8	—0·8	4·8	0	0	16	2	6	6	1	1	0	0	0	14	0
	1730	,,	1509·0	780·5	..	15·1	13·1	11·9	13·8	81	..	6·0	..	2·1	0	0	7	1	1	4	1	0	0	0	0	23	0
Coonoor	0830	1747	1534·1	829·5	..	16·7	14·2	12·1	14·5	78	+2	4·4	—0·7	1·4	0	0	12	0	1	5	3	3	0	0	0	18	0

(R) Register not received.

†Data not reliable.

*Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Sikkim																											
Lachen	0830	..	..	..	..	2·8	2·3	1·7	6·8	91	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (Chumbi)	0830	..	..	..	..	2·4	1·3	−0·4	6·1	85	+5	0	−1·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa (R)	0830	3685																									
Ceylon																											
Colombo	0830	7	1013·1	1012·2	+1·2	25·8	24·2	23·5	28·8	87	0	5·8	+0·8	7·0	0	1	28	4	15	5	5	0	0	0	0	1	0
	1730	"	1010·3	1009·5	..	27·1	24·8	23·7	29·6	83	..	7·5	..	8·5	0	0	26	5	3	0	2	1	2	8	5	4	0
Trincomalee	0830	3	1012·9	1012·6	+2·1	26·1	24·2	23·5	28·7	86	0	6·3	+1·7	9·4	0	4	20	5	4	0	1	3	9	1	1	6	0
	1730	"	1010·3	1009·9	..	27·1	24·6	23·6	28·9	82	..	6·7	..	16·0	0	11	18	9	14	2	0	1	0	0	3	1	0
Batticoloa	0830	3	1013·3	1013·0	..	25·6	24·4	23·9	29·7	90	..	5·5	..	6·5	0	0	22	1	2	0	0	2	4	6	7	8	0
	1730	"	1010·4	1010·1	..	26·8	24·9	24·0	29·9	85	..	6·8	..	12·6	0	4	22	5	11	5	2	0	1	2	0	4	0
Hambantota	0830	15	1013·1	1011·4	+2·3	25·8	24·3	23·7	29·0	89	+2	5·1	+1·0	11·7	0	4	25	7	10	0	1	1	1	5	4	1	0
	1730	"	1010·2	1008·5	..	27·1	24·8	23·8	29·6	82	..	6·6	..	18·5	0	9	21	4	5	5	5	0	9	1	1	0	0
Mannar	0830	4	1013·5	1013·1	..	26·4	24·6	23·8	29·5	86	..	6·4	..	9·9	0	1	28	2	16	4	3	2	2	0	0	1	0
	1730	"	1010·6	1010·2	..	26·8	24·7	23·7	29·3	83	..	7·5	..	11·9	0	2	26	11	8	2	1	1	4	0	1	2	0
Hydrometeorological Observatories																											
Damodar Catchment																											
Bokaro	0830	239	1017·5	989·8	..	18·8	14·6	10·9	13·3	61	..	1·7	..	2·2	0	0	21	0	0	0	0	0	8	5	8	9	0
	1730	"	1013·0	985·8	..	23·1	16·5	11·1	13·3	47	..	2·1	..	3·1	0	0	25	6	1	1	0	0	0	4	13	5	0
Hazaribagh	0830	615	1016·2	947·4	..	21·3	14·5	8·9	11·1	46	..	1·1	..	3·2	0	0	17	2	0	0	0	0	1	3	11	13	0
	1730	"	1013·5	944·6	..	21·4	15·1	10·3	12·0	50	..	1·0	..	4·6	0	0	20	0	0	0	0	0	1	4	15	10	0
Tilaiya	0830	..	..	..	..	21·1	15·6	11·0	13·2	53	..	1·2	..	5·6	0	0	17	0	0	0	0	1	5	11	0	13	0
	1730	..	..	..	..	23·6	15·9	9·4	11·8	41	..	1·7	..	2·4	0	0	21	0	0	0	0	0	0	17	4	9	0
Ramgarh	0830	..	..	..	..	19·1	14·7	11·3	13·2	60	..	1·6	..	2·5	0	0	24	0	0	0	0	0	15	7	2	6	0
	1730	..	..	..	..	22·7	16·4	11·3	13·6	49	..	2·1	..	0·7	0	0	7	0	0	0	0	0	1	0	6	23	0
Panchet Hills	0830	..	..	..	..	22·4	16·4	11·6	13·8	51	..	1·8	..	2·6	0	0	29	0	0	0	1	0	22	3	3	1	0
	1730	..	..	..	..	24·9	16·6	9·9	12·1	39	..	2·2	..	2·5	0	0	25	0	3	0	0	0	1	3	8	5	0
Durgapur	0830	..	..	..	..	23·8	18·4	14·6	16·7	57	..	0·7	..	13·1	0	7	21	2	0	2	0	0	0	15	9	2	0
	1730	..	..	..	..	25·5	19·5	15·3	17·8	55	..	0·4	..	8·9	0	0	27	2	2	4	1	0	0	7	11	3	0
Mahanadi Catchment																											
Baramul	0830	64	1016·9	1009·4	..	22·2	18·9	16·8	19·1	71	..	1·9	..	5·5	0	0	24	13	11	0	0	0	0	0	0	6	0
	1730	"	1013·7	1006·1	..	23·1	19·5	17·7	20·4	73	..	1·8	..	1·3	0	0	6	1	0	0	4	1	0	0	0	24	0
Hirakud	0830	159	1017·4	999·1	..	23·2	19·5	17·1	19·8	69	..	1·1	..	2·6	0	0	19	7	3	1	0	0	1	2	3	11	2
	1730	"	1013·3	995·3	..	26·2	20·4	16·7	19·3	56	..	1·5	..	0·5	0	0	5	0	0	1	0	3	0	1	0	25	0
Khijrawan	0830	..	..	..	..	19·8	16·6	14·3	16·2	71	..	2·1	..	..	..	..	..	5	18	2	0	1	0	1	3	0	0
	1730	..	..	..	..	25·1	18·4	13·3	15·6	48	..	1·9	..	..	..	..	..	12	10	1	0	0	0	0	7	0	0
Sonepur	0830	..	..	..	..	24·8	20·2	16·7	19·9	63	..	..	..	6·3	0	0	16	3	1	2	2	2	5	0	1	14	0
Ginabahar	0830	..	..	..	..	21·4	15·2	10·6	12·4	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhimkund	0830	..	..	..	..	21·2	17·5	14·9	17·1	67	..	3·3	..	2·5	0	0	20	2	0	0	0	0	0	2	16	10	0
	1730	..	..	..	..	23·6	18·4	14·9	17·9	58	..	7·5	..	0·2	0	0	2	0	0	0	0	0	0	0	2	28	0
Narbada Catchment																											
Punasa (R)	0830	..																									
(R)	1730	..																									
Bagra Tawa	0830	..	..	..	..	21·4	16·2	12·2	14·0	56	..	1·4	..	5·5	0	0	22	2	4	2	4	1	8	1		8	0
	1730	..	..	..	..	26·8	19·0	13·7	15·8	45	..	2·1	..	2·3	0	0	11	1	1	3	3	1	2	0	0	19	0
Thikri	0830	..	..	..	..	24·6	18·5	14·2	16·3	54	..	2·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	18·8	15·4	12·8	15·0	69	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dharoi	0830	..	..	..	..	22·4	15·7	10·0	12·5	46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	29·6	19·2	11·1	13·7	33	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ganga Catchment																											
Mukhim	0830	..	..	..	..	13·1	7·8	2·3	7·2	48	..	1·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·1	8·8	5·0	8·6	57	..	1·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri	0830	..	..	..	..	11·8	9·9	7·9	10·9	78	..	1·1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	21·0	15·4	11·1	13·5	54	..	1·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed per hour km.	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories—*Contd.*																											
Gandak Catchment																											
Gorkha	0830	..	..	..	..	17·5	14·8	12·7	14·9	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	17·3	14·5	12·2	14·4	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara	0830	..	..	..	..	17·7	15·3	13·5	15·7	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·0	16·7	15·2	17·4	79	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	18·0	15·6	13·8	16·0	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	19·3	15·4	12·7	14·8	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jomosom	0830	..	..	..	..	6·5	1·9	−4·0	4·5	47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	8·7	6·0	3·3	7·9	70	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timure	0830	..	..	..	..	8·4	5·1	1·2	6·7	61	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·6	10·7	8·4	11·1	71	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh	0830	..	..	..	..	15·1 (*b*)	11·8 (*b*)	9·0 (*b*)	11·4 (*b*)	66 (*b*)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·7	12·2	9·3	11·7	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dandeldhura *	0830	..	..	..	..	12·8	9·1	3·4	7·7	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·8	8·7	3·6	8·0	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari †	0830																										
†	1730																										
Sallyana	0830	..	..	..	..	16·9	12·9	9·7	12·0	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	16·2	11·9	8·2	10·9	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Butwal	0830	..	..	..	..	21·4	17·0	13·7	15·8	62	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	23·6	19·4	16·9	19·2	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1541·0	872·5	..	11·7	10·8	9·9	11·5	89	..	4·4	..	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1130	”	1532·5	870·9	..	20·4	14·2	9·0	11·7	49	..	2·0	..	1·3	0	0	12	0	1	3	3	2	2	1	0	18	0
	1730		1511·2	869·1	..	16·3	13·2	10·8	12·9	70	..	1·7	..	0·8	0	0	7	3	0	0	1	0	0	0	3	23	0
Kosi Catchment																											
Chautara	0830	..	..	..	..	14·7	12·3	10·5	12·8	76	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	17·6	13·0	9·5	12·0	60	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldunga	0830	..	..	..	..	12·8	11·1	9·8	11·9	82	..	3·3	..	0·2	0	0	1	0	0	0	0	1	0	0	0	29	0
	1130	..	..	..	..	15·7	12·8	10·4	12·9	71	..	4·7	..	1·6	0	0	15	0	0	0	0	4	6	3	2	15	0
	1730	..	..	..	..	12·7	10·9	9·6	11·9	81	..	6·3	..	1·8	0	0	15	0	0	0	0	0	4	8	3	15	0
Barahkshetra	0830	146	1017·7	1000·7	..	18·1	16·1	14·9	16·7	81	..	1·6	..	5·1	0	0	19	1	2	4	1	1	4	5	1	11	0
	1130	”	1015·4	998·7	..	24·9	20·0	16·8	19·3	61	..	2·2	..	9·7	0	0	29	0	0	1	2	0	17	8	1	1	0
	1730		1013·3	996·7	..	20·5	18·4	16·9	19·6	80	..	2·7	..	8·8	0	0	27	0	1	12	9	2	1	1	1	3	0
Angbung	0830	..	..	..	..	16·5	13·7	11·3	13·6	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung	0830	..	..	..	..	13·0	11·1	9·6	12·0	80	..	4·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	16·7	12·8	10·2	12·3	66	..	4·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·7	10·7	8·2	10·9	69	..	3·6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok	0830	..	..	..	..	14·1	12·3	11·1	13·0	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)	0830	..	..	..	..	..	..	..	..	†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhojpur	0830	..	..	..	..	15·7	13·1	11·1	13·4	75	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·5	12·2	11·5	13·4	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur	0830	..	..	..	..	16·3	13·6	11·5	13·6	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
†	1730																										
Tista Catchment																											
Gangtok	0830	1812	1538·9	823·5	..	12·0	10·1	8·3	11·2	80	..	4·0	..	1·4	0	0	16	0	1	2	2	4	1	2	4	13	1
	1130	”	1527·0	822·2	..	15·1	12·4	10·4	12·5	75	..	4·3	..	3·1	0	0	29	0	0	0	1	7	14	5	2	1	0
	1730	”	1514·6	820·7	..	12·1	10·8	9·8	12·2	86	..	6·0	..	2·1	0	0	25	0	1	3	10	8	2	1	0	5	0
Geyzing	0830	..	..	..	..	14·5	12·5	11·1	13·2	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	14·5	13·1	12·3	14·2	86	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R) Register not received. (*b*) Mean of 29 days. * Observations for 29 days. † Data not reliable.

MONTHLY MEANS OF UPPER WINDS

NOVEMBER 1957 (KARTIKA 10—AGRAHAYANA 9, 1879 SAKA)

During the month, observations of velocity and direction of upper winds were made at 55 stations in India. Out of these, at 43 stations all the observations were taken by means of pilot balloons and at 12 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a.m.s.l. are given under Table IV and data above 9.0 km. a.m.s.l. under Table V.

In Tables IV and V :

n—represents the number of observations ;

V—represents the mean wind speed in knots irrespective of direction ;

v—represents the resultant mean velocity in knots ;

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0.15 km.a.g., 0.3, 0.6, 0.9, 1.5, 2.1, 3.0, 3.6, 4.5, 5.4, 6.0, 7.2, 9.0, 10.5, 12.0, 14.1, 16.2, 18.0, 21.0 24.0, 27.0, 30.0, 33.0 and 36.0 km. a.m.s.l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km. a.m.s.l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb respectively.

Station	Lat. N.	Long. E	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST).			
1. Agartala	23°53′	91°15′	17	28th Nov. 1951	0530	1730	2330	
2. Ahmedabad	23 04′	72 38′	60	19th May 1928	0530	1730	2330	
3. Amausi	26°45′	80 53′	132	20th Nov. 1950	0530	1730	2330	
4. Ambala	30 23′	76°46′	283	1st Apr. 1941	0530	1730	2330	
5. Amritsar	31 38′	74°52′	230	21st Jun. 1957	0530*	1730*		
6. Anantapur	14 41′	77 37′	364	12th Feb. 19 6	0530	1730	2330	
7. Asansol	23 41′	86 59′	136	29th May 19 2	0530	1730	2330	
8. Baghdogra	26 38′	88°19′	140	7th Jun. 1953	0530	1730	2330	
9. Bairagarh	23 17′	77 21′	532	26th Feb. 1943	0530	1730	2330	
10. Bamrauli	25 27′	81 44′	103	28th Feb. 1930	0530*	1130	1730*	2330
11. Bangalore	12 58′	77 35′	936	19th May 1915	0530	1730	2330	
12. Bareilly	28 22′	79 24′	180	12th Jan. 1943	0530	1730		
13. Begumpet	17 27′	78 28	553	1st Sep. 1929	0530	1730	2330	
14. Bhagalpur	25 14′	86 57′	61	19th May 1950	0530	1730		
15. Bhubaneshwar	20 15′	85 50′	55	5th Dec. 1912	0530	1730	2330	
16. Bhuj	23 15′	69 48	111	14th Sep. 1937	0530	1730	2330	
17. Bikaner	28°00′	73 18′	229	18th Oct. 1946	0530	1730	2330	
18. Chikalthana	19°51′	75 24′	583	7th Oct. 1951	0530	1730	2330	
19. Cochin †	09 56′	76 14′	3	16th Mar. 1942	0530	1730	2330	
20. Darjeeling	27 03′	88°16′	2115	21st May 1956	0830	1730		
21. Dum Dum	22 39′	88°27′	19	14th May 1921	0530*	1130	1730*	2330
22. Gadag	15 25′	75 38′	650	3rd May 1943	0530	1730	2330	
23. Gannavaram	16 32′	80 48′	24	8th Apr. 1942	0530	1730	2330	
24. Gauhati	26 05′	91 43′	51	12th Mar. 1955	0530*	1130	1730*	2330
25. Gaya	24 45′	84 57′	119	19th Mar. 1937	0530	1730	2330	
26. Gopalpur	19 16′	84 53′	24	15th Feb. 1946	0530	1730	2330	
27. Gorakhpur	26 45′	83 22′	83	5th Jan. 1943	0530	1730		
28. Gwalior	26 14′	78 15′	219	7th May 1938	0530	1730	2330	
29. Imphal	24 51′	93 58′	805	8th Mar. 1952	0530	1730	2330	
30. Jabalpur	23 10′	79 57′	402	30th Jul. 1928	0530	1730	2330	
31. Jagadalpur	19 05′	82 02′	562	25th Mar. 1948	0530	1730	2330	
32. Jaipur	26°49′	75 48′	404	6th Jun. 1953	0530	1730		
33. Jamshedpur	22 49′	86 11′	147	23rd Jul. 1942	0530	1730		
34. Jharsuguda	21 55′	84 05′	234	1st May 1944	0530	1730	2330	
35. Jodhpur	26 18′	73 01′	229	15th Oct. 1934	0530*	1130	1730*	2330
36. Madras	13°00′	80 11′	29	8th Apr. 1926	0530*	1130	1730*	2330
37. Mangalore	12 52′	74 51′	40	4th Jun. 1928	0530	1730	2330	
38. Minicoy	08 18′	73 00′	16	14th Apr. 1941	0530	1730	2330	
39. Mohanbari	26°29′	95 01′	110	1st Jun, 1948	0530	1730	2330	
40. Mussoorie	30 27′	78 05′	2050	3rd Nov. 1955	0830	1730		
41. Nagpur	21°06′	79 03′	316	23rd Apr. 1943	0530*	1130	1730*	2330
42. Nanpara	27°50′	81 30′	141	23rd Apr. 1957	0530	1730		
43. New Delhi	28 35′	77°12′	227	20th Oct. 1936	0530*	1130	1730*	2330
44. Poona	18°32′	73°51′	593	5th Jan. 1925	0530	1730	2330	
45. Port Blair	11 40′	92 43′	93	29th Oct. 1945	0530*	1130	1730*	2330
46. Raipur	21 14′	81 39′	308	15th Jul. 1944	0530	1730	2330	
47. Raxaul	26 59′	84°51′	83	28th Oct. 1957	0530			
48. Santa Cruz	19°07′	72°51′	12	14th May 1933	0530*	1130	1730*	2330
49. Tezpur	26°37′	92°47′	79	12th Aug. 1932	0530	1730	2330	
50. Tiruchirapalli	10 46′	78 43′	96	22nd Jun. 1936	0530	1730	2330	
51. Trivandrum	08°29′	76 57′	73	8th Dec. 1928	0530*	1130	1730*	2330
52. Udaipur	24°35′	73 42′	587	24th Jun. 1947	0530	1730	2330	
53. Vengurla	15°52′	73 38′	8	22nd Nov. 1941	0530	1730	2330	
54. Veraval	20 54′	70 22′	17	13th Oct. 1941	0530*	1130	1730*	2330
55. Visakhapatnam	17°43′	83°14′	10	24th Sep. 1928	0530	1730	2330	

*Radiowind ascents.

†Naval Meteorological Office.

5—342 D.D.G. Obs. Poona/62.

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km, above mean sea level

November 1957 (KARTIKA 10—AGRAHAYNA 9, 1879 SAKA)

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	0·6	0·3	140	30	2·3	1·1	356	30	0·9	0·6	139	30	3·8	3·2	042	30	4·2	1·7	023	30	3·4	2·4	350
0·15 a. g.	30	5·2	2·5	050	30	5·6	3·1	333	30	5·2	2·5	350	30	15·0	12·0	047	29	5·6	3·2	010	28	11·5	7·7	010
0·3 a. m.s.l.	30	5·1	3·1	020	30	5·0	2·5	341	30	5·2	3·0	333	30	14·2	10·6	052	29	5·4	3·0	015	28	11·4	7·6	014
0·6 ,,	30	5·6	3·7	020	30	3·9	1·0	338	30	5·5	3·7	330	30	10·9	6·5	057	29	5·7	3·0	016	28	9·1	4·8	020
0·9 ,,	30	7·2	4·5	012	30	4·0	0·4	235	30	5·8	3·6	308	30	7·5	3·2	052	29	5·8	3·0	017	28	6·6	3·2	028
1·5 ,,	30	8·7	3·4	313	30	6·3	1·4	256	30	7·8	2·8	249	30	5·9	0·9	241	29	5·7	2·4	023	28	6·5	2·4	086
2·1 ,,	29	9·5	3·2	311	30	8·8	4·2	300	30	8·0	2·9	234	30	8·4	4·2	202	30	6·9	0·9	344	28	7·9	1·8	120
3·0 ,,	27	15·0	12·6	287	29	16·2	14·7	289	30	15·6	13·7	281	29	10·1	5·9	249	28	8·4	4·7	268	24	9·5	3·6	215
3·6 ,,	26	21·8	20·8	288	25	22·5	21·0	289	20	20·7	19·4	285	26	11·0	9·3	264	28	10·6	7·7	263	17	9·5	6·2	246
4·5 ,,	25	25·8	24·9	280	17	24·0	23·6	281	8	27·0	25·9	277	22	17·1	15·8	267	25	15·2	14·3	267	7	14·1	13·3	266
5·4 ,,	21	27·7	26·6	283	8	26·1	25·2	283	2	19·0	18·6	273	8	18·5	16·5	270	23	20·4	19·3	267	5	22·6	22·2	261
6·0 ,,	17	31·2	28·4	279	8	27·8	26·6	279	1	17·0	17·0	280	6	19·2	16·7	272	22	24·9	23·8	269	3	24·0	23·0	265
7·2 ,,	8	27·9	27·6	277					1	17·0	17·0	265					17	32·0	30·8	268				
9·0 ,,	4	38·7	38·1	266													7	51·3	50·4	266				

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·8	1·6	299	30	3·8	3·3	305	30	2·8	2·3	303	30	3·9	2·2	321	30	4·0	2·8	304	30	5·9	3·8	326
0·15 a.g.	30	10·2	6·3	325	30	9·2	8·0	298	30	10·0	7·9	311	30	14·7	9·3	332	30	12·6	9·2	315	29	18·3	14·9	335
0·3 a. m.s. l.	30	9·9	6·3	324	30	9·3	8·2	299	30	10·0	8·1	310	30	6·5	3·4	336	30	6·2	4·5	309	29	8·3	5·9	337
0·6 ,,	30	10·2	8·8	315	30	10·1	9·6	292	30	10·0	9·3	302	30	14·8	10·3	327	30	13·8	10·1	315	29	16·7	13·6	330
0·9 ,,	30	11·6	10·0	304	30	10·4	10·1	293	30	11·3	10·5	300	30	14·4	10·5	321	30	14·2	10·6	317	29	15·0	12·0	328
1·5 ,,	30	14·6	12·6	300	30	15·3	14·8	304	30	12·9	11·8	297	30	12·2	10·6	312	30	13·5	10·7	323	29	12·4	10·5	317
2·1 ,,	28	14·8	13·6	304	30	17·9	17·6	305	30	13·9	13·3	300	30	11·9	10·2	312	30	12·1	9·6	320	29	12·3	10·0	305
3·0 ,,	19	16·0	13·2	303	26	17·2	16·9	300	13	11·3	11·0	292	26	11·2	9·2	293	28	11·5	9·1	302	29	11·5	7·6	287
3·6 ,,	8	16·8	16·4	292	26	18·3	17·4	297	6	15·0	14·0	286	15	12·7	10·2	277	28	12·1	9·8	295	13	9·9	6·7	260
4·5 ,,					16	21·8	24·2	286					6	13·5	12·1	256	22	16·5	14·7	283				
5·4 ,,					9	27·4	26·8	281									15	21·3	21·5	279				
6·0 ,,					3	27·0	26·7	282									14	27·8	26·1	278				
7·2 ,,																	5	42·6	40·2	276				
9·0 ,,																	1	54·0	54·0	270				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (KARTIKA 10—AGRAHAYANA 9, 1879 SAKA)

Station	AMRITSAR								ANANTAPUR												ASANSOL			
Time in I. S. T.	0530*				1730*				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3·4	2·2	335	30	3·5	2·8	320	30	2·5	2·4	078	30	9·2	8·9	087	30	6·9	6·3	105	30	2·3	2·1	296
0·15 a. g.	27	4·9	3·1	239	30	4·5	3·7	319	30	7·6	7·0	088	30	12·9	12·4	086	30	12·6	12·2	105	30	7·6	5·7	328
0·3 a. m. s. l.	27	4·1	2·7	337	30	3·5	2·8	321													30	7·4	5·3	341
0·6 ,,	27	8·4	5·1	325	30	8·9	6·9	312	30	9·7	9·1	095	30	12·5	12·1	086	30	13·5	13·2	106	30	7·3	5·8	347
0·9 ,,	27	8·6	5·1	312	30	7·9	5·4	315	30	14·7	14·4	097	30	13·3	13·0	084	30	15·4	14·9	100	30	9·0	7·4	333
1·5 ,,	27	8·7	5 4	295	30	8·9	5·7	290	30	16·5	15·1	086	29	12·6	12·2	087	28	13·7	11·9	078	30	13·1	11·1	317
2·1 ,,	27	9·2	6·4	285	30	9·3	5·5	271	28	13·7	12·0	088	28	11·3	10·1	081	27	12·8	11·4	078	30	14·4	13·2	319
3·0 ,,	27	10·9	8·3	277	30	10·5	6·9	262	26	11.3	9·1	095	26	11·5	9·6	078	26	11·0	9·6	092	22	18·3	17·4	305
3·6 ,,	27	13 0	10·6	267	30	13·3	10·1	254	25	10·4	8·7	098	24	11·4	9·5	081	22	9·4	7·6	087	8	16·5	16·1	287
4·5 ,,	28	17·3	15·5	265	30	17·8	14·4	264	23	10·5	8·3	108	20	11·6	9·7	094	14	11·0	8·0	113	3	23·7	23·2	262
5·4 ,,	28	24·1	22·7	265	30	25·3	23·4	267	20	10·3	7·4	120	17	10·6	8·3	081	9	9·8	6·3	128				
6·0 ,,	29	30·1	28·9	267	30	29·6	27·6	265	18	9·1	6·4	130	13	10·8	7·1	082	5	12·2	10·0	154				
7·2 ,,	29	41·3	39·8	267	30	38·8	36·9	270	11	7·4	1·4	105	12	10·1	4·6	107	1	17.0	17.0	160				
9·0 ,,	26	58·4	57·6	269	27	54·8	51·2	263	8	13·5	8·0	271	7	8·7	5·1	216								

Station	ASANSOL								BAGHDOGRA												BAIRAGARH			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·0	1·7	310	30	1·5	1·1	319	30	1·9	1·9	002	30	0·7	0·4	320	30	3·2	3·0	001	30	1 0	0·4	077
0·15 a. g.	30	7·7	5·7	327	30	8·8	5·7	358	30	4·6	3·6	060	30	4·2	3·7	252	30	4·3	2 6	053	30	11·5	7·5	121
0·3 a. m. s. l.	30	7·8	5·8	328	30	8·8	5·7	358	30	4·7	3·6	071	30	4·1	3 7	250	30	4·3	1·5	065				
0·6 ,,	30	8·1	6 6	326	30	8·7	5·9	343	30	4·6	3·2	074	30	4·2	3·9	215	30	4·2	1·2	258	30	11·1	7·2	123
0·9 ,,	30	7·8	6·8	320	30	8·6	6·4	318	30	4·7	1·7	019	30	4·5	3·6	245	30	4·1	1·9	257	30	8·2	4.6	122
1·5 ,,	30	9·9	8·9	310	30	11·3	9·9	301	30	4·4	0·9	069	30	5·5	2·5	228	29	5·2	2·1	242	30	6 3	2.7	302
2·1 ,,	30	13·5	12·7	309	30	14·1	12·1	311	30	6·1	0·4	092	30	5·1	2·0	239	29	5·8	1·2	2 3	30	9 5	7.3	306
3·0 ,,	16	16·9	16·2	317	21	17·4	16·4	305	29	6·6	1·0	318	29	8·3	5·9	320	26	6·0	1·3	321	29	11 3	9·5	308
3·6 ,,	3	18·7	18·5	294	4	16·5	16·3	301	26	14·1	9·8	297	25	18·8	14·4	295	23	15·5	12·6	300	18	11.7	10·2	296
4·5 ,,									22	28·5	27·4	284	7	14·0	13·6	281	15	30.4	28·6	290	7	17·1	14·9	282
5·4 ,,									19	30·0	30·0	283	3	16·7	16·3	287	3	35·0	35·0	282				
6·0 ,,									16	34·6	31·5	280	3	24·0	23·0	287								
7·2 ,,									10	44·2	44·0	280	2	34·5	34·0	300								
9·0 ,,									1	57.0	57·0	285												

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (KARTIKA 10—AGRAHAYNA 9, 1879 SAKA)

Station	BAIRAGARH								BAMRAULI															
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	0	1·6	1·3	022	30	1·5	1·2	064	29	1·0	0·9	253	30	4·7	3·7	299	30	2·3	1·9	316	30	0·8	0·5	267
0·15 a. g.	30	6·0	3·6	035	30	10·0	7·0	098	28	4·1	2·9	303	30	5·5	4·4	299	29	5·4	4·4	309	30	8·4	5·8	316
0·3 a. m. s. l.									28	5·2	3·6	311	30	5·6	4·5	300	29	6·1	5·1	306	30	8·2	6·2	317
0·6 „	30	5·5	3·1	035	30	10·5	7·0	097	28	8·5	6·8	312	30	6·8	5·9	299	29	7.7	7·0	299	30	9·7	8·1	304
0 9 „	30	5·5	3·3	033	30	7.4	5·1	101	28	10·9	9·7	307	30	9·5	8·7	304	29	9·1	8·8	292	30	11·8	11·0	294
1·5 „	30	4·7	2·9	001	30	5·3	0·7	339	28	15 1	14·0	301	30	14·8	14·2	309	29	9.8	9·3	299	29	14·6	13·9	300
2·1 „	30	5·5	3·7	332	30	7·1	4·5	296	28	16·3	15·3	301	30	17·1	16·4	314	29	15·8	15·5	307	27	15·5	14·6	305
3·0 „	29	10·6	8·2	299	30	10·8	8·0	295	28	17·4	16·4	296	30	17·9	16·6	307	29	17·2	16·8	299	19	15·1	14·5	294
3·6 „	28	13·5	12·0	288	18	13·2	11·8	274	28	18·8	18·2	290	29	18·7	18·1	291	29	19·3	18·9	292	6	18·0	17·7	293
4·5 „	25	16·2	14 9	278	8	15·5	13·9	283	28	22·0	21·4	281	28	23·7	22·6	282	29	23·8	23·0	282	3	20·0	19·6	288
5·4 „	24	20·5	19·2	270	2	16·0	15·9	284	28	28·6	28·2	274	24	28·9	28·1	277	29	28·4	27·7	277	1	6·0	6·0	310
6·0 „	20	24·0	23·2	271					28	32 9	32·3	272	23	32·9	32·2	274	29	32·0	31·0	274	1	9·0	9·0	3.0
7·2 „	15	34·3	32·6	269					27	43·2	42·6	267	22	41·6	40·5	272	28	40·9	39·6	270				
9·0 „	2	55·5	55·1	256					25	59·0	57·9	258	7	56·7	53·7	267	24	55·3	54·8	277				

Station	BANGALORE									BAREILLY							BEGUMPET			
Time in I.S.T.	0530				1730				2330				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	7·4	6·7	077	30	8·8	7·8	095	30	8·1	7·6	087	30	2·9	1·5	336	30	3·5	3·1	304	30	0·3	0 3	055
0·15 a. g.	28	13·4	12 5	078	30	11·9	10·8	089	29	15·3	14·8	086	30	13·8	10·2	320	30	9·9	8·2	297	30	8·9	7·9	109
0·3 a. m. s. l.													30	13·1	9·3	321	3)	9·5	7·8	298				
0·6 „													30	14·6	12·1	313	30	12·1	10·6	297	30	5·8	4·9	105
0·9 „													30	14·2	12·1	310	30	13·4	11·7	291	30	11·6	10 5	099
1·5 „	23	17·1	15 9	077	28	12.9	12·3	08.	28	17·8	16·8	083	29	16·2	15·1	302	30	16·1	15·2	304	3)	13·2	11·5	067
2·1 „	18	15·4	14·4	082	26	11·5	10·1	079	24	13·6	11·7	077	29	17·3	16·2	302	30	16·4	16·0	30	30	12·6	10·1	056
3·0 „	18	13·4	12·2	090	20	11·9	10·8	081	20	12·7	11·6	080	20	16·2	14·8	285	29	16·8	16·1	302	29	8·3	5·2	076
3·6 „	18	14·0	.2 3	086	20	13·3	11·9	091	18	14·2	12·9	083	9	20·7	20·2	277	28	18·9	18·0	299	27	8·0	4·3	075
4·5 „	9	14·9	13·2	077	16	13 3	11·5	098	14	11·6	9·5	086	2	16·0	14·7	283	25	22·0	20·8	290	25	6·6	2.3	099
5·4 „	4	16·0	14·1	066	12	11·9	10·5	106	11	10 2	6·5	099	1	35·0	35·0	255	19	29·8	28·0	284	24	6·7	0·5	080
6·0 „	4	13·0	11·8	068	12	11·2	8·7	108	7	9·9	6·1	112					10	31·1	29·9	275	21	7·7	1·7	216
7·2 „	3	11·7	11·1	081	10	8·2	3·8	100	6	6·2	2·3	332					2	21·5	20·5	256	12	12·1	5·6	235
9·0 „	2	26·5	26·3	267	8	11·9	6·8	241	1	7·0	7·0	350					1	35·0	35·0	275	4	15·3	15·2	231

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (KARTIKA 10—AGRAHAYANA 9, 1879 SAKA)

Station	BEGUMPET								BHAGALPUR								BHUBANESHWAR							
Time in I. S. T.	1730				2330				0530				1730				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3·1	3·0	073	30	2·4	2·1	095	30	1·6	1·1	229	30	1.8	1 5	277	30	2.2	1·9	332	30	2·8	1·6	071
0·15 a. g.	30	10·0	9·1	074	30	13·7	12·6	085	30	5·6	2·7	307	30	6·2	5·6	307	30	4·5	3·0	330	30	6·4	4·2	075
0·3 a. m. s. l.									30	5·7	3·0	316	30	6·1	5·6	307	30	4.5	1·2	229	30	5·6	4·0	065
0·6 „ .	30	8·3	7·7	078	30	8·7	8·1	080	30	5·6	3·8	321	30	6·8	6·2	299	30	5·8	4·8	009	30	4·9	3·8	032
0·9 „	30	9.9	9·4	077	30	14.3	3·6	093	30	6·2	5·1	315	30	7·1	6 3	285	30	7·9	7·2	016	30	5·1	4·3	005
1·5 „ .	30	0·4	9·9	080	30	.2·3	11·0	092	29	9·3	8·4	295	29	8·8	7·3	283	30	10·0	8·7	016	30	8·1	7·4	374
2·1 „ .	30	11·1	9 3	074	30	1·2	9·1	071	27	12·5	10·5	305	26	11·8	10·2	305	30	8·4	6·5	352	29	12·0	11·5	342
3·0 „ .	26	8·3	4·7	061	29	8·8	4·2	073	17	18·7	18·2	297	16	18·5	17·7	306	30	10·2	8·4	301	29	12·8	11·7	309
3·6 „ .	23	7·7	3·6	032	18	8·1	4·2	089	9	23·5	23·3	287	4	15·5	15·1	306	30	10·9	8·9	293	25	13·2	11·9	301
4·5 „ „	22	6·9	1·9	002	2	7·0	3·5	357	4	25·3	24·9	274	1	16·0	16·0	275	27	11·7	9·5	288	18	12·2	11·3	286
5·4 „ .	20	6.6	0·7	298					2	31·0	31·0	258					25	13·5	11·5	267	11	13.7	12·5	284
6·0 „ .	19	6·5	2·9	302													24	15·0	12·9	274	9	15.8	12.6	277
7·2 „ .	13	13·5	8 7	283													22	20.3	16.5	273	4	22.3	21.3	271
9·0 „ .	10	21·1	20·0	268													18	32.1	30.9	267	1	29.0	29.0	285

Station	BHUBANESHWAR				BHUJ												BIKANER							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1·7	1.1	292	30	0·6	CALM		30	4·4	3·6	033	30	1·5	0·6	086	30	1·5	0·5	140	30	2·1	1·3	315
0·15 a. g.	30	7·0	5·1	179	30	10·1	6·9	017	30	8·6	6·2	025	30	10·4	5·4	017	30	11·5	3·6	091	30	5·9	2·9	334
0·3 a. m. s. l.	30	6·5	4·6	203	30	10 7	7·4	023	30	8·5	6·3	024	30	11·0	6·2	019	30	10 2	4·8	105	30	5·6	3·4	320
0·6 „ .	30	4·2	1·3	257	30	11·1	7·7	037	30	8·1	5·9	026	30	10·7	7·0	032	30	10·1	1·3	043	30	6·3	3·9	313
0·9 „ .	30	4·9	4·0	33.	30	9·3	5·2	047	30	7·6	4·7	027	30	9·1	6·7	046	30	10·0	4.3	290	30	6·3	3·4	316
1·5 „ .	30	9·0	7·5	359	30	8.4	1.4	147	30	7·1	1·0	027	30	8·6	4·3	096	29	10·6	8·5	280	30	7·2	4·0	292
2·1 „ .	29	7·7	5·9	348	30	10·0	2·7	213	30	9·1	1·6	217	30	9·5	3·5	166	29	11·5	9·7	275	30	9·8	8·3	277
3·0 „ .	29	8·8	6 8	303	29	11·3	7·1	250	30	11·9	5·8	245	29	10·7	6·2	229	28	12 9	11·2	280	29	14·6	12·0	263
3·6 „ .	11	10·6	9·0	295	22	12.9	8·0	271	23	14·0	8·8	265	22	11.8	8·5	258	24	14·0	12·6	282	29	18·8	17·1	267
4·5 „ .	4	16·3	15 9	280	13	15·6	14·7	259	27	16.7	14·6	264	11	17·6	16·0	273	9	19 4	18·6	278	28	25·1	24·2	270
5·4 „ .	3	19.3	18.1	287	2	18.0	17·1	249	25	22·1	20·6	265	4	24·0	23·6	262	1	25·0	25·0	260	26	30·3	29·4	272
6·0 „ .	1	23.0	23.0	310	2	14.5	14.5	247	24	25·1	23·8	269	4	27·5	26·9	254	1	26 0	26·0	255	23	31·8	30·8	271
7·2 „ .					1	29.0	29.0	280	22	33·3	31·6	270	3	31.0	29.9	264					16	37·3	36·1	274
9·0 „ .									10	49·1	48·5	262									1	75·0	75·0	285

Table IV—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	BIKANER				CHIKALTHANA												COCHIN							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·2	1·6	010	30	1·5	0·8	051	30	4·5	3·8	107	30	0·9	0·9	080	30	1·3	0·8	080	30	4·4	3·1	245
0·15 a. g.	30	10·8	6·2	027	30	10·9	9·2	098	30	7·6	6·3	091	30	11·3	10·4	092	30	6·0	5·0	085	24	5·7	4·3	268
0·3 a. m. s. l.	30	9·5	6·4	027													30	5·5	3·4	084	24	6·0	4·1	277
0·6 ,,	30	9·0	4·5	024													30	5·2	2·3	080	24	5·5	2·8	344
0·9 ,,	30	6·2	1·0	315	30	13·0	11·3	117	30	8·0	7·4	092	30	12·9	12·0	097	30	5·4	3·3	097	24	6·6	4·4	031
1·5 ,,	30	8·1	5·5	240	30	12·0	10·4	106	30	9·0	8·3	083	30	12·7	12·2	099	30	6·7	4·8	089	23	8·2	6·7	079
2·1 ,,	30	11·2	8·8	257	30	9·9	6·9	085	29	9·8	7·8	080	29	10·2	8·0	092	30	8·5	6·7	081	22	8·9	7·4	087
3·0 ,,	28	13·1	10·7	274	28	9·1	3·9	057	29	7·6	3·0	067	29	7·2	1·8	064	28	10·6	8·7	093	19	9·6	8·8	089
3·6 ,,	26	14·9	13·5	296	25	8·8	1·9	069	24	6·7	0·2	280	22	7·7	2·2	285	22	12·3	9·4	089	16	10·1	9·6	084
4·5 ,,	16	20·2	18·5	271	6	9·3	2·1	258	20	9·1	5·6	214	4	10·5	8·1	254	19	14·0	12·2	086	13	12·3	11·5	081
5·4 ,,	11	24·1	22·4	272	1	10·0	10·0	205	17	10·9	7·8	274	2	9·5	5·4	112	5	16·6	5·8	096	3	16·3	16·3	087
6·0 ,,	3	19·3	13·6	278					15	14·3	11·8	277					3	13·7	13·0	111	1	25·0	25·0	360
7·2 ,,									5	21·4	20·0	297												
9·0 ,,																								

Station	COCHIN				DARJEELING								DUM DUM											
Time in I.S.T.	2330				0830				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·1	1·0	099	30	0·9	0·8	095	30	1·7	0·9	244	30	1·1	1·0	002	30	2·6	2·1	346	30	0·7	0·4	013
0·15 a. g.	13	4·2	1·3	136	20	1·8	0·9	139	8	5·1	3·2	236	30	7·8	5·3	003	30	5·0	3·8	346	30	6·8	5·2	338
0·3 a. m. s. l.	13	5·1	1·4	096									30	7·6	5·5	010	30	5·6	4·7	350	30	7·2	6·1	340
0·6 ,,	13	6·1	4·5	090									30	7·8	6·4	351	30	6·4	5·8	351	30	7·7	6·5	338
0·9 ,,	13	5·9	3·7	059									30	8·6	7·6	350	30	7·7	7·1	347	30	8·3	7·5	339
1·5 ,,	13	7·6	6·9	052									30	10·9	10·1	350	29	10·9	9·7	335	30	10·2	9·4	336
2·1 ,,	13	12·3	11·5	088									30	12·6	11·7	327	29	13·3	12·2	324	30	14·4	13·7	328
3·0 ,,	9	15·7	14·5	098	10	3·9	1·3	149	8	4·6	1·8	315	30	16·1	15·0	297	26	17·5	16·5	298	30	19·6	18·7	308
3·6 ,,	7	14·0	13·5	102	14	11·0	7·7	283	2	8·0	7·9	136					25	20·6	19·4	294				
4·5 ,,	2	12·5	12·4	109	9	17·9	13·7	284	1	3·0	3·0	080	30	22·4	15·0	167	23	22·8	21·7	284	30	24·7	23·7	309
5·4 ,,					6	16·9	14·6	289					30	26·1	25·2	281	21	25·4	24·0	280	30	27·3	26·5	286
6·0 ,,					5	20·4	20·2	278					30	28·7	27·4	278	21	27·3	25·8	279	30	30·5	29·3	280
7·2 ,,					4	29·5	27·3	281					30	32·8	31·3	274	14	32·6	31·4	275	30	36·3	34·8	277
9·0 ,,					1	37·0	37·0	270					30	43·6	42·8	269	5	40·8	39·6	258	30	44·0	42·8	270

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (KARTIKA 10—AGRAHAYANA 9, 1879 SAKA)

Station	DUM DUM				GADAG												GANNAVARAM							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1·2	0·9	360	30	7·0	5·7	105	30	7·9	7·7	094	30	7·3	6·2	093	30	5·0	4·6	042	30	5·2	4·6	091
0·15 a. g.	30	6·9	3·5	344	30	15·4	14·2	107	30	12·9	12·3	092	29	17·0	15·0	092	30	9·7	9·3	075	29	8·0	7·1	092
0·3 a. m. s. l.	30	6·7	3·9	342													30	10·4	10·3	083	29	8·7	7·9	088
0·6 ,,	30	5·9	4·4	338													30	11·0	10·5	087	29	8·8	8·4	080
0·9 ,,	30	6·9	5·9	332	30	16·8	15·4	105	30	13·8	13·2	088	29	17·5	15·9	093	30	11·5	10·3	077	29	9·3	8·6	072
1·5 ,,	30	10·0	9·4	326	28	18·8	16·6	087	30	13·7	12·8	085	29	18·6	17·9	087	30	11·3	10·3	058	29	9·9	8·9	056
2·1 ,,	30	12·3	11·7	322	27	15·9	13·7	081	30	14·7	12·9	088	29	16·7	15·2	086	29	9·2	7·3	068	29	11·5	10·3	051
3·0 ,,	28	15·6	15·0	303	26	12·4	9·2	078	27	13·9	10·7	090	23	13·1	10·7	094	26	7·7	5·5	067	27	9·1	6·5	049
3·6 ,,	3	18·7	12·6	309	20	11·9	8·9	087	25	11·8	8·2	094	19	12·0	8·7	085	24	7·8	5·0	086	25	7·7	3·7	069
4·5 ,,					13	10·0	7·0	095	19	9·4	8·5	082	13	7·8	5·7	089	22	7·2	4·2	092	22	7·4	2·7	095
5·4 ,,					7	8·3	5·5	070	17	8·9	6·3	069	6	9·7	2·6	315	18	6·8	3·3	136	20	7·3	2·5	140
6·0 ,,					3	12·0	6·9	045	14	7·6	3·5	088	4	12·0	5·9	290	16	7·5	2·5	163	20	7·3	2·8	147
7·2 ,,									10	12·0	6·6	267	4	14·3	12·1	278	10	7·4	3·6	246	17	10·5	4·1	241
9·0 ,,									5	18·6	14·2	264					5	13·6	11·6	235	11	18·6	16·0	254

Station	GANNAVARAM				GAUHATI												GAYA			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	4·2	3·6	076	30	C	A	L	M	30	2·5	2·4	037	30	1·7	1·4	061	30	1·2	0·3	070	30	1·5	1·4	184
0·15 a. g.	30	10·8	10·0	101	30	3·8	2·3	078	30	4·5	3·8	047	30	7·0	4·2	045	30	4·3	1·4	110	30	6·2	4·7	270
0·3 a. m. s. l.	30	12·3	11·6	098	30	4·5	2·8	084	30	4·7	3·9	069	30	6·7	4·8	054	30	4·8	1·9	089	30	5·8	4·3	285
0·6 ,,	30	12·8	12·5	092	30	5·4	3·5	087	29	5·7	4·1	109	30	6·1	3·9	062	30	6·3	3·3	084	30	7·2	5·6	310
0·9 ,,	30	12·3	11·8	080	29	6·4	3·7	088	28	6·2	4·0	121	30	5·1	2·5	068	29	4·9	1·2	045	30	9·4	8·7	305
1·5 ,,	30	10·8	9·6	065	29	6·8	2·7	090	24	7·6	4·1	124	30	5·8	1·9	215	27	6·0	1·2	238	30	13·6	12·5	302
2·1 ,,	29	9·6	8·3	069	29	7·6	1·0	125	22	10·9	2·7	160	30	7·0	4·3	217	24	7·7	1·8	114	30	16·7	16·0	304
3·0 ,,	23	7·2	5·2	063	27	10·1	3·3	290	20	14·1	9·6	284	30	10·0	5·5	258	16	10·3	1·9	030	17	17·7	16·0	305
3·6 ,,	20	6·7	2·7	070	28	17·4	12·5	289	17	27·6	26·2	279	30	15·8	9·4	277	7	19·8	5·8	297	10	16·4	15·8	302
4·5 ,,	16	7·6	1·9	064	28	33·4	32·4	280	11	27·8	26·8	276	30	32·8	30·3	274	2	41·5	41·5	282	5	17·6	17·6	284
5·4 ,,	10	5·0	2·2	283	27	35·7	34·1	277	8	32·0	30·2	279	30	39·8	38·9	274					1	20·0	20·0	290
6·0 ,,	8	6·5	2·6	291	28	39·6	38·6	279	3	35·3	35·3	288	29	42·2	41·2	278					1	25·0	25·0	280
7·2 ,,	1	5·0	5·0	200	28	51·2	49·4	276	1	66·0	66·0	265	28	52·3	50·9	280								
9·0 ,,					17	65·1	64·1	271					21	69·8	68·0	277								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (KARTIKA 10—AGRAHAYANA 9, 1879 SAKA)

Station	GAYA								GOPALPUR												GORAKHPUR			
Time in I.S.T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·7	2·6	316	31	0·6	0·5	221	30	4·4	4·3	330	30	3·9	3·7	117	30	2·4	1·8	299	30	5·0	1·1	307
0·15 a. g.	30	8·9	8·4	313	30	7·4	5·2	304	30	9·4	9·0	337	30	7·3	6·5	116	30	4·5	1·4	170	30	8·4	5·3	301
0·3 a. m. s. l.	30	8·8	8·1	311	30	7·8	6·0	309	30	5·2	3·5	009	30	6·7	5·9	094	30	4·5	2·3	141	30	8·6	5·8	300
0·6 ,, .	30	10·0	9·8	302	30	8·8	8·3	304	30	5·0	3·5	037	30	5·8	5·2	049	30	4·5	2·8	088	30	8·8	6·8	292
0·9 ,, .	30	10·3	10·0	293	30	10·2	9·8	292	30	7·4	6·8	031	30	7·0	6·3	013	30	5·7	4·8	043	30	9·1	7·2	298
1·5 ,, .	30	12·4	11·6	286	30	13·3	12·5	283	30	11·1	9·7	026	30	10·7	9·8	354	30	9·7	8·8	006	29	12·0	8·3	302
2·1 ,, .	30	15·7	15·4	305	30	14·3	13·6	302	30	8·6	6·3	006	30	11·7	10·3	352	30	9·0	7·2	359	27	15·9	12·8	310
3·0 ,, .	22	18·7	18·1	307	11	18·7	18·0	307	30	9·0	6·3	300	30	11·1	9·0	318	30	7·9	6·0	303	16	19·6	19·1	304
3·6 ,, .	11	18·8	18·5	301	1	23·0	23·0	300	30	8·5	5·7	295	30	10·4	7·9	305	18	7·7	5·1	284	8	19·4	18·8	307
4·5 ,, .	1	19·0	19·0	285					29	9·9	6·8	292	30	10·4	8·3	296	6	7·3	7·2	268	7	22·3	21·0	285
5·4 ,, .									25	9·3	6·6	259	26	11·6	8·2	292	1	4·0	4·0	270	2	20·5	18·3	311
6·0 ,, .									23	11·1	8·3	258	25	12·0	9·0	286								
7·2 ,, .									15	16·8	15·5	255	10	16·6	14·7	264								
9·0 ,, .									9	25·3	24·8	253	1	18·0	18·0	245								

Station	GORAKHPUR				GWALIOR												IMPHAL							
Time in I.S.T.	1730				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1·2	1·1	268	30	1·3	0·8	281	30	2·2	1·8	336	30	0·7	0·3	312	30	0·2	0·2	135	30	2·7	1·7	279
0·15 a. g.	30	7·8	7·0	270	30	9·9	3·6	3.0	30	7·0	6·0	343	30	7·9	3·5	014	27	1·7	0·6	154	30	5·8	4·6	252
0·3 a. m. s. l.	30	7·9	7·3	269	30	8·1	2·8	327	30	5·8	4·8	344	30	6·6	3·2	016								
0·6 ,, .	30	8·4	7·8	271	30	10·2	4·9	332	30	7·6	6·2	337	30	7·7	3·2	349								
0·9 ,, .	30	9·2	8·0	280	30	9·6	6·8	323	30	7·6	6·1	329	30	8·2	5·2	300	27	1·9	0·9	148	30	5·4	4·1	265
1·5 ,, .	30	11·7	9·3	293	30	12·2	10·8	306	30	10·8	9·9	304	30	11·2	9·7	298	27	3·4	0·9	051	30	4·8	4·0	201
2·1 ,, .	26	18·0	16·1	307	30	15·4	13·7	299	30	14·4	13·6	303	30	13·6	12·2	293	27	6·5	3·8	231	30	6·2	5·1	220
3·0 ,, .	20	24·3	23·3	302	29	18·5	17·2	285	30	16·8	16·1	295	29	15·0	13·9	292	25	10·0	7·8	258	28	11·6	9·2	257
3·6 ,, .	11	22·4	22·1	299	21	17·0	15·9	289	30	18·6	17·8	287	16	14·7	13·5	280	23	19·0	17·6	267	26	21·4	19·6	274
4·5 ,, .	5	25·6	25·4	298	1	14·0	14·0	290	27	22·7	21·4	283	3	20·3	20·2	267	21	29·9	28·1	277	18	30·9	25·4	276
5·4 ,, .	1	21·0	21·0	275	1	31·0	31·0	275	20	29·1	27·0	275	2	35·0	34·5	263	7	30·6	30·4	274	3	8·0	17.4	274
6·0 ,, .					1	40·0	40·0	275	14	35·9	35·0	270					3	21·0	21·0	280				
7·2 ,, .					1	58·0	58·0	265									3	29·0	27·3	288				
9·0 ,, .					1	78.0	78.0	270																

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	IMPHAL				JABALPUR												JAGDALPUR							
Time in I.S.T.	2330				0530				1730				2330				0530				730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	30	0·4	0.1	237	30	2·5	2·1	145	30	2·3	1·3	025	30	1·4	1·3	139	30	0·3	0·2	058	30	2·0	1·8	031
0·15 a. g. .	30	2·2	0·5	232	30	7·5	4·2	099	30	7·6	5·1	016	30	8·7	6·6	057	30	6·7	5·7	018	30	9·0	8·0	035
0·3 a.m.s.l. .																								
0·6 ,, .					30	7·0	3·5	083	30	7·8	5·7	013	30	8 9	6 8	053	30	3·1	2·6	036	30	6·2	5·5	035
0·9 ,, .	30	1·9	0·8	182	30	6·6	3.2	039	30	7·6	6·1	004	30	7·7	6·2	035	30	8·3	7·1	062	30	9·8	8·8	035
1·5 ,, .	30	4·7	1·9	211	30	9·1	7·4	337	30	8·2	6·9	348	30	8·0	5·9	351	30	10·4	9·3	039	30	7·7	6·4	038
2·1 ,, .	30	6·3	3·7	215	30	12.9	11·0	321	30	11·3	10·2	334	30	10·7	8·7	325	29	10·3	8·1	020	30	8•5	6·4	030
3·0 ,, .	28	11·7	8 5	254	30	14·0	12·2	316	30	13·4	11·9	317	29	13·2	11·1	304	27	9·4	6·2	313	30	8·4	5·6	328
3·6 ,, .	25	21·5	19·5	266	30	13·3	11·9	304	29	14·0	13·1	291	27	14·4	12·2	290	24	7·5	4·1	313	27	8·8	5·4	316
4·5 ,, .	8	32·1	28·1	287	29	17·7	16·3	276	29	17·8	16·5	282	16	15·4	14·1	284	18	8·1	5·5	302	25	9·6	6·3	304
5·4 ,, .	1	22·0	22 0	280	21	19·1	17·9	271	26	22·4	21·0	272	6	15·3	11·3	279	8	7·9	3·7	280	23	10·7	6·9	274
6·0 ,, .					15	26·7	24·2	263	24	24·1	22·8	274	5	14·2	13·0	263	4	5·7	2·9	032	20	12·1	9·1	26
7·2 ,, .					2	38·5	38·5	267	16	33·7	31·4	273	1	31·0	31·0	215	1	6·0	6·0	065	14	16·3	14·5	269
9·0 ,, .																					8	19·7	17·3	254

Station	JAGDALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I.S.T.	2330				0530				1730				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	30	0·9	0·8	060	30	1·7	1·0	055	30	1·3	1·1	313	30	1·3	0·9	281	30	1·2	0 9	338	30	3·3	3·1	023
0·15 a. g. .	28	9·8	9·1	072	30	8·0	2·8	076	30	6·4	4·2	283	30	5·9	5·3	294	29	4·1	3·1	342	30	7·3	6·8	031
0·3 a. m. s.l. .													30	5·8	4·8	305	29	4·2	3·4	342	30	6·9	6·7	027
0·6 ,, .	28	6·2	5·6	075	30	8·5	2 2	073	30	6·7	3·7	289	30	6·4	4·3	350	30	5·4	4·9	338	30	6·4	4·3	009
0·9 ,, .	30	10 6	10·2	065	30	8 5	0·6	301	30	6·6	4·1	303	30	7·8	6·2	340	30	7·0	6·3	333	30	6 6	5·1	359
1·5 ,, .	30	8·8	7·7	077	30	9·2	5·6	287	30	7·3	4·9	310	30	10·2	9·5	328	30	10·3	9·2	328	30	8·2	7·2	3·7
2·1 ,, .	30	8·3	6.5	030	30	12·8	10·3	276	30	10·3	8·4	300	30	12·9	12·0	326	30	13·6	12·7	326	30	12·0	11·2	343
3·0 ,, .	28	9·4	4·8	347	29	15·3	10·5	281	27	14·2	11·7	292	30	14·5	13·4	303	28	16·7	15·4	318	29	10·9	9·7	317
3·6 ,, .	25	7·9	4·7	311	9	19 1	18·2	273	25	16·5	15·1	281	27	16·5	15·6	296	3	19·7	18·7	305	22	11·5	10·6	295
4·5 ,, .	22	8·3	5·9	271	2	19·5	18 6	255	19	21·2	18·9	276	21	19·6	18·7	286	6	16·8	16·5	296	3	14·0	13·9	263
5·4 ,, .	15	8·3	6·3	271					14	30 6	29·2	278	15	23·0	21·4	277	2	8·0	7·9	316	2	18·5	18·5	265
6·0 ,, .	9	12·4	10·2	256					12	34·8	34·0	268	7	21·2	20·2	275	1	8·0	8·0	320	1	19·0	19·0	275
7·2 ,, .	3	17·3	16·2	240					7	40·1	40·0	266	4	27·8	26·7	282	1	4·0	4·0	330				
9·0 ,, .									1	80·0	80·0	275					1	4·0	4·0	330				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	JHARSUGUDA								JODHPUR											
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	31	2·5	1·2	25	31	1·7	0·9	052	30	5·0	4·8	006	30	3·9	2·2	043	29	3·3	0·9	358	30	4·3	3·4	015
0·15 a.g.	31	5·5	2·9	207	29	4·7	1·3	229	29	5·6	4·7	007	30	5·1	2·5	070	29	4·2	1·3	004	30	11·6	7·2	036
0·3 a.m.s.l.	31	5·4	3·0	202	30	4·1	1·1	112	29	5·5	4·9	007	30	4·6	2·3	060	29	4·0	1·2	356	30	9·8	6·4	033
0·6 „	31	4·1	2·0	255	29	5·1	2·3	274	29	6·3	3·3	007	30	6·2	2·6	070	29	4·9	1·6	347	30	10·5	6·1	047
0·9 „	30	3·6	2·3	321	29	5·0	3·2	329	29	7·3	1·0	007	30	6·7	0·8	101	29	5·9	1·9	342	30	7·9	3·1	076
1·5 „	31	8·8	8·1	350	28	6·5	5·5	001	30	8·2	3·2	053	31	7·3	2·2	253	29	6·0	1·8	310	30	7·7	2·9	198
2·1 „	30	13·3	12·7	353	29	9·5	7·8	3·8	30	9·8	6·0	053	31	9·2	5·0	251	29	7·5	3·7	280	30	9·3	5·0	238
3·0 „	31	12·1	11·3	318	29	12·1	10·1	314	30	13·0	10·8	053	30	11·6	9·3	257	29	12·3	10·3	266	23	12·6	9·4	261
3·6 „	28	14·5	13·7	299	28	13·5	1·5	300	30	15·3	13·7	053	30	14·8	12·9	262	27	16·4	14·5	265	9	12·0	10·0	276
4·5 „	25	17·6	6·3	295					29	19·4	18·4	053	29	21·0	19·5	264	26	22·4	21·4	264	3	17·7	16·6	258
5·4 „	6	19·0	18·1	287					28	27·0	26·4	05	29	28·0	26·5	263	26	28·1	27·4	263	1	37·0	37·0	255
6·0 „	2	18·5	17·9	285					27	32·2	31·5	052	29	30·3	29·0	261	25	33·7	32·1	263				
7·2 „									23	41·6	41·3	052	21	40·2	39·3	264	25	43·4	42·0	265				
9·0 „									24	57·7	56·7	051	12	53·3	52·7	268	24	57·3	55·7	260				

Station	MADRAS												MANGALORE							
Time in I.S.T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	30	6·4	5·2	014	30	7·7	6·8	033	30	8·5	7·9	029	30	4·2	3·2	015	30	7·1	6·5	095	30	6·7	3·9	256
0·15 a.g.	30	12·3	11·2	027	29	12·0	10·7	043	30	13·5	12·5	037	27	11·8	11·3	043	30	11·8	9·9	102	30	8·4	4·4	266
0·3 a.m.s.l.	31	13·0	11·9	037	29	13·1	11·8	045	30	14·1	13·1	038	27	13·3	12·9	049	30	12·7	10·3	107	30	8·7	3·1	265
0·6 „	30	13·9	12·1	050	28	13·5	12·1	049	30	15·2	13·9	043	27	13·6	13·2	052	30	13·2	11·7	112	30	8·0	1·7	152
0·9 „	30	14·1	12·1	060	26	13·3	12·7	050	31	15·2	13·7	049	26	14·0	13·5	055	30	13·0	11·3	113	30	9·2	5·7	108
1·5 „	30	13·4	10·2	068	23	14·6	13·6	063	30	15·2	13·8	051	25	12·0	10·5	068	30	12·8	11·8	105	30	14·1	12·1	095
2·1 „	31	12·1	9·5	082	12	13·6	12·4	081	30	12·5	11·1	080	25	11·6	10·2	077	30	12·1	9·6	105	30	14·3	12·0	100
3·0 „	29	13·6	10·3	088	6	13·5	11·0	099	30	12·5	10·3	088	24	12·3	10·9	088	28	12·5	9·5	105	29	12·1	9·5	100
3·6 „	29	13·4	10·1	092	5	12·8	11·1	102	30	12·5	10·4	090	19	10·9	9·6	091	18	13·1	8·3	113	27	12·7	10·1	094
4·5 „	28	12·6	9·4	097	5	12·0	10·1	091	29	12·3	9·7	093	12	12·1	10·9	093	4	13·5	11·5	129	26	12·4	10·0	097
5·4 „	26	11·1	8·9	097	3	10·0	9·4	091	28	10·9	8·1	099	3	13·3	13·2	090	2	11·0	2·3	134	23	13·1	8·9	095
6·0 „	26	10·7	8·1	101	3	10·7	9·4	095	27	10·3	6·9	102	2	8·5	8·5	079	1	8·0	8·0	35	22	9·8	7·2	100
7·2 „	25	10·8	5·3	106	3	8·0	6·4	096	26	10·2	3·4	105									20	6·7	2·6	085
9·0 „	17	12·6	4·6	162	3	13·0	3·9	271	21	12·0	3·9	165									17	14·7	9·9	239

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	MANGALORE				MINICOY												MOHANBARI							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	30	5·2	3·7	079	30	4·0	1·0	121	30	4·2	0·9	173	30	3·7	0·7	111	30	0·7	0.7	054	30	0·2	0·2	045
0·15 a. g.	28	6·4	2·0	048	29	8·0	2·0	092	30	9·0	1·2	138	29	8·5	2·2	091	27	8·1	7·1	061	30	3·3	2·9	050
0·3 a. m. s. l.	28	6·2	1·5	061	29	8·2	1·5	111	30	9·4	1·0	143	29	8·5	2·1	108	27	8·0	6·9	063	30	3·3	2·9	051
0·5 ,,	28	7·3	3·1	092	28	8·9	3·4	110	30	10·6	1·5	167	29	9·7	2 6	100	27	5·3	4·7	052	30	3·3	2·7	050
0·9 ,,	26	9·4	6·8	097	28	10·6	5·2	112	30	10·5	2·5	130	29	11·5	3·6	102	27	4·3	3·8	0 2	30	3·3	2·7	050
1·5 ,,	26	14·2	12·7	098	27	12·3	6·1	106	28	10·4	4·3	094	29	12·8	6 0	103	26	4·0	3·4	055	29	3·3	1·6	079
2·1 ,,	25	12·8	11·4	104	26	12.2	7·7	095	27	10·4	5·2	099	25	12·1	7·4	102	26	3·7	0·4	174	28	5·0	4·3	179
3·0 ,,	24	12·5	10·7	093	22	11·2	7·6	098	23	10·2	6·4	097	22	13·2	9 0	095	24	5·5	1·5	174	27	8·1	6·1	190
3·6 ,,	19	12·1	10 9	088	17	11·0	5·3	100	20	11·8	7·9	097	17	12·3	10 0	093	22	6·5	1·5	206	23	7·2	3·1	183
4·5 ,,	15	12·2	10·4	103	10	9·4	8·7	087	18	13·1	9·3	096	12	12·0	9 8	093	12	1·44	8 3	273	16	9·5	4·9	272
5·4 ,,	6	9·7	6·7	083	5	11·4	10·1	099	16	11·3	6·7	117	7	10·9	10·2	095	10	27·0	23·9	274	7	19·3	16·3	276
6·0 ,,	6	9·7	6·7	105	2	11.5	10·9	136	14	9·1	5·4	106	4	6·5	6·3	074	8	33·0	31·8	277	3	17·3	13·4	278
7·2 ,,	3	10·3	6·2	230	1	10·0	10·0	085	10	9·6	4·9	014	1	6·0	6·0	035	3	45·7	45·3	279	1	22·0	22·0	300
9·0 ,,									6	14·5	11·2	159					1	62·0	62·0	270				

Station	MOHANBARI				MUSSOORIE								NAGPUR											
Time in I.S.T.	2330				0830				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	30	0·2	0·2	045	30	1·9	0·7	282	30	2 1	1·2	257	30	3.0	2·8	350	30	2·7	2·1	076	30	3·5	3·3	079
0·15 a. g.	28	5 7	5 3	0.3	30	5·1	1·4	31?	28	4·0	2·7	281	30	3·9	3·2	005	30	3·8	3·2	065	30	4·0	3·8	074
0·3 a. m. s. l.	28	5·5	5·0	046																				
0·6 ,,	28	4·5	4·1	055									30	4·6	3·7	024	30	3·8	3·4	073	30	4·6	4·4	070
0·9 ,,	27	4·5	4·2	056									30	6·1	4·8	062	30	5·0	3 8	058	30	6·0	5·6	061
1·5 ,,	27	3·7	2·6	072									30	8·7	6·9	043	30	9·4	6·9	033	30	7·3	6·0	033
2·1 ,,	27	3·5	1·5	183	30	5·1	1·2	281	28	6·1	3·9	281	30	10·5	7·3	017	30	10·7	8·1	019	30	9·7	7·7	003
3·0 ,,	23	7·6	3·4	197	30	8·0	5·3	300	28	9·0	5·7	311	30	9·9	6·6	329	30	9·5	5·6	339	30	9·7	7·1	320
3·6 ,,	17	8·1	3·6	180	30	8·3	5·6	277	28	8·2	5·7	304	30	9 9	7·9	310	29	9·3	4·7	297	30	10·5	8·4	295
4·5 ,,	10	11·6	8·8	215	30	12·7	10·4	273	27	12·7	9·9	297	29	11·5	9·8	283	28	11·9	9·9	271	29	12·7	11·5	271
5·4 ,,	1	6 0	6·0	190	28	20 9	19·6	273	23	20·3	19·3	285	29	13·5	12·2	269	28	14·6	13·2	255	29	15·5	14·6	266
6·0 ,,	1	23·0	23·0	270	28	26·9	25·4	273	21	27·7	26·9	282	29	16·2	14·8	263	26	16·3	14·4	259	28	18·0	16·7	264
7·2 ,,	1	18·0	18.0	260	13	35·5	34·7	270	18	45·2	44·0	276	29	24·9	23·5	261	21	21·6	19·0	267	28	24·4	22·8	261
9·0 ,,					1	35·0	35·0	285	2	50·5	50·5	263	28	37·3	35·9	258	10	35·8	33·1	263	26	35·7	34·5	253

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	NAGPUR				NANPARA								NEW DELHI											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·6	1·1	033	30	2·0	1·3	301	30	2·1	1·8	299	30	3·9	2·5	312	30	6·2	3·9	306	30	4·5	4·1	318
0·15 a. g.	30	8·9	7·0	111	30	7·8	3·4	323	30	8·6	7·3	296	30	12·7	7·8	322	30	7·6	5·1	308	30	12·1	10·2	321
0·3 a. m.s.l.					30	7·7	3·7	311	30	8·3	7·2	292	30	11·4	6·6	315	30	8·0	5·3	306	30	11·0	9·2	323
0·6 ,,	30	9·5	7·8	104	30	7·1	5·3	311	30	8·9	8·0	290	30	12·2	8·0	318	30	8·6	6·1	302	30	11·1	9·8	318
0·9 ,,	30	9·3	7·8	091	29	8·1	6·3	306	30	9·7	8·6	290	30	13·3	10·6	311	30	12·7	10·6	305	30	11·4	10·5	313
1·5 ,,	30	9·3	8·1	053	29	12·0	9·2	305	30	13·4	10·9	300	30	16·3	14·8	306	30	15·9	14·7	301	29	14·0	13·1	311
2·1 ,,	30	9·6	7·6	018	26	14·3	11·7	306	29	14·9	12·8	310	30	16·8	15·7	300	30	16·2	14·6	297	29	14·4	13·1	305
3·0 ,,	29	9·2	5·3	319	22	18·0	17·5	304	19	13·8	12·5	305	30	16·2	15·3	290	30	16·7	14·9	290	30	15·1	13·5	295
3·6 ,,	8	9·1	7·5	296	8	15·0	14·7	308	9	20·5	20·2	305	30	15·8	14·9	286	30	16·5	14·9	279	30	17·0	15·8	289
4·5 ,,	1	8·0	8·0	290	1	19·0	19·0	295	6	22·3	22·3	300	30	20·2	19·3	279	29	20·0	18·8	271	30	22·2	21·0	290
5·4 ,,									3	29.3	29·1	286	30	26·9	26·0	277	29	26·4	25·6	271	30	28·9	27·9	275
6·0 ,,									1	34·0	34·0	290	30	33·5	32·5	274	28	29·7	28·2	270	30	34·0	33·0	273
7·2 ,,													29	44·7	43·7	274	27	41·1	39·2	270	30	44·5	43·0	272
9·0 ,,													27	61·2	60·1	270	24	53·0	51·2	268	30	62·2	60·0	267

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	2·4	1·9	312	30	0·7	0·4	147	30	3·4	3·0	097	30	0·8	0·2	242	30	5·3	4·5	059	30	6·3	5·7	073
0·15 a. g.	30	12·7	7·9	329	29	6·4	5·2	104	30	7·3	6·6	097	30	8·4	5·1	084	30	9·2	8·3	059	29	9·9	9·2	066
0·3 a. m.s.l.	30	11·4	6·9	325													30	9·7	8·6	063	29	10·1	9·3	067
0·6 ,,	30	12·3	8·8	322	29	3·0	0·8	109	30	5·3	4·8	095	30	3·7	1·3	157	30	10·3	9·1	071	29	10·1	9·4	073
0·9 ,,	30	12·5	10·6	313	29	11·0	9·8	110	30	8·9	8·2	100	30	11·2	8·9	094	30	10·4	9·1	080	29	10·4	9·6	079
1·5 ,,	30	15·1	12·9	301	29	14·8	13·8	105	30	10·8	9·6	096	30	14·8	13·9	098	29	10·4	9·5	083	27	10·1	9·4	083
2·1 ,,	30	15·0	13·2	292	27	11·3	10·1	094	29	12·0	10·2	092	29	13·2	12·2	097	28	10·1	8·7	080	25	8·6	7·3	080
3·0 ,,	30	16·8	15·3	272	27	7·4	2·2	096	25	8·4	6·0	094	26	9·3	7·7	099	25	8·3	6·1	077	21	6·9	4·3	080
3·6 ,,	20	17·4	15·9	270	24	6·8	1·7	090	24	6·3	2·7	083	16	5·4	2·1	058	24	8·8	7·0	073	19	7·8	4·9	075
4·5 ,,	8	18·4	17·1	287	11	5·5	1·8	344	23	5·2	2·0	322	8	6·5	3·8	213	23	8·6	7·4	077	14	7·5	7·0	075
5·4 ,,	1	31·0	31·0	295	5	6·4	6·1	265	23	7·8	5·0	284	3	10·0	8·1	253	23	8·9	6·9	080	13	8·1	7·5	083
6·0 ,,	1	41·0	41·0	285	4	8·7	6·6	245	21	11·0	7·8	270	2	13·0	12·3	258	20	9·3	7·6	082	12	9·1	8·2	077
7·2 ,,									14	16·0	14·6	260	2	17·0	16·8	252	17	9·4	5·1	080	12	8·0	6·3	099
9·0 ,,									8	29·9	28·7	247					11	7·9	4·0	088	7	7·6	1·8	112

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	PORT BLAIR								RAIPUR												RAXAUL			
Time in I. S. T.	1730*				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	30	5·9	5·3	063	30	4·9	4·0	060	30	0·7	0·5	005	30	2·4	1·6	037	30	2·7	1·8	098	30	0·1	0·1	270
0·15 a. g.	30	9·7	8·9	070	30	8·8	7·6	062	30	5·3	3·7	030	30	5·3	4·4	040	30	7·5	5·6	115	30	5·9	0·4	352
0·3 a. m. s. l.	30	9·9	8·9	071	30	8·7	7·7	063													30	6·2	1·4	310
0·6 ,, .	30	10·2	9·2	072	30	9·2	8·4	070	30	5·0	3·0	044	30	5·6	4·8	042	30	7·1	5·1	102	30	5·5	2·6	283
0·9 ,, .	28	9·9	8·8	081	30	9·2	8·5	079	30	5·4	3·8	045	30	5·6	4·8	038	30	6·3	4·7	065	30	4·5	1·8	260
1·5 ,, .	26	9·3	8·0	082	28	8·1	7·2	083	30	8·6	7·1	019	30	7·4	6·5	020	30	8·5	7·3	021	30	5·9	1·3	296
2·1 ,, .	23	8·7	6·7	081	24	6·8	5·7	083	29	12·0	10·2	005	30	11·7	10·1	002	30	11·3	10·0	013	30	7·6	2·3	304
3·0 ,, .	20	8·1	6·0	083	15	7·5	5·9	078	27	11·6	9·7	339	30	10·9	9·0	327	28	10·8	7·8	335	29	14·0	12·0	295
3·6 ,, .	19	8·7	6·6	085	15	7·3	5·5	085	14	8·2	6·7	303	29	11·0	9·5	303	21	10·6	9·1	301	25	20·2	17·5	283
4·5 ,, .	15	9·4	7·5	076	13	7·2	6·6	080	6	12·2	9·8	273	29	12·8	11·8	288	7	13·4	12·8	286	13	25·5	24·7	278
5·4 ,, .	11	10·5	8·4	064	2	10·5	10·5	094	3	12·7	12·0	238	25	16·5	15·4	278	4	14·0	14·0	283	2	35·0	34·7	269
6.0 ,, .	10	10·3	6·8	059	2	12·0	11·9	097	3	15·7	15·2	244	18	20·6	19·1	279	4	15·7	15·1	273	1	35·0	35·0	250
7·2 ,, .	7	7·6	4·4	333					2	22·5	22·1	272	1	7·0	7·0	270	1	15·0	15·0	305				
9·0 ,, .	3	9·0	8·2	237					1	43·0	43·0	255												

Station	SANTA CRUZ												TEZPUR							
Time in I. S. T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface.	30	4·3	3·4	058	30	4·7	4·3	078	30	7·4	5·0	330	30	2·0	1·7	070	30	0·6	0·4	061	30	0·5	0·5	075
0·15 a. g.	29	10·2	8·3	061	30	6·7	6·1	093	30	11·2	7·1	340	29	6·0	4·5	058	27	6·9	6·6	078	30	8·9	8·4	061
0·3 a. m. s. l. .	29	9·9	8·2	068	30	8·4	7·3	096	30	11·6	6·9	351	29	7·5	5·1	045	27	7·0	6·6	081	29	8·3	7·8	064
0·6 ,, .	29	9·7	8·3	074	30	11·3	9·7	102	30	10·8	5·9	035	29	10·1	6·8	051	27	6·9	6·4	091	29	6.4	6·1	065
0·9 ,, .	29	10·0	7·7	091	30	12·7	10·7	106	30	9·6	6·5	070	29	10·2	7·6	072	26	6·1	5·8	082	29	4·3	2·9	085
1·5 ,, .	29	9·5	7·9	100	29	11·9	8·7	105	30	12·3	10·1	092	29	11·6	9·9	100	26	5·0	3·9	077	29	4·8	2·3	188
2·1 ,, .	29	9·2	7·0	105	29	10·4	6·7	106	30	13·2	11·3	097	29	13·7	11·6	107	23	4·5	1·8	092	28	6·7	4·2	199
3·0 ,, .	28	8·2	2·1	173	26	6·5	3·5	047	30	10·4	6·0	097	27	8·1	5·9	114	21	7·6	1·5	049	24	7·9	2·7	236
3·6 ,, .	28	8·2	2·0	333	26	5·8	2·5	039	30	9·7	3·3	090	19	5·9	1·5	156	19	12·9	5·9	087	18	14·4	9·9	282
4·5 ,, .	28	8·5	2·5	241	26	5·2	1·3	045	30	8·9	1·7	220	15	6·9	2·0	292	11	25·9	24·4	273	8	26·6	25·4	261
5·4 ,, .	28	9·7	3·8	234	26	7·5	5·4	241	30	10·5	4·4	255	7	8·7	8·2	263	9	31·0	28·0	279	1	10·0	10·0	215
6·0 ,, .	28	11·0	4·9	235	25	9·1	5·0	250	30	11·9	6·2	253	4	9·5	8·0	264	5	36·8	36·2	272	1	12·0	12·0	285
7·2 ,, .	28	16·9	11·9	259	23	17·4	14·2	262	30	18·8	13·2	260	1	18·0	18·0	250	3	45·3	42·1	277				
9·0 ,, .	24	26·5	22·0	247	22	27·5	25·2	255	27	28·7	26·7	255					2	67·0	66·9	272				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	TEZPUR				TIRUCHIRAPALLI												TRIVANDRUM							
Time in I.S.T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1·0	0·9	050	30	4·0	3·5	016	30	5·5	4·9	054	30	4·7	4·2	043	30	2·1	1·3	040	30	2·6	0·7	268
0·15 a. g.	30	11·4	9·7	077	26	13·8	12·2	023	27	10·7	9·5	062	27	14.3	14·0	046	26	4·1	1·3	020	30	4·8	0·1	262
0·3 a. m. s. l.	30	11·1	9·4	082	26	15·6	14·6	025	27	11·7	10 5	059	27	16·3	15 9	016	26	4·7	1·1	022	30	4·6	0·7	179
0·6 „	30	8·5	6·7	092	26	16·6	15·3	038	27	14·1	13·0	054	27	19·8	19·3	049	26	5·3	4·9	043	29	4·5	0·7	113
0.9 „	30	4·9	2·6	109	26	15·0	13·7	047	27	14·7	13·5	051	27	17·4	16·5	050	26	6·5	2·4	053	27	5·8	2 9	072
1·5 „	29	5·7	1·6	256	26	12·6	10 6	063	27	14·0	12·5	054	27	13·5	12·4	055	26	7·6	3·3	076	19	9·3	6·1	084
2·1 „	26	7·8	3·5	241	24	12·7	11·2	076	25	12·0	10 7	069	25	12·2	11·3	081	26	9·0	4·4	084	16	9·9	7·1	086
3·0 „	20	8·1	1·2	141	21	13·3	12·1	097	22	12.5	11·5	086	23	13·8	12·2	090	24	11·2	7·6	085	10	16·1	14·5	094
3·6 „	10	8·9	3·3	263	17	12 8	10·8	096	19	12·5	11·6	087	19	12·2	11·5	091	22	11·8	9·1	079	1	17·7	15·7	091
4·5 „					15	11·7	10 0	090	16	12·7	12 0	086	13	12·0	10·8	090	22	11·5	8·0	070	8	17·1	16·2	077
5·4 „					13	12 6	9·4	093	15	11·7	10·6	087	4	10·3	9 9	081	22	11·0	7·1	075	4	19·0	18·3	088
6·0 „					12	10·4	8·9	089	15	11·5	10·1	097	4	8·3	6·7	090	20	10·7	6·6	078	3	18·7	18·0	081
7·2 „					7	7·0	4·8	067	12	8·6	7·3	099	1	7·0	7·0	290	20	9·5	6·4	089	2	12·0	11·5	101
9·0 „					4	8·7	8·1	186	7	10·1	6·9	106					17	11·7	9·6	133				

Station	TRIVANDRUM								UDAIPUR												VENGURLA			
Time in I. S.T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	3·2	1.8	259	30	3·3	1·9	042	30	C	A	L	M	30	0·5	0·4	290	30	C	A	L	M	30	1·7	1·1	031
0·15 a. g.	25	4·6	2·5	268	28	5·7	0·8	054	29	5·4	3·4	011	30	5·1	1·5	035	30	5·0	3 5	014	28	9·5	7·8	075
0·3 a. m. s. l.	25	4·9	2·2	279	28	5·1	0·6	081													28	11·4	9·6	094
0·6 „	25	5·7	2·2	352	28	5·0	1·4	070													27	13·7	12·1	098
0·9 „	25	7·0	3·8	037	27	6·4	3 6	073	29	6·9	2·5	054	30	5·6	1·3	014	30	6·4	3·3	036	27	14·6	11·5	103
1.5 „	25	9·3	7·1	058	26	8·5	6·6	076					30	5·2	0 6	326	30	6·0	2·5	125	25	12·9	11·4	097
2·1 „	24	10·7	7·7	068	25	9·5	6·9	083	29	6·8	1·8	220					30	7·4	4·3	195	24	10·0	8·6	087
3·0 „	23	10·9	7·8	082	15	10·3	8·1	079	29	8·5	6·4	248	28	5·8	3·1	270	30	11·0	8·5	254	24	9·1	8·2	087
3·6 „	20	11·4	9·6	084	12	10·9	7·9	076	29	10·1	8·5	264	27	10·0	7·8	262								
4·5 „	18	11·5	10·0	081	10	9·9	7·2	097	25	12·5	11·0	266	26	13·5	11·5	260	27	11·8	9·9	258	15	7·9	6·4	075
5·4 „	18	11·4	9·5	084	2	5·5	4·9	100	7	15·7	15·3	270	21	19·0	17·5	265	12	19·8	19·5	257	6	9·5	6·6	092
6·0 „	18	11·3	9·4	084	2	9·0	8·2	044					20	25·2	19·9	267	2	18·0	17·9	270				
7·2 „	18	10·9	7·0	072									19	30·7	29·8	267								
9·0 „	16	13·0	8·7	106									17	39·1	38·9	266								
													5	55·4	54·8	255								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Station	VENGURLA								VERAVAL															
Time in I.S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	30	2·4	1·0	191	30	1·8	1·3	035	30	6·7	5·4	039	30	9·7	5·3	069	30	10·0	4·6	188	30	5·1	3·5	032
0·15 a. g. .	28	7·3	2·8	294	29	8·7	5·9	047	30	14·6	11·5	018	30	9·2	6·1	075	30	15·4	6·6	178	30	9·5	5·0	025
0·3 a. m. s. l. .	28	7·5	1·1	350	29	10·3	6·5	059	30	14.1	11·1	053	30	9·5	7·5	071	30	14·7	5·3	165	30	9·9	5·3	043
0·6 ,, .	28	7·6	4·0	072	29	11·6	8·1	080	30	12·7	9·4	063	30	9·5	8·2	076	30	12·5	4·4	123	30	11·2	7·2	079
0.9 ,, .	28	9·7	6·7	081	29	14·0	11·6	091	30	11·2	8·3	083	30	10·0	8·2	086	30	10·7	5·3	097	30	12·3	9·5	089
1·5 ,, .	28	15·5	13·2	087	27	17·2	16·0	095	30	11·2	8·0	117	28	10·9	7·0	097	30	10·7	7·3	071	30	12·4	10·5	098
2·1 ,, .	27	17·2	14·4	090	25	16·3	15·5	090	30	12·4	8·3	133	26	10·4	·3	111	30	12·1	6·7	064	27	9·7	6·3	088
3·0 ,, .	23	12·2	10·5	082	24	10·9	9·3	088	30	10.1	2·5	183	25	9·6	1·3	236	30	10·7	1·2	360	26	8·7	1·1	112
3.6 ,, .	22	9·9	8·3	076	11	9·5	7·8	092	30	11·1	4·4	248	25	8 8	3 9	255	30	11·2	3·8	282	19	8·1	4·6	215
4·5 ,, .	21	9·5	7·5	085	1	6·0	6·0	110	30	13·7	9·7	257	25	12·3	9·6	251	30	12 9	9·1	262	7	11·9	9·7	231
5·4 ,, .	21	7·5	5·3	085					30	16·1	12·8	263	25	16·5	13·4	251	30	16·3	14·4	270	3	12·7	12·3	271
6·0 ,, .	21	8 1	3 1	100					30	18·0	14·7	265	25	18·4	15·0	253	30	18·5	16·8	270	2	16·5	16·1	275
7·2 ,, .	11	11·1	3·1	296					30	26·1	24·7	263	20	25·2	23·4	262	30	26·1	24·8	264				
9·0 ,, .	2	16·0	11·3	252					29	40·3	38·7	260	11	36·9	31·8	253	29	40·9	39·3	260				

Station	VISAKHAPATNAM											
Time in I.S.T.	0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	30	0·8	0·7	006	30	6·5	6·0	097	30	1·5	0·8	015
0·15 a. g. .	30	4·4	3·9	022	30	9.5	8·7	092	30	3·9	3·5	063
0·3 a. m. s. l. .	30	5·0	4·7	050	30	9·9	9·3	086	30	5·2	4·8	077
0·6 ,, .	30	6·0	5·8	064	30	9·2	8·7	067	30	7·2	7·0	078
0·9 ,, .	30	7·3	6·8	057	30	8·8	8.4	042	30	8·1	7·7	074
1·5 ,, .	29	8·7	7·2	034	30	11·4	10·5	023	29	9·5	8·7	030
2·1 ,, .	28	6 8	4·2	022	30	11·4	10·0	009	29	7·1	4·5	032
3·0 ,, .	26	5·4	1·4	342	29	8·8	5·7	007	28	6·0	0·9	029
3·6 ,, .	22	5·2	0·7	255	27	8·9	2·9	357	27	6·6	1·7	314
4·5 ,, .	17	4·8	1·1	301	26	8·7	1·4	288	18	6·3	3·7	302
5·4 ,, .	8	7·5	5·9	238	22	7·6	3·9	268	9	5.6	3·4	248
6·0 ,, .	5	6·4	5·0	279	18	6·8	4·3	263	3	7·0	2·4	304
7·2 ,, .	1	10·0	10·0	225	6	9·3	7·6	274				
9·0 ,, .												

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km. above mean sea level

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

AGARTALA

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	3	44·7	41·5	269
12·0	2	33·0	33·0	267
14·1	2	27·0	26·8	253

AHMEDABAD

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	3	69·7	68·7	255
12·0	1	56·0	56·0	245

AMRITSAR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	23	73·7	71·7	269
12·0	19	95·2	92·6	263
14·1	12	88·7	85·7	262
16·2	7	89·0	85·7	258
18·0	3	58·0	53·0	243
21·0	2	50·0	44·3	251

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	24	70·4	65·4	260
12·0	17	81·7	79·7	259
14·1	14	82·0	79·3	263
16·2	5	75·2	75·0	266
18·0	1	37·0	37·0	260

ANANTAPUR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	6	13·2	10·2	266
12·0	3	23·7	9·5	253

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	4	20·5	19·5	2 2
12·0	3	30·3	28·0	196
14·1	3	27·0	25·3	209
16·2	2	27·0	24·5	173

BAGHDOGRA

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	51·0	51·0	270

BAIRAGARH

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	67·0	67·0	245

BAMRAULI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	29	66·9	63·0	255
12·0	13	81·4	69·6	260
14·1	6	89·2	89·1	256
16·2	1	63·0	63·0	255
18·0	1	98·0	98·0	280

BAMRAULI

11 0 hrs.

Ht. in Km.	n	V	v	D
10·5	5	81·0	78·4	263
12·0	2	82·0	81·8	253
14·1	1	69·0	69·0	255

1730 hrs.*

Ht. in Km.	n	V	v	D
0·5	23	63·5	62·8	281
12·0	16	73·1	72·0	281
14·1	10	70·9	69·9	278

BANGALORE

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	19·0	19·0	230
12·0	1	33·0	33·0	235
14·1	1	21·0	21·0	230

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	6	19·0	16·0	216
12·0	5	22·8	19·7	213
14·1	5	26·4	19·0	215
16·2	2	13·5	13·5	268
1·0	1	20·0	20·0	100
21·0	1	9·0	9·0	105

BEGUMPET

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	3	23·7	23·1	235
12·0	2	6·5	15·0	252
14·1	1	21·0	21·0	250
16·2	1	25·0	25·0	230
18·0	1	21·0	21·0	240

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	6	32·0	29·8	257
12·0	3	43·0	40·6	262
14·1	1	57·0	57·0	240

BHUBANESHWAR

0530 hrs.

Ht. in Km.	n	V	v	D
0·5	3	38·0	37·5	263
12·0	1	53·1	52·6	252
14·8	2	36·0	33·5	262
16·2	1	25·0	25·0	265
18·0	1	14·0	14·0	185
21·0	1	10·0	10·0	115

BHUJ

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	7	68·4	66·5	254
12·0	2	65·5	63·5	252

DUM DUM

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	29	54·5	53·3	269
12·0	27	63·1	61·8	269
14·1	19	15·7	49·5	261
16·2	12	50·2	8·2	260
18·0	5	24·2	6·5	249

1130 hrs.

Ht. in Km.	n	V	v	D
0·5	2	34·0	33·6	261
2·0	1	27·0	27·0	260

1730 hrs.*

Ht. in Km.	n	V	v	D
10·6	30	53·0	51·4	268
12·0	29	68·3	67·0	269
14·1	27	56·5	54·1	264
16·2	19	47·0	5·0	270
18·0	5	24·8	21·6	290

GADAG

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	4	28·3	25·1	2·8
12·0	3	39·7	35·1	238
14·1	1	41·0	41·0	270
16·2	1	18·0	18·0	270

GANNAVARAM

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	3	20·1	19·9	235
12·0	3	20·0	17·5	223
14·1	1	10·0	10·0	190

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	7	23·0	21·9	243
12·0	4	35·7	31·9	242

GAUHATI

0530 hrs *

Ht. in Km.	n	V	v	D
10·5	13	73·8	73·0	270
12·0	8	85·5	83·9	268
14·1	5	81·2	63·8	268
16·2	3	59·7	57·6	270
8·0	1	77·0	77·0	280

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	11	70·4	69·5	279
12·0	6	76·2	71·7	284
14·1	2	81·5	81·5	280

GOPALPUR

530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	32·5	32·5	248
12·0	1	34·0	34·0	230

JAGADALPUR

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	2	18·5	18·3	239

JAIPUR

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	78·0	78·0	250

JODHPUR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	20	73·9	67·5	051
12·0	17	85·1	81·4	051
14·1	8	81·7	80·0	051
16·2	3	52·0	49·7	049

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	4	61·5	60·3	265

2330 hrs.*

Ht. in Km.	n	V	v	D
10·5	21	70·3	68·1	260
12·0	15	83·3	80·3	260
14·1	4	78·3	78·0	265
16·2	3	58·7	58·7	275

MADRAS

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	8	10·6	8·3	141
12·0	4	10·2	8·0	142
14·1	1	9·0	9·0	125

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	3	11·0	5·6	137
12·0	3	14·0	11·0	215
14·1	1	8·0	8·0	185
16·2	1	5·0	5·0	200

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	12	14·0	11·5	158
12·0	8	18·7	13·4	176
14·1	8	24·6	15·6	104
16·2	1	15·0	15·0	315

MANGALORE

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	12	20·7	17·7	212
12·0	10	27·0	22·8	210
14·1	7	21·1	16·7	207
16·2	5	16·6	11·8	164
18·0	4	9·8	7·6	110
21·0	1	20·0	20·0	355
24·0	1	6·0	6·0	170

MINICOY

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	4	15·7	14·5	163
12·0	5	18·8	18·1	191
14·1	2	31·5	27·5	258

NAGPUR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	25	47·8	46·1	250
12·0	18	53·4	51·1	247
14·1	7	49·1	47·3	248

1130 hrs.*

Ht. in Km.	n	V	v	D
10·5	4	57·7	55·5	249
12·0	2	65·0	29·5	230

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	25	46·0	45·0	259
12·0	22	49·1	46·8	245
14·1	14	44·3	42·2	247
16·2	2	23·0	10·6	259

NEW DELHI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	28	77·1	74·3	268
12·0	28	91·9	88·1	263
14·1	16	85·7	82·0	264
16·2	6	84·8	83·5	270
18·0	2	43·5	42·5	270
21·1	1	33·0	33·0	260

NEW DELHI

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	18	72·7	71·7	264
12·0	11	87·7	84·6	258
14·1	5	67·8	66·5	257

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	27	80·0	78·8	265
12·0	27	92·0	90·0	262
14·1	19	90·7	90·5	263
16·2	2	79·5	78·3	269
18·0	1	73·0	73·0	270

POONA

1730 hrs *

Ht. in Km.	n	V	v	D
10·5	4	31·0	30·5	233
12·0	3	34·0	33·6	220
14·1	2	39·5	38·0	218
16·2	1	48·0	48·0	230

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 km. above mean sea level

November 1957 (Sravana 10—Bhadra 9, 1879 Saka)

Ht. in Km.	n	V	v	D
		PORT BLAIR		
		0530 hrs.		
10·5	7	8·6	1·7	188
12·0	4	11·0	8·0	088
14·1	1	12·0	12·0	090
		1130 hrs.		
10·5	3	8 0	4·2	238
12·0	4	8·0	8·0	090
		1730 hrs *		
10·5	1	20 0	20·0	290
12·0	1	25·0	25·0	290
		SANTA CRUZ		
		053) hrs.*		
10·5	22	35·2	30·5	239
12·0	19	44·6	39·6	236
14·1	12	41·4	39·2	238
16·2	5	38·8	35·6	244
18·0	1	25·0	25·0	330
21·0	1	12·0	12·0	185
		1130 hrs.		
10·5	20	38·5	36·3	251
12·0	11	46·6	45·3	251
14·1	4	46·0	45·3	244
		1730 hrs.*		
10·5	25	38·4	36·4	242
12·0	21	51·4	48·3	233
14·1	14	49·6	41·3	230
16·2	6	33·2	29·0	230
18·0	4	33·5	20·5	240
21·0	1	11·0	11·0	330
		TIRUCHIRAPALLI		
		0530 hrs.		
10·5	4	18·3	8·5	195
12·0	3	24·3	23·9	226
14·1	2	32·0	31·3	229
		1730 hrs.		
10·5	5	9·8	8·5	122
12·0	5	13·8	11·0	146
14·1	2	13·5	9·2	155
16·2	1	24·0	24·0	145
		TRIVANDRUM		
		0530 hrs.*		
10·5	15	16·0	13·2	139
12·0	11	18·7	14·5	194
14·1	7	22·0	13·2	233
16·2	6	20·0	8·4	291
		1730 hrs.*		
10·5	13	14·0	11·2	148
12·0	8	17·3	12·4	190
14·1	5	19·6	10·6	224
16·2	3	13·3	8·4	293
		UDAIPUR		
		1730 hrs.*		
10·5	3	72·0	69·2	265
		VERAVAL		
		0530 hrs.		
10·5	25	55·3	52·6	253
12·0	21	61·6	58·3	243
14·1	17	54·7	52·8	247
16·2	6	35·8	34·3	250
18·0	2	33·0	16·7	157
		1130 hrs.		
10·5	6	45·7	44·5	263
12·0	4	48·7	47·5	252
14·1	3	53·3	53·0	251
		1730 hrs.*		
10·5	26	52·7	51·1	250
12·0	22	58·2	56·1	240
14·1	17	55·4	53·6	240
16·2	7	48·1	46·8	242
18·0	4	48·0	47·6	241
21·0	1	24·0	24·0	240

RADIOSONDE DATA

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

During the month, observations of upper air temperature, pressure and humidity were made at 13 stations in India as given in the list below. For a detailed description of the instruments used, a reference may be made to the I.M.D. Scientific Notes Nos. 112 and 113 Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

S. No.	Name of station	Type of instrument used	Date of starting	Hours of routine observations in G.M.T. during the month	Remarks
1	Allahabad	Clock type	1st October 1944	00 and 12	
2	Amritsar	Clock type	21st June 1957	00 and 12	
3	Bombay	Clock type	7th September 1954	00 and 12	
4	Calcutta	Clock type	13th December 1946	00 and 12	Fan type used from 13-12-46 to 30-11-47.
5	Gauhati	Clock type	22nd July 1955	00 and 12	
6	Jodhpur	Clock type	17th April 1946	00 and 12	
7	Madras	Fan type	29th June 1946	00 and 12	
8	Nagpur	Fan type	1st October 1946	00 and 12	
9	New Delhi	Clock type	3rd December 1943	00 and 12	
10	Port Blair	Fan type	4th December 1949	00 and 12	
11	Trivandrum	Fan type	1st July 1947	00 and 12	
12	Veraval	Fan type	3rd October 1944	00 and 12	
13	Visakhapatnam	Fan type	8th December 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

November 1957 (Kartika 10–Agrahayana 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (1004 mb.) No. of Obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	AMRITSAR (989 mb.) No. of Obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	BOMBAY (1011 mb.) No. of Obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point
Surface	30	98	287·8	291	285	284·4	30	230	285·8	291	282	282·1	30	13	296·8	299	294	292·1
							29	136	..	..	..	..	30	110	..	..	..	..
1000	30	130	..	..	..	..												
900	28	1014	291·1	294	287	274·9	29	1032	289·5	295	285	272·1	30	1033	295·3	298	291	283·6
850	28	1524	288·0	291	283	271·6	29	1516	286·9	292	282	269·7	30	1529	292·2	297	289	280·7
800	28	2035	285·0	289	280	268·1	29	2024	283·8	288	280	265·6	30	2047	288·9	296	286	277·4
700	28	3142	279·3	284	275	258·7	29	3124	276·4	282	271	259·7	29	3168	282·9	287	276	268·0
600	28	4392	273·0	277	267	250·7	29	4356	268·2	273	262	..	29	4435	276·6	280	272	259·5
500	28	5827	263·1	270	257	..	29	5765	258·7	265	253	..	29	5889	267·4	271	263	..
400	27	7511	251·7	257	243	..	29	7421	246·9	250	241	..	29	7605	256·8	261	248	..
300	23	9579	237·3	244	230	..	27	9135	230·9	240	220	..	26	9720	242·6	256	235	..
250	20	10825	228·5	235	223	..	27	10623	223·6	231	218	..	23	10992	233·3	239	226	..
200	16	12298	218·9	225	210	..	27	12089	216·3	224	211	..	21	12486	222·3	227	213	..
175	13	13173	214·7	222	208	..	25	12936	213·1	219	207	..	19	13345	216·3	221	211	..
150	11	14145	209·9	219	199	..	23	13861	211·0	217	204	..	15	14322	210·7	217	203	..
125	10	15264	205·5	215	199	..	17	15020	209·9	220	206	..	11	15414	205·7	210	196	..
100	8	16583	201·9	212	192	..	14	16100	208·4	215	205	..	8	16720	201·0	206	195	..
80	..	..	..	..	..	..	10	17775	208·2	213	202	..	..	..	..	..	..	..

	CALCUTTA (1014 mb.) No. of Obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	GAUHATI (1010 mb.) No. of Obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	JODHPUR (991 mb.) No. of Obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point
Surface	30	6	290·9	295	288	289·7	30	49	291·3	296	289	290·7	30	218	291·4	295	287	280·1
							29	132	..	..	..	..	30	136		..	..	..
1000	30	130	..	..	..	..												
900	30	1034	288·8	293	285	281·8	29	1036	289·2	293	285	285·0	30	1047	293·5	298	289	275·8
850	30	1517	285·6	289	281	277·3	29	1520	286·2	290	282	281·5	30	1537	289·7	294	285	273·9
800	30	2023	282·8	286	280	272·5	29	2027	283·1	287	279	277·8	30	2050	286·2	289	282	272·4
700	30	3121	280·0	284	277	263·1	29	3124	277·3	287	272	269·1	30	3160	279·3	283	274	264·1
600	30	4382	274·1	277	271	257·1	29	4364	272·4	277	269	259·9	29	4406	271·9	275	267	253·9
500	30	5825	265·0	270	261	252·7	29	5806	265·0	271	259	..	29	5839	263·8	269	257	..
400	30	7524	253·5	258	249	..	29	7501	253·2	258	245	..	27	7527	251·6	255	241	..
300	29	9607	239·6	245	233	..	21	9587	239·6	249	233	..	27	9589	236·7	243	225	..
250	27	10862	230·9	238	225	..	18	10836	230·3	239	224	..	22	10824	228·6	235	217	..
200	24	12319	220·5	227	211	..	17	12321	221·8	231	214	..	21	12295	220·9	229	215	..
175	20	13226	214·9	223	205	..	12	13202	216·8	223	211	..	18	13174	216·2	223	201	..
150	19	14169	208·4	216	199	..	10	14159	211·7	220	201	..	16	14132	212·3	220	208	..
125	15	15293	203·1	211	195	..	9	15301	207·0	211	198	..	11	15243	208·5	217	204	..
100	10	16628	199·8	204	195	..	7	16646	203·3	208	197	..	8	16630	204·9	209	202	..
80	5	17962	195·4	197	193	..	..	..	..	..	..	..	5	18079	204·2	207	203	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1011 mb.)						NAGPUR (979 mb.)						NEW DELHI (991 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	15	297·2	299	295	295·5	29	311	293·0	296	288	285·8	30	210	286·6	292	283	283·1
1000	28	107	..	..	..	..	29	129	..	..	..	..	30	136	..	..	..	..
900	28	1025	292·6	295	290	288·2	29	1041	293·4	297	289	279·4	30	1038	290·9	296	286	276·3
850	28	1517	290·1	293	286	284·0	29	1532	289·8	293	285	277·3	30	1524	288·2	293	285	272·7
800	28	2033	287·9	291	285	279·8	29	2045	286·3	290	283	275·0	30	2035	285·3	288	281	269·3
700	28	3153	282·1	285	279	271·3	29	3157	281·2	285	276	264·0	30	3139	278·0	282	274	262·3
600	28	4415	274·9	278	270	261·3	29	4413	273·9	276	269	256·1	30	4379	269·8	275	261	255·2
500	26	5868	266·9	271	263	..	29	5856	264·7	268	261	..	30	5799	261·0	265	256	..
400	25	7583	256·6	264	252	..	29	7554	252·9	259	247	..	30	7469	249·0	253	246	..
300	13	9679	241·8	247	234	..	28	9625	238·3	245	232	..	28	9509	234·7	242	229	..
250	8	10950	231.5	240	223	..	27	10878	228·8	235	222	..	28	10741	226·5	233	220	..
200							23	12334	216·4	224	207	..	28	12195	218·1	223	213	..
175							22	13186	210·7	215	202	..	27	13039	213·1	219	208	..
150							16	14179	206·3	213	194	..	27	13992	208·8	215	201	..
125							7	15211	203·3	206	200	..	25	15099	205·0	211	197	..
100													23	16431	203·0	209	196	..
80													17	17793	204·1	212	199	..

	PORT BLAIR (1003 mb.)						TRIVANDRUM (1003 mb.)						VERAVAL (1012 mb.)					
Surface	30	79	297·8	299	295	296·2	29	64	297·3	299	296	295·6	30	8	296·4	300	292	289·4
1000	24	104	..	..	..	..	29	93	..	..	..	..	30	114	..	..	..	..
900	24	1027	293·4	295	291	291·1	29	1011	293.2	295	291	289·1	30	1037	295·0	299	290	281·4
850	24	1521	291·1	293	290	287·3	29	1503	290·4	293	287	286·3	30	1530	291·4	295	285	279·1
800	24	2039	288·1	290	286	284.7	29	2019	287·9	291	284	283·3	30	2047	287·6	291	281	276·1
700	24	3160	282·3	286	280	276·9	29	3137	281·7	285	277	276·6	30	3161	281·5	285	276	266·3
600	23	4423	275·8	281	272	268.8	28	4393	274·2	277	271	270·4	30	4421	274·5	279	273	257·8
500	23	5876	268·0	273	264	..	27	5840	266·0	271	261	..	30	5866	265·4	271	256	..
400	21	7599	257·2	265	253	..	26	7517	255·8	258	251	..	30	7569	254·2	260	248	..
300	15	9715	242·9	249	239	..	22	9650	241·1	246	235	..	28	9647	239·1	247	231	..
250	14	10988	233·4	239	227	..	19	10915	232.0	238	222	..	25	10914	231·4	237	224	..
200	7	12484	221·1	227	215	..	13	12400	220·1	225	216	..	20	12397	221·9	231	216	..
175							9	13233	213·8	216	211	..	19	13247	215·1	227	209	..
150							9	14204	206·8	209	199	..	18	14210	208·4	225	201	..
125							6	15363	201·0	208	197	..	11	15307	202·9	211	196	..
100							5	16583	196·8	200	193	..	6	16717	198·2	209	187	..
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 Hours G. M. T.

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (996 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	30	48	297·7	299	296	292·2
1000	30	117	..	..	..	..
900	30	1036	292·9	296	289	285·3
850	30	1527	290·1	294	287	280·7
800	30	2043	288·5	293	285	274·0
700	30	3167	283·2	291	278	267·4
600	30	4433	276·2	284	272	262·3
500	29	5888	266·9	274	262	..
400	29	7598	255·7	259	248	..
300	23	9692	241·3	250	226	..
250	20	1 953	230·8	242	215	..
200	19	12420	219·1	235	203	..
175	18	13237	212·6	224	195	..
150	17	14218	207·4	217	194	..
125	12	15255	202·7	212	196	..
100	10	16687	197·0	204	189	..
80	6	17925	197·0	201	192	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

NOVEMBER 1957 (REMARKS IN AGRICULTURAL YEAR 1879 SERIES)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (1002 mb.)						AMRITSAR (989 mb.)						BOMBAY (1009 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A				No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	30	98	297·6	303	289	286·0	30	230	295·4	299	289	284·4	30	13	303·0	306	294	291·9
1000	30	118	..	..	..	..	30	130	..	..	..	..	30	98	..	..	..	..
900	29	1039	293·9	299	288	273·5	30	1039	294·6	298	286	274·7	30	1029	296·3	301	291	284·9
850	29	1529	290·1	295	281	268·3	30	1526	288 6	294	283	268·4	30	1525	292·6	297	287	281·9
800	29	2043	287·1	291	283	264·3	30	2037	285·5	290	280	265·8	30	2044	288·6	292	282	279·2
700	29	3157	281·3	287	276	253·0	30	3143	278·0	285	271	255·5	30	3166	282·9	287	278	267·5
600	29	4415	274·5	280	271	240·1	30	4381	269·5	277	263		30	4432	276·0	281	272	258·0
500	29	5849	265·2	271	262	..	30	5796	259·4	266	252		30	5886	267·5	271	262	..
400	28	7557	253·7	263	249	..	30	7457	247·6	254	238	..	30	7612	257·0	262	249	..
300	27	9639	239·0	246	231	..	29	9478	231·5	238	220	..	29	9715	242·3	252	234	..
250	24	10894	230·6	237	223	..	28	10707	223·8	232	218	..	26	10980	233·5	243	227	..
200	22	12381	220 4	226	213	..	26	12102	217·1	225	210	..	24	12478	222·2	230	217	..
175	21	13241	214·7	222	209	..	26	12994	214·0	221	207	..	22	13341	216·1	226	211	..
150	17	14176	210·6	215	205	..	25	13919	210·7	219	205	..	18	14277	209·2	216	204	..
125	10	15320	208·4	213	204	..	18	15077	209·4	218	206	..	14	15417	204·1	212	197	..
100	6	16658	205·7	221	201	..	13	16482	208·5	214	205	..	8	16794	202·3	209	193	..
80							5	17832	210·0	222	203	..	7	18115	202·1	209	195	..

	CALCUTTA (1012 mb.)						GAUHATI (1007 mb.)						JODHPUR (989 mb.)					
Surface	30	6	299·1	301	296	292·3	30	49	297·0	299	293	295·4	28	218	301·7	306	298	281·9
1000	30	111	..	..	..	..	30	113	..	..	..	..	28	116	..	..	..	..
900	30	1064	293·3	296	288	282·7	30	1030	292·1	298	289	288·0	28	1044	295·6	301	291	276·1
850	30	1520	289·6	293	285	278·8	30	1518	288·4	294	285	284·3	28	1537	291·2	296	287	273·7
800	30	2034	286·4	290	282	274·2	30	2030	285·4	289	283	281·1	28	2053	287·1	291	283	270·7
700	30	3150	282·7	286	278	264·0	30	3138	279·1	288	275	272·5	28	3164	279 7	284	275	264·0
600	30	4417	276·6	280	273	256·4	30	4390	274·7	283	269	262·9	27	4413	272·9	277	269	251·0
500	30	5875	268·0	272	263	..	30	5836	266·0	273	260	..	27	5851	264·4	269	258	..
400	30	7592	256·1	263	249	..	30	7540	254·8	265	245	..	26	7539	252·2	257	249	..
300	28	9696	241·3	248	234	..	24	9618	239·7	246	230	..	25	9605	237 8	241	233	..
250	28	10963	232·0	237	221	..	21	10863	231·2	237	227	..	23	10856	229·6	236	223	..
200	28	12447	220·5	227	203	..	21	12346	222·0	231	216	..	19	12327	220·2	226	215	..
175	26	13288	214·7	223	196	..	12	13204	217·2	223	212	..	17	13166	215·4	220	211	..
150	24	14234	208·8	219	193	..	10	14149	211·2	219	205	..	15	14143	211·8	219	205	..
125	19	15383	204·2	210	199	..	6	15197	209·4	218	203		12	15273	208 3	215	203	..
100	15	16720	199·3	204	190	..							10	16649	206·4	214	201	..
80	8	17989	197·4	203	185	..												

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1010 mb.) No. of obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	NAGPUR (978 mb.) No. of obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	NEW DELHI (990 mb.) No. of obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point
Surface	30	15	300·1	302	298	295·2	30	311	301·4	305	298	285·6	30	210	296·4	301	291	285.8
1000	29	105	..	..	..	..	30	112	..	..	..	..	30	122	..	..	..	..
900	29	1027	293·1	297	290	288·4	30	1039	296·5	300	293	280·2	30	1039	292·7	299	287	276.9
850	29	1519	290·6	295	287	284·9	30	1532	292·0	296	289	277·7	30	1527	289·1	294	284	272.4
800	29	2036	288·2	291	285	281·1	30	2049	287·6	292	284	275·8	30	2039	285·9	289	277	268.8
700	29	3158	282·9	287	278	273·4	30	3161	281·6	285	277	264·6	30	3150	279·7	285	277	260·9
600	28	4425	276·1	281	272	265·1	29	4423	274·7	278	270	257·5	30	4396	271·2	276	266	250·1
500	28	5882	268·2	273	263	..	27	5868	266·0	270	262	..	30	5822	262·1	265	259	..
400	27	7605	258·1	267	251	..	27	7571	253·2	258	249	..	30	7498	249·7	254	246	..
300	19	9720	243·4	251	236	..	27	9657	239·7	246	232	..	29	9547	235·3	242	230	..
250	11	11009	234·1	240	230	..	25	10917	229·4	235	220	..	29	10779	227·1	232	222	..
200	10	12507	223·7	230	219	..	22	12366	217·3	223	207	..	28	12242	218·9	222	214	..
175	8	13367	218·6	223	215	..	17	13215	213·4	219	207	..	26	13094	214·2	220	209	..
150	8	14344	212·0	219	208	..	16	14169	206·6	213	200	..	25	14050	209·4	217	208	..
125													19	15160	205·6	213	199	..
100													18	16198	204·6	213	198	..
80													13	17845	204·8	210	199	..

Standard Pressure Surface mbs.	PORT BLAIR (1002 mb.) No. of obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	TRIVANDRUM (1003 mb.) No. of obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point	VERAVAL (1011 mb.) No. of obs.	Ht. gpm.	Temperature °A Mean	Max.	Min.	Dew point
Surface	30	79	299·8	301	298	296·7	27	64	300·6	303	298	296·9	30	8	302·4	308	301	296·3
1000	17	96	..	..	..	..	27	87	..	..	..	..	30	105	..	..	..	..
900	17	1019	293·3	297	289	290·3	27	1012	294·4	297	291	289·1	30	1035	296·1	301	291	283·9
850	17	1511	290·1	293	287	286·1	27	1505	291.7	295	289	286·2	30	1530	292·3	295	288	281·5
800	17	2 28	287·2	291	284	282·7	27	2023	288·7	293	285	283·4	30	2047	288·3	293	285	278·3
700	17	31.6	281·8	285	279	274·5	27	3145	282·7	287	279	277·5	30	3166	281·7	286	279	267·0
600	17	4413	275·0	277	273	267·7	24	4412	275·5	283	267	270·0	30	4426	275·0	278	269	257·6
500	15	5858	266·5	271	261	..	24	5867	268·1	273	263	..	30	5873	265·9	271	261	..
400	14	7564	255·5	258	248	..	24	7588	257·2	262	252	..	30	7573	253·9	260	247	..
300	7	9679	241·7	247	237	..	21	9703	243·1	248	237	..	29	9652	238·5	247	233	..
250							17	10972	233·6	242	227	..	26	10914	229·6	237	224	..
200							10	12430	221·0	225	215	..	22	12383	218·9	227	211	..
175							6	13235	213·7	217	208	..	18	13243	213·1	224	206	..
150							6	14211	205·3	211	199	..	18	14191	208·4	218	200	..
125													13	15291	203·1	212	195	..
100													9	16574	198·8	208	191	..
80													5	17905	196·6	203	185	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 Hours G. M. T.

November 1957 (Kartika 10—Agrahayana 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (1007 mb.)					
	No. of obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	29	48	301·1	303	299	292·9
1000	29	112	..	..	..	..
900	29	1037	293·6	298	290	284·7
850	29	1528	290·2	293	287	279·7
800	29	2041	287.9	291	284	274·5
700	29	3161	282·8	286	276	270·2
600	28	4428	275·7	279	267	266·8
500	27	5885	267·0	272	260	..
400	25	7593	256·0	260	250	..
300	23	9685	240·7	249	233	..
250	19	10959	229·8	236	226	..
200	13	12438	218·8	225	213	..
175	7	13217	211·7	218	205	..
150	6	14190	207·2	214	203	..
125	5	15268	201·2	206	197	..
100						
80						

NOTE :—Number of observations refer to those of dynamic height.

Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273°A.

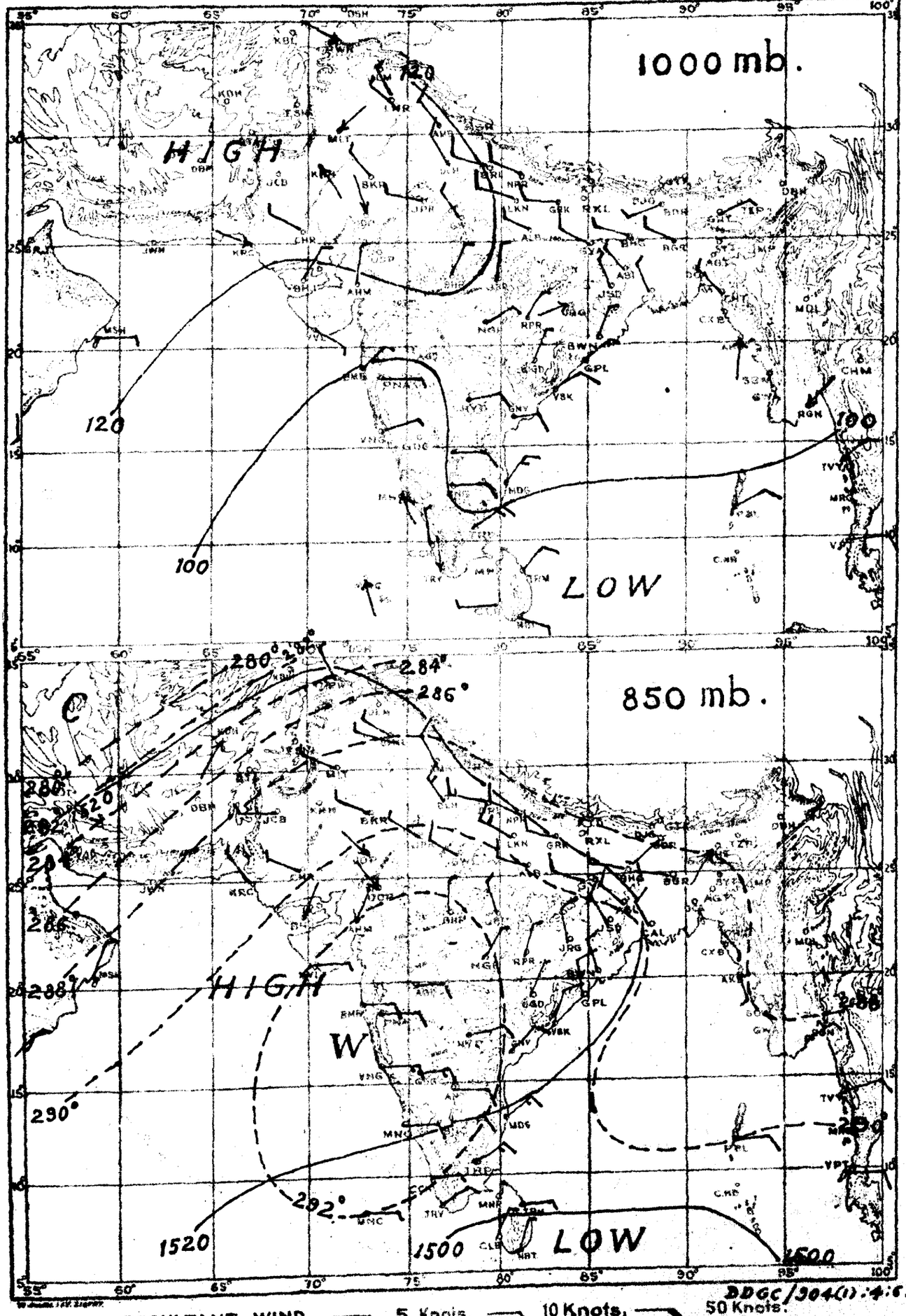
Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—S7—342 D. D. G. Obs. Poona/62—25-9-63—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

NOVEMBER 1957

I.Met.D. Plate I



DDGC/304(1):4:62

RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

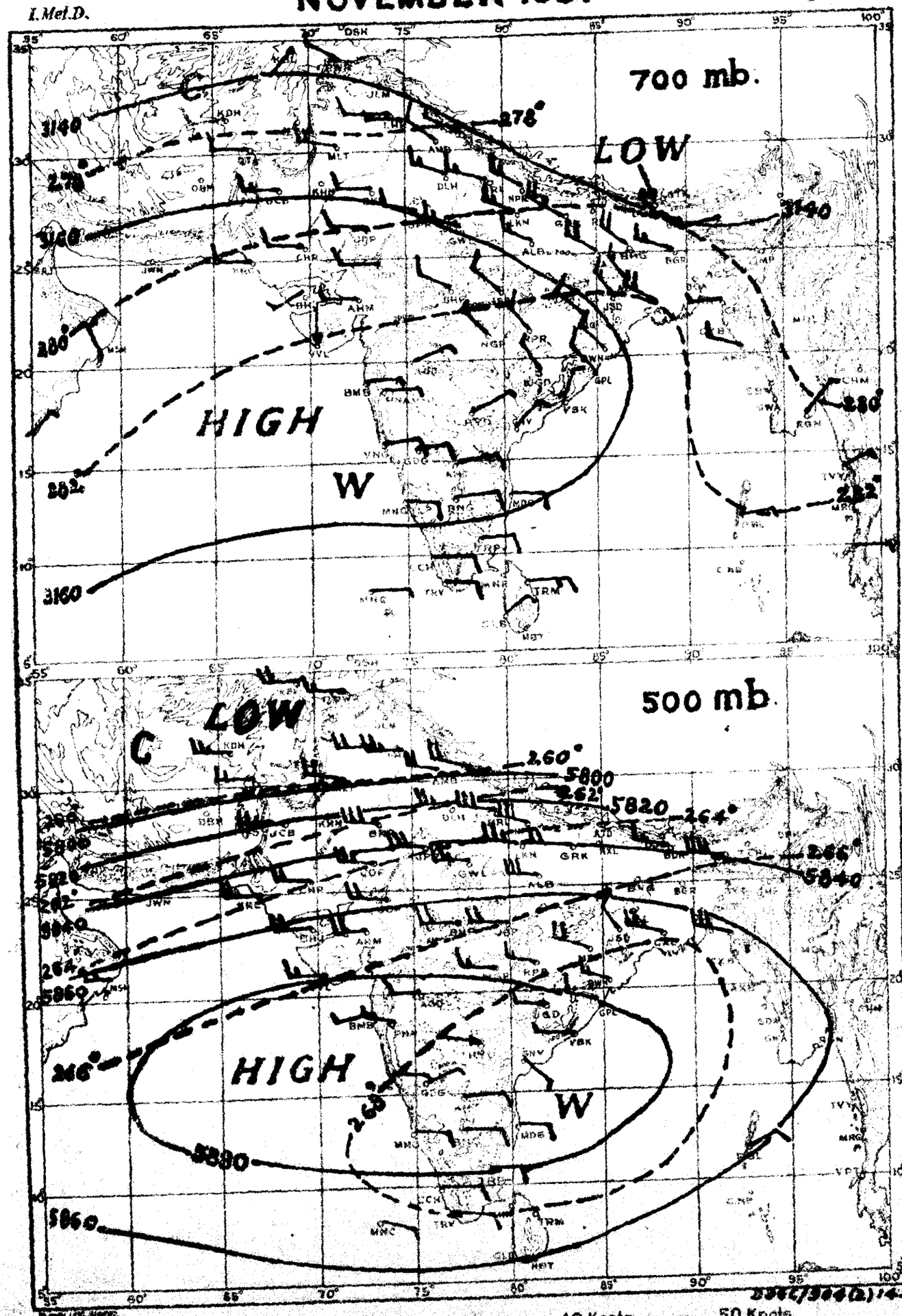
---------- Isotherms in degrees absolute. —— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

NOVEMBER 1957

Plate II

I. Met. D.



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

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INDIA WEATHER REVIEW, 1957

Monthly Weather Report

December.

Published by authority of the Government of India

SUPERINTENDENT
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Chief features:

(1) Six western disturbances of which the first three caused good precipitation in Jammu and Kashmir, Himachal Pradesh and the Punjab (I).

(2) Mainly dry weather over the country outside the south Peninsula during the latter half of the month and

(3) A cyclonic storm in the south west Bay of Bengal which caused a spell of wet weather in the extreme south of the country during the last week.

Six western disturbances moved across the northern parts of the country during the month. Of these, the last three were feeble and did not cause any precipitation. The third western disturbance which was active, moved into Baluchistan on the 10th. Taking an eastnortheasterly course, it lay as a depression over north Rajasthan and the adjoining areas of the Punjab (I) on the 11th. It, however, weakened on the next day and moved away across the western Himalayas. Under its influence, there was fairly widespread precipitation in Jammu and Kashmir, Himachal Pradesh and the Punjab (I) on the 11th and 12th and in west Uttar Pradesh on the 12th. Locally heavy to very heavy falls of rain occurred in the Kumaon hills on the 12th, when Nainital recorded 15 cms. Mussooree 11 cms. and Muktesar 9 cms.

A statement giving the details regarding the movement and activity of the six western disturbances is given below :

Details regarding movement and activity of Western disturbances in the month of December 1957.

S.No.	Period	Course	Region affected	Nature of precipitation	Period	Remarks
1	2nd-5th	Afghanistan to Punjab hills	Jammu and Kashmir Himachal Pradeh Punjab (I)	Fairly widespread rain or snow Fairly widespread or local rain Scattered showers	3rd to 5th 4th and 5th 4th and 5th	
1(a)	3rd-4th	Rajasthan	...	...	...	1 (a) was induced by western disturbance No. 1.
2	4th-8th	Baluchistan and adjoining north Arabian Sea to the Punjab-Kumaon hills.	Jammu and Kashmir Himachal Pradesh Punjab (I) west Uttar Pradesh	Local or scattered rain or snow Fairly widespread rain Local or scattered rain Scattered showers	6th to 9th 6th to 9th 7th to 9th 7th and 8th	
3	10th-12th	Baluchistan to Punjab-Kumaon hills.	Jammu and Kashmir Punjab (I) Himachal Pradesh West Uttar Pradesh	Fairly widespread rain or snow do do Fairly widespread or local thundershowers	11th and 12th do do 11th and 12th	
3(a)	11th-12th	South Rajasthan to south-east Uttar Pradesh	East Rajasthan East Uttar Pradesh Bihar	Local or scattered thundershowers do do	12th 12th 12th	3(a) was induced by western disturbance No. 3
4	14th-15th	Northern divisions of West Pakistan to Jammu and Kashmir	...	...	...	Did not cause any precipitation.
5	21st-24th	Northern divisions of West Pakistan to Jammu and Kashmir	...	...	...	do
6	28th-31st	Baluchistan to Jammu and Kashmir.	...	...	...	do

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Bay Islands experienced scattered or local showers on most days of the m . Scattered or local showers occurred in Madras from 1st to 4th, in Assam from the 9th to 11th and Madras and Kerala from the 19th to 21st. Otherwise, the weather was mainly dry over the country during the month except for a wet spell in the extreme south of the Peninsula in the last week caused by a cyclonic storm from the Bay.

In association with the movement of an easterly wave across the south Bay, conditions became unsettled over the extreme southwest Bay to the southeast of Ceylon on the 24th. By the next morning, a deep depression formed over the southwest Bay with its centre near Lat. 7.5°N and Long. 82.5°E. Moving in a northwesterly direction., it intensified into a cyclonic storm of small extent by the 25th evening and was centred near Lat. 9.5°N and Long. 81.5°E. The storm remained practically stationary for the next 24 hours without any significant change in intensity, but weakened into a depression by the 27th morning. Weakening further, it became a trough of low pressure over Ceylon and the Palk-Straits on the 27th evening. The trough moved northwestwards and lay off the Malabar coast and over the Comorin Maldives areas on the 29th. It moved away westwards across the Laccadives area by the 31st. In association with the cyclonic storm, fairly widespread or local rainfall occurred in Madras from the 26th to 31st and in Kerala from the 28th to 30th. Local or scattered showers also occurred in south Mysore on the 30th, coastal Mysore on the 31st and in Kerala on the 27th, 30th and 31st. Locally heavy to very heavy rain occurred in south Madras from the 26th to 28th. Pamban recorded 9 cms on the 26th and Nagapattinam 9 cms and 14 cms on the 27th and 28th respectively. According to newspaper reports, the storm caused very heavy rains over many parts of Ceylon and the associated floods were reported to be the worst in the last 50 years.

During the first half of the month, night temperatures were generally above normal in northwest India and west Uttar Pradesh, while they were nearly normal in northeast India. During the third week of the month, night temparatures generally decreased in northwest India and west Uttar Pradesh and remained normal or below normal there for the rest of the month. They, however, increased in some parts of northeast India during the third week and remained above normal over those parts for the rest of the month. The central parts of the country experienced night temperatures above the normal practically throughout the month.

The total rainfall during the month was in large excess in Assam, west Uttar Pradesh, the Punjab (I), west Rajasthan and Saurashtra and Kutch and in moderate excess in Jammu and Kashmir and the Madras State. It was in slight defect in east Uttar Pradesh, in moderate defect in Bihar, Gujarat and Kerala and in large defect over the rest of the country.

Mean maximum temperature was above normal in the Bay Islands, Gangetic West Bengal, Orissa, Chota Nagpur, Bihar, Madhya Pradesh, Gujarat, Maharashtra, Vidarbha and Andhra Pradesh below normal in Jammu and Kashmir and normal over the rest of the country. Mean minimum, temperature was normal in Sub-Himalayan West Bengal, Jammu and Kashmir, east Rajasthan, Saurashtra and Kutch, coastal Andhra Pradesh, the Madras State and coastal Mysore and above normal elsewhere over the country.

Mean relative humidity was in excess in west Uttar Pradesh, the Punjab(I) and Rajsthan, in defect in Gangetic West Bengal, Chota Nagpur, Bihar and east Madhya Pradesh and normal elsewhere.

Mean cloud amount was normal in the Bay Islands, Assam, Bihar, east Rajsthan, east Madhya Pradesh, Saurashtra and Kutch, the Konkan. Vidarbha, coastal Andhra Pradesh and Rayalaseema and in defect in Gangetic West Bengal, Orissa and Chota Nagpur. Over the rest of the country it was in excess.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 14 chief political divisions and the 29 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

The highest maximum temperature given for any station in the accompanying tables is that recorded within the 24 hours ending at 0830 hrs. IST of the date noted in the succeeding column ; similarly the heaviest fall in 24 hours for any station denotes the amount recorded during the 24 hours ending at 0830 hrs. IST of the date given in the succeeding column.

Poona 5,

The 17th February 1959.

S. S. LAL,

for *Director General of Observatories.*

Errata to M.W.R. for the month December 1957 (Agrahayana 10 - Pausa 10, 1879 S)

Page No.	Station	Month/ Hour.	Column	For	Read
Text portion					
2	First line last but third word is 'manth'.				
Table I - Division					
3	(Heading)		2	(Not clear)	Rainfall (millimetres).
3	2. West Bengal		4	26.6	26.5
Table I - Sub-division					
3	17. Gujarat		5	14.3	14.8
Table II					
4	Nancowry		5	7	7 days
4	Goalpara		2	26.0	26.0 (m)
4	(Foot note)		-	(Not given)	(m) Mean of 18 days
5	Jamshedpur (P.B.O)		10	0.3	0
5	Jamshedpur		11	0	0.3
5	Darbhanga		5	15,,9	1,5,9
5	Fatehpur		6	9.5	9.8
5	Bahraich		28	0	1
7	Sheopur Kalan		10	0.0	0
7	Ratlam		6	15.1	15.0
7	Bhopal (Bairagarh)		28	1	0
7	Seoni		15	0	1
8	Bombay (Colaba)		28	4	0
8	Ahmednagar		18	4.6	4.3
9	Visakhapatnam		4	31.4	31.5
9	Hanamkonda		16	-4.0	-0.4
10	Palghat		5	1,28	8,28
10	Dharampur		1	Dharampur	Dharampur (R)
10	Kyelang		1	Kyelang	Kyelang (R)
11	Hambantota		12	+352.	+352.9
11	Bagra Tawa		7	Blank	..
11	(Foot note)		-	Observatory closed from December, 1957	* Observatory closed from December, 1957.
12	Taplethok		8	4.6	5.6
13	Amini Divi	Feb.	1	Anini Divi	Amini Divi
13	Amini Divi	Feb.	7	0.82	+0.8
13	Miniccy	June	17	10.8	18.8
13	Miniccy	June	18	10.1	18.1
13	Daltonganj	July	12	+151.8	+151.1
13	(Foot note)	-	-	(a) Mean of 17 days	(n) Mean of 17 days
14	Sainwara(Surajgarh)	July	11	9.8	0.8
14	Bahraich	Aug.	25	Blank	0
Table III					
16	Sibsagar	1730	4	014.5	1014.5
16	Jorhat	0530	4	01.58	1015.8
16	Jorhat	0830	4	18.0	1018.0
16	Jorhat	1130	4	1055.8	1015.8
17	Bagdogra	2330	7	14.2(h)	14.3 (h)
17	(Foot note)	-	-	(Not given)	(i) Mean of 22 days
18	Baripada	1730	28	3	0
20	Bhagalpur	2330	19	9	0
20	Gonda	1730	4	1013.8	1013.4
20	Gonda	1730	27	25	29
20	Azamgarh	0830	28	..	0
20	Azamgarh	1730	28	..	0
20	Varanasi(Banaras)	0830	28	..	0

contd 2.

Page No.	Station	Month/ Hour	Column	For	Read
20	Varanasi (Banaras)	1730	28	..	0
21	Bareilly (P.B.O.)	1130	10	13.1	13.3
21	Dehra Dun	2330	4	0117.1	1017.1
21	New Delhi	2330	15	14.2	4.2
22	Hissar	0830	6	0.5	-0.5
22	Amritsar	0530	17	3	0
22	Leh	0830	5	667.6	667.5
22	Leh	0830	11	43	47
27	Vengurla	0530	13	0.1	0.7
27	Aurangabad	0830	18	29	28
27	Poona (Lohagaon (Aerodrome)	1130	28	0	1
27	Sholapur	0830	4	1015.6	1015.7
29	Mahbubnagar	0830	15	19.8	10.8
29	Palayamcottai	1730	5	1004.9	1004.0
30	Madras	1130	8	22.2	23.2
30	Mangalore (Bajpe Aerodrome)	0830	17	0	2
31	Belgaum (C.T.O.)	1730	9	15.8	15.9
31	Bangalore (Central Observatory)	1130	4	1587.1	1537.1
31	Trivandrum	1130	17	9	0
32	Kalimpong	0830	6	+2.7	-2.7
32	Mussooree	0830	28	Blank	0
32	Mussooree	1730	28	Blank	0
32	Simla	1730	28	Blank	0
32	Dalhousie	0830	28	Blank	0
32	Dalhousie	1730	28	Blank	0
33	Trincomalee	0830	5	1011.	1011.3
33	Trincomalee	1730	5	1009	1009.1
35	Motihari	Feb.1730	26	11	1
36	(Foot note)	-	-	(d) Mean of 27 days	(delete)
37	Dholpur	Jul.0830	15	8.4	8.4 (b)
37	Azamgarh	Aug.0830	15	(a)	5.2 (a)
37	Azamgarh	Aug.1730	15	5.2	0.9
37	Lakhimpur Kheri	Aug.0830	3	47	147
38	Minicoy	Aug.1730	4	1008	1008.9
38	Minicoy	Aug.2330	4	1011.	1011.2
38	Amini Divi	Aug.0830	4	1009.	1009.8
Table III(A)					
40	Jorhat	June	X	1957	1955
42	Gauhati	April	X	0.0	40.0
42	Gauhati	February	N	932	1932
42	Goalpara	July	R	595	1955
42	Dhubri	March	R	07.9	107.9
42	Dhubri	April	R	97.6	197.6
42	Dhubri	May	R	26.3	226.3
42	Dhubri	July	R	85.7	285.7
42	Dhubri	January	X	953	1953
42	Dhubri	February	R	904	1904
42	Dhubri (Rupsi Aero-drome)	July	R	60.0	160.0
42	Dhubri (Rupsi Aero-drome)	May	X	957	1957
42	Dhubri (Rupsi Aero-drome)	July	N	957	1957
42	Tura	May	R	93.3	193.3
42	Tura	July	N	956	1956
42	Agartala	March	X	195	1954
42	Agartala	June	X	1955	1953
42	Agartala	July	N	195	1955

contd 3.

Page No.	Station	Month/ Hour	Column	For	Read
42	Silchar	January	R	00.	100.1
42	Silchar	March	X	7.8	37.8
42	Silchar	June	R	27.3	227.3
42	Silchar	February	R	927	1927
42	Silchar	April	X	937	1937
42	Silchar	July	N	897	1897
42	Imphal	February	N and R	not clear	-1.1, 14.5
42	Imphal	March	X	1.1	31.1
42	Imphal	April	X	4.4	34.4
42	Imphal	February	X	195	1956
42	Imphal	February	N and R	not clear	1955 and 1957
42	Imphal	April	X	9 54	1954
42	Haflong	June	R	20.7	220.7
42	Haflong	February	N, R	1, 954	1957, 1954
42	Haflong	April	X	956	1956
42	Lumding	February	R	4.5	34.5
42	Lumding	February	R	957	1957
42	Lumding	July	R	956	1956
42	Cooch Behar (C.W.O)	April	X	9.4	39.4
42	Cooch Behar (C.W.O)	July	R	59.1	259.1
42	Jalpaiguri	July	R	90.4	390.4
42	Jalpaiguri	February	R	914	1914
42	Jalpaiguri	July	R	not clear	1892
42	Bagdogra	July	R	87.5	187.5
42	Bagdogra	February	R	952	1952
42	Bagdogra	March	X	195	1954
42	Malda	February	R	942	1943
44	Berhampore	January	N	3.1	3.9
45	Cuttack	November	R	194.6	195.6
46	Sambalpur	June	R	254.4	254.5
48	Varanasi (Benaras) (Babatpur Aerodrome)	March	X	31.3	41.1
50	Meerut	March	X	87.8	37.8
52	Mandi	June	N	1956	1954
52	Srinagar	June	X	5.8	37.8
54	Jodhpur	June	R	152.7	152.9
54	Alwar	June	X	1956	1957
55	Barmer	August	R	25.5	255.5
56	Alwar	September	X	38.8	37.8
55	Alwar	November	N	1957	1956
55	Jaipur	August	X	14.7, 1957	41.7, 1911
55	Jaipur (Sanganer Aerodrome)	August	X	1911. 38.3	38.3, 1955
55	Dholpur	August	X	1955, 39.0	39.0, 1957
56	Neemuch	March	N	1904	1905
56	Foot note	-	-	Highest Maximum Temperature	X = Highest Maximum Temperature
57	Alirajpur	August	R	140.6	140.7
60	Bombay (Santa Cruz Aerodrome)	May	X	1951	1950
60	Foot note	-	-	N = Lower Minimum Temperature	N = Lowest Minimum Temperature
61	Veraval	November	X	3.87	37.8
63	Baramati	August	X	32.2	32.3
66	Khammameth	May	R	1953	1948
68	Shimoga	July	R	195	1953
71	Cochin (Naval Air Stations)	September	R	1957	1956
71	Minicoy	December	R	87.5	187.5
71	Amini Divi	October	N	10.6	20.6
72	Mawsynram	May	R	450.5	450.9

contd 4.

Page No.	Station	Month/ Hour	Column	For	Read
72	Dalhousie	March	N	0.9	0
76	Heading		Month	(Not clear)	July
78	Gorkha	February	R	4.3	-
78	Pokhara	February	R	1957, 0	4.3, 1957
78	Nawakot	February	R	-	0
80	Gangtok	May	R	1956	1957
81	Geyzing	August	R	150.0	50.0
83	Bamrauli		5th	20th February 1930	28th February, 1930
83	Raxaul		1st	Raxual	Raxaul

* * * * *

Page No.	Station	Time in I.S.T.	Height in Km.	Existing entry n	V	v	D	Correct Entry n	V	v	D
Table IV											
85	Amausi	2330	0.9	31	8.9	5.3		30	9.2	5.4	
85	Ambala	0530	0.15 a.g.	19				29			
87	Bareilly	0530	4.5		29.9				29.0		
88	Bhubaneshwar	[illegible]	0.3amsl				Nil				065
89	Cochin	0530	1.5	3				30			
90	Gauhati	2330	3.6		13.0				31.8		
91	Gaya	1730	1.5	28				31			
91	Gorakhpur	1730	5.4				291				290
91	Gwalior	1730	7.2		45.4				45.0		
92	Jamshedpur	0530	5.4		23.7				23.9		
93	Jharsuguda	1730	0.3		6.6				5.6		
93	Madras	2330	1.5		21.1				12.1		
94	(Heading)	(Instead of July 1957, read December 1957)									
94	Mangalore	2330	Surface		3.3				3.8		
94	Mussoorie	1730	7.2			52.9				52.8	
96	Tezpur	0530	2.1	12				22			
97	Trivandrum	(Instead of 1730, read 1730*)									
97	Udaipur	(Instead of 1730, read 2330 i.e in 3rd column 1730)									
97	Trivandrum	2330	4.5				034				084
97	Udaipur	2330	4.5			218				21.8	
99	Bangalore	1730	30.0	(Instead of 30.3, read 30.0)							
99	Begumpet	1730	12.0		42.2				42.0		

Table VI		
102	Amritsar	Under column gpm and against standard pressure surface Mbs :- 400, 300, 250, 200, 175, 150, 125, 100 and 80 read, 7356, 9381, 10603, 12049, 12897, 13870, 15012, 1640 and —— (dash) respectively instead of Blank 7356, 9381 etc.
103	Trivandrum	Under column No. of Observations and against 850 mbs. read 31 instead of 21
105	Calcutta	Under column Mean of Temperature °A against 125 mbs. read 206.0 instead of 200.6

= =

	Rainfall (millimetres)	Percentage of normal	Mean maximum temperature °C	Mean minimum temperature °C	Relative humidity %		Cloud	
					0830 hrs. I.S.T.	1730 hrs. I.S.T.	0830 hrs. I.S.T.	173 hrs. I.S.T.
1	2	3	4	5	6	7	8	9
Division								
1. Assam (Including Manipur, Tripura)	16·1	196	24·6	12·8	86	75	2·6	1·4
	+7·9		+0·7	+1·2	0		0	
2. West Bengal	0·3	8	26·6	13·8	69	55	0·6	0·5
	—3·6		+1·0	+1·1	—4		—0·7	
3. Orissa	0	0	28·6	15·7	68	54	0·9	2·0
	—5·5		+1·7	+1·4	—4		—0·6	
4. Bihar	1·5	33	26·3	11·2	66	54	0·8	1·1
	—3·1		+2·0	+1·2	—7		—0·4	
5. Uttar Pradesh	17·0	167	23·4	9·8	80	59	2·1	2·5
	+6·8		—0·2	+1·7	+7		+0·7	
6. Punjab (I) (Including Himachal Pradesh & Delhi)*	30·3	212	22·1	8·6	85	62	2·7	3·1
	+16·0		—0·5	+2·0	+14		+0·7	
7. Jammu and Kashmir.	74·4	131	8·0	—0·8	72	73	5·6	5·1
	+17·8		—2·2	+0·4	+2		+1·5	
Sub-Division								
1. Bay Islands	6·9	3	31·1	24·1	71	79	4·1	4·6
	—194·3		+2·4	+1·4	0		—0·1	
2. Assam (Including Manipur, Tripura)	16·1	196	24·6	12·8	86	75	2·6	1·4
	+7·9		+0·7	+1·2	0		0	
3. Sub-Himalayan West Bengal	1·1	32	24·4	12·5	81	59	1·1	0·5
	—2·3		—0·1	+0·9	+2		+0·3	
4. Gangetic West Bengal.	0	0	27·1	14·2	66	54	0·4	0·4
	—4·1		+1·3	+1·2	—6		—1·0	
5. Orissa	0	0	28·6	15·7	68	54	0·9	2·0
	—5·5		+1·7	+1·4	—4		—0·6	
6. Chota Nagpur	0	0	26·7	11·2	62	50	0·5	1·0
	—6·1		+2·3	+1·2	—8		—0·8	
7. Bihar	2·2	56	26·0	11·3	70	58	1·0	1·2
	—1·7		+1·7	+1·1	—6		0	
8. Uttar Pradesh (East).	5·7	75	24·2	10·1	79	59	2·0	2·4
	—1·9		0	+1·5	+3		+0·8	
9. Uttar Pradesh (West).	27·0	214	22·7	9·6	81	59	2·2	2·6
	+14·4		—0·4	+1·9	+10		+0·6	
10. Punjab (India) (Including Delhi.)	30·3	212	22·1	8·6	85	62	2·7	3·1
	+16·0	..	—0·5	+2·0	+14		+0·7	
11. Himachal Pradesh.	77·2	..	19·3	6·0	98	69	7·5	4·1
	..		..	..	..		..	
12. Jammu and Kashmir.	74·4	131	8·0	—0·8	72	73	5·6	5·1
	+17·8		—2·2	+0·4	+2		+1·5	
13. Rajasthan (West).	5·8	181	24·4	9·7	66	36	2·1	2·3
	+2·6		—0·7	+1·7	+10		+0·4	
14. Rajasthan (East).	0·6	12	25·8	10·2	64	41	1·3	2·1
	—4·6		+0·3	+0·5	+7		0	
15. Madhya Pradesh (West).	2·9	32	27·3	11·8	59	37	1·8	2·3
	—6·1		+1·5	+2·1	—1		+0·3	
Division—(*Contd.*)								
8. Rajasthan	3·9	97	25·0	9·9	65	38	1·8	2·2
	—0·1		—0·3	+1·2	+9		+0·2	
9. Madhya Pradesh	1·7	21	27·6	11·9	61	40	1·6	2·3
	—6·5		+1·9	+2·1	—3		+0·1	
10. Bombay	0·8	19	30·5	16·1	62	44	1·7	1·8
	—3·5		+1·2	+1·8	+2		+0·2	
11. Andhra Pradesh	0	0	29·7	18·2	75	54	2·6	2·9
	—15·7		+1·1	+1·2	+2		+0·2	
12. Madras	150·9	130	28·5	21·6	80	67	5·3	5·6
	+35·2		—0·2	+1·0	—1		+1·4	
13. Mysore	0·5	6	29·3	17·6	70	43	3·2	3·7
	—8·1		+0·7	+1·3	+3		+0·8	
14. Kerala	28·0	65	31·5	23·9	78	70	4·9	5·2
	—15·0		+0·9	+1·3	+1		+1·9	
Mean of India	11·7	90	27·3	13·9	70	50	2·1	2·4
(Excluding Jammu and Kashmir and Himachal Pradesh).	—1·3		+0·9	+1·5	+2		+0·2	
Sub-Division-(*Contd.*)								
16. Madhya Pradesh (East).	0	0	27·9	11·9	63	44	1·5	2·3
	—7·1		+2·5	+2·2	—7		—0·1	
17. Gujarat	0·9	64	31·5	14·3	63	40	1·5	1·2
	—0·5		+1·5	+2·4	+1		+0·3	
18. Saurashtra and Kutch	3·1	163	28·8	13·8	58	39	1·2	1·1
	+1·2		+0·3	+0·8	+5		—0·1	
19. Konkan	0	0	30·9	20·9	69	64	2·0	2·0
	—3·1		+0·9	+1·7	+2		+0·3	
20. Maharashtra	0	0	30·7	15·0	61	36	2·0	2·3
	—6·0		+1·7	+2·3	+3		+0·4	
21. Vidarbha	0	0	30·2	14·4	60	40	1·8	2·6
	—10·0		+1·9	+1·7	—2		+0·2	
22. Coastal Andhra Pradesh.	0	0	29·4	19·1	76	65	2·9	3·2
	—23·0		+1·2	+0·7	+1		+0·1	
23. Telangana	0	0	29·4	15·4	72	40	2·3	2·6
	—6·0		+1·1	+1·8	+4		+0·4	
24. Rayalaseema	0	0	31·1	19·3	75	43	2·3	2·3
	—10·7		+1·1	+1·9	+1		0	
25. Madras	150·9	130	28·5	21·6	80	67	5·3	5·6
	+35·2		—0·2	+1·0	—1		+1·4	
26. Coastal Mysore	0·8	10	33·0	22·3	67	63	3·5	3·8
	—7·1		+0·8	+1·0	+2		+0·8	
27. Mysore (North)	0	0	29·5	16·9	65	38	2·5	3·2
	—6·7		+0·9	+1·4	+3		+0·7	
28. Mysore (South)	0·8	7	27·7	16·8	77	42	3·9	4·3
	—10·3		+0·3	+1·3	+4		+0·8	
29. Kerala (Including Laccadives.)	28·0	65	31·5	23·9	78	70	4·9	5·2
	—15·0		+0·9	+1·3	+1		+1·9	

NOTE :—The entries in the second line for each division and sub-division indicate departures from normal.
*Data of Himachal Pradesh not included.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Bay Islands																												
Maya Bandar	27·4	..	30·4	21	23·7	..	21·2	28	0	0	..	0	..	0	..	15·6	10·0	..	0	0	0	0	0	0	0	0	0	0
Long Island	30·2	..	31·1	8,9, 24	23·0	..	20·6	28	7·9	9·4	..	7·9	18	1	..	2·3	1·2	..	2	0	0	0	0	0	0	0	0	0
Port Blair	31·1	+2·4	32·1	20	24·1	+1·4	20·2	28	9·1	6·9	−194·3	3·1	5	2	−5·2	13·5	11·8	−2·8	3	0	0	2	2	0	0	0	0	0
Car Nicobar	29·7	..	30·6	2,3, 30	24·7	..	19·9	26	148·6	264·2	..	158·8	6	8	..	8·7	6·8	..	10	0	0	2	0	0	0	0	0	0
Nancowry	30·9	..	32·2	7	24·4	..	22·9	4	115·6	353·8	..	87·3	4	15	..	0·5	0·3	..	18	0	0	13	0	0	0	0	0	0
Kondul	28·6	..	29·4	2,3	24·9	..	23·1	6	64·3	270·1	..	40·4	3	15	..	10·7	8·7	..	19	0	0	0	0	0	0	1	0	
Assam (Including Manipur, Tripura)																												
Pasighat	22·8	..	25·1	8	13·2	..	10·8	27	3·6	40·7	..	20·8	10	4	..	8·2	13·1	..	4	0	0	0	0	0	0	0	0	0
Digboi	23·5	..	27·4	11	11·4	..	9·1	22,23	1·0	40·5	..	25·4	11	2	..	2.8	2·0	..	5	0	0	0	0	0	0	0	0	0
Dibrugarh	24·0	+0·7	26·0	8	12·0	+1·4	10·6	23,25, 26	9·1	26·7	+10·7	11·4	1	3	+1·6	1·6	1·0	+0·2	3	0	0	0	10	0	0	0	0	0
Dibrugarh (Mohanbari Aerodrome)	23·2	..	24·5	8	10·2	..	8·2	22	8·1	23·6	..	11·4	11	2	..	3·9 (g)	2·0 (f)	..	3	0	0	1	31	0	0	0	0	0
North Lakhimpur	23·5	..	25·4	6	9·6	..	6·6	30	10·4	51·3	..	21·6	10	3	..	6·8	4·3	..	4	0	0	0	7	0	0	0	0	0
Sibsagar	23·9	+1·6	26·1	7	11·8	+1·3	9·1	25	0	20·6	+5·9	11·7	11	2	+0·5	1·0	0·7	−0·9	3	0	0	0	21	0	0	0	0	0
Jorhat	23·5	..	25·0	10	11·4	..	9·2	26	0	10·9	..	9·9	11	1	..	..	..	..	2	0	0	2	31	0	0	0	0	0
Golaghat	23·9	..	25·6	7,17	..	..	..	..	2·5	25·4	..	25·4	11	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Gohpur (R)																												
Tezpur	24·7	+0·7	26·7	8	13·1	+0·8	10·8	4	4·6	8·2	+1·9	8·2	11	1	+0·3	3·1	1·9	−0·3	1	0	0	0	0	0	0	0	0	0
Tezpur (P.B.O.)	23·7	..	25·6	8	12·2	..	9·6	23	5·6	5·6	..	5·6	11	1	..	4·2	2·1	..	1	0	0	1	6	0	0	0	0	0
Majbat	..	..	..	..	..	..	..	..	1·3	24·6	..	9·4	11	3	..	2·6	3·4	..	3	0	0	2	7	0	0	0	0	0
Chap armukh	26·1	..	28·0	4,7	13.8	..	12.0	30,31	0	13·0	..	9·9	11	2	..	..	..	..	2	0	0	1	9	0	0	0	0	0
Tangla	24·8	.	26·8	6	11·1	..	8·8	24	0	29·2	..	15·2	11	2	..	4·5	3·0	..	3	0	0	0	0	0	0	0	0	0
Gauhati	24·5	+0·3	26·8	9,10	13·5	+2·0	11·2	23	0	26·4	+22·3	21·3	10	2	+1·5	3·2	1·8	0	2	0	0	0	8	0	0	0	0	0
Gauhati (Kaikuchi Aerodrome)	25·0	..	30·9	18	11·8	..	9·3	23	0	0·3	..	0·3	1	0	..	5·6	1·6	..	1	0	0	0	18	0	0	0	0	0
Rangiya	24·4	..	27·3	8,9	..	..	..	..	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Goalpara	26·0	..	..	..	12·3	..	10·2	23	0	2·0	..	1·5	9	0	..	3.6	2·2	..	2	0	0	0	0	0	0	0	0	0
Dhubri	23·6	+0·2	26·2	11,21	15·1	+1·9	13·2	25	0	0	−1·8	0	0	0	−0·1	3·0	3·3	−2·3	0	0	0	0	0	0	0	0	0	0
Dhubri (Rupsi Aerodrome)	25·5	..	26·8	6,7,8	11·9	..	9·8	25,27	0	0	..	0	..	0	..	4·6 (h)	3·2 (g)	..	0	0	0	0	5	0	0	0	0	0
Tura	24·8	..	26·7	8	14·5	..	12·9	27	0	0	..	0	0	0	..	4·3	5·2	..	0	0	0	0	0	0	0	0	0	0
Agartala	26·9	..	28·9	11	11·1	..	8·5	29	0	0·5	..	0·5	13	0	..	6·3	3·4	.	1	0	0	0	4	0	0	0	0	0
Silchar	26·1	−0·5	29·5	3	13·2	+0·6	10·8	31	0	0	−10·7	0	..	0	−0·7	1·4	0·8	−0·6	0	0	0	0	0	0	0	0	0	0
Silchar (Kumbhigram Aerodrome)	27·3	..	29·6	23	12·5	..	10·3	24	0	0·8	..	0·8	13	0	..	5·1	7·7	..	1	0	0	0	0	0	0	0	0	0
Imphal	22·3	..	23·7	5,6	4·3	..	0·2	26	0	0	..	0	..	0	..	6·1	3·5	..	0	0	0	0	22	0	0	0	0	0
Haflong	21·9	..	23·9	5	11·3	..	10·2	22	0	0	..	0	..	0	..	..	..	..	0	0	0	0	7	0	0	0	0	0
Lumding	25·3	+2·0	27·2	10	11·0	+0·6	7·1	25	6·6	30·8	+27·2	21·1	10	3	+2·6	1·7	1·0	..	3	0	0	0	6	0	0	0	0	0
Sub-Himalayan West Bengal																												
Cooch Behar (C.W.O.)	25·4	..	26·9	5,7	11·1	..	8·8	24	0	0	−4·1	0	..	0	−0·3	5·1	2·5	..	0	0	0	0	18	0	0	0	0	0
Jalpaiguri	22·9	−1·9	26·7	4	12·5	+0·7	10·7	28	0	3·3	−1·0	3·3	14	1	+0·6	5·3	3·7	+2·4	1	0	0	0	0	0	0	0	0	0
Bagdogra	25·0	..	26·9	5	10·5	..	8·2	23,24	0·8	0·8	..	0·8	10	0	..	5·3	3·8	..	1	0	0	1	0	0	0	0	0	0
Malda	25·9	+1·6	27·8	6,9,10	12·4	+1·0	9.3	28	0	0	−1·8	0	..	0	−0·2	6·2	4·1	−0·4	0	0	0	0	1	0	0	0	0	0
Gangetic West Bengal																												
Dum Dum	27·8	..	30·1	9,13	13·3	..	10·3	31	0	0	..	0	..	0	..	5·8	3·1	..	0	0	0	0	7	0	0	0	0	0
Calcutta	28·2	+1·9	30·7	9	14·6	+1·8	10·9	30	0	0	−4·6	0	..	0	−0·3	4·9	2·6	−0·5	0	0	0	0	16	0	0	0	0	0
Barrackpore	27·3	..	29·9	9	13·0	..	9·9	30,31	0	0	..	0	..	0	..	..	..	..	0	0	0	0	9	0	0	0	0	0
Saugor Island	26·1	+1·2	28·2	11,13	17·1	+2·0	14·3	24	0	0	−5·3	0	..	0	−0·4	..	..	..	0	0	0	0	9	0	0	0	0	0
Sandheads	..	..	..	..	..	..	..	..	0	0	−3·8	0	..	0	−0·3	..	..	..	0	0	0	0	0	0	0	0	0	0
Contai	27·9	..	30·1	12	15·1	..	11·7	23	0	0	..	0	..	0	..	4·1	3·2	..	0	0	0	0	0	0	0	0	0	0
Midnapore	28·1	+1·5	31·7	13	13·9	+0·8	9·6	24	0	0	−4·1	0	..	0	−0·3	4·2	2·7	+0·4	0	0	0	0	0	0	0	0	0	0
Purulia	27·1	..	30·1	13	13·4	..	10·4	22,24	0	0	..	0	..	0	..	3·7	2·7	..	0	0	0	0	0	0	0	0	0	0
Bankura	..	..	..	..	..	..	..	..	..	0	−2·8	0	..	0	−0·3	..	..	..	0	..	..	..	..	..	..	..	..	..
Burdwan	24·3	−1·8	30·2	9	13·7	+0·4	11·2	31	0	0	−4·8	0	..	0	−0·3	2·4	1·8	−0·1	0	0	0	0	0	0	0	0	0	0
Krishnagar	29·2	+3·3	31·7	9	12·8	+1·1	9·4	30	0	0	−2·8	0	..	0	−0·2	3·5	2·6	+0·8	0	0	0	0	0	0	0	0	0	0
Asansol	27·5	+1·6	30·2	10	13·2	+1·3	10·0	22,23	0	0	−4·6	0	..	0	−0·4	6·9	4·4	−0·9	0	0	0	0	0	0	0	0	0	0
Suri	26·7	..	29·6	10	13·9	..	11·0	31	0	0	..	0	..	0	..	7·1	5·3	..	0	0	0	0	0	0	0	0	0	0
Berhampore	26·5	+1·4	30·6	10	13·9	+1·1	11·2	30	0	0	−4·1	0	..	0	−0·4	0·3	0	−1·4	0	0	0	0	0	0	0	0	0	0
Orissa																												
Baripada	29·5	..	32·6	10	..	..	..	..	0	0	..	0	..	0	..	2·5	1·1	..	0	0	0	0	1	0	0	0	0	0
Balasore	28·7	+2·0	31·1	12	14·8	+1·6	10·5	26	0	0	−4·1	0	..	0	−0·3	6·3	3·4	+0·8	0	0	0	0	0	0	0	0	0	0

(f) Mean of 25 days. (g) Mean of 24 days. (R) Register not received. (h) Mean of 23 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Orissa—(*Contd.*)																												
Chandbali	26·0	—0·8	27·5	1,19	15·5	+1·2	11·1	23	0	0	—0·8	0	..	0	—0·1	6·7	4·7	—0·6	0	0	0	0	0	0	0	0	0	0
Cuttack	30·2	+2·9	32·6	13	16·5	+1·7	12·7	24,31	0	0	—5·8	0	..	0	—0·4	3·1	2·7	+1·3	0	0	0	0	0	0	0	0	0	0
Bhubaneswar	29·6	..	32·7	13	16·8	..	12·8	24	0	0	..	0	..	0	..	6·8	6·2	..	0	0	0	0	0	0	0	0	0	0
Puri	28·1	+1·2	29·8	21	18·5	+1·6	15·6	24	0	0	—6·1	0	..	0	—0·4	11·3	11·0	+1·7	0	0	0	0	0	0	0	0	0	0
Gopalpur	29·3	+2·4	31·1	12	17·2	+1·1	14·7	24,31	0	0	—13·5	0	..	0	—0·7	..	..	..	0	0	0	0	0	0	0	0	0	0
Koraput	25·3	..	27·8	17	12·0	..	7·8	31	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Titilagarh	27·9	..	31·2	13	13·5	..	8·3	31	0	0	..	0	..	0	..	3·0	1·7	..	0	0	0	0	14	0	0	0	0	0
Bolangir	29·4	..	31·2	5days	12·7	..	9·4	31	0	0	..	0	..	0	..	6·5	4·5	..	0	0	0	0	0	0	0	0	0	0
Angul	28·8	+2·1	31·7	13	14·2	+1·4	10·7	23	0	0	—3·6	0	..	0	—0·4	4·6	4·4	—0·4	0	0	0	0	1	0	0	0	0	0
Keonjhar	27·1	..	29·3	13	12·8	..	9·7	24	0	0	..	0	..	0	..	5·2	3·7	..	0	0	0	0	2	0	0	0	0	0
Sambalpur	28·9	+2·1	31·2	13	13·2	+1·1	8·9	31	0	0	—4·3	0	..	0	—0·3	1·1	0·3	—2·8	0	0	0	0	29	0	0	0	0	0
Jharsuguda	29·4	..	31·1	13,14	13·0	..	8·3	31	0	0	..	0	..	0	..	5·9	4·8	..	0	0	0	0	0	0	0	0	0	0
Chota Nagpur																												
Jamshedpur	28·0	+1·4	31·0	13	12·6	+1·8	8·3	23	0	0	—5·8	0	..	0	—0·4	4·2	2·4	0	0	0	0	0	0	0	0	0	0	0
Jamshedpur (P.B.O.)	27·8	..	31·3	13	12·3	..	7·8	23	0.3	0	..	0·3	10	0	..	5·6	3·0	..	1	0	0	0	0	0	0	0	0	0
Chaibasa	28·2	+2·5	31·1	13	12·6	+1·7	8·7	23,24	0	0	—4·6	0	..	0	—0·4	2·0	1·2	—0·6	0	0	0	0	0	0	0	0	0	0
Ranchi	26·0	+3·3	29.5	10	10·7	+0·4	7·8	24, 29,31	0	0	—6·9	0	..	0	—0·6	2·5	1·9	—2·8	0	0	0	0	0	0	0	0	0	0
Ranchi (C.W.O.)	24·7	..	27·8	13	11·0	..	7·3	29	0	0	..	0	..	0	..	..	7·4	..	0	0	0	0	0	0	0	0	0	0
Daltonganj	26·4	+1·7	30·9	13	9·7	+1·6	5·1	23	0	0	—6·3	0	..	0	—0·5	3·8	2·1	—0·3	0	0	0	0	0	0	0	0	0	0
Hazaribagh	25·1	+2·7	28·3	13	10·5	+0·5	5·5	23	0	0	—6·9	0	..	0	—0·5	8·5	6·2	—1·0	0	0	0	0	0	0	0	0	0	0
Dhanbad	26·8	..	30·0	13	13·8	..	10·7	23	0	0	..	0	..	0	..	5·5	4·5	..	0	0	0	0	13	0	0	0	0	0
Bihar																												
Purnea	26·2	+1·6	28·8	5	10·2	+0·5	7·1	25	0	4·6	+1·5	4·6	12	1	+0·7	5·0	2·3	+0·5	1	0	0	0	1	0	0	0	0	0
Forbesganj	26·8	..	29·0	5,6	11·2	..	8·6	30	3·1	5·1	..	3·1	13	1	..	5·3	2·9	..	2	0	0	0	21	0	0	0	0	0
Darbhanga	25·9	+1·2	27·8	15,,9	12·7	+1·7	10·0	22	0	4·4	+1·3	3·6	12	1	+0·7	0·5	0·1	—1·7	2	0	0	0	0	0	0	0	0	0
Motihari (R)																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	6·9	+3·8	6·9	12	1	+0·7	..	..	..	1	..	..	..	..	..	..	..	..	..
Chapra	..	..	..	..	..	..	..	..	..	2·5	—1·1	2·5	18	1	+0·6	..	..	..	1	..	..	..	..	..	..	..	..	..
Arrah	..	..	..	..	..	..	..	..	..	0	—4·3	0	..	0	—0·5	..	..	..	0	..	..	..	..	..	..	..	..	..
Patna	25·5	+1·8	27·8	6,9	12·5	+1·2	8·9	24	0	1·6	—4·0	1·3	18	0	—0·5	4·7	4·4	+1·7	2	0	0	0	0	0	0	0	0	0
Patna(Aerodrome)	25·2	..	27·2	9	10·7	..	6·4	24	0	20·9	..	19·6	12	1	..	6·3	2·7	..	2	0	0	0	5	0	0	0	0	0
Dehri	25·8	..	28·1	13	12·1	..	7·6	24	0	0	—4·6	0	..	0	—0·5	5·3	3·4	..	0	0	0	0	0	0	0	0	0	0
Gaya	25·7	+2·0	27·8	26	10·3	+1·1	6·2	24	0	0	—4·6	0	..	0	—0·4	3·7	1·9	—3·1	0	0	0	0	0	0	0	0	0	0
Jamui	26·2	..	29·2	6	11·5	..	8·5	29	0	0	..	0	..	0	..	5·3	2·6	..	0	0	0	0	0	0	0	0	0	0
Dumka	26·8	+2·1	29·2	9	11·7	+0·8	8·2	25,29	0	0	—3·3	0	..	0	—0·3	0·1	0·1	—1·7	0	0	0	0	0	0	0	0	0	0
Bhagalpur	25·8	..	28·9	6	13·5	..	11·1	25, 29,30	0	1·5	..	1·5	12	0	..	5·9	4·1	..	1	0	0	0	2	0	0	0	0	0
Sabour	25·7	+1·4	28·9	6	10·2	+1·4	6·7	29	0	1·8	—1·3	1·8	12	0	—0·1	7·3	3·5	—0·8	1	0	0	0	0	0	0	0	0	0
Uttar Pradesh (East)																												
Gonda	24·1	—0·2	26·6	20	9·0	+0·3	5·6	22	3·6	6·1	—2·0	3·6	18	2	+0·9	3·5	2·6	—0·8	2	0	0	1	0	0	0	0	0	0
Nautanwa	26·0	..	28·4	1	11·1	..	8·4	27	1·8	12·8	..	9·7	12	1	..	3·1	2·2	..	3	0	0	0	3	0	0	0	0	0
Gorakhpur	24·9	+1·3	26·9	1	11·9	+2·0	9·4	22,23	6·3	10·9	+6·1	6·3	18	2	+1·6	3·5	1·7	+0·4	2	0	0	1	0	0	0	0	0	0
Azamgarh	25·0	..	27·6	3	10·6	..	7·0	24	3·1	13·5	..	10·4	12	2	..	..	..	..	2	0	0	0	0	0	0	0	0	0
Ballia	25·2	..	27·6	9	9·8	..	6·3	1,2	0	1·8	..	1·8	18	0	..	4·8	2·5	..	1	0	0	0	0	0	0	0	0	0
Varanasi(Banaras)	24·5	+0·5	28·0	26	10·5	+1·5	5·1	24	1·3	1·3	—5·6	1·3	8	0	—0·5	6·5	5·0	+2·1	1	0	0	0	0	0	0	0	0	0
Varanasi (Banaras) (Babatpur Aerodrome).	24·6	..	27·3	26	10·2	..	5·6	23	0·5	0·5	..	0·5	12	0	..	8·4	5·2	..	1	0	0	0	0	0	0	0	0	0
Allahabad (Bamrauli).	25·6	+1·3	28·2	6	10·6	+2·2	6·0	23	0·5	1·3	—7·3	1·3	7	0	—0·7	5·6	3·3	—0·1	1	0	0	0	0	0	0	0	0	0
Banda	25·1	..	29·0	6	10·4	..	5·3	22	0	2·5	..	2·5	7	1	..	0·9	0·3	..	1	0	0	0	0	0	0	0	0	0
Fatehpur	22·9	—1·6	26·2	1,2	9·5	+1·2	4·5	22	0	0	—8·6	0	..	0	—1·1	6·4	3·1	+0·5	0	0	0	0	1	0	0	0	0	0
Kanpur	20·9	—2·4	27·1	12	9·0	+0·9	5·8	22	0	21·0	+13·9	19·0	17	1	+0·2	10·0	6·9	+3·5	2	0	0	0	10	0	0	0	0	0
Lucknow	23·4	—1·0	26·1	3	10·1	+1·6	6·5	22	7·4	9·2	+1·1	4·3	18	2	+1·3	..	..	..	3	0	0	0	6	0	0	0	0	0
Lucknow (Amausi Aerodrome)	23·8	—0·6	25·6	3,4	8·6	+1·7	4·0	22	9·0	10·8	+2·7	4·6	8	2	+1·3	8·9	5·6	..	3	0	0	1	5	0	0	0	0	0
Hardoi	23·6	..	26·2	3	9·9	..	6·9	21	7·6	12·4	..	7·6	8	2	..	5·8	3·6	..	3	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri	23·6	..	25·9	10	10·6	..	7·5	22,30	0·3	6·9	..	6·9	12	1	..	2·8	1·8	..	1	0	0	0	0	0	0	0	0	0
Bahraich	22·9	—1·0	25·8	23	10·3	+1·3	7·1	22	2·0	3·8	—4·8	2·0	18	0	—0·9	3·4	2·1	+0·2	2	0	0	1	4	0	0	0	0	0

(R) Register not received.

TABLE II—SUMMARY OF OBSERVATIONS OF TEMPERATURE, RAINFALL AND WEATHER.—DECEMBER, 1957. (AGRAHAYANA 10-PAUSA 10, 1879 SAKA)

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Uttar Pradesh (West)																												
Orai	24·3	..	29·0	12	7·7	..	3·9	22,23	0	5·6	..	5·1	17	1	..	6·8	4·1	..	2	0	0	0	0	0	0	0	0	0
Jhansi	24·9	—0·7	31·2	12	10·4	+1·3	6·4	22	0	6·9	—0·5	5·6	7	1	+0·2	5·6	2·7	0	2	0	0	1	0	0	0	0	0	0
Agra	22·9	—1·2	28·9	12	9·5	+1·6	5·0	22	0	3·3	—4·3	1·3	12	0	—0·8	4·5	2·7	—1·0	3	0	0	0	0	0	0	0	0	0
Agra (Aerodrome) (R)																												
Mainpuri	24·5	+0·4	27·3	7	10·0	+2·1	6·2	21,22, 23	0	8·9	—0·5	7·6	12	1	+0·2	1·9	0·6	—1·2	2	0	0	1	0	0	0	0	0	0
Aligarh	22·6	—0·7	25·2	3	9·0	+0·6	6·1	22,23	0	12·7	+1·8	10·2	7	2	+0·8	7·3	6·0	+1·2	2	0	0	1	1	0	0	0	0	0
Bareilly	23·0	+0·2	24·7	4,9,10	10·6	+2·5	6·7	22	1.8	4·8	—5·6	2·5	12	1	0	4·3	2·7	+0·8	3	0	0	0	3	0	0	0	0	0
Meerut	22·2	—0·5	25·3	2	9·5	+2·5	4·9	22	..	17·8	+5·6	17·8	12	1	—0·2	..	4·1	..	1	0	0	0	0	0	0	0	0	0
Najibabad	21·9	..	24·4	3	8·5	..	4·8	21	17·5	29·8	..	25·9	12	2	..	1·9	0·9	..	3	0	0	0	1	0	0	0	0	0
Roorkee	21·3	—0·5	23·3	9	9·6	+3·3	6·8	29	40·9	69·5	+52·2	54·9	12	2	+0·7	5·0	3·0	+0·9	4	0	0	0	0	0	0	0	0	0
Dehra Dun	20·3	—0·1	23·4	30	8·4	+1·1	5·2	16	53·1	92·2	+66·3	78·7	12	2	+0·3	2·5	1·9	—0·5	4	0	0	0	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
New Delhi	22·3	—0·8	25·9	31	9·6	+2·8	5·8	23	8·1	18·3	+7·4	13·5	12	2	+1·1	13·1	8·9	+0·5	3	0	0	0	6	0	0	0	0	0
Hissar	22·7	—0·7	25·9	2	7·7	+1·5	3·9	20	10·2	14·0	+4·1	10·2	12	2	+1·0	5·5	4·9	+0·1	2	0	0	0	4	0	0	0	0	0
Karnal	21·1	..	24·0	2	8·7	..	5·1	22	15·3	38·7	..	17·0	12	3	..	..	..	..	3	0	0	0	0	0	0	0	0	0
Patiala	20·6	..	23·9	2	8·9	..	4·6	22	21·3	43·9	+31·0	21·3	12	2	+0·8	8·9	7·0	..	3	0	0	0	0	0	0	0	0	0
Ambala	22·2	—0·2	24·7	6	8·8	+2·2	5·1	15	20·3	40·9	+21·6	20·3	12	2	+0·5	5·5	5·0	+1·6	3	0	0	0	0	0	0	0	0	0
Ambala (Aerodrome) (R)																												
Chandigarh	21·7	..	26·4	22	9·8	..	6·6	21	15·3	52·4	..	28·7	11	3	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Ludhiana	21·3	—0·3	25·3	4	8.2	+1·4	5·2	21	3·6	34·3	+16·0	25·4	11	4	+2·6	3·7	2·6	+0·8	4	0	0	0	1	0	0	0	0	0
Ferozepur	20·5	..	24·6	3	7·5	..	3·8	21	0	52·1	..	44·5	11	2	..	2·8	1·3	..	2	0	0	0	3	0	0	0	0	0
Amritsar	19·8	..	24·0	1	6·0	..	2·2	18,21	4·9	29·0	..	18·0	11	3	..	5·0	3·1	..	4	0	0	0	13	0	0	0	0	0
Pathankot	19·9	..	23·3	1	9·1	..	6·0	28	34·6	60·3	..	30·0	12	4	..	2·8	2·2	..	5	0	0	0	0	0	0	0	0	0
Pathankot Aerodrome (R)																												
Himachal Pradesh																												
Bilaspur	19·8	..	23·9	30	7·1	..	3·4	29	24·6	65·4	..	25·9	12	6	..	3·1	2·5	..	8	0	0	0	26	0	0	0	0	0
Mandi	18·9	..	23·9	30	4·9	..	—1·0	21	34·5	89·0	..	24·1	12	6	..	2·4	2·1	..	8	0	0	0	21	0	0	0	0	0
Jammu and Kashmir																												
Srinagar	6·6	—2·4	10·7	1	0·9	+3·3	—1·9	21	22·9	51·9	+18·4	13·7	12	6	+2·6	4·4	4·4	+1·2	8	1	0	0	4	0	10	0	0	0
Gulmarg	Closed during winter months																											
Sonamarg*																												
Dras (R)																												
Kargil (R)																												
Leh	—2·6	—4·4	5·8	4	—12·9	—2·2	—18·8	16	4·5	23·5	+18·7	8·8	12	4	+3·4	3·9	3·3	+1·0	6	11	0	0	0	0	0	0	0	0
Skardu (R)																												
Gurez	..	..	..	..	..	..	..	..	..	50·1	—20·3	12·7	21	6	—0·5	..	..	..	7	..	..	..	..	..	..	..	..	..
Gilgit (R)																												
Misgar (R)																												
Jammu	20·1	+0·1	23·9	1	9·5	0	7·3	20,23	..	63·5	+32·0	30·5	12	4	+1·4	..	..	..	5	0	0	0	0	0	0	0	0	0
Gund (R)																												
Pandras	..	..	..	..	..	..	..	..	..	17·5	..	2·5	12	1	..	..	..	..	15	..	..	..	..	..	..	..	..	..
Panamik	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Khangral	..	..	..	..	..	..	..	..	..	3·9	..	1·0	12	0	..	..	..	..	7	..	..	..	..	..	..	..	..	..
Digar	..	..	..	..	..	..	..	..	..	23·1	..	12·2	11	2	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Khalatse (R)																												
Mulbik	..	..	..	..	..	..	..	..	..	30·7	..	7·6	12	6	..	..	..	..	8	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Sri Ganganagar	21·6	—1·5	26·0	2	8·3	+3·9	4·8	20	3·0	28·7	+25·6	20·8	11	2	+1·0	0·9	1·0	—4·8	4	0	0	0	5	0	0	0	0	0
Churu	23·4	..	28·2	4	6·5	..	0·9	21	1·8	2·3	..	1·0	7	0	..	5·8	3·0	..	3	0	0	0	5	0	0	0	0	0
Bikaner	23·1	—1·6	27·3	3	6·5	+0·9	0·9	21	0·5	0·5	—4·6	0·5	7	0	—0·5	4·3	3·6	—0·4	1	0	0	0	2	0	0	0	0	0
Jaisalmer	24.9	..	28·3	3	9·9	..	3·5	26	0	6·3	..	6·3	11	1	..	8·1	8·4	..	1	0	0	0	3	0	0	0	0	0
Phalodi	23·1	..	26·1	1	8·9	..	5·7	21,22	0	0	—2·5	0	..	0	—0·2	9·2	7·4	..	0	0	0	0	0	0	0	0	0	0
Jodhpur	26·2	+0·1	30·5	2	11·3	+1·0	6·0	23	0	0	—2·8	0	..	0	—0·3	8·7	8·0	—1·8	0	0	0	0	0	0	0	0	0	0
Barmer	26·7	0	30·8	3	12·8	+0·9	9·7	20	0	0	—2·5	0	..	0	—0·3	9·0	8·5	+1·9	0	0	0	0	0	0	0	0	0	0

(R) Register not received.

*Data not reliable.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Rain	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rajasthan (East)																												
Alwar	23·5	..	26·7	12	..	..	..	..	6·3	6·3	..	6·3	12	1	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Sikar	22·4	..	27·9	3,4	7·4	..	0·6	21	1·8	3·1	..	2·0	7	0	..	7·5	4·8	..	2	0	0	0	0	0	0	0	0	0
Jaipur	24·4	—0·3	27·2	2	10·2	+1·5	4·4	21	0·8	1·6	—6·0	1·6	12	0	—0·7	6·1	5·2	+0·2	1	0	0	0	0	0	0	0	0	0
Jaipur (Sanganer) Aerodrome)	23·9	..	26·7	2	10·1	..	5·0	18	0	0	..	0	..	0	..	..	..	..	0	0	0	0	1	0	0	0	0	0
Dholpur	24·9	..	31·3	12,16	7·9	..	3·3	21,25	0·5	2·6	..	1·3	7,12	0	..	7·2	4·3	..	2	0	0	0	0	0	0	0	0	0
Ajmer	23·9	—0·2	26·7	3,5,6	7·3	—0·8	1·8	21	0	0	—6·6	0	..	0	—0·4	5·4	3·6	+1·7	0	0	0	0	0	0	0	0	0	0
Kotah	26·6	+0·4	30·7	12	12·0	+0·8	8·5	22	0	0	—5·3	0	..	0	—0·5	3·5	1·9	+0·3	0	0	0	1	0	0	0	0	0	0
Chambal	26·9	..	30·6	5,6	8·8	..	4·6	24	0	0	..	0	..	0	..	7·0	4·3	..	0	0	0	0	0	0	0	0	0	0
Jhalawar	26·9	+1·2	31.0	4,6	11·3	+2·0	8·0	22,23, 24	1·5	3·1	—1·7	3·1	7	1	+0·7	6·0	4·2	+1·8	1	0	0	13	0	0	0	0	0	0
Udaipur	26·5	+0 8	30·1	2	8·5	—0·7	4·6	22	0	0·3	—2·5	0·3	12	0	—0·3	2·6	1·4	..	1	0	0	0	0	0	0	0	0	0
Erinpura (Jawai Dam).	26·3	..	29·9	6	10·4	..	6·7	26,27	3·8	3·8	..	3·8	12	1	..	4·2	3·3	..	1	0	0	0	0	0	0	0	0	0
Madhya Pradesh (West)																												
Gwalior (P.B.O.)	24·2	—0·4	30·4	12	8·6	+1·5	2·7	21	2·3	9·2	+3·1	6·1	6	2	+1·3	7·8	5·0	..	2	0	0	1	1	0	0	0	0	0
Sheopur Kalan	26·0	..	30·0	12	8·6	..	4·1	19	0·0	0	..	0	..	0	..	6·5	5·4	..	0	0	0	0	0	0	0	0	0	0
Guna	26·1	+0·6	29·5	12	9·7	+2·2	3·9	29	0·8	0·8	—9·9	0·8	7	0	—1·2	8·5	5·6	..	1	0	0	1	1	0	0	0	1	0
Rajgarh	28·6	..	31·7	12	10·8	..	5·3	18	5·1	9·4	..	9·4	7	1	..	7·8	5·6	..	1	0	0	0	0	0	0	0	0	0
Neemuch	26·7	+0·9	30·0	2	11·6	+1·9	8·0	24	0	0	—4·6	0	..	0	—0·5	6·9	5·3	—0·3	0	0	0	0	0	0	0	0	0	0
Ratlam	29·0	..	31·6	3	15·1	..	12·2	24	0	0	..	0	..	0	..	6·4	6·1	..	0	0	0	0	0	0	0	0	0	0
Alirajpur	30·5	..	32·2	2	13·3	..	10·0	24	0	0	..	0	..	0	..	6·2	5·2	..	0	0	0	0	0	0	0	0	0	0
Indore	28·4	+1·9	30·4	12	11·7	+1·9	7·8	18	0	0·3	—6·6	0·3	7	0	—0·6	10·4	8·3	..	1	0	0	0	0	0	0	0	0	0
Bhopal (Bairagarh)	27·6	+1·9	29·8	9	12·6	+2·8	9·1	25	0	2·3	—2·8	2·3	7	0	—0·5	8·4	7·8	+2·0	1	0	0	0	0	0	0	0	1	0
Khandwa	31·7	+2·8	33·9	12	15·0	+4·2	11·7	25	0	0	—8·1	0	..	0	—0·5	6·3	4·0	+0·5	0	0	0	0	0	0	0	0	0	0
Hoshangabad	28·8	+2·1	31·6	12	15·6	+3·4	10·5	30	0	0	—11·9	0	..	0	—0·7	2·5	1·5	—1·6	0	0	0	0	0	0	0	0	0	0
Betul	28·6	..	30·4	12	13·1	..	9·2	29	0	0	..	0	..	0	..	5·5	4·0	..	0	0	0	0	0	0	0	0	0	0
Chhindwara	27·5	..	29·4	7,16	11·0	..	6·6	31	0	0	..	0	..	0	..	5·6	5·0	..	0	0	0	0	0	0	0	0	0	0
Seoni	27·9	+2·5	29·5	1	13·0	+2·7	8·9	31	0	13·7	+0·5	13·7	19	0	+0·1	4·1	2·3	—0·9	1	0	0	0	0	0	0	0	0	0
Sagar	26·5	+1·1	29·3	5	13·1	+0·9	10·0	18	0	0·5	—12·4	0·5	7	0	—0·8	7·0	6·9	..	1	0	0	0	0	0	0	0	0	0
Nowgong	25·6	+2·0	31·2	12	7·0	—1·0	2·8	21	0	1·8	—8·4	1·3	8	0	—0·7	5·1	2·6	+1·2	2	0	0	0	0	0	0	0	0	0
Madhya Pradesh (East)																												
Sutna	26·6	+2·3	30·9	12	10·1	+1·5	5·9	29	0	0	—10·9	0	..	0	—0·9	4·9	3·1	+0·4	0	0	0	0	0	0	0	0	0	0
Umaria	27·6	+2·7	30·3	12	9·9	+2·2	4·4	29,31	0	0	—8·9	0	..	0	—0·9	4·8	2·5	—0·4	0	0	0	0	0	0	0	0	0	0
Jabalpur	28·8	+3·7	31·6	12	11·6	+3·5	6·6	29,31	0	0	—9·4	0	..	0	—0·7	4·7	3·1	+1·3	0	0	0	0	0	0	0	0	0	0
Mandla	28·0	..	29·8	10	9·7	..	4·0	31	0	0	..	0	..	0	..	(b) 4·0	1·8	..	0	0	0	0	0	0	0	0	0	0
Pendra	25·8	+2·6	28·1	13	12·3	+2·5	8·9	29	0	0	—7·4	0	..	0	—0·5	8·8	5·5	..	0	0	0	0	0	0	0	0	0	0
Ambikapur	25·3	..	27·8	13	9·1	..	7·8	27	0	0	..	0	..	0	..	8·2	5·5	..	0	0	0	0	0	0	0	0	0	0
Champa	28·9	..	30·6	12,13	14·9	..	11·0	29	0	0	..	0	..	0	..	4·7	3·7	..	0	0	0	0	0	0	0	0	0	0
Raigarh	29·9	..	31·8	13	14·5	..	9·6	31	0	0	..	0	..	0	..	4·2	3·1	..	0	0	0	0	0	0	0	0	0	0
Raipur	28·9	+2·2	30·8	10	15·0	+2·5	11·3	31	0	0	—5·1	0	..	0	—0·3	5·0	3·9	—0·4	0	0	0	0	0	0	0	0	0	0
Kanker	28·5	+1·8	30·6	13,16	12·8	+2·4	7·8	31	0	0	—3·6	0	..	0	—0·4	1·0	0·6	—2·1	0	0	0	0	0	0	0	0	0	0
Jagdalpur (P.B.O.)	28·9	+2·2	30·6	13	11·9	+1·0	8·5	31	0	0	—4·1	0	..	0	—0·4	4.0	2·3	..	0	0	0	0	0	0	0	0	0	0
Gujarat																												
Deesa	29·5	..	32·5	3	12·4	..	6·6	23	0	0	..	0	..	0	..	8·8	7·8	..	0	0	0	0	0	1	0	0	0	0
Idar	29·7	..	32·6	6	15·6	..	9·6	24	0	2·0	..	2·0	31	0	..	7·8	7·4	..	1	0	0	0	0	0	0	0	0	0
Ahmedabad	30·4	+1·1	32·8	12	14·0	+1·9	9·8	25	0	2,8	+1·8	2·8	31	1	+0·9	10·0	6·3	+3·1	1	0	0	0	1	0	0	0	0	0
Dohad	29·8	+0.7	31·6	1,2,11	14·5	+2·8	11·1	24	0	0·8	—1·2	0·8	6	0	—0·3	9·9	8·4	+4·4	1	0	0	0	0	0	0	0	0	0
Baroda	32·1	+1·4	34·4	5	13·8	+3·1	10·6	24	0	0	—0·5	0	..	0	—0·1	4·5	3·5	+0·1	0	0	0	0	0	0	0	0	0	0
Baroda (Aerodrome)	31·4	..	34·0	5	15·2	..	11·3	24	0	0	..	0	..	0	..	8·0	5·8	..	0	0	0	0	0	0	0	0	0	0
Broach	34·0	..	36·1	2	15·0	..	11·7	25	0·5	0	..	0	..	0	..	6·1	5·0	..	0	0	0	0	0	0	0	0	0	0
Surat	33·7	+2·6	36·8	29	17·0	+1·8	14·0	25	0	0	—2·0	0	..	0	—0·1	8·3	7·3	+3·0	0	0	0	0	0	0	0	0	0	0
Saurashtra and Kutch																												
Bhuj (P.B.O.)	28·0	+0·3	31·0	11	12·4	0	8·8	20,22	0	0	—1·8	0	..	0	—0·1	9·6	5·6	—0·2	0	0	0	0	0	0	0	0	0	0
Bhuj (Aerodrome)	28·0	..	30·8	12	11·8	..	7·1	27	0	0	..	0	..	0	..	12·7	7·7	..	0	0	0	0	0	0	0	0	0	0
Kandla	28·0	..	31·0	30	14·9	..	11·3	26	0	0·8	..	0·8	12	0	..	11·5	9·7	..	1	0	0	0	1	0	0	0	0	0
Mandvi	27·4	..	30.1	1	15·9	..	12.8	21,27	0	0	..	0	..	0	..	15·9	14·2	..	0	0	0	0	0	0	0	0	0	0

(b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Saurashtra and Kutch—*(Contd.)*																												
Dwarka	27·1	−0·2	30·5	31	17·8	+1·2	13·9	27	0	0	−2·3	0	..	0	−0·2	17·4	13·3	+1·2	0	0	0	0	0	0	0	0	0	0
Porbander	30·3	..	33·4	31	17·0	..	13·7	27	0	0	..	0	..	0	..	7·7	5·4	..	0	0	0	0	0	0	0	0	0	0
Porbander (Aerodrome)	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	0	0	0	1	0	0	0	0	0
Jamnagar	..	..	..	..	12·5	+1·7	7·2	26	0	0	−2·0	0	..	0	−0·1	..	..	..	0	0	0	0	0	0	0	0	0	0
Rajkot (Aerodrome)	28·9	−0·6	31·9	30	11·9	0	7·8	26	0	0	−1·5	0	..	0	−0·2	17·7	12·9	+7·1	0	0	0	0	1	0	0	0	0	0
Surendranagar	30·0	..	33·1	12	14·4	..	10·6	23	0	1·3	..	1·3	31	0	..	10·2	9·2	..	1	0	0	0	0	0	0	0	0	0
Bhavnagar	31·1	+1·6	34·8	12	14·3	+1·1	10·7	18,25	0	2·0	+0·5	2·0	31	0	−0·1	8·5	5·7	+0·7	1	0	0	0	0	0	0	0	0	0
Bhavnagar (Aerodrome)	30·0	..	34·6	12	15·7	..	11·9	23	..	2·5	..	2·5	31	1	..	..	14·2	..	1	0	0	0	0	0	0	0	0	0
Mahuva	32·1	..	34·4	11	16·4	..	13·8	18	0	1·5	..	1·5	31	0	..	(b) 11·0	7 0	..	1	0	0	0	0	0	0	0	0	0
Keshod	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17·5	14·0	..	..	0	0	0	0	0	0	0	0	0
Veraval	30·8	..	34·3	1	16·1	..	11·6	3	3·6	16·3	+14·5	16·3	31	1	+0·8	17·6	15·1	..	1	0	0	0	0	0	0	0	0	0
Konkan																												
Dahanu	29·5	+0·8	33·3	2	18·7	+1·4	16·1	24	0·5	0	0	0	..	0	0	17 0	12·4	+0·8	0	0	0	0	0	0	0	0	0	0
Bombay (Colaba)	31·8	+1·5	34·3	22	21·4	+1·0	19·2	25	0·3	0	−2·0	0	..	0	−0·2	9·3	8·0	−2·5	0	0	0	0	0	0	0	0	4	0
Bombay (Santacruz Aerodrome)	32·6	+1·5	35·1	22	18·8	+3·1	15·9	24	0	0	−2·0	0	.	0	−0·2	11·5	7·2	..	0	0	0	0	0	0	0	0	0	0
Alibag	29·9	+0·3	34·4	30	19·8	+1·4	16·7	17	..	0	−3·8	0	..	0	−0·4	..	7·0	−0·2	0	0	0	0	0	0	0	0	0	0
Harnai	29·7	+0·2	32·7	29	24·1	+2·1	21·7	25	0	0	−1·3	0	..	0	−0·2	13·4	12·3	+1·2	0	0	0	0	0	0	0	1	0	0
Ratnagiri	32·2	..	34·5	31	20·9	..	18·8	25	0	0	−3·8	0	..	0	−0·3	..	..	..	0	0	0	0	0	0	0	0	0	0
Devgad	31·7	+0·8	34·2	31	22·5	+1·1	20·6	1	0	0	−8·9	0	..	0	−0·6	13·6	11·4	+1·1	0	0	0	0	0	0	0	0	0	0
Vengurla	32·8	..	34·9	31	20·0	..	17·2	1	0·3	0	..	0	..	0	..	8.9	5·3	..	0	0	0	0	0	0	0	0	0	0
Maharashtra																												
Nandurbar	32·7	..	34·4	7	17·8	..	15·1	25	0	0	..	0	..	0	..	6·7	4·6	..	0	0	0	0	0	0	0	0	0	0
Jalgaon	32·6	..	34·5	23	14·9	..	10·0	25	0	0	−5·6	0	..	0	−0·4	10·2	8·5	..	0	0	0	0	0	0	0	0	0	0
Malegaon	31·7	+2·3	33·8	12	14·2	+2·9	11·4	25	0	0	−5·3	0	..	0	−0·4	6·3	4·9	+0·2	0	0	0	0	0	0	0	0	0	0
Deolali	30·6	..	31·6	16	12·9	..	9·4	24	0	0	..	0	..	0	..	7·7	4·5	..	0	0	0	0	0	0	0	0	0	0
Aurangabad	30·5	+1·9	32·2	13	16·0	+2·8	13·0	24	0	0	−6·9	0	..	0	−0·5	7·5	6·0	−0·9	0	0	0	0	0	0	0	0	0	0
Aurangabad (Chikalthana Aerodrome)	29·8	..	31·6	13	11·2	..	7·6	29	0	0	..	0	..	0	..	5·5	2·6	..	0	0	0	0	0	0	0	0	0	0
Khandala	..	..	..	..	..	..	..	..	..	0	−3·1	0	..	0	0	..	..	..	0	..	..	..	..	..	..	..	..	..
Ahmednagar	30·2	+1·8	31·6	15	13·1	+1·5	10·6	23,24	0	0	−6·6	0	..	0	−0·5	7·5	4·6	−1·2	0	0	0	0	0	0	0	0	0	0
Parbhani	30·4	..	31·7	13	13·0	..	10·1	30	0	0	−5·6	0	..	0	−0·4	6·6	4·6	..	0	0	0	0	0	0	0	0	0	0
Poona	31·1	+1·7	33·3	17	14·4	+2·7	11·9	29	0	0	−3·8	0	..	0	−0 5	4·0	2·1	−3·5	0	0	0	0	0	0	0	0	0	0
Poona (Lohagaon Aerodrome)	30·3	..	31·2	14,17	15·2	..	11·7	25	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Baramati	30·6	..	31·7	13	14·1	..	11·9	29	0	0	..	0	..	0	..	7·6	5·9	..	0	0	0	0	0	0	0	0	0	0
Jeur	30·8	..	31·7	14	13·7	..	9·9	24	0	0	..	0	..	0	..	9·2	5·1	..	0	0	0	0	0	0	0	0	0	0
Sholapur	30·5	+0·8	31·2	14	16·7	+2·0	15·1	24	0	0	−10·4	0	..	0	−0·7	11·9	8·9	−0·3	0	0	0	0	0	0	0	0	0	0
Miraj	30·3	+1·4	31·7	5	15·7	+1·8	12·8	13,17	0	0	−7·1	0	..	0	−0·6	12·7	8·4	+0·5	0	0	0	0	0	0	0	0	0	0
Kolhapur	30·7	..	31·7	21	15·6	..	13·2	2	0	0	..	0	..	0	..	13·0	8·2	..	0	0	0	0	1	0	0	0	0	0
Vidarbha																												
Buldhana	28·4	..	31·1	15	16·7	..	14·3	31	0	0	..	0	..	0	..	8·0	6·8	..	0	0	0	0	0	0	0	0	0	0
Akola	31·8	+2·5	33·9	11	15·8	+4·0	11·1	31	0	0	−13·7	0	..	0	−0·9	(a) 6·0	4·9	+1·0	0	0	0	0	0	0	0	0	0	0
Amravati	30·5	+2·1	32·2	12	16·2	+1·5	13·3	31	0	0	−11·2	0	..	0	−0·8	7·4	7·0	+1·7	0	0	0	0	0	0	0	0	0	0
Yeotmal	29·7	..	31·6	12,13	16·4	..	12·6	31	0	0	..	0	..	0	..	8·5	8·1	..	0	0	0	0	0	0	0	0	0	0
Nagpur	30·1	+1·7	32·2	13	13·5	+1·8	8·2	31	0	0	−11·9	0	..	0	−0·8	8·1	6·5	..	0	0	0	0	0	0	0	0	0	0
Gondia	29·2	..	31·1	17	14·5	..	9·9	31	0	0	..	0	..	0	..	3·7	2·1	..	0	0	0	0	0	0	0	0	0	0
Brahmapuri	30·3	..	37·2	16	..	..	..	..	0	0	..	0	..	0	..	(a) 5·0	(b) 2·8	..	0	0	0	0	0	0	0	0	0	0
Chanda	30·1	+2·0	32·2	12	13·4	+1·8	8·3	31	0	0	−6·9	0	..	0	−0·7	5·5	3·6	+1·5	0	0	0	0	0	0	0	0	0	0
Sironcha	30·5	..	32·2	16	15·1	..	12·2	30	0	0	..	0	..	0	..	4·5	2·3	..	0	0	0	0	0	0	0	0	0	0
Coastal Andhra Pradesh																												
Nellore	29·7	+1·0	30·6	10,13	20·7	+0·5	19·6	27	0	0	−72·6	0	..	0	−3·0	10·8	6·2	+1·4	0	0	0	0	0	0	0	0	0	0
Ongole	27·1	..	29·3	26	20·3	..	19·2	29,30	0	0	..	0	..	0	..	8·5	4·5	..	0	0	0	0	0	0	0	0	0	0
Rentachintala	31·5	+1·6	32·8	14,15	17·8	+1·2	15·7	2	0	0	−3·1	0	..	0	−0·4	5·3	3·7	−1·4	0	0	0	0	0	0	0	0	0	0
Gannavaram	30·2	..	31·7	14	19·9	..	18·2	26	0	0	..	0	..	0	..	13·0	10·0	..	0	0	0	0	0	0	0	0	0	0

(a) Mean of 30 days. (b) Mean of 29 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm.or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Coastal Andhra Pradesh—*(contd.)*																												
Masulipatam	28·7	+0·6	29·7	14,16	20·4	+1·2	19·4	31	0	0	-16·5	0	..	0	-0·9	13·9	10·[illegible]	[illegible]3·5	0	0	0	0	0	0	0	0	0	0
Nidadavolu	30·0	..	31·6	14,16	18·8	..	17·7	2,11	0	0	..	0	..	0	..	11·4	8·1	..	0	0	0	0	0	0	0	0	0	0
Kakinada	28·6	+1·7	29·4	2,16	19·2	+0·1	17·1	8	0	0	-17·8	0	..	0	-0·8	14·0	11·8	+1·5	0	0	0	0	0	0	0	0	0	0
Visakhapatnam	30·0	+0·9	31·4	21	18·5	+0·1	15·5	31	0	0	-14·5	0	..	0	-0·9	15·9	9·0	+[illegible]·5	0	0	0	0	0	0	0	0	0	0
Calingapatam	28·1	+1·3	30·6	12,14	18·2	+0·9	16·1	24	0	0	-13·7	0	..	0	-0·4	11·0	11·1	+2·2	0	0	0	0	0	0	0	0	0	0
Telangana																												
Ramagundam	31·3	..	32·8	11,13	16·0	..	11·2	24	0	0	..	0	..	0	..	5·9	3·4	..	0	0	0	0	0	0	0	0	0	0
Nizamabad	29·8	+1·1	32·2	12	15·3	+2·5	12·5	30	0	0	-4·6	0	..	0	-0·4	4·8	3·[illegible]	+0·8	0	0	0	0	0	0	0	0	0	0
Mahbubnagar	29·1	..	30·7	14	17·0	..	15·4	10	0	0	..	0	..	0	..	13·6	10·[illegible]	..	0	0	0	0	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome)	28·3	+0·6	29·7	14	14·7	+1·4	12·1	2	0	0	-7·6	0	..	0	-0·4	10·8	5·[illegible]	-0·9	0	0	0	0	0	0	0	0	0	0
Hakimpet	27·5	..	31·2	16	16·5	..	14·8	31	0	0	..	0	..	0	..	..		..	0	0	0	0	2	0	0	0	0	0
Hanamkonda	30·1	+1·7	31·8	15	17·3	+1·6	15·4	1	0	0	-5·8	0	..	0	-4·0	6·4	4·[illegible]	+0·3	0	0	0	0	3	0	0	0	0	0
Bhadrachallam	31·1	..	32·8	16	16·3	..	13·9	1,31	0	0	..	0	..	0	.	6·0	4·[illegible]	..	0	0	0	0	[illegible]	0	0	0	0	0
Khammameth	31·2	..	32·7	14	16·3	..	13·9	2	0	0	..	0	..	0	..	5·2	4·0	..	0	0	0	0	0	0	0	0	0	0
Rayalaseema																												
Arogyavaram	26·7	..	28·1	8	15·8	..	13·4	14	0	0	..	0	.	0	..	9·0	5·0	..	0	0	0	0	0	0	0	0	0	0
Cuddapah	30·5	+0·5	31·4	14	20·1	+1·4	18·2	15	0	0	-20·6	0	..	0	-1·5	6·6	5·0	-2·2	0	0	0	0	0	0	0	0	0	0
Anantapur	30·3	..	31·4	14	18·0	..	15·2	15	0	0	-6·3	0	..	0	-0·5	13·0	10·5	..	0	0	0	0	0	0	0	0	0	0
Kurnool	31·8	+1·6	33·1	14	18·4	+2·4	15·6	12	0	0	-5·1	0	..	0	-0·3	8·1	6·[illegible]	+2·4	0	0	0	0	0	0	0	0	0	0
Madras																												
Palayamcottai	28·6	..	31·3	7	23·2	..	21·6	25	66·6	147·2	+39·5	61·8	30	10	+4·6	12·7	9·7	..	13	0	0	0	0	0	0	0	0	0
Tuticorin	27·6	..	28·7	10	23·4	..	21·7	16,25	14·8	87·3	..	23·9	30	9	..	21·1	19·[illegible]	..	10	0	0	0	0	0	0	0	0	0
Pamban	26·8	-1·3	28·9	14	23·8	0	20·4	26	83·4	392·7	+199·9	93·7	26	16	+6·6	12·6	12·[illegible]	-6·0	19	0	0	0	0	0	0	0	0	0
Mathurai	29·5	+0·2	31·5	8	22·2	+1·0	20·7	23	17·3	55·7	+4·6	24·9	29	5	+1·4	9·3	6·[illegible]	0	7	0	0	0	0	0	0	0	0	0
Nagapattinam	27·7	-0·1	28·9	3,18	23·0	+0·6	20·6	26	269·6	578·8	+300·7	155·6	28	14	+4·9	19·8	19·[illegible]	+6·4	17	0	0	0	0	0	0	0	0	0
Tiruchirapalli	29·0	-0·5	30·8	8	21·9	+1·1	20·5	14	62·5	94·9	+23·8	35·8	29	5	+0·5	14·2	12·[illegible]	+3·3	10	0	0	0	0	0	0	0	0	0
Coimbatore	27·8	-1·3	29·7	9	20·2	+1·3	18·4	16	10·5	25·7	-8·8	11·4	30	4	+1·4	10·1	7·[illegible]	+3·6	5	0	0	0	0	0	0	0	0	0
Coimbatore (Peelamedu Aerodrome).	28·8	..	30·6	8	19·8	..	17·4	15	16·7	34·7	..	11·7	0,30	3	..	17·1	11·4	..	6	0	0	0	0	0	0	0	0	0
Salem	30·7	+0·6	33·7	8	20·6	+1·8	17·2	16	9·9	13·5	-12·7	11·2	30	1	-1·2	9·1	30·3	+5·0	3	0	0	0	0	0	0	0	0	0
Kallakurichi	29·0	..	30·6	9,27	21·6	..	19·2	14	30·4	71·1	..	25·2	30	4	..	13·8	0·4		4	0	0	0	0	0	0	0	0	0
Cuddalore	27·9	-0·2	28·9	1	22·1	+0·9	20·1	16	34·6	194·5	+4·2	37·6	4	11	+4·7	15·6	11·[illegible]	+3·5	12	0	0	1	0	0	0	0	0	0
Vellore	28·7	+0·7	29·9	8,26	19·3	+1·1	16·6	16	0·6	3·2	-63·3	2·6	29	1	-2·9	12·5	8·0	+4·9	2	0	0	0	0	0	0	0	0	0
Madras	28·6	-0·3	29·4	13	21·6	+1·1	20·1	7	0	2·8	-135·6	1·5	30	0	-5·4	19·2	12·4	-1·3	3	0	0	0	0	0	0	0	0	0
Madras (Nungambakkam).	28·5	..	29·1	1	22·0	..	19·8	7	..	2·8	..	2·5	4	1	..	..	6·9	..	2	0	0	0	0	0	0	0	0	0
Coastal Mysore																												
Karwar	32·1	..	33·9	23	20·3	..	18·3	14	0·8	0	-5·8	0	..	0	-0·3	7·4	4·6	..	0	0	0	0	0	0	0	0	0	0
Honavar	33·2	+0·5	34·9	15	21·7	+0·8	19·4	27	0	0	-5·1	0	..	0	-0·4	8·7	6·[illegible]	+2·1	0	0	0	1	0	0	0	0	0	0
Mangalore	32·8	+1·1	34·3	9,22	23·0	+1·2	20·5	1	0	2·5	-10·4	2·5	31	1	-0·7	11·2	8·5	+1·3	1	0	0	0	0	0	0	0	0	0
Mangalore (Bajpe Aerodrome).	33·1	..	34·6	10	21·4	..	19·4	16,17	0	1·0	..	1·0	29	0	..	..	.	..	1	0	0	0	0	0	0	0	0	0
Mysore (North)																												
Bidar	27·8	+0·5	28·8	5, 12	16·9	+0·5	15·7	30	0	0	-6·1	0	..	0	-0·5	12·4	9·0	+1·4	0	0	0	0	0	0	0	0	0	0
Gulbarga	30·4	+0·7	31·3	15	16·4	+1·6	13·4	2	0	0	-3·8	0	..	0	-0·3	10·2	8·9	+1·0	0	0	0	0	0	0	0	0	0	0
Bijapur	30·5	+1·5	31·9	15	16·8	+2·0	13·8	2	0	0	-6·3	0	..	0	-0·6	7·4	4·0	+0·9	0	0	0	0	0	0	0	0	0	0
Belgaum	28·2	+0·4	30·2	13	16·0	+1·3	13·4	13	0	0	-8·6	0	..	0	-0·5	12·3	6·[illegible]	+0·5	0	0	0	0	4	0	0	0	0	0
Belgaum (C.T.O.)	..	..	..	..	15·2	+1·3	13·1	2	0	0	8·6	0	..	0	..	17·7	12·7	..	0	0	0	0	3	0	0	0	0	0
Belgaum (Sambre Aerodrome).	28·7	..	29·7	14	16·5	..	13·6	17	0	0	..	0	..	0	..	11·6	8·2	+1·1	0	0	0	0	0	0	0	0	0	0
Gadag	30·0	+1·4	32·5	13	17·4	+1·1	15·8	10, 27	0	0	-10·4	0	..	0	-0·6	8·8	7·3	-1·2	0	0	0	0	0	0	0	0	0	0
Raichur	30·4	+1·1	31·1	11,15	19·3	+1·7	17·5	15	0	0	-3·3	0	..	0	-0·3	8·0	3·9	0	0	0	0	0	0	0	0	0	0	0
Mysore (South)																												
Bellary	30·2	+0·4	31·2	14	18·5	+1·9	17·2	2	0	0	-3·3	0	..	0	-0·3	10·4	7·4	0	0	0	0	0	0	0	0	0	0	0
Chitaldrug	28·0	0	29·2	13	17·3	+0·7	15·1	10	0	0	-13·2	0	..	0	-0·8	9·3	4·3	..	0	0	0	0	25	0	0	0	0	0
Shimoga	29·1	..	30·6	13	15·6	..	12·8	14	0	0	..	0	..	0	..	..	..	..	1	0	0	0	0	0	0	0	0	0
Balehonnur	26·8	+0·7	28·6	31	16·0	+1·2	14·2	1	..	1·3	-10·6	1·3	30	0	-0·8	..	..	..	0	0	0	0	0	0	0	0	0	0
Hassan	27·2	+0·2	28·7	13	15·7	+1·5	12·7	15	0	0	-16·8	0	..	0	-1·1	7·9	5·0	+0·2	0	0	0	0	0	0	0	0	0	0
Mysore	27·3	-0·4	29·2	28	17·3	+1·1	14·7	16	0	3·6	-6·6	3·6	30	1	+0·1	15·7	12·3	+2·2	1	0	0	0	0	0	0	0	0	0
Bangalore(Central Observatory).	26·7	+0·1	29·2	8,14	16·1	+1·5	13·9	15	0	0	-11·2	0	..	0	-1·2	12·0	10·7	+3·0	0	0	0	0	3	0	0	0	0	0
Bangalore(Aerodrome).	27·6	..	30·1	8	16·1	..	12·8	15	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3mm.) or more	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squal l	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Kerala (Including Laccadives)																												
Kozhikode	32·3	+1·4	34·8	31	23·5	+1·7	20·4	17	0	0	—25·7	0	..	0	—1·6	9·8	8·6	+2·2	0	0	0	1	0	0	0	0	0	0
Palghat	32·2	..	33·8	1,28	23·3	..	21·7	16	0	0	..	0	..	0	..	14·1	11·8	..	0	0	0	0	0	0	0	0	0	0
Fort Cochin	30·8	+0·5	32·9	12	24·4	+1·0	21·7	21	1·3	3·8	—36·8	2·5	30	1	—1·5	6·2	4·3	—1·5	3	0	0	0	0	0	0	0	0	0
Cochin (Naval Air Station).	31·7	..	34·1	12	23·3	..	20·7	16	0·5	4·8	..	2·8	30	1	..	7·1	4·4	..	3	0	0	1	0	0	0	0	0	0
Alleppey	31·5	..	33·6	12	24·2	..	21·7	16	9·5	26·9	..	7·6	30	4	..	11·6	7·8	..	8	0	0	5	0	0	0	0	0	0
Punalur	32·3	..	34·4	12	22·4	..	20·8	3	38·9	104·7	..	49·1	30	4	..	7·5	4·4	..	4	0	0	0	0	0	0	0	0	0
Trivandrum	31·4	+0·7	33·8	14	23·7	+1·3	21·7	16	59·5	80·3	+17·6	24·6	3	6	+2·3	5·5	4·2	0	8	0	0	4	0	0	0	0	0	0
Trivandrum (Aerodrome)	30·6	..	32·8	14	23·4	..	21·3	16	..	86·0	..	21·3	10	5	..	..	5·7	..	8	0	0	6	0	0	0	0	0	0
Hill Stations excluding Kashmir																												
Walong (R)																												
Kohima Aijal*	15·6	..	17·3	3	8·9	..	7·7	26,30	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Shillong	15·9	0·5	17·8	24	5·2	+0·8	3·3	27	3·6	4·3	—2·8	4·3	10	1	+0·1	1·3	0·6	—1·3	1	0	0	0	0	0	0	0	0	0
Cherrapunji	16·8	0	18·6	6,23	8·3	—0·6	7·1	25,27	0	0	—12·5	0	..	0	—0·7	6·7	5·1	+1·1	0	0	0	0	0	0	0	0	0	0
Mawsynram	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Darjiling (Raj Bhawan).	11·6	+0·4	15·1	24	4·5	+0·9	3·1	13	0	1·8	—5·1	1·0	3	0	—0·7	0·1	0	—1·3	2	0	0	0	14	0	0	0	0	0
Kalimpong	16·3	—0·5	21·3	3	9·0	0	7·8	5 days	0	5·1	—3·0	5·1	8	1	+0·3	7·1	5·5	—5·4	1	0	0	0	0	0	0	0	0	0
Katmandu	18·4	—0·4	21·9	1	4·7	+1·5	0	26	3·8	10·4	+2·0	6·6	12	2	+1·2	2·7	1·3	—0·3	2	0	0	0	17	0	0	0	0	0
Mukteswar (Kumaon).	13·1	+1·3	20·6	31	4·3	+0·7	—0·7	12	34·8	97·6	+70·9	90·7	12	2	+0·2	8·5	9·2	+0·8	3	0	0	0	4	0	0	0	0	0
Nainital	13·1	..	21·2	30,31	3·4	..	0·6	17,18	78·0	177·6	..	153·7	12	3	..	6·4	5·9	..	3	0	0	0	2	0	0	0	0	0
Tapoban	13·7	..	17·8	30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Badrinath	Closed during winter months																											
Lokpal (R)																												
Jamuna Chetty	..	..	..	..	..	..	..	..	..	95·7	..	57·1	12	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Mussooree	13·0	+1·0	21·4	30	5·1	+0·9	1·8	12	72·1	126·0	+90·9	111·0	12	4	+1·4	7·0	6·7	—0·5	6	0	0	0	0	0	0	0	0	0
Kharsali	..	..	..	..	..	..	..	..	..	49·8	..	24·1	12	5	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	69·8	..	63·5	11	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Simla	11·6	+1·3	19·2	30	4·2	+0·1	—0·1	12	19·2	66·6	+35·1	23·4	11	5	+2·6	4·0	3·4	—1·4	8	2	0	0	0	0	2	0	0	0
Dharampore																												
Kyelang																												
Gondla (R)																												
Kothi (R)																												
Koksar (R)																												
Dalhousie	13·1	..	20·1	1	4·8	..	2·2	9,12	60·8	169·0	+71·2	110·5	11	7	+2·5	2·8	3·5	..	7	0	0	0	0	0	0	0	0	0
Dharamshala	16·0	..	19·1	31	7·6	..	6·2	17	64·4	168·4	..	57·9	12	6	..	5·9	4·6	..	6	0	0	0	0	0	0	0	0	0
Abu	21·2	+1·0	23·7	10	10·9	—0·5	7·3	23	8·6	8·6	+5·5	8·6	12	1	+0·7	6·9	5·3	+06	1	0	0	0	0	0	0	0	0	0
Pachmarhi	24·6	+2·8	26·2	12	9·4	+1·7	5·0	30,31	0	0	—10·9	0	..	0	—0·8	5·3	2·9	0	0	0	0	0	0	0	0	0	0	0
Mahabaleshwar	25·4	+2·8	27·1	12,15, 31	14·3	+0·7	12·3	23	0	0	—6·6	0	..	0	—0·6	8·9	9·6	—1·8	0	0	0	0	0	0	0	0	0	0
Nandi Hills†	21·2	..	..	..	16·4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mercara	24·3	+0·5	25·7	14	15·6	+1·3	13·4	16	0	0	—18·3	0	..	0	—1·2	14·0	12·2	+4·8	0	0	0	0	0	0	0	0	0	0
Kodaikanal	16·0	—0·5	18·4	15	9·5	+1·1	6·8	23	109·5	196·9	+65·8	44·9	30	12	+4·9	15·2	16·0	+2·8	17	0	0	0	21	0	0	0	0	0
Ootacamund	20·0	+1·7	23·3	8	6·1	—0·5	2·2	1	29·9	70·1	+26·4	44·7	30	3	—0·7	4·3	2·8	—1·9	6	0	0	0	0	0	7	0	0	0
Coonoor	20·0	+1·3	22·8	3	10·5	+0·9	6·5	24	..	172·0	+30·3	121·2	30	7	+0·4	..	4·2	—0·9	9	0	0	1	0	0	0	0	0	0
Sikkim																												
Thangu	..	..	..	..	..	..	..	..	..	76·2	..	15·2	19	9	..	...	..	..	21	..	..	..	..	..	..	..	..	..
Chungthang	..	..	..	..	..	..	..	..	..	43·7	..	16·0	11	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Lachen	13·0	..	13·9	13,25	—4·2	..	—5·0	4 days	..	38·3	..	15·2	12	4	..	..	..	..	5	..	..	..	..	..	..	..	..	..
Tibet																												
Yatung (Chumbi)	7·7	—0·5	10·6	24	—6·8	—0·7	—10·4	23	..	26.6	+17·2	12·7	7	3	+2·2	..	..	..	3	0	0	0	0	0	0	0	0	0
Lhasa (R)																												

(R) Register not received.

*Temporarily closed.

†Observations for 26 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with								
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Ceylon																												
Colombo	29·4	—0·8	32·0	9,10	23·1	+0·6	20·0	26	215·8	541·7	+400·0	105·2	25	20	+12·4	..	..	..	24	0	0	10	0	0	0	0	0	0
Trincomalee	27·6	—0·5	30·0	10	24·4	+0·8	21·0	26	191·7	770·1	+423·1	109·5	25	22	+8·4	..	..	..	28	0	0	0	0	0	0	1	0	0
Batticoloa (R)																												
Hambantota	28·5	—0·7	31·0	7,8	23·5	+0·8	22·0	18, 19, 22	214·4	479·6	+352·	97·0	21	17	+8·7	..	..	..	19	0	0	2	0	0	0	0	0	0
Mannar	27·9	..	30·0	9,30	24·2	..	20·0	26	265·0	642·2	..	205·5	26	17	..	..	..	..	22	0	0	2	0	0	0	0	0	0
Hydrometeorological Observatories.																												
Damodar Catchment.																												
Bokaro	27·1	..	30·7	13	9·1	..	4·4	23	0·8	0·8	..	0·8	10	0	..	5·2	3·7	..	1	0	0	0	0	0	0	0	0	0
Hazaribagh	23·8	..	27·4	13	10·0	..	5·4	23	0·3	0·3	..	0·3	10	0	..	5·8	3·1	..	1	0	0	0	1	0	0	0	0	0
Tilaiya	24·7	..	28·8	13	11·1	..	6·2	24	0	0	..	0	..	0	..	8·6	4·8	..	0	0	0	0	0	0	0	0	0	0
Ramgarh	28·5	..	31·6	13	7·8	..	3·9	24, 31	0	0	..	0	..	0	..	3·2	1·5	..	0	0	0	0	0	0	0	0	0	0
Panchet Hills	27·8	..	30·5	13	11·8	..	8·4	23, 25	0	0	..	0	..	0	..	7·0	4·5	..	0	0	0	0	0	0	0	0	0	0
Durgapur	27·4	..	30·0	9, 10, 13	13·8	..	10·4	22	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Asansol	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dumri	..	..	..	.	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	
Bishungarh	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	
Palganj (Giridih) *	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chandwa	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Maithon	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Mahanadi Catchment.																												
Baramul	30·6	..	32·2	13	11·4	..	7·1	31	0	0	..	0	..	0	..	2·4	1·1	..	0	0	0	0	0	0	0	0	0	0
Hirakud	29·1 (a)	..	31·4	13	15·1	..	10·8	30	0	0	..	0	..	0	..	3·9	2·6	..	0	0	0	0	0	0	0	0	0	0
Khijrawan	26·0	..	30·8	13	12·4 (c)	..	10·2	29	0	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sonepur	29·9	..	32·2	16	13·2	..	9·1	31	..	0	.	0	..	0	..	..	2·0	..	0	..	..	..	..	..	..	..	..	..
Ginabahar	29·5	..	30·7	13	9·5	..	5·3	29	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bhimkund	28·1	..	30·4	13	11·6	..	7·6	24	0	0	..	0	..	0	..	3·9	2·5	..	0	0	0	0	1	0	0	0	0	0
Narbada Catchment.																												
Punasa (R)	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagra Tawa	29·6	..	32·7	12	12·2		8·2	23	0	0	..	0	..	0	..	4·8	3·3	..	0	0	0	0	0	0	0	0	0	0
Thikri	31·9	..	33·9	12	14·9	..	11·5	25, 26	..	0	..	0	..	0	..	..	..	..	0	0	0	0	0	0	0	0	0	0
Sabarmati Catchment.																												
Jhadol	25·9	..	28·4	1	8·1	..	2·2	7	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Bikrani	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Tarpal	..	..	..	..	..	..	..	..	..	7·6	..	7·6	11	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Kotra Cantonment.	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Dharoi	30·0	..	32.1	3,6	14·3	..	..	..	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Ganga Catchment.																												
Mukhim	14·3	..	20·2	30	5·6	..	0·9	12	59·2	88·8	..	77·7	12	3	..	..	..	..	5	0	0	0	0	0	0	0	0	0
Tehri (R)																												
Gandak Catchment.																												
Gorkha	18·7 (c)	..	21·2	8	10·2	..	7·8	18	7·6	30·4	..	9·9	12	4	..	..	..	..	4	..	..	..	..	..	..	..	..	..
Pokhara	20 2	..	24·2	25	9·8	..	5·3	19	15·2	37·4	..	19·1	12	4	..	..	..	..	6	..	.	..	..	..	..	..	..	..
Nawakot	20·1	..	22·3	8	10·4	..	8·0	18	6·6	14·2	..	6·6	13	2	..	..	..	..	3	..	..	..	..	..	..	•	..	•

(c) Mean of 28 days.
(R) Register not received.
(a) Mean of 30 days.
Observatory closed from December, 1957
(e) Mean of 26 days

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2·5 mm. or more)		Wind speed, km. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0·3 mm	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19.	20	21	22	23	24	25	26	27	28	29
Hydrometeorological Observatories.—*(contd.)*																												
Candak Catchment (*Contd.*)																												
Jomosom . .	(d) 13·1	..	21·5	31	0·9	..	—1·2	11	12·7	27·2	..	13·5	12	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Timure . .	(a) 16·4	..	18·9	30	4·4	..	1·7	22,26	3·8	22·9	..	10·2	12	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																												
Dailekh .	16·4	..	20·5	30	..	..	..	..	1·5	50·0	..	50·0	12	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Gogra Catchment.																												
Dandeldhura	14·1	..	21·3	30	6·5	..	3·4	12	29·5	92·2	..	86·6	12	2	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Munsiyari .	..	..	..	..	..	..	..	..	34·8	87·1	..	82·0	12	2	..	..	..	..	3		..	..	..	..	..	..	..	..
Sallyana .	(b) 17·8	..	20·6	10	..	..	..	..	0	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
Butwal . .	25·0	..	26·4	30	(b) 13·2	..	6·8	21	0	3·8	..	3·8	12	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Bagmati Catchment.																												
Katmandu . .	18·9	..	20·9	7	4·2	..	—0·3	26	4·1	10·7	..	6·6	12	2	..	2·8	1·4	..	2	0	0	1	17	3	0	0	0	0
Kosi Catchment.																												
Chautara . .	17·7	..	21·9	1	8·8	..	6·4	27	9·9	12·4	..	9·9	13	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Okhaldunga + .															..			..										
Barahkshetra .	24·0	..	26·4	5	12·6	..	10·6	25	3·8	4·8	..	3·3	13	1	..	5·7	4·2	..	2	0	0	0	0	0	0	0	0	0
Angbung . .	19·1	..	21·7	25	(a) 10·3	..	8·4	19	..	12·9	..	7·1	9	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Taplejung . .	15·2	..	19·4	16	6·9	..	4·7	11	1·5	11·4	..	5·3	8	1	..	..	..	..	6	0	0	0	5	0	0	0	0	0
Taplethok .	21·0	..	22·7	25	7·7	..	4·6	30	..	21·6	..	12·5	4	2	..	..	..	..	6	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)																												
Bhojpur . .	(a) 15·6	..	18·1	24	(a) 7.8	..	6·6	28	4·3	8·9	..	4·6	12	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Chainpur . .	18·5	..	20·8	1	9·5	..	7·9	11	..	19·0	..	8·9	9	3	..	..	..	..	3	..	..	..	..	..	..	..	..	..
Tista Catchment.																												
Gangtok . .	13·5	..	17·5	24	5·8	..	3·8	11	5·4	38·8	..	12·5	8	5	..	3·7	2·9	..	9	0	0	0	8	0	0	0	0	0
Geyzing . .	17·4	..	20·7	1	8·3	..	6·3	20	0	17·7	..	7·6	8,10	3	:	..	..	..	3	..	..	..	..	..	..	..	..	..

(a)—Mean of 30 days. (b) Mean of 29 days. (d) Mean of 27 days +Data not available. (R) Register not received.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5 mm. or more)		Wind speed, Km. per hour.			Weather phenomena—No. of days with									
	Mean maximum.	Departure from normal.	Highest.	Date.	Mean minimum.	Departure from normal.	Lowest.	Date.	Total fall during 0830-1730 hours.	Total fall in 24 hours.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean between 0830-1730 hours.	Mean 24 hours.	Departure from normal.	Precipitation (0.3mm. or more).	Snow or sleet.	Hail.	Thunder heard.	Fog.	Dust-storm.	Ground frost.	Gale.	Squall.	Line squall.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
JANUARY																												
Bihar																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	25·6	+12·4	20·3	1	2	+0·9	..	..	..	2	..	..	..	..	..	..	..	..	..
Kerala (Including Laccadives)																												
Minicoy	29·5	0	30·6	6	22·5	—0·3	19·3	7,24	0	0	—46·5	0	..	0	—2·6	9·3	6·8	—0·1	0	0	0	0	0	0	0	0	0	0
Amini Divi	31·9	+1·3	32·8	1,11,22	23·4	—0·1	20·7	9	..	0	—16·8	0	..	0	—1·1	..	6·3	+0·2	0	0	0	0	0	0	0	0	0	0
FEBRUARY																												
Bihar																												
Motihari	24·1	—0·8	28·0	22,23,25	9·5	—0·5	6·0	13	0	0	—15·2	0	..	0	—1·4	4·1	3·0	—0·7	0	0	0	0	17	0	0	0	0	0
Kerala (Including Laccadives)																												
Minicoy	29·6	—0·1	30·5	19	23·9	+0·2	21·6	12	7·9	34·4	+16·4	21·6	19	4	+2·8	11·2	6·9	—0·5	5	0	0	3	0	0	0	0	0	0
Anini Divi	32·5	+1·4	33·8	16	25·3	0·82	23·3	27	..	0	—1·8	0	..	0	—0·3	..	9·3	+1·4	0	0	0	0	0	0	0	0	0	0
MARCH																												
Orissa																												
Bolangir	..	..	..	..	..	..	..	..	11·7	12·0	..	11·4	4	1	..	(i) 8·0	(j) 6·0	..	3	0	0	0	0	0	0	0	0	0
Chota Nagpur																												
Daltonganj	30·7	—2·2	38·3	20	16·0	+0·5	9·7	1	3·8	17·8	+0·8	11·2	26	2	+0·4	..	..	..	5	0	0	5	0	0	0	1	0	0
Kerala (Including canives)																												
Minicoy	30·3	+0·1	31·0	21,23,24	24·4	—0·5	21·8	15,22	46·5	90·2	+67·9	39·9	29	5	+3·5	9·0	6·8	—0·3	6	0	0	2	0	0	0	0	0	0
Amini Divi	33·5	+1·4	34·7	25	25·5	+0·1	22·2	7	..	1·0	—3·1	1·0	19	0	—0·2	..	8·0	—0·2	1	0	0	0	0	0	0	0	0	0
Sikkim																												
Chungthang	..	..	..	..	..	..	..	..	..	(g) 371·2	..	..	..	..	..	:	..	..	..	..	..	..	..	..	..	..	..	..	..
APRIL																												
Gangetic West Bengal																												
Purulia	38 4	..	42·4	18	24·3	..	19·4	2	7·6	7.6	..	5·1	23	2	..	8·0	5·1	..	2	0	0	1	0	0	0	0	0	0
Orissa																												
Bolangir.*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chota Nagpur																												
Daltonganj	38·1	—0·5	42·7	26	21·6	+0·5	17·0	1,10	1·5	1·5	—8·9	1·5	8	0	—0·8	9·2	4·8	—0·8	1	0	0	0	0	0	0	0	0	0
Kerala (Including Lac cadives)																												
Minicoy	31·3	+0·5	32·2	30	25·2	—1·2	22·4	9	11·2	58·5	+0·1	33·8	23	5	+1·5	8·0	5·6	—3·7	8	0	0	8	0	0	0	0	0	0
Amini Divi.	34·3	+1·2	36·4	23	26·9	+0·2	25·3	8	..	0	—29·2	0	..	0	—1·6	..	7·2	—2·0	0	0	0	0	0	0	0	0	0	0
MAY																												
Gangatic West Bengal																												
Purulia	42·7	..	45·2	29	29·2	..	25·0	31	0	4·3	..	1·8	31	0	..	9·3	6·0	..	3	0	0	1	0	0	0	0	0	0
Chota Nagpur																												
Daltonganj	42·0	+0·8	45·1	30	26·4	+0·5	21·7	10	0	1·0	—13·5	1·0	20	0	—1·3	11·2	6·1	—1·0	1	0	0	1	0	0	0	0	0	0
Kerala (Including Laccadives)																												
Minicoy	31·3	0	32·2	2,6,12	26·1	—0·1	23·4	12	73·1	232·9	+55·1	78·2	30	9	+0·3	12·3	9·8	—2·3	13	0	0	6	0	0	0	0	1	0
Amini Divi	33·7	+0·8	35·9	7	27·2	—0·1	23·7	19	..	89·6	—23·4	30·0	14	5	+0·2	..	12·7	+0·5	7	0	0	0	0	0	0	0	0	0
JUNE																												
Orissa																												
Bolangir	(j) 39·8	..	..	..	(n) 23·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chota Nagpur																												
Daltonganj	40·0	+2·1	44·2	18	28·6	+1·4	23·1	28	35·2	75·8	—77·1	35·1	28	5	—3·2	—9·1	6·2	—1·2	6	0	0	6	0	1	0	0	0	0
Kerala (Including Laccadives)																												
Minicoy	30·0	0	31·0	6	25·7	+0·5	22·9	18	72·7	223·9	—70·7	41·7	18	13	—4·0	10·8	10·1	—0·9	22	0	0	1	0	0	0	0	0	0
Amini Divi	30·5	—0·1	32·3	9,10	25·8	+0·2	23·8	23	..	292·2	—76·3	61·5	8	22	—5·2	..	16·4	—3·4	24	0	0	0	0	0	0	0	0	0
JULY																												
Orissa																												
Bolangir	..	..	..	..	..	..	..	..	..	383.8	..	139·2	13	13	..	10·5	10·0	..	15	0	0	0	0	0	0	0	0	0
Chota Nagpur																												
Daltonganj	32·3	—0·5	35·6	28	25·9	+0·2	22·9	24	262·1	491·5	+151·8	145·8	3	16	+0·4	7·8	5·2	—0·6	19	0	0	10	0	0	0	0	0	0
Bihar																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	762·3	+437·7	129·5	25	15	+1·0	..	..	..	15	..	..	..	..	..	..	..	..	..

(a) Mean of 17 days.) (i) Mean of 22 days. (j) Mean of 21 days. *Data not available. (g) Total for 24 days.

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2 55 mm. or more)		Wind speed, kms. per hour			Weather phenomena—No. of days with									
	Mean maximum	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lowest	Date	Total fall during 0830-1730 hours	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	Precipitation (0.3mm. or more)	Snow or sleet	Hail	Thunder heard	Fog	Dust-storm	Ground frost	Gale	Squall	Line squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
JULY (*Contd.*)																												
Uttar Pradesh (East)																												
Azamgarh	33·3	..	38·0	9	26·3	..	24·0	29	211·5	390·4	..	64·0	22	13	..	..	..	..	14	0	0	0	0	0	0	0	0	0
Varanasi (Banaras)	33·9	+0·5	39·0	9	26·6	+0·1	24·0	29	22·3	166·4	—133·6	75·3	21	10	—4·3	..	..	..	14	0	0	1	0	0	0	0	0	0
Fatehpur	32·5	—1·4	38·9	3,8	26·9	+0·4	23·9	11,12	255·2	317·8	—0·5	69·3	12	12	—1·9	7·2	4·4	—1·4	14	0	0	2	0	0	0	0	0	0
Bahraich	32·6	—0·7	37·0	6	26·5	+0·3	24·0	11,29	82·0	389·2	+88·3	67·0	30	15	+3·1	..	..	..	16	0	0	5	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
Ambala	35·0	—0·3	42·7	3,6	26·3	+0·1	22·6	19	77·6	248·8	+4·7	67·8	23	15	+4·4	10·3	9·8	+4·8	15	0	0	0	0	0	0	0	0	0
Chandigarh	34·9	..	41·6	4	25·8	..	22·2	31	53·4	214·3	..	55·9	21	13	..	..	..	..	16	0	0	0	0	0	0	0	0	0
Ludhiana	37·2	+0·9	45·7	3,5	26·8	0	22·1	10	77·3	281·7	+76·7	70·4	10	7	—1·4	7·3	6·4	+3·2	9	0	0	0	0	0	0	0	0	0
Jammu and Kashmir																												
Leh	23·5	—1·2	27·4	19	9·6	—0·6	5·4	24	2·9	8·7	—3·2	4·8	24	2	+0·6	5·8	5·8	+2·7	3	0	0	0	0	0	0	0	0	0
Jammu	38·3	+3·1	44·9	6	25·6	—0·7	20·4	27,31	..	320·4	—4·5	82·0	25	9	—2·5	..	..	..	11	0	0	1	0	0	0	0	0	0
Rajasthan (West)																												
Churu	37·3	..	44·8	7	27·4	..	22·8	25	111·2	193·3	..	76·0	11	6	..	17·1	13·8	..	10	0	0	6	0	2	0	0	0	0
Rajasthan (East)																												
Alwar	34·9	..	42·8	7	29·8	..	26·7	22	137·5	246·6	..	55·3	19	12	..	..	..	..	12	0	0	0	0	0	0	0	0	0
Sikar	34·6	..	42·2	7	25·6	..	22·2	22,25	230·8	296·1	..	129·3	23	11	..	10·3	8·0	..	13	0	0	0	0	0	0	0	0	0
Dholpur	34·7	..	42·2	6	29·3	..	23·5	31	109·0	254·1	..	102·6	20	12	..	11·9	8·7	..	12	0	0	0	0	0	0	0	0	0
Kerala (Including Laccadives)																												
Minicoy	29·7	+0·3	30·6	9	25·8	+0·9	22·3	4	21·2	87·6	—137·4	55·1	3	6	—7·7	19·6	18·4	—0·4	19	0	0	0	0	0	0	0	0	0
Amini Divi.	30·1	+0·4	31·1	28	25·8	+0·5	23·8	14	..	176·8	—123·2	50·8	9	12	—3·7	..	23·2	+0·7	19	0	0	0	0	0	0	0	0	0
Hill Stations excluding Kashmir																												
Lokpal	9·4	..	10·0	5 days	5·6	..	3·3	18	..	366·0	..	45·7	31	28	..	..	..	..	29	0	0	13	0	0	0	0	0	0
Jamuna Chetty	..	..	..	..	..	..	..	..	..	1017·2	..	144·8	10	20	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Kharsali	..	..	..	..	..	..	..	..	..	714·6	..	102·6	15	21	..	..	..	..	25	..	..	..	..	..	..	..	..	..
Rana	..	..	..	..	..	..	..	..	..	650·4	..	95·3	10	21	..	..	..	..	24	..	..	..	..	..	..	..	..	..
Abu	24·7	+0·6	29·2	8	19·7	+0·8	21·1	20	112·0	241·3	—317·2	50·1	12	14	—3·8	15·6	14·0	+1·1	21	0	0	2	0	0	0	0	0	0
Hydrometeorological Observatories																												
Sabarmati Catchment																												
Jhadol	30·1	..	37·2	30	24·4	..	22·9	26,28 30	..	22·2	..	11·9	13	8	..	..	..	..	10	0	0	0	0	0	0	0	0	0
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	9·8	..	0·8	15	0	..	..	..	..	1	..	..	..	..	..	..	..	..	..
AUGUST																												
Chota Nagpur																												
Daltonganj	32·8	+1·3	34·8	4,18	25·8	+0·9	24·2	26	97·2	238·2	—104·9	38·9	27	15	—1·4	7·8	4·9	—0·4	17	0	0	9	0	0	0	0	0	0
Bihar																												
Muzaffarpur	..	..	..	..	..	..	..	..	..	889·8	+570·8	193·5	5,6	11	—2·6	..	..	..	11	..	..	..	..	..	..	..	..	..
Uttar Pradesh (East)																												
Azamgarh	33·0	..	36·7	21,22	26·6	..	23·5	7	96·6	186·7	..	87·6	14	13	..	..	..	..	13	0	0	0	0	0	0	0	0	0
Ballia	33·7	..	36·8	22	23·6	..	20·7	15	31·1	74·9	..	35·6	1	6	..	7·9	4·9	..	11	0	0	0	0	0	0	0	0	0
Varanasi (Banaras)	32·8	+0·8	36·0	22	26·3	+0·5	23·0	30	58·4	67·9	—237·2	17·1	30	6	—8·9	..	..	..	14	0	0	0	0	0	0	0	0	0
Lakhimpur Kheri	32·3	..	35·8	23	26·0	..	22·2	7	197·4	299·6	..	131·1	17	12	..	4·3	2·7	..	16	0	0	12	0	0	0	0	0	0
Bahraich	31·7	—0·6	36·7	22	25·7	—0·1	22·4	7	64·2	178·3	—146·6	34·5	13	15	+2·5	7·9	6·3	+2·8	17	0	0	1	0		0	0	0	0
Uttar Pradesh (West)																												
Roorkee	32·7	+0·6	36·7	23	25·3	+0·2	20·8	7	95·0	201·6	—83·4	45·7	7	10	—1·8	7·0	4·9	+1·7	12	0	0	4	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
Ludhiana	34·2	—0·7	37·8	6	25·3	—0·9	20·8	1	72·2	167·9	—1·0	43·9	20	9	+1·7	7·3	4·8	+2·4	12	0	0	0	0	0	0	0	0	0
Jammu and Kashmir																												
Panamik	..	..	..	..	..	..	..	..	..	52·2	..	16·5	26	6	..	..	..	..	10	..	..	..	..	..	..	..	..	..
Rajasthan (West)																												
Jaisalmer	39·2	..	43·3	5	26·0	..	22·7	25	17·8	91·7	..	59·4	25	6	..	19·9	18·6	..	6	0	0	0	0	0	0	0	0	0
Rajasthan (East)																												
Alwar	34·2	..	39·4	6	28·6	..	21·7	29	38·4	96·5	..	23·9	12	9	..	..	..	..	11	0	0	1	0	0	0	0	0	0
Dholpur	34·3	..	39·0	5,6	27·6	..	24·0	19,30	47·0	277·8	..	3·3	31	14	..	..	..	..	18	0	0	0	0	0	0	0	0	0

Division and station	Air temperature in °C								Rainfall in millimetres					No. of rainy days (2.5mm. or more)		Wind speed Km. per hour			Weather phenomena—No. of days with								
	Mean maximum.	Departure from normal	Highest	Date	Mean minimum	Departure from normal	Lower	Date	Total fall during 0830-1730 hours.	Total fall in 24 hours	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean between 0830-1730 hours	Mean 24 hours	Departure from normal	[illegible] sion (Snow or more)	sleet	Hail	Thunder heard.	Fog	Dust-storm	Ground frost	Gale	Squall	Line-squall
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
AUGUST (*Contd.*)																												
Kerala (Including Laccadives)																												
Minicoy	29·5	+0·2	30·4	23	25·2	+0·1	22·8	25	93·8	178·9	−19·5	32·3	25	13	+1·2	17·0	16·0	−0·1	18	0	0	2	0	0	0	0	0	0
Amini Divi	30·2	+0·6	31·6	13	25·9	+0·6	23·4	1	..	71·0	−126·1	10·2	25, 31	12	+0·7	..	26·1	+5·0	16	0	0	0	0	0	0	0	0	0
Hill Stations excluding Kashmir)																												
Koksar	..	..	..	..	..	..	..	..	..	163·7	..	56·1	12	12	..	..	..	..	13	..	..	..	..	..	..	..	..	..
Abu	23·8	+1·6	28·8	5	18·9	+0·9	16·7	31	190·7	689·3	+111·4	283·2	24	14	−3·4	21·3	12·7	+0·1	17	0	0	2	5	0	0	0	0	0
Hydrometeorological Observatories Sabarmati Catchment																												
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	230·7	..	134·6	23	5	..	..	..	..	5	..	..	..	..	..	..	..	..	.
SEPTEMBER																												
Uttar Pradesh (East)																												
Lakhimpur Kheri	32·2	..	34·9	26	24·3	..	21·1	30	79·3	184·6	..	59·7	15	7	..	4·7	3·5	..	10	0	0	7	0	0	0	0	0	0
Bahraich	31·9	−1·0	34·4	26	23·7	−1·0	22·0	30	57·4	140·2	−77·7	46·0	15	7	−0·3	7·5	5·1	+1·9	11	0	0	0	0	0	0	0	0	0
Punjab (India) (Including Delhi)																												
Ambala	31·2	−3·2	36·5	28	22·3	−1·0	17·3	28	118·2	319·4	+189·6	176·5	15	9	+4·3	11·0	0·6	−2·9	9	0	0	0	0	0	0	0	0	0
Ludhiana	33·7	−1·2	38·1	24	22·1	−1·7	19·1	2	63·5	120·7	+20·4	57·9	3	6	+2·2	5·7	3·5	+1·6	7	0	0	0	0	0	0	0	0	0
Jammu and Kashmir																												
Leh	18·6	−2·3	21·7	1	4·2	−1·2	1·3	25, 27	5·8	22·3	+15·4	8·9	3	3	+2·1	5·8	4·9	+2·0	4	0	0	1	0	0	0	0	0	0
Rajasthan (East)																												
Dholpur	33·1	..	35·8	24,25,29	23·2	..	20·9	21	..	170·3	..	45·0	1	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kerala (Including Laccadives)																												
Minicoy	29·6	+0·2	30·0	27	25·5	+0·4	23·5	8	12·7	45·6	−114·4	10·7	8	7	−3·1	13·7	11·9	−2·3	12	0	0	0	0	0	0	0	0	0
Amini Divi	31·1	+1·3	32·6	30	25·9	+0·7	22·8	5	..	55·9	−95·5	36·8	5	3	−7·1	..	17·8	+1·2	11	0	0	0	0	0	0	0	0	0
Hill Stations (excluding Kashmir)																												
Koksar	..	..	..	..	..	..	..	..	..	268·7	..	56·9	10	12	..	..	..	..	12	..	..	..	..	..	..	..	..	..
Hydrometeorological Observatories Sabarmati Catchment																												
Sainwara (Surajgarh)	..	..	..	..	..	..	..	..	..	0	..	0	..	0	..	..	..	..	0	..	..	..	..	..	..	..	..	..
OCTOBER																												
Kerala (Including Laccadives)																												
Minicoy	29·8	+0·2	31·0	30	24·4	0	20·6	31	97·8	333·2	+148·3	76·5	11	12	+1·4	11·3	9·5	−1·1	17	0	0	2	0	0	0	0	0	0
Amini Divi	31·2	+1·0	34·3	8	25·4	+0·4	22·8	19	..	145·3	−0·5	33·0	18	11	+2·4	..	5·7	−4 3	13	0	0	0	0	0	0	0	0	0
NOVEMBER																												
Kerala (Including Laccadives)																												
Minicoy	30·1	+0·6	31·8	5	24·3	+0·8	22·7	24	69·2	149·9	+10·7	48·7	7	10	+2·3	9·4	7·3	−0·7	16	0	0	4	0	0	0	0	0	0
Amini Divi	31·4	+0·9	33·8	20, 22	24·6	+0·3	23·2	12, 27	..	304·5	+227·8	85·1	12	9	+4·1	..	3·6	−2·2	9	0	0	3	0	0	0	0	0	0
DECEMBER																												
Kerala (Including Laccadives)																												
Minicoy	30·0	+0·3	32·2	31	24·5	+1·2	21·2	18	26·2	67·6	−18·0	28·2	29	5	+0·7	9·2	7·2	+0·3	5	0	0	0	0	0	0	0	0	0
Amini Divi	32·5	+1·9	33·9	21	24·5	+1·1	21·7	18	..	26·1	−11·8	14·2	30	2	0	..	5·1	0	2	0	0	0	0	0	0	0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in C: Dry bulb	Mean temperature in C: Wet bulb	Mean temperature in C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bay Islands																											
Maya Bandar	0830	23	1013·4	1010·7	..	27·2	24·0	22·4	26·9	75	..	4·2	..	6·4	0	0	21	2	16	0	0	0	0	0	3	10	0
	1730	"	1011·0	1008·3	..	26·8	24·1	22·9	27·7	79	..	4·3	..	9·6	0	0	28	1	27	0	0	0	0	0	0	3	0
Long Island	0830	33	1013·8	1010·0	..	27·4	24·5	23·0	28·1	77	..	4·0	..	1·3	0	0	10	0	0	1	0	0	5	0	4	21	0
	1730	"	1011·3	1007·6	..	26·6	23·6	22·3	26·7	77	..	3·7	..	0·2	0	0	2	0	0	0	0	0	2	0	0	29	0
Port Blair	0530	79	1011·4	1002·4	..	24·7	23·1	22·4	26·9	87	..	4·5	..	9·5	0	1	22	1	20	2	0	0	0	0	0	8	0
	0830	"	1013·3	1004·4	+0·3	29·0	25·1	23·3	28·7	71	0	4·1	−0·1	12·3	0	0	31	3	25	3	0	0	0	0	0	0	0
	1130	"	1011·7	1002·9	..	30·2	25·5	23·3	28·7	67	..	4·9	..	13·9	0	0	31	1	23	7	0	0	0	0	0	0	0
	1730	"	1011·0	1002·1	..	26·2	23·6	22·5	27·3	79	..	4·6	..	12·4	0	2	28	0	28	2	0	0	0	0	0	1	0
	2330	"	1012·4	1003·5	..	25·4	23·5	22·7	27·4	85	..	4·6	..	12·7	0	1	29	3	23	3	0	0	0	0	1	1	0
Car Nicobar	0830	10	1012·1	1010·9	..	28·3	25·2	23·8	29·7	77	..	5·0	..	8·3	0	0	30	0	15	13	2	0	0	0	0	1	0
	1730	"	1009·9	1008·7	..	26·7	24·5	23·4	28·9	83	..	4·9	..	3·5	0	0	27	0	19	6	2	0	0	0	0	4	0
Nancowry	0830	26	1012·2	1009·3	..	28·1	25·9	24·9	31·6	83	..	5·0	..	0·3	0	0	2	0	1	0	1	0	0	0	0	29	0
	1730	"	1009·8	1006·9	..	26·4	24·7	23·9	29·9	87	..	5·0	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Kondul	0830	8	1012·3	1011·3	..	27·4	25·5	24·7	31·4	85	..	5·1	..	9·9	0	0	29	2	24	3	0	0	0	0	0	2	0
	1730	"	1009·9	1009·0	..	27·3	25·4	24·7	30·8	86	..	5·1	..	7·6	0	0	26	1	25	0	0	0	0	0	0	5	0
Assam (Including Manipur, Tripura)																											
Pasighat	0830	..	..	..	..	17·0	14·0	11·5	13·6	70	..	2·9	..	19·2	0	13	17	11	1	0	0	1	0	0	17	1	0
	1730	..	..	..	..	16·2	15·0	14·0	16·2	88	..	2·2	..	3·3	0	0	20	5	0	0	0	0	0	1	14	11	0
Digboi	0830	..	..	..	..	15·5	14·5	13·8	15·7	85	..	3·5	..	3·0	0	0	31	5	2	2	3	9	5	3	2	0	0
	1730	..	..	..	..	20·1	17·2	15·3	17·3	75	..	4·0	..	3·0	0	0	31	9	4	1	1	3	4	8	1	0	0
Dibrugarh	0830	106	1018·4	1005·9	−0·2	17·4	15·3	13·9	15·7	80	+11	2·5	−0·1	1·6	0	0	16	2	2	12	0	0	0	0	0	15	0
	1730	"	1014·4	1002·0	..	18·3	16·2	14·7	16·7	80	..	1·0	..	0·1	0	0	1	0	0	1	0	0	0	0	0	30	0
Dibrugarh (Mohanbari Aerodrome)	0230	111	1015·7	1002·4	..	11·4	11·2	11·0	13·1	98	..	2·3	..	0·3	0	0	2	0	1	0	0	0	0	0	1	29	0
	0530	"	1016·5	1003·2	..	11·0	10·0	10·8	13·0	98	..	3·7	..	0·3	0	0	2	0	2	0	0	0	0	0	0	29	0
	0830	"	1018·7	1005·6	..	16·7	15·2	14·1	16·1	85	..	2·4	..	2·9	0	0	17	0	12	4	1	0	0	0	0	14	0
	1130	"	1016·0	1003·2	..	21·4	17·2	14·1	16·2	64	..	3·3	..	5·1	0	0	26	3	10	7	1	0	0	1	4	5	0
	1730	"	1014·7	1001·7	..	16·8	15·3	14·3	16·2	85	..	2·5	..	0·5	0	0	3	1	2	0	0	0	0	0	0	28	0
	2330	"	1016·1	1002·9	..	12·3	12·0	11·7	13·7	96	..	2·4	..	0·2	0	0	2	0	0	1	0	0	1	0	0	29	0
North Lakhimpur	0830	102	1018·1	1006·1	..	16·5	15·1	14·0	16·0	86	..	2·7	..	..	0	0	27	7	10	9	0	0	0	0	1	4	0
	1130	"	1015·9	1004·1	..	21·8	17·2	13·9	16·0	62	..	3·2	..	..	0	0	30	4	3	13	8	1	0	0	1	1	0
	1730	"	1014·2	1002·2	..	16·9	15·4	14·4	16·3	84	..	2·2	..	..	0	0	12	8	2	0	1	0	0	0	1	19	0
Sibsagar	0830	97	1018.5	1007·1	−0·1	16·8	15·7	14·9	16·9	89	−5	6·1	+0·2	0·9	0	0	7	3	2	0	1	0	1	0	0	24	0
	1730	"	014·5	1003·2	..	19·1	17·3	16·0	18·4	83	..	2·2	..	0·3	0	0	2	0	1	0	0	0	1	0	0	29	0
Jorhat	0530	90	01·58	1005·0	..	11·9	11·9	11·9	13·9	100	..	5·5	..	0·2	0	0	1	1	0	0	0	0	0	0	0	30	0
	0830	"	:8·0	1007·4	..	16·2	15·4	14·9	17·0	92	..	5·0	..	0·8	0	0	4	2	2	0	0	0	0	0	0	27	0
	1130	"	1055·8	1005·4	..	21·7	17·8	15·2	17·2	67	..	3·0	..	5·1	0	0	21	7	9	4	0	0	0	0	1	10	0
	1730	"	1013.7	1003.3	..	17·5	16·0	15·1	17·0	86	..	1·6	..	1·0	0	0	3	2	1	0	0	0	0	0	0	28	0
Golaghat	0830	..	..	..	..	17·0	15·6	14·6	16·5	85	..	4·6	..	..	0	0	1	0	0	0	1	0	0	0	0	30	0
	1730	..	..	..	..	22·1	19·8	18·4	21·4	82	..	4·6	..	..	0	0	0	0	0	0	0	0	0	0	0	31	0
Gohpur (R)	0830	..																									
(R)	1730	..																									
Tezpur	0830	79	1018·5	1009·1	−0·5	15·1	14·3	13·6	15·6	92	+4	2·0	0	3.6	0	0	30	0	18	10	2	0	0	0	0	1	0
	1730	"	1014.1	1004·9	..	19·5	17·3	15·8	18·0	79	..	0·9	..	1.6	0	0	15	1	8	6	0	0	0	0	0	16	0
Tezpur (P.B.O.)	0230	78	1015·9	1006·5	..	13·6	13·1	12·7	14·7	95	..	1·1	..	0·5	0	0	3	0	2	1	0	0	0	0	0	28	0
	0530	"	1016·3	1006·9	..	12·6	12·2	11·8	14·0	96	..	2·6	..	1·1	0	0	8	2	2	4	0	0	0	0	0	23	0
	0830	"	1018·5	1009·2	..	17·6	15·6	14·1	16·2	80	..	2·3	..	3·2	0	0	22	2	7	12	1	0	0	0	0	9	0
	1130	"	1016·4	1007·3	..	21·9	17·8	15·0	16·9	65	..	1·9	..	5·8	0	2	27	2	9	9	7	1	0	0	1	2	0
	1730	"	1014·1	1005·3	..	18·6	16·4	14·8	16·8	79	..	1·2	..	1·4	0	0	8	1	3	4	0	0	0	0	0	23	0
	2330	"	1016·3	1007·0	..	14·6	14·1	13·5	15·6	93	..	1·4	..	1·2	0	0	7	4	2	1	0	0	0	0	0	24	0
Majbat	0830	..	..	..	..	..	..	..	..	..	..	2·2	..	5·5	0	0	30	1	6	18	4	1	0	0	0	1	0
	1730	..	..	..	..	..	..	..	..	..	..	2·9	..	2·7	0	0	24	7	8	6	1	0	0	0	2	7	0
Chaparmukh	0830	66	1018·9	1011·4	..	18.3	16.3	14.8	17.0	81	..	2.0	..	6.4	0	0	30	0	2	0	28	0	0	0	0	1	0
	1730	"	1014·5	1006.8	..	20·0	17·3	15·4	17·5	75	..	1.2	..	0.5	0	0	3	0	1	0	1	0	0	0	1	28	0
Tangla	0830	78	1017·7	1008·5	..	18·5	16·2	14·5	16.7	77	..	1·4	..	5·9	0	0	30	0	6	12	7	3	2	0	0	1	0
	1730	"	1013·8	1004·7	..	18·6	17·3	16·4	18·9	87	..	0·9	..	6·8	0	0	4	1	0	2	1	0	0	0	0	27	0

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity%.	Departure from normal.	Colud amount (Oktas): Mean amount.	Colud amount (Oktas): Departure from normal.	Mean wind speed, km. per hour.	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Assam (Including Manipur, Tripura) —*(Contd.)*																											
Gauhati	0830	55	1018·0	1011·5	−0·1	16·4	15·6	15·0	17·0	91	+2	2·7	+0·8	2·0	0	0	21	6	10	0	3	1	0	0	1	10	0
	1730	"	1014.1	1007·6	..	21·1	17·9	15·9	18·0	72	..	2·8	..	0·6	0	0	6	0	1	2	3	0	0	0	0	25	0
Gauhati (Kaikuchi Aerodrome)	0230	49	1015·2	1009·3	..	13·4	13·1	12·6	14·8	96	..	1·7	..	0·6	0	0	5	0	4	0	0	1	0	0	0	26	0
	0530	"	1015·7	1009·8	..	12·5	12·1	11·9	13·8	96	..	2·3	..	1·2	0	0	8	0	7	1	0	0	0	0	0	23	0
	0830	"	1017·8	1012·0	..	17·7	15·9	14·6	16·6	82	..	2·4	..	3·2	0	3	12	2	9	3	0	1	0	0	0	16	0
	1130	"	1015·5	1009·8	..	22·7	17·9	14·5	16·8	60	..	2·1	..	7·2	0	1	28	9	15	3	1	0	0	0	1	2	0
	1730	"	1013·7	1008·0	..	19·3	17·0	15·5	17·5	77	..	3·3	..	1·3	0	0	11	1	4	1	0	2	1	0	2	20	0
	2330	"	1015·7	1009·9	..	14·5	13·9	13·4	15·4	93	..	2·0	..	1·6	0	0	9	0	4	3	0	0	2	0	0	22	0
Rangiya	0830	..	..	..	..	17·7	15·9	14·4	16·6	81	..	0·5	..	..	..	..	..	6	11	9	2	3	0	0	0	0	0
	1730	..	..	..	..	19·8	17·4	15·9	18·1	80	..	0·1	..	..	..	..	..	9	10	6	2	3	0	0	1	0	0
Goalpara	0830	38	1016·7	1012·2	..	16·0	14·8	13·8	55·8	85	..	3·6	..	2·0	0	0	18	0	10	1	4	1	2	0	0	13	0
	1730	"	1012·6	1007·8	..	23·5	19·0	16·9	18·3	67	..	0·7	..	1·4	0	0	12	0	10	1	0	0	0	0	1	19	0
Dhubri	0830	35	1018·3	1014·2	+0·4	17 9	16·5	15·3	17·6	85	+2	1·6	+0·3	3·3	0	0	21	1	20	0	0	0	0	0	0	10	0
	1730	"	1013·9	1009·9	..	20·6	17·5	15·3	17·5	72	..	0·8	..	1·7	0	0	15	1	10	0	0	1	2	1	0	16	0
Thubri (Rupsi Aerodrome)	0830	..	..	..	..	17·9	16·0	14·8	16·8	83	..	2·0	..	4·6	0	0	26	2	7	14	3	0	0	0	0	5	0
	1130	..	..	..	..	23·1	18·2	14·9	17·6	60	..	2·3	..	6·5	0	0	30	1	4	13	8	3	0	1	0	1	0
	1730	..	..	..	..	18·2	16·5	15·5	17 4	84	..	1·4	..	1·2	0	0	6	2	1	2	1	0	0	0	0	25	0
														(g)													
Tura	0830	370	1018 7	975·8	..	16·1	14·1	12·6	14·5	79	..	1·5	..	3·0	0	0	20	0	1	14	5	0	0	0	0	4	0
														(f)													
	1730	"	1014·7	972·7	..	21·5	17·5	14·7	16·7	67	..	3·6	..	1·3	0	0	11	0	1	6	0	0	1	3	0	14	0
Agartala	0230	16	1013·8	1011·9	..	12·8	12·3	11·8	13·8	94	..	0·3	..	1·9	0	0	11	0	2	1	4	2	0	1	1	20	0
	0530	"	1014·2	1012·3	..	11·7	11·3	10·9	13·1	95	..	1·0	..	2·0	0	0	15	0	0	5	5	3	1	1	0	16	0
	0830	"	1016·4	1014·5	..	19·3	16·6	14·7	16·6	75	..	1·1	..	1·7	0	0	14	2	2	1	3	3	0	2	1	17	0
	1130	"	1014·8	1013·0	..	25·5	18·1	12·5	14·6	45	..	1·9	..	8·0	0	0	30	8	2	0	0	1	3	3	13	1	0
	1730	"	1012·8	1010·9	..	21·?	17·0	13·8	15·9	63	..	1·1	..	3·2	0	0	20	12	2	0	0	0	0	2	4	11	0
	2330	"	1014·7	1012·8	..	14·5	13·5	12·7	14·8	89	..	0·3	..	1·8	0	0	10	0	1	2	5	0	1	1	0	21	0
Silchar	0830	29	1017·6	1014·1	−0·2	18·0	15·8	14·2	16·2	78	−5	0·6	−1.4	1·2	0	0	12	0	5	3	4	0	0	0	0	19	0
	1730	"	1013·2	1009·8	..	23·0	18·5	15·5	17·7	63	..	0·5	..	0·1	0	0	1	0	0	0	0	0	1	0	0	30	0
Silchar (Kumbhigram Aerodrome)	0530	97	1014·4	1002·8	..	13·0	12·5	12·0	14·1	94	..	1·2	..	9·9	0	0	31	0	1	30	0	0	0	0	0	0	0
	0830	"	1016·2	1004·9	..	18·6	15·7	13·8	15·6	75	..	0·7	..	9·7	0	0	31	0	0	18	12	1	0	0	0	0	0
	1130	"	1013·8	1002·7	..	23·9	18·0	13·8	15·9	53	..	0·9	..	6·1	0	0	30	0	2	7	11	7	2	0	0	1	1
	1730	"	1012·3	1001·1	..	19·5	16·9	14·9	17.5	75	..	0·3	..	6·4	0	0	30	3	21	6	0	0	0	0	0	1	0
Imphal	0530	801	1029·9	926·9	..	5·2	5·0	5·0	8·6	99	..	4·3	..	0·2	0	0	2	1	0	0	0	0	0	0	1	29	0
	0830	"	1020·2	928·7	..	12·7	10·7	9·0	11·5	78	..	1·2	..	1·4	0	0	12	0	0	1	5	5	1	0	0	19	0
	1130	"	1015·0	926·1	..	19·7	14·3	9·8	12·5	53	..	1·5	..	8·4	0	1	30	0	0	1	4	20	5	0	1	0	0
	1730	"	1014·8	924.6	..	15·6	12·2	9·2	11·8	67	..	0·7	..	3·5	0	0	25	1	2	1	0	0	6	4	11	6	0
	2330	"	1019·4	926·4	..	8·0	7·6	7·3	10·1	96	..	1·1	..	0·8	0	0	7	1	0	0	0	2	3	0	1	24	0
Haflong	0830	682	1017·1	939·8	..	16·4	14·0	12·4	14·3	77	..	2·6	..	..	0	0	31	7	21	1	0	2	0	0	0	0	0
	1730	"	1013·3	936·4	..	17·3	14·5	12·4	14·5	73	..	2·7	..	..	0	0	31	9	4	0	3	2	4	0	9	0	0
Lumding	0830	149	1018·4	1000·7	..	15·8	14·4	13·7	15·6	85	−6	2·6	..	0·1	0	0	1	0	0	1	0	0	0	0	0	30	0
	1730	"	1013·5	996·3	..	21·1	18·0	16·1	18·1	73	..	2·8	..	0·6	0	0	5	0	0	3	2	0	0	0	0	26	0
Sub-Himalayan West Bengal.																											
Cooch Behar (C.W.O.)	0830	43	1018·0	1012·8	..	17·6	15·6	14·1	16·2	80	..	1·8	..	7·4	0	0	30	0	12	18	0	0	0	0	0	1	0
	1130	"	1016·1	1011·0	..	23·4	17·9	14 2	16·0	56	..	1·9	..	9·0	0	1	30	0	10	12	2	0	0	0	1	0	6
	1730	"	1014·4	1008·9	..	18·9	16·5	14·8	16·7	77	..	1·5	..	0·2	0	0	1	1	0	0	0	0	0	0	0	30	0
Jalpaiguri	0830	83	1018·0	1008·1	0	14·9	13·9	13·1	14·9	89	+5	1·0	0	3·6	0	0	26	15	4	0	0	0	1	2	4	5	0
	1730	"	1013·6	1004·0	..	22·3	17·4	13·8	15·7	59	..	0·7	..	1·8	0	0	16	2	2	2	1	0	5	4	0	15	0
			(i)	(i)		(i)	(i)	(i)	(i)	(i)																	
Bagdogra	0230	131	1014·5	999·3	..	13·1	12·4	11·8	14·1	92	..	2·3	..	1·5	0	0	13	9	3	0	0	0	0	0	1	18	0
	0530	"	1015·3	999·6	..	11·7	11·2	10·7	12·9	94	..	1·8	..	2·4	0	0	22	19	1	0	0	0	0	0	2	9	0
	0830	"	1017·4	1002·0	..	17·5	15·6	14·1	16·6	81	..	2·8	..	2·0	0	0	14	4	4	6	0	0	0	0	0	17	0
	1130	"	1015·6	1000·5	..	23·3	17·6	13·5	15·3	54	..	2·9	..	5·0	0	0	28	0	2	5	11	3	3	3	1	3	0
	1730	"	1013·6	998·3	..	17·9	16·3	15·1	17·2	83	..	3·3	..	1·7	0	0	15	1	1	1	0	0	2	8	2	16	0
			(h)	(h)		(h)	(h)	(h)	(h)	(h)																	
	2330	"	1015·3	1000·1	..	14·2	13·4	12·6	14·8	90	..	1·9	..	3·1	0	0	25	21	1	0	0	0	0	2	1	6	0
Malda	0830	31	1017·6	1013·9	−0·5	18·5	15·4	13·1	15·1	72	−1	1·1	+0·5	6·9	0	0	29	10	5	1	0	1	3	2	7	2	0
	1730	"	1013·7	1010·1	..	22·4	17·5	14·0	15·9	59	..	0·4	..	3·0	0	0	22	2	2	1	0	1	0	3	13	9	0

(f) Mean of 25 days. (h) Mean of 23 days. (g) Mean of 24 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %.	Cloud amount (Oktas): Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Wind speed (Km. p.h.): Mean wind speed, km. per hour.	Wind speed (Km. p.h.): 62 or more.	Wind speed (Km. p.h.): 20 to 61.	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gangetic West Bengal																											
Dum Dum	0230	6	1014·4	1013·6	..	14·6	14·3	13·9	16·1	96	..	0·3	..	0·6	0	0	4	2	1	0	0	0	0	0	1	27	0
	0530	"	1014·9	1014·1	..	13·7	13·5	13·4	15·2	98	..	0·3	..	1·1	0	0	11	3	0	0	0	0	1	0	7	20	0
	0830	"	1017·2	1016·4	..	18·9	16·8	15·3	17·4	80	..	0·9	..	4·2	0	0	28	13	1	1	0	0	0	3	10	3	0
	1130	"	1015·9	1015·1	..	25·6	19·3	15·0	17·1	53	..	0·4	..	6·7	0	0	30	16	3	0	2	1	1	0	7	1	0
	1730	"	1013·3	1012·[illegible]	..	23·1	19·3	16·7	19·1	68	..	0·8	..	1·0	0	0	8	4	1	0	0	0	1	0	2	23	0
	2330	"	1015·2	1014·4	..	15·8	15·2	14·7	16·3	93	..	0·2	..	1·4	0	0	10	3	0	0	0	2	1	0	4	21	0
Calcutta	0830	6	1017·1	1016·4	−0·5	19·7	16·2	13·5	15·4	68	−9	0·5	−0·9	2·2	0	0	16	4	3	3	0	0	0	0	6	15	0
	1130	"	1015·6	1014·9	..	26·3	18·0	11·8	13·9	41	..	0·1	..	4·3	0	0	29	7	4	6	0	0	0	5	7	2	0
	1730	"	1013·2	1012·5	..	22·6	17·6	13·8	16·1	57	..	0·4	..	0·4	0	0	4	0	0	0	1	0	1	0	2	27	0
Barrackpore	0530	7	1015·0	1014·2	..	13·4	13·0	12·6	14·7	95	..	0·7	..	1·1	0	0	3	3	0	0	0	0	0	1	1	26	0
	0830	"	1017·4	1016·6	..	19·6	16·7	14·4	16·7	72	..	1·2	..	4·5	0	0	17	9	0	1	0	0	0	1	6	14	0
	1130	"	1015·9	1015·1	..	25·6	18·4	13·1	15·3	47	..	0·5	..	8·4	0	0	28	9	3	2	0	1	2	4	7	3	0
	1730	"	1015·4	1012·6	..	20·9	17·0	14·2	16·3	66	..	0·5	..	1·1	0	0	8	3	0	0	0	0	1	0	4	23	0
	2330	"	1015·3	1014·5	..	15·2	14·5	13·8	15·7	93	..	0·2	..	0·5	0	0	5	1	1	1	0	0	1	0	1	26	0
Saugor Island	0830	3	1016·6	1016·3	−0·7	21·5	18·2	15·8	18·2	71	−6	0·8	−1·1	11·3	0	2	29	15	14	0	0	0	0	1	1	0	0
	1730	"	1012·9	1012·6	..	23·1	18·4	15·1	17·3	61	..	1·3	..	7·7	0	6	30	3	9	0	6	4	6	2	1	1	0
Sandheads	0530	10	1014·5	1013·4	..	20·6	19·9	15·8	18·7	6[illegible]	..	0·1	..	..	0	5	19	11	8	1	0	0	0	3	1	7	6
	0830	"	1016·7	1015·6	0·6	24·5	19·9	17·0	19·9	63	+5	0·7	−1·1	..	0	3	14	13	10	0	1	1	0	2	1	4	0
	1130	"	1016·1	0[illegible]5·0	..	25·3	20·0	16·5	19·2	59	..	1·0	..	..	0	3	26	15	8	0	0	0	0	3	3	2	0
	1730	"	1013·7	1012·6	..	25·5	19·9	16·3	18·8	58	..	0·6	..	..	0	3	18	11	5	2	0	0	0	1	2	10	0
	2330	"	1015·0	1013·9	..	24·0	19·4	16·2	19·2	62	..	..	..	..	0	1	18	9	5	1	1	1	2	1	0	12	0
Contai	0830	11	1017·1	1015·8	..	21·6	17·2	13·7	16·7	62	..	0·5	..	1·0	0	0	0	8	0	0	0	0	0	0	2	21	0
	1730	"	1013·5	1012·3	..	23·6	19·4	16·1	19·2	65	..	0·3	..	0·3	0	0	3	0	0	0	0	3	0	0	0	28	0
Midnapore	0830	45	1017·5	1016·2	0·2	22·4	16·0	10·6	13·1	48	−15	0·1	−1·2	6·4	0	0	25	13	11	1	0	0	0	0	0	6	0
	1730	"	1013·1	1011·9	..	25·6	17·5	10·9	13·9	41	..	0	..	2·4	0	0	15	7	4	1	0	0	0	0	3	16	0
Purulia	0830	255	1018·2	1016·6	..	18·1	13·5	9·0	11·6	55	..	0·6	..	1·8	0	0	18	3	0	0	1	0	0	0	9	5	13	0
	1730	"	1013·5	1012·4	..	23·0	16·2	10·6	13·2	47	..	0·7	..	0·3	0	0	3	0	0	0	0	0	0	1	2	28	0
Burdwan	0830	32	1017·8	1016·0	0	19·6	15·9	13·5	15·3	67	−1	0·3	−1·1	0·5	0	0	5	5	0	0	0	0	0	0	0	26	0
	1730	"	1013·8	1012·1	..	23·5	18·5	14·7	17·0	58	..	0·1	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Krishnagar	0830	15	1017·6	1015·[illegible]	0·[illegible]	[illegible]·8	16·0	13·3	15·0	6[illegible]	−8	0·5	−0·[illegible]	1·2	0	0	12	8	1	1	0	0	0	2	0	19	0
	1730	"	1013·6	1012·[illegible]	..	22·6	17·6	14·4	16·1	6[illegible]	..	0·2	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Asansol	0230	126	1015·0	1[illegible]00·[illegible]	..	15·3	12·7	10·3	12·8	72	..	0·4	..	0·8	0	0	5	1	0	0	0	0	0	0	4	26	0
	0530	"	1015·6	1000·7	..	15·7	11·8	9·9	12·7	78	..	0·9	..	1·1	0	0	5	0	0	0	0	0	0	0	5	26	0
	0830	"	1017·6	1002·9	−0·2	18·4	14·5	11·1	13·4	62	−5	0·7	0·7	4·9	0	0	23	1	0	1	0	0	0	4	17	8	0
	1130	"	1015·9	1001·[illegible]	..	25·1	16·8	10·1	12·8	39	..	0·5	..	7·2	0	0	28	4	2	1	2	1	0	3	15	3	0
	1730	"	1013·2	998·8	..	22·9	16·1	10·4	12·6	46	..	0·9	..	3·2	0	0	19	2	0	0	1	0	0	2	14	12	0
	2330	"	1015·6	1000·[illegible]	..	16·6	13·4	10·5	13·1	68	..	0·6	..	1·3	0	0	11	4	0	0	0	0	0	0	7	20	0
Suri	0830	77	1017·7	1008·8	..	19·0	14·8	11·4	13·4	62	..	0·7	..	5·1	0	0	28	8	2	2	0	0	1	4	11	3	0
	1730	"	1014·2	1005·5	..	23·1	16·4	11·6	13·3	49	..	1·2	..	2·7	0	0	21	6	3	2	0	0	1	2	7	10	0
Berhampore	0830	19	1017·3	1015·0	−0·7	17·7	15·3	13·7	15·2	77	+1	0·2	−1·2	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	"	1013·0	1010·8	..	22·7	17·6	14·0	16·2	58	..	0·2	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Orissa																											
Baripada	0830	54	1017·8	1011·4	..	18·8	14·6	11·1	13·3	61	..	0·2	..	1·3	0	0	24	17	4	0	0	0	0	0	3	7	0
	1730	"	1013·5	1007·3	..	24·1	17·5	12·5	14·6	48	..	0·1	..	0·5	0	0	5	0	1	1	2	1	0	0	0	26	3
Balasore	0830	20	1017·2	1014·9	−0·6	20·6	16·0	12·4	14·5	60	−10	1·0	−0·5	4·4	0	0	30	17	7	0	0	0	0	0	6	1	0
	1730	"	1013·2	1010·9	..	23·5	18·2	14·5	16·8	58	..	1·7	..	0·4	0	0	5	0	0	0	4	0	1	0	0	26	0
Chandbali	0830	6	1017·3	1016·6	+0·1	22·4	18·2	15·5	17·6	65	−10	0·5	−1·2	4·7	0	0	31	9	3	2	0	0	0	4	13	0	0
	1730	"	1013·5	1012·8	..	24·3	19·1	16·0	17·8	59	..	1·3	..	3·9	0	0	31	0	3	15	12	1	0	0	0	0	0
Cuttack	0830	27	1017·0	1013·9	−0·8	19·4	17·4	15·9	18·4	80	+5	0·4	−1·4	0·5	0	0	2	0	2	0	0	0	0	0	0	29	0
	1730	"	1012·8	1009·8	..	26·5	19·8	14·9	17·8	51	..	0·5	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Bhubaneswar	0230	46	1014·7	1009·2	..	18·5	16·6	15·3	17·3	82	..	0·5	..	1·7	0	0	16	7	2	1	0	1	0	1	4	15	0
	0530	"	1015·0	1009·5	..	17·4	15·9	14·8	17·7	84	..	0·8	..	1·7	0	0	14	8	1	0	0	0	1	0	4	17	0
	0830	"	1017·3	1011·9	..	22·6	18·0	14·6	16·9	62	..	1·3	..	4·7	0	0	23	8	7	0	0	0	1	2	5	8	0
	1130	"	1016·0	1010·7	..	27·5	18·7	12·3	14·5	39	..	1·6	..	6·8	0	0	29	5	7	1	4	4	2	0	6	2	0
	1730	"	1013·3	1008·1	..	26·2	18·0	11·7	13·7	41	..	1·4	..	3·9	0	0	27	6	6	8	3	1	1	0	2	4	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Mean wind speed, Km. per hour.	Wind speed (Km. p.h.): 62 or more.	Wind speed (Km. p.h.): 20 to 61.	Wind speed (Km. p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Orissa—*Contd.*																											
Bhubaneswar (*Contd.*)	2330	46	1015·7	1010·2	..	19·7	17·3	15·5	17·6	77	..	0·4	..	2·1	0	0	18	4	2	0	1	2	2	0	7	13	0
Puri	0830	6	1017·1	1016·4	−0·1	22·5	18·7	16·6	18·3	69	−3	1·8	+0·4	10·9	0	3	28	17	10	0	0	0	2	0	2	0	0
	1730	"	1013·4	1012·7	..	25·3	20·4	17·6	19·8	63	..	6·0	..	14·4	0	3	28	0	1	1	17	8	4	0	0	0	0
Gopalpur	0530	17	1014·8	1012·8	..	17·9	16·3	15·1	17·2	84	..	6·9	..	4·0	0	0	29	11	0	0	0	0	0	0	18	2	0
	0830	"	1017·2	1015·2	−0·1	21·8	18·2	15·7	18·0	69	−3	1·1	−0·3	7·5	0	0	31	15	0	0	0	0	0	0	16	0	0
	1130	"	1016·0	1014·0	..	28·1	21·4	17·3	20·1	53	..	1·5	..	5·0	0	0	26	3	3	6	9	4	0	0	1	5	0
	1730	"	1013·5	1011·5	..	25·5	20·6	17·6	20·0	62	..	1·7	..	7·5	0	0	31	0	0	8	19	4	0	0	0	0	0
	2330	"	1015·5	1013·5	..	20·9	18·5	16·9	19·2	77	..	0·8	..	2·6	0	0	17	4	0	0	0	0	3	1	9	14	0
Koraput	0830	913	1515·0	915·0	..	16·7	13·5	11·1	13·0	71	..	0·7	..	..	0	0	31	1	0	3	3	16	8	0	0	0	0
	1730	"	1525·8	912·5	..	21·6	14·4	8·5	11·1	44	..	0·5	..	..	0	0	31	21	0	1	2	1	0	2	4	0	0
Titilagarh	0830	211	1017·5	993·0	..	19·4	15·9	12·4	15·1	66	..	1·2	..	1·5	0	0	16	0	0	2	6	2	4	2	0	15	0
	1730	"	1012·8	989·0	..	27·4	18·1	11·2	15·0	36	..	0·5	..	2·1	0	0	22	6	14	1	0	0	1	0	0	9	0
Bolangir	0830	190	1017·4	995·6	..	23·3	17·9	13·9	16·4	56	..	..	..	2·7	0	0	21	5	4	0	5	3	4	0	0	10	0
	1730	"	1013·5	991·9	..	25·5	18·6	13·9	15·7	48	..	..	..	2·1	0	0	20	3	10	0	0	1	2	3	1	11	0
Angul	0830	139	1017·7	1001·6	+0·2	18·9	15·6	13·1	15·0	68	4	0·6	−1·0	2·5	0	0	22	0	0	0	0	0	7	9	6	9	0
	1730	"	1012·3	997·1	..	26·6	17·8	11·0	13·1	38	..	1·2	..	2·1	0	0	20	4	10	0	0	1	0	1	4	11	0
Keonjhar	0830	463	1014·6	962·1	..	19·7	14·7	10·3	13·1	56	..	0·5	..	2·8	0	0	27	7	6	3	1	3	1	0	6	4	0
	1730	"	1010·2	958·5	..	23·4	17·3	9·6	13·3	42	..	1·7	..	4·0	0	0	27	7	5	2	0	2	2	3	6	4	0
Sambalpur	0830	148	1017·8	1000·6	−0·2	19·4	15·8	13·1	15·1	67	−6	1·0	−0·4	0·4	0	0	4	1	2	1	0	0	0	0	0	27	0
	1730	"	1013·3	996·5	..	25·9	18·6	13·4	15·8	46	..	1·3	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Jharsuguda	0230	230	1014·9	987·9	..	14·9	13·4	12·1	14·4	84	..	0·5	..	1·7	0	0	16	4	7	0	0	0	0	0	5	15	0
	0530	"	1015·7	987·7	..	13·8	12·4	11·2	13·4	86	..	0·2	..	3·2	0	0	23	8	12	1	0	0	0	0	2	8	0
	0830	"	1017·5	990·7	..	18·0	14·2	10·9	12·4	64	..	0·7	..	4·4	0	0	28	11	11	0	1	0	0	0	5	3	0
	1130	"	1015·8	989·7	..	25·7	17·0	10·0	12·5	38	..	0·4	..	5·1	0	0	27	2	9	0	0	6	2	2	6	4	0
	1730	"	1012·8	986·7	..	23·8	16·7	10·9	13·3	44	..	0·9	..	1·9	0	0	15	0	1	0	1	10	0	1	2	16	0
	2330	"	1015·5	988·7	..	17·1	14·4	12·1	14·1	72	..	0·4	..	2·2	0	0	15	2	8	1	0	0	0	0	4	16	0
Chota Nagpur																											
Jamshedpur	0830	129	1018·2	1002·9	0	16·1	13·7	11·5	13·6	72	−3	0·6	−1·0	3·2	0	0	25	0	0	1	0	0	0	16	8	6	0
	1730	"	1013·2	998·5	..	23·7	17·8	13·6	15·8	53	..	1·0	..	0·6	0	0	5	0	0	2	0	0	0	2	1	26	0
Jamshedpur (P.B.O.)	0530	145	1015·7	998·5	..	13·2	11·8	10·6	12·8	85	..	0·7	..	2·1	0	0	17	1	0	0	0	0	3	7	6	14	0
	0830	"	1017·8	1000·8	..	17·2	13·6	10·4	12·7	65	..	0·7	..	4·3	0	0	29	0	0	0	0	0	3	5	21	2	0
	1130	"	1016·0	999·4	..	24·1	16·1	9·2	11·7	40	..	0·6	..	5·6	0	0	31	1	2	2	1	2	2	7	14	0	0
	1730	"	1013·1	996·5	..	24·6	16·8	10·5	12·9	44	..	1·5	..	1·4	0	0	7	2	0	0	1	0	0	1	3	24	0
	2330	"	1015·6	998·5	..	16·0	13·7	11·9	14·0	77	..	0·2	..	1·9	0	0	10	0	1	1	0	0	7	1	0	21	0
Chaibasa	0830	226	1017·6	991·4	−0·2	18·5	15·0	12·3	14·0	66	−10	0·6	−0·9	1·0	0	0	10	0	1	1	0	0	0	0	0	31	0
	1730	"	1012·8	987·1	..	23·9	17·5	11·8	14·9	51	..	1·5	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Ranchi	0830	655	1016·7	942·6	−0·3	17·6	11·7	6·0	9·6	47	−11	0	−1·4	0·7	0	0	7	5	0	0	0	1	0	1	0	24	0
	1730	"	1013·8	940·4	..	20·2	13·5	7·9	10·7	46	..	0	..	0·1	0	0	1	1	0	0	0	0	0	0	0	30	0
Ranchi (C.W.O.)	0530	652	1016·4	941·2	..	11·9	9·2	6·3	9·4	69	..	0·5	..	1·3	0	0	12	3	1	0	0	0	1	5	2	19	0
	0830	"	1017·4	943·5	..	17·9	12·3	7·3	10·3	51	..	0·6	..	4·9	0	0	26	8	2	1	0	1	3	4	7	5	0
	1130	"	1014·9	942·3	..	22·6	13·9	6·0	9·0	35	..	0·8	..	6·3	0	1	26	5	0	0	0	0	3	12	7	4	0
	1730	"	1014·5	941·7	..	21·0	13·6	6·1	10·0	39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Daltonganj	0830	221	1018·5	992·5	−0·3	15·9	12·8	9·9	12·4	69	−10	1·1	+0·1	0·7	0	0	6	0	1	0	0	1	0	3	1	25	0
	1730	"	1013·5	988·1	..	21·7	16·1	11·5	13·9	53	..	1·2	..	0·8	0	0	8	1	1	1	0	0	0	1	4	23	0
Hazaribagh	0830	611	1017·6	948·0	+0·1	17·1	12·2	7·9	10·5	55	−6	0·4	−0·9	3·7	0	0	21	1	0	2	1	4	2	0	11	10	0
	1730	"	1013·7	945·0	..	19·9	13·4	7·5	10·9	45	..	1·1	..	4·1	0	0	28	10	0	0	0	0	0	1	17	3	0
Dhanbad	0830	257	1017·7	987·9	..	19·4	13·7	8·3	10·9	49	..	2·5	..	4·0	0	0	30	6	3	1	1	0	1	12	6	1	0
	1730	"	1013·6	984·1	..	21·9	14·9	8·5	11·4	43	..	1·4	..	3·1	0	0	29	13	0	0	1	0	2	4	9	2	0
Bihar																											
Purnea	0830	38	1018·1	1013·6	−0·1	17·3	14·7	12·7	14·8	75	−10	1·0	+0·1	3·3	0	0	25	2	5	2	0	2	5	8	1	6	0
	1730	"	1013·5	1009·2	..	20·6	16·6	13·6	15·9	64	..	1·0	..	0·8	0	0	8	0	0	1	0	0	0	6	1	23	0
Forbesganj	0830	61	1017·6	1010·4	..	16·0	14·4	13·0	15·0	83	..	1·7	..	3·2	0	0	23	0	3	10	0	0	2	6	2	8	0
	1730	"	1013·5	1006·5	..	21·4	17·1	14·0	15·8	63	..	1·3	..	1·0	0	0	9	1	0	1	0	0	0	5	2	22	0
Darbhanga	0830	49	1017·7	1011·9	−0·4	15·6	14·5	13·4	15·7	87	+4	1·5	+0·6	1·5	0	0	15	1	1	4	0	0	1	8	0	16	0
	1730	"	1014·1	1008·2	..	22·1	17·9	15·2	17·2	67	..	1·3	..	0·2	0	0	2	0	1	0	0	0	0	1	0	29	0
Motihari (R)	0830	66																									
(R)	1730	"																									

(R) Register not received.

Division and station	Hour of observation I.S.T	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %.	Departure from normal.	Cloud amount (Oktas)		Mean wind speed Km. per hour.	Wind speed (Km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level.	Departure from normal.	Dry bulb	Wet bulb.	Dew point.				Mean amount.	Departure from normal.		62 or more.	20 to 61.	1 to 19.	Wind direction								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Bihar—*(Contd.)*																											
Patna	0830	53	1017·8	1011·6	—0·5	17·9	14·3	11·3	13·4	65	—5	1·2	+0·2	5·8	0	0	24	0	2	1	1	2	9	7	2	7	0
	1730	"	1014·0	1008·0	..	21·3	16·0	11·6	14·0	55	..	1·4	..	3·4	0	0	22	0	2	0	0	1	2	16	1	9	0
Patna (Aerodrome)	0530	60	1015·2	1008·1	..	11·4	10·7	10·0	13·1	92	..	1·5	..	0·6	0	0	2	0	0	1	0	0	0	1	0	29	0
	0830	"	1017·2	1010·2	..	16·3	13·9	11·7	13·8	75	..	1·5	..	5·2	0	1	17	1	0	0	1	0	5	8	3	13	0
	1130	"	1016·2	1009·4	..	22·9	16·1	11·2	13·7	49	..	1·5	..	9·7	0	1	29	1	0	3	3	2	2	10	9	1	0
	1730	"	1013·5	1006·6	..	21·9	16·1	11·3	13·6	50	..	2·0	..	4·1	0	0	16	1	0	0	1	0	0	8	6	15	0
	2330	52	1015·8	1009·6	..	16·4	14·8	13·7	15·5	84	..	1·0	..	1·3	0	0	4	0	1	1	0	0	0	1	1	27	0
Dehri	0830	107	1017·8	1005·1	..	16·5	13·8	11·6	13·4	73	..	1·1	..	3·0	0	0	31	0	0	0	8	2	11	5	5	0	0
	1730	"	1013·3	1001·0	..	23·1	16·5	11·1	13·4	47	..	1·1	..	3·0	0	0	27	6	2	1	0	0	0	3	15	4	0
Gaya	0230	116	1016·1	1002·2	..	12·7	10·6	8·5	11·0	76	..	0·7	..	0·7	0	0	4	0	0	0	2	2	0	0	0	27	0
	0530	"	1016·2	1002·3	..	11·3	9·6	7·8	10·7	80	..	0·5	..	0·8	0	0	6	0	0	1	1	0	4	0	0	25	0
	0830	"	1018·4	1004·7	+0·5	16·9	13·2	10·0	12·4	64	—3	1·1	+0·1	1·7	0	0	8	0	0	0	0	1	6	1	0	23	0
	1130	"	1017·0	1003·6	..	23·8	16·5	10·9	13·0	45	..	1·0	..	4·8	0	0	15	1	0	1	1	0	1	2	9	16	0
	1730	"	1014·3	1000·8	..	21·9	15·4	9·9	12·5	47	..	1·4	..	2·9	0	0	18	4	3	1	0	0	0	0	10	13	0
	2330	"	1016·5	1002·8	..	14·8	11·9	9·2	11·8	69	..	0·7	..	0·3	0	0	2	0	0	0	1	0	0	1	0	29	0
Jamui	0830	82	1018·0	1008·2	..	15·9	13·5	11·5	13·4	75	..	0·8	..	2·7	0	0	19	0	1	6	2	1	0	0	9	12	0
	1730	"	1013·9	1004·2	..	22·8	17·5	13·3	15·8	56	..	1·6	..	3·1	0	0	21	0	0	1	0	0	0	0	20	10	0
Dumka	0830	149	1017·8	1000·5	—0·1	20·5	15·1	10·0	13·0	52	—14	0·3	—0·6	..	0	0	31	1	1	0	1	1	4	10	13	0	0
	1730	"	1013·8	996·6	..	22·4	16·4	11·6	13·6	51	..	0·5	..	..	0	0	30	3	0	1	3	1	6	6	10	1	0
Bhagalpur	0530	49	1015·7	1009·9	..	14·3	12·7	11·2	13·9	82	..	0·7	..	2·6	0	0	15	0	0	2	0	3	4	6	0	16	0
	0830	"	1018·0	1012·2	..	16·2	13·9	11·7	14·2	75	..	0·7	..	2·1	0	0	17	1	1	1	0	3	5	6	0	14	0
	1130	"	1017·1	1011·4	..	21·9	16·5	13·0	14·1	56	..	0·8	..	4·0	0	0	21	1	2	3	0	0	5	8	2	10	0
	1730	"	1014·1	1008·5	..	21·4	16·8	13·5	15·2	60	..	0·8	..	2·8	0	0	21	1	0	1	0	2	3	12	2	10	0
	2330	"	1016·0	1010·3	..	16·9	14·4	12·3	14·8	75	..	0·5	..	2·2	0	0	15	9	0	1	0	0	6	8	0	16	0
Sabour	0830	37	1017·7	1013·2	—0·3	16·9	14·7	12·0	15·0	75	—7	1·1	—0·2	2·6	0	0	23	1	1	0	2	1	9	8	1	8	0
	1730	"	1013·7	1009·3	..	21·0	17·0	13·8	16.4	64	..	1·7	..	1·8	0	0	17	0	1	0	0	0	0	2	14	14	0
Uttar Pradesh (East)																											
Gonda	0830	110	1017·7	1005·0	..	14·5	12·8	11·5	13·4	80	—2	1·6	+0·1	1·2	0	0	13	0	0	3	0	1	0	4	5	18	0
	1730	"	1013·8	1001·4	..	19·8	16·0	13·3	15·2	65	..	2·0	..	0·2	0	0	2	0	0	1	0	0	0	1	0	25	0
Nautanwa	0830	..	..	..	..	13·8	13·0	12·8	14·4	91	..	1·9	..	2·0	0	0	14	0	0	2	3	3	5	1	0	17	0
	1730	..	..	..	..	20·8	16·6	13·1	15·9	63	..	2·4	..	1·0	0	0	8	0	0	1	1	0	4	2	0	23	0
Gorakhpur	0830	77	1016·9	1008·1	—0·6	14·6	13·3	11·5	13·9	84	+6	1·6	+0·7	1·4	0	0	14	2	1	0	1	0	1	9	0	17	0
	1730	"	1013·8	1004·7	..	20·9	16·8	13·9	15·9	65	..	1·9	..	0·6	0	0	6	0	0	1	0	0	1	4	0	25	0
Gorakhpur (P.B.O.)	0230	78	1015·1	1005·8	..	14·0	12·8	11·6	14·4	87	..	1·1	..	4·0	0	0	20	5	1	0	0	0	4	8	2	11	0
	0530	"	1015·1	1005·8	..	13·0	12·0	10·9	12·8	88	..	1·0	..	3·1	0	0	15	2	1	1	0	0	4	5	2	16	0
	1130	"	1017·0	1007·9	..	21·9	17·1	13·5	14·9	59	..	1·8	..	5·0	0	0	28	1	2	1	2	8	7	4	3	3	0
	2330	"	1015·7	1006·5	..	15·5	13·9	12·4	14·5	82	..	1·7	..	2·7	0	0	18	4	0	0	0	0	7	5	2	13	0
Azamgarh	0830	78	1017·0	1008·2	..	13·9	12·9	11·9	13·9	89	..	1·5	..	..	0	0	26	0	0	9	0	1	0	16	0	5	..
	1730	"	1013·8	1005·0	..	20·1	17·0	15·0	16·8	72	..	1·3	..	..	0	0	0	0	0	0	0	0	0	0	0	31	..
Ballia	0830	64	1017·9	1010·3	..	15·2	12·9	10·9	13·0	75	..	2·2	..	3·3	0	0	23	2	0	0	2	3	16	0	0	8	0
	1730	"	1014·1	1006·7	..	21·4	16·0	11·7	14·4	55	..	2·7	..	1·0	0	0	10	0	2	1	1	0	3	3	0	21	0
Varanasi (Banaras).	0830	76	1017.9	1008·9	—0·4	16·1	13·3	10·8	13·1	70	—6	2.1	+1·0	4·9	0	0	22	1	1	2	0	5	11	1	1	9	..
	1730	"	1013·9	1005·1	..	21.7	16·3	11.8	13·8	55	..	3·0	..	0·8	0	0	25	2	2	1	0	0	8	5	7	6	..
Varanasi (Banaras) (Babatpur Aerodrome).	0530	85	1016·7	1006·4	..	10·9	10·2	9·4	11·8	90	..	1·2	..	4·0	0	0	22	0	0	3	0	4	10	3	2	9	0
	0830	"	1018·9	1008·9	..	15·4	13·2	11·2	13·5	77	..	1·7	..	6·7	0	0	28	1	2	3	3	1	12	4	2	3	0
	1130	"	1018.2	1008·2	..	21·7	16·3	11·6	13·8	53	..	1·4	..	9·1	0	1	28	2	3	4	1	1	7	8	3	2	0
	1730	"	1015·2	1005·2	..	20·4	15·9	12·4	14·7	60	..	2·0	..	3·7	0	0	22	4	2	1	0	1	8	3	3	9	0
	2330	"	1017·0	1006·4	..	13·8	12·1	10·6	12·9	83	..	1·2	..	3·2	0	0	16	0	1	1	2	1	4	5	2	15	0
Allahabad (Bamrauli)	0230	98	1015·7	1004·0	..	12·7	11·0	9·3	11·9	80	..	1·0	..	2·4	0	0	14	1	0	1	0	1	5	4	2	17	0
	0530	"	1015·9	1004·3	..	11·5	10·1	8·6	11·4	84	..	1·0	..	2·4	0	0	18	0	4	1	0	2	7	4	0	13	0
	0830	"	1018·2	1006·3	—0·6	15·0	12·1	8·5	12·0	70	—7	1·9	+0·4	3·6	0	0	25	0	2	3	2	1	9	7	1	6	0
	1130	"	1017·5	1006·2	..	22·7	15·7	9·8	12·4	44	..	1·6	..	6·0	0	0	31	2	6	6	1	0	1	11	4	0	0
	1730	"	1014·5	1003·0	..	21·3	15·7	10·7	13·0	52	..	2·5	..	2·1	0	0	14	3	2	2	0	0	0	4	3	17	0
	2330	"	1016·4	1004·7	..	14·3	11·8	9·4	12·0	73	..	1·2	..	1·9	0	0	14	3	0	2	0	0	2	4	3	17	0
Banda	0830	121	1018·0	1003·6	..	15·6	12·6	9·5	12·0	67	..	1·7	..	0·5	0	0	4	0	2	1	1	0	0	0	0	27	0
	1730	"	1014·6	1000·9	..	22·0	16·8	12·5	15·0	56	..	1·6	..	0·1	0	0	1	0	0	0	1	0	0	0	0	30	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibar: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibar: At station level.	Mean pressure in millibar: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Mean wind speed, Km. per hour.	Wind speed (Km. p.h.): 62 or more.	Wind speed (Km. p.h.): 20 to 61.	Wind speed (Km. p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Uttar Pradesh (East) *(Contd.)*																											
Fatehpur	0830	114	1018·0	1004·4	..	13.5	11·4	9·5	11·4	77	+8	1·8	+0·4	1·3	0	0	11	0	3	3	0	1	0	1	3	20	0
	1730	"	1014·1	1000·9	..	21·3	15·7	11·4	13·2	54	..	2·4	..	1·3	0	0	11	0	2	4	0	0	0	2	3	20	0
Kanpur	0830	126	1018·4	1003·4	..	14·0	12·0	10·0	12·4	78	+1	2·8	+2·1	5·7(b)	0	0	20	0	4	5	0	1	1	8	1	9	0
	1730	"	1015·2	1000·6	..	20·4	14·9	10·1	12·6	52	..	3·0	..	6·0(d)	0	0	21	2	1	3	1	0	2	11	1	6	0
Lucknow	0830	111	1018·3	1005·0	+0·1	12·9	11·6	10·3	12·4	85	+8	2·6	+1·6	..	0	0	31	0	0	11	0	0	0	20	0	0	0
	1730	"	1014·6	1001·7	..	19·7	15·7	12·5	14·5	64	..	2·0	..	..	0	0	31	0	0	4	0	0	3	23	1	0	0
Lucknow (Amausi Aerodrome)	0230	128	1015·7	1000·4	..	10·4	9·9	9·2	11·8	91	..	1·3	..	4·3	0	0	20	0	2	1	1	0	1	6	9	11	0
	0530	"	1015·8	1000·5	..	9·7	9·1	8·5	10·9	93	..	1·3	..	4·9	0	0	22	2	0	3	2	0	1	1	13	9	0
	0830	"	1017·7	1002·4	−0·7	13·2	12·0	10·6	13·3	85	+17	2·2	+1·2	4·8	0	0	23	1	1	4	0	2	0	3	12	8	0
	1130	"	1017·2	1002·6	..	22.1	15·0	10·0	11·2	51	..	2·1	..	1·0	0	0	29	4	3	3	3	3	0	3	10	2	0
	1730	"	1014·6	999·6	..	18·5	14·7	11·0	12·3	61	..	2·7	..	5·5	0	0	25	6	2	2	0	1	0	4	10	6	0
	2330	"	1016·4	1001·1	..	11·9	10·9	10·0	11·9	88	..	1·8	..	4·0	0	0	19	0	0	3	1	0	1	7	7	12	0
Hardoi	0830	142	1017·6	1000·6	..	12·0	11·2	10·4	12·8	90	..	1·8	..	2·7	0	0	21	2	0	2	1	0	1	11	4	10	0
	1730	"	1014·4	997·8	..	19·2	15·6	12·9	14·8	67	..	2·1	..	1·4	0	0	12	1	0	1	0	0	0	8	2	19	0
Lakhimpur Kheri	0830	147	1017·9	1000·4	..	13·3	12·0	10·7	12·9	84	..	1·5	..	1·2	0	0	11	2	0	1	0	0	0	2	6	20	0
	1730	"	1014·5	997·4	..	18·7	15·7	13·3	15·3	70	..	2·4	..	0·4	0	0	4	0	0	1	0	1	0	2	0	27	0
Bahraich	0830	124	1017·6	1003·1	+0·2	15·2	13·5	12·1	14·0	82	+2	2·3	+1·3	2·9	0	0	20	2	1	0	5	0	0	3	8	11	1
	1730	"	1014·2	999·9	..	19·4	16·1	13·6	15·6	70	..	2·2	..	1·2	0	0	8	1	2	2	0	1	1	0	1	23	0
Uttar Pradesh (West).																											
Orai	0830	141	1019·4	1002·7	..	16·5	13·0	9·5	12·1	64	..	1·8	..	3·2	0	0	23	1	5	1	5	0	3	2	6	8	0
	1730	"	1015·1	998·7	..	21·5	15·5	10·5	12·7	50	..	0·9	..	2·8	0	0	26	5	5	2	2	0	1	4	7	5	0
Jhansi	0830	251	1018·0	988·4	−1·0	13·5	11·4	8·9	11·4	73	+13	2·0	+0·9	0·9	0	0	7	1	2	1	0	1	0	0	2	24	0
	1730	"	1014·1	985·4	..	22·9	15·4	9·6	11·9	44	..	1·6	..	1·9	0	0	18	7	1	5	0	0	0	0	5	13	0
Agra	0830	169	1018·3	998·2	−0·4	13 4	11·2	8·8	11·4	76	+14	2·0	+0·6	1·3	0	0	9	0	0	0	1	4	2	0	2	22	0
	1730	"	1014·8	995·3	..	21·3	15·0	9·7	11·6	49	..	2·4	..	1·4	0	0	12	1	2	1	0	1	0	1	6	19	0
Agra (Aerodrome)	0530	169																									
(R)	0830	"																									
(R)	1130	"																									
(R)	1730	"																									
(R)	2330	"																									
Mainpuri	0830	157	1018·8	1000·1	+0·5	12·6	11·0	9·5	11·9	82	+11	1·7	+0·3	0·8	0	0	7	0	0	0	0	0	1	5	1	24	0
	1730	"	1015·0	996·7	..	20·3	15·5	11·6	14·2	57	..	1·5	..	0·3	0	0	3	0	0	1	0	0	0	1	1	28	0
Aligarh	0830	187	1017·9	995·5	..	12·6	10·5	8·9	11·4	79	+17	2·0	+0·6	2·8	0	0	18	2	0	1	0	0	0	13	2	13	0
	1730	"	1014·8	993·0	..	19·4	15·2	11·7	13·5	61	..	3·0	..	2·7	0	0	19	6	0	3	0	0	0	10	0	12	0
Bareilly	0830	173	1017·5	996·9	−0·6	13·7	12·2	10·7	13·4	82	+1	2·2	+0·8	3·0	0	0	19	4	0	3	1	1	1	6	3	12	0
	1730	"	1014·2	993·8	..	19·3	14·8	11·0	13·5	60	..	2·9	..	1·0	0	0	9	0	0	0	0	0	1	8	0	22	0
Bareilly (P.B.O.)	0230	172	1015·7	995·1	..	13·0	11·4	10·7	12·4	86	..	1·9	..	3·3	0	0	22	1	1	3	0	0	1	12	4	9	0
	0530	"	1015·7	995·1	..	12·0	10·9	10·0	12·3	88	..	1·6	..	4·4	0	0	22	0	1	4	2	0	0	11	4	9	0
	1130	"	1017·4	997·4	..	18·5	14·7	12·1	13·1	67	..	2·6	..	6·4	0	0	27	1	2	4	0	1	1	10	8	4	0
	2330	"	1016·4	995·9	..	14·4	12·7	11·3	13·4	82	..	2·2	..	2·6	0	0	14	0	1	2	0	0	0	7	4	17	0
Meerut	0830	222	1018·5	992·8	+0·8	13·3	11·5	9·9	11·9	80	+5	1·5	+0·1	1·7	0	0	13	0	0	9	0	1	0	3	0	18	0
Najibabad	0830	270	1018·1	985·9	..	10·5	9·8	8·9	11·4	90	..	2·2	..	1·3	0	0	11	0	2	0	0	0	0	1	8	20	0
	1730	"	1015·5	984·3	..	19·4	15·2	11·8	13·8	62	..	2·1	..	1·5	0	0	11	1	0	0	2	0	0	0	8	20	0
Roorkee	0830	274	1018·1	985·5	−0·3	11·2	10·5	10·2	11·8	92	+10	3·3	+1·5	0·8	0	0	8	0	0	0	4	0	0	0	4	23	0
	1730	"	1014·9	983·4	..	18·1	14 6	12·2	13·8	70	..	3·5	..	0·7	0	0	7	0	0	0	1	0	0	1	5	24	0
Dehra Dun	0530	682	1016·5	937·1	..	9·4	8·4	7·3	10·1	87	..	2·0	..	0·9	0	0	9	4	4	0	0	0	0	1	0	22	0
	0830	"	1018·2	939·0	−0·3	10·8	9·2	7·5	10·1	81	+6	2·6	+0·1	0·7	0	0	10	3	6	0	0	0	1	0	0	21	0
	1130	"	1016·7	939·5	..	17·7	12·9	8·9	11·2	57	..	3·2	..	1·4	0	0	14	0	0	0	1	3	5	5	0	17	0
	1730	"	1014·7	937·1	..	16·2	13·1	10·5	12·6	70	..	3·4	..	0·2	0	0	3	1	1	0	0	0	0	1	0	28	0
	2330	"	0117·1	938·1	..	11·4	10·2	9·1	11·9	88	..	2·8	..	1·5	0	0	15	6	9	0	0	0	0	0	0	16	0
Punjab (India) (Including Delhi)																											
New Delhi	0230	216	1016·6	990·7	..	11·4	10·1	8·6	11·2	84	..	2·0	..	3·7	0	0	18	1	0	0	1	1	0	6	9	13	0
	0530	"	1016·4	990·5	..	10·4	9·2	7·8	10·9	85	..	1·9	..	5·1	0	0	23	1	0	0	3	0	0	10	9	8	0
	0830	"	1018·2	992·3	−0·3	11·4	9·8	8·0	10·9	80	+15	2·3	+0·3	6·3	0	1	22	0	0	1	2	1	1	11	7	8	0
	1130	216	1018·1	992·8	..	19·0	13·8	8·9	11·3	53	..	2·7	—	10·9	0	3	25	2	1	2	6	0	0	6	11	3	0
	1730	"	1015·1	989·9	..	18·8	14·0	9·7	12·3	57	..	3·0	..	6·3	0	0	24	2	1	3	0	0	0	3	15	7	0
	2330	"	1017·2	991·4	..	12·7	11·1	9·4	11·9	81	..	2·1	..	14·2	0	0	18	1	1	0	1	0	0	5	10	13	0

(b) Mean of 29 days.

(d) Mean of 27 days.

(R) Register not received.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Mean wind speed, Km. per hour.	Wind speed (Km. p.h.): 62 or more.	Wind speed (Km. p.h.): 20 to 61.	Wind speed (Km. p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Punjab (India) (Including Delhi)—(Contd.)																											
Hissar	0530	221	1016·8	990·2	..	8·7	8·0	7·1	10·5	90	..	1·5	..	3·0	0	0	24	1	2	1	2	1	3	12	2	7	0
	0830	"	1018·4	991·8	0·5	10·1	8·8	7·2	10·1	82	+13	2·1	+0·4	2·9	0	0	22	1	4	3	2	1	4	4	3	9	0
	1130	"	1018·2	992·5	..	19·0	13·7	8·9	13·3	53	..	3·1	..	2·7	0	0	17	1	0	4	4	1	0	2	5	14	0
	1730	"	1015·4	989·7	..	19·4	13·9	8·7	11·4	52	..	3·1	..	3·0	0	0	20	4	3	2	0	0	0	2	9	11	0
	2330	"	1017·3	990·9	..	11·4	9·7	8·7	10·7	83	..	2·3	..	1·5	0	0	12	0	2	3	2	0	0	2	3	19	0
Karnal	0830	249	1017·5	988·0	..	11·5	10·4	9·1	11·9	86	..	2·5	..	..	0	0	1	0	0	0	0	0	0	0	1	30	0
	1730	"	1015·6	986·7	..	19·4	14·5	10·0	12·4	58	..	3·4	..	..	0	0	0	0	0	0	0	0	0	0	0	31	0
Patiala	0830	251	1017·9	988·0	..	11·3	10·2	8·7	11·4	87	..	3·4	..	5·6	0	0	20	6	0	0	5	0	0	0	9	11	0
	1730	"	1015·7	986·4	..	17·4	14·1	11·0	13·2	67	..	4·0	..	3·6	0	1	12	3	0	0	1	0	0	0	9	18	0
Ambala	0830	272	1017·3	984.6	−1·3	10.8	10.1	9.3	11.8	91	+17	3.0	+0.8	2.7	0	0	18	0	0	0	4	0	3	0	11	13	0
	1730	"	1014.7	983.2	..	17.6	14.3	11.4	13.8	68	..	2.8	..	1.6	0	0	12	0	1	0	5	0	3	0	3	19	0
Ambala (P.B.O.)	0230	278	1015·8	983·1	..	12·4	11·1	9·9	11·9	85	..	2·5	..	6·3	0	0	26	2	3	2	3	1	3	1	11	5	0
	0530	"	1015·6	982·9	..	11·3	10·3	9·3	11·4	88	..	2·7	..	6·1	0	0	27	4	4	4	1	0	1	5	8	4	0
	1130	"	1017·3	985.4	..	17·0	13·8	11·6	13·2	71	..	3·8	..	8·5	0	1	30	2	1	1	7	2	1	5	12	0	0
	2330	"	1016·5	983·9	..	13·4	11·8	10.7	12·4	84	..	2·5	..	6·4	0	0	28	3	3	3	2	2	1	3	11	3	0
Ambala (Aerodrome) (R)	0530	273																									
(R)	0830	"																									
(R)	1130	"																									
(R)	1730	"																									
(R)	2330	"																									
Chandigarh	0830	347	1017.0	976.2	..	11.9	10.5	9.2	11.9	82	..	2.0	..	..	0	6	4	0	0	0	1	0	0	0	3	27	0
	1730	"	1014·5	974.4	..	17.5	13.9	11.0	13.3	65	..	1·8	..	..	0	0	15	0	1	0	3	0	6	0	5	16	0
Ludhiana	0830	247	1018·1	988.8	−0·3	11.5	10.6	9.3	11.9	85	+10	3.2	+1.1	1.8	0	0	15	3	1	2	2	1	0	3	3	16	0
	1730	"	1015·4	986.5	..	16.8	14.0	11.2	13.6	70	..	3.4	..	1.6	0	0	15	0	1	1	1	1	1	6	4	16	0
Ferozepur	0830	200	1018·8	994·6	..	9·2	8·8	8·3	10·9	98	..	2·1	..	0.4	0	0	3	1	1	0	1	0	0	0	0	28	0
	1730	"	1015·7	992·3	..	18.1	14·7	11·8	14·4	67	..	2·6	..	0.5	0	0	5	0	1	0	0	0	0	0	4	26	0
Amritsar	0530	234	1017·0	988·7	..	7·8	7·5	7·2	10·1	96	..	2·3	..	4·6	0	3	23	3	3	2	2	0	3	6	4	8	0
	0830	"	1018·5	990·3	..	8·5	8·0	7·4	10·1	93	..	3·8	..	4·4	0	1	18	4	1	2	1	1	1	5	4	12	0
	1130	"	1018.8	991·3	..	15·9	12·8	9·6	12·6	70	..	4·0	..	5·5	0	0	24	2	0	5	4	2	1	2	8	7	0
	1730	"	1015.9	988·6	..	16·7	13·4	10·6	12·6	68	..	4·1	..	5·0	0	0	26	3	4	1	0	0	0	8	10	5	0
Pathankot	0830	344	1018.4	977·6	..	10·9	9·7	8·4	11 4	85	..	4·7	..	1·4	0	0	13	1	1	6	5	0	0	0	0	18	0
	1730	"	1016.4	976·4	..	16·6	13·8	11·5	13·6	72	..	4·9	..	1·3	0	0	12	0	1	1	0	2	2	6	0	19	0
Pathankot (Aerodrome) (R)	0830	312																									
(R)	1130																										
(R)	1730																										
Himachal Pradesh																											
Bilaspur	0830	493	1019·6	961·1	..	8·3	8·0	7.9	10·2	98	..	7·7	..	1·1	0	0	10	3	1	0	1	1	1	0	3	21	0
	1730	"	1014·9	958·2	..	17·1	13·5	10·6	13·0	67	..	4·3	..	4·0	0	0	26	2	0	0	2	8	6	4	4	5	0
Mandi	0830	761	1020·1	930·2	..	6·3	6·2	6·0	9·2	98	..	7·3	..	0·5	0	0	5	0	0	0	1	0	0	3	1	26	0
	1730	"	1014·7	928·2	..	14·1	11·2	8·5	11·0	71	..	3·9	..	1·0	0	0	9	0	0	0	0	4	3	1	1	22	0
Jammu and Kashmir																											
Srinagar	0830	1587	1555·5	846·9	+0·4	2·1	1·5	0·9	6·5	91	+1	7·4	+2·5	2·3	0	0	17	0	2	2	5	0	1	3	4	14	0
	1130	"	1559·3	847·3	..	4·2	2·9	1·4	6·7	79	..	7·3	..	3·7	0	0	28	1	1	1	11	0	1	3	10	3	0
	1730	"	1537·1	845·0	..	5·1	3·2	0·8	6·5	74	..	6·1	..	4·6	0	0	29	4	5	1	6	1	1	2	9	2	0
Gulmarg	0830	2655	Closed during Winter months.																								
	1730	"	Closed during Winter months.																								
Leh	0530	3514	3130.3	666·3	..	−11·8	−13·2	−18·8	1·3	53	..	1 5	..	2·0	0	0	8	2	6	0	0	0	0	0	0	21	0
	0830	"	3139.3	667·6	+1·0	−9·3	−11·3	−17·6	1·4	43	−11	5·0	+0·4	0·1	0	0	1	0	0	0	0	1	0	0	0	30	0
	1730	"	3112.7	665.2	..	−6.9	−8.1	−11.1	2.5	73	..	4.1	..	2·0	0	0	18	1	9	0	0	3	3	2	0	13	0
Skardu (R)	0830	2288																									
(R)	1730	"																									
Gilgit (R)	0830	1491																									
(R)	1730	"																									
Misgar (R)	0830	3106																									
(R)	1730	"																									
Jammu	0830	..	..	..	..	11.2	9·5	7.8	10.5	79	+17	4.3	+1·7	10.2	0	0	31	0	30	0	0	0	1	0	0	0	0

(R) Register not received.

*Observations for 29 days.

TABLE III—SUMMARY OF OBSERVATIONS AT FIXED HOURS—DECEMBER, 1957. (AGRAHAYANA 10—PAUSA 10, 1879 SAKA)

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level.	Mean pressure in millibars: At station level.	Mean pressure in millibars: Departure from normal.	Mean temperature in °C: Dry bulb.	Mean temperature in °C: Wet bulb.	Mean temperature in °C: Dew point.	Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas): Mean amount.	Cloud amount (Oktas): Departure from normal.	Mean wind speed, Km. per hour.	Wind speed (Km.p.h.): 62 or more.	Wind speed (Km.p.h.): 20 to 61.	Wind speed (Km.p.h.): 1 to 19.	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm.	Variable.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (West)																											
Sri Ganganagar	0530	177	1016·6	995·3	..	9·3	8·5	7·8	10·5	90	..	1·9	..	1·0	0	0	8	3	4	1	0	0	0	0	0	23	0
	0830	"	1018·1	993·5	..	9·6	8·8	7·7	10·5	88	+23	2·5	+0·7	0·6	0	0	5	1	0	2	2	0	0	0	0	26	0
	1130	"	1018·4	997·7	..	17·7	13·4	9·3	12·2	61	..	2·4	..	2·1	0	0	16	2	2	2	2	2	0	2	4	15	0
	1730	"	1015·3	994·7	..	19·5	14·3	9·7	11·9	54	..	3·0	..	0·4	0	0	3	1	0	0	0	0	0	1	1	28	0
	2330	"	1017·5	996·3	..	12·2	10·5	8·6	11·4	79	..	2·2	..	0·6	0	0	4	3	1	0	0	0	0	0	0	27	0
Churu	0830	291	1018·9	983·8	..	8·8	7·2	4·6	8·8	77	..	2·0	..	1·9	0	0	11	0	1	3	2	3	2	0	0	20	0
	1730	"	1015·0	981·5	..	21·1	14·3	7·6	10·6	44	..	3·0	..	6·0	0	1	28	19	4	4	0	0	0	1	1	2	0
Bikaner	0830	224	1018·6	991·6	0·3	9·0	6·6	2·9	7·6	67	+11	1·9	+0·1	1·8	0	0	12	1	2	0	6	0	0	0	3	19	0
	1730	"	1014·8	988·8	..	21·8	13·2	3·7	8·1	33	..	2·1	..	5·9	0	0	29	5	8	2	2	0	0	0	12	2	0
Bikaner (P.B.O.)	0530	224	1016·6	989·7	..	8·3	6·7	4·4	8·5	78	..	2·1	..	2·4	0	0	8	1	1	1	0	1	1	0	3	23	0
	0830	"	1018·1	992·1	..	19·1	13·7	8·1	11·3	53	..	2·1	..	4·3	0	0	22	4	7	2	1	3	1	2	2	9	0
	1130	"	1017·2	990·5	..	12·8	10·3	7·3	10·5	70	..	2·4	..	4·2	0	0	14	4	6	0	0	0	0	0	4	17	0
	2330	"	1017·5	988·4	..	11·9	9·9	6·8	10·1	72	..	1·9	..	10·5	0	0	20	0	14	0	2	0	1	0	3	11	0
Jaisalmer	0830	242	1013·9	986·4	..	22·9	15·7	10·1	11·8	44	..	1·7	..	16·8	0	3	28	0	20	0	0	0	3	0	8	0	0
	1730	"	1018·5	990·4	..	10·9	8·1	5·5	8·8	66	..	2·8	..	7·0	0	0	18	4	5	3	1	3	1	0	1	13	0
Phalodi	0330	224	1015·5	988·6	..	22·9	14·5	6·3	9·7	35	..	2·6	..	14·9	0	1	30	12	5	3	0	0	2	0	9	0	0
	1730	"	1016·3	989·8	..	14·4	9·6	3·6	8·3	49	..	1·0	..	12·2	0	0	30	10	18	0	1	0	1	0	0	1	0
Jodhpur	0230	224	1016·1	989·4	..	13·1	9·1	4·2	8·7	55	..	1·1	..	12·7	0	0	29	8	20	0	0	0	1	0	0	2	0
	0530	"	1017·6	991·2	+1·0	13·6	9·5	4·6	8·7	55	+5	2·0	+0·3	11·2	0	0	29	6	22	0	0	0	1	0	0	2	0
	0830	"	1017·8	992·1	..	20·9	13·9	7·0	10·6	42	..	1·8	..	11·3	0	1	25	1	18	5	0	0	1	0	1	5	0
	1130	"	1014·0	988·3	..	24·4	14·8	4·9	8·9	30	..	2·0	..	10·2	0	2	27	5	14	2	0	0	2	3	3	2	0
	1730	"	1016·7	990·4	..	17·1	11·1	3·8	8·5	43	..	1·5	..	13·8	0	1	29	13	15	0	0	1	0	1	0	1	0
	2330	"	1015·7	992·6	..	14·1	9·7	4·0	8·3	53	..	1·5	..	9·7	0	0	30	3	0	0	0	0	1	0	26	1	0
Barmer	0530	194	1017·4	994·4	+0·1	14·2	9·9	4·4	9·2	54	+1	2·1	+0·5	10·4	0	0	31	4	0	0	0	0	0	2	25	0	0
	0830	"	1017·4	995·0	..	21·3	13·5	5·3	9·1	37	..	1·0	..	9·4	0	1	30	10	13	4	1	0	0	1	2	0	0
	1130	"	1013·1	991·0	..	24·9	14·7	4·1	8·5	27	..	1·9	..	6·7	0	0	31	10	10	2	0	0	1	1	7	0	0
	1730	"	1016·2	993·5	..	17·3	11·2	3·8	8·3	42	..	1·4	..	9·5	0	0	28	1	0	0	0	0	1	3	23	3	0
Rajasthan (East)																											
Alwar	0830	271	1018·5	986·0	..	10·7	10·3	9·8	11·8	95	..	2·2	..	0·2	0	0	2	1	0	1	0	0	0	0	0	29	0
	1730	"	1015·1	983·8	..	20·2	16·3	13·3	15·2	65	..	2·6	..	1·7	0	0	16	16	0	1	0	1	0	3	1	15	0
Sikar	0830	433	1018·5	967·4	..	10·6	9·2	7·7	10·5	83	..	1·9	..	2·1	0	0	20	0	2	15	2	1	0	3	7	6	0
	1730	"	1014·5	965·4	..	20·4	16·9	14·4	17·0	69	..	2·4	..	2·7	0	0	25	3	8	2	1	1	0	3	7	10	0
Jaipur	0830	436	1018·3	967·4	-0·8	13·7	10·5	7·0	10·1	65	+10	1·6	+0·1	4·3	0	0	21	2	6	10	1	1	0	0	1	10	0
	1130	"	1017·3	967·7	..	21·4	13·7	5·8	9·6	38	..	1·8	..	5·7	0	0	31	5	3	8	2	4	2	2	5	0	0
	1730	"	1014·3	964·7	..	21·0	14·0	6·9	10·6	41	..	2·4	..	4·1	0	0	28	5	4	6	5	3	0	0	5	3	0
Jaipur (Sanganer Aerodrome)	0230	390	1016·4	970·4	..	12·2	9·6	6·9	10·1	70	..	1·2	..	..	0	1	25	6	3	15	0	0	0	0	0	7	0
	0530	"	1016·5	970·3	..	10·6	8·5	6·2	9·2	75	..	0·8	..	..	0	0	18	4	1	11	1	0	0	0	1	13	0
	0830	"	1017·9	972·3	..	13·3	10·4	7·1	10·5	68	..	2·0	..	..	0	0	20	4	5	10	1	0	0	0	0	11	0
	1130	"	1017·2	972·5	..	20·5	13·7	7·6	10·5	45	..	1·9	..	..	0	1	22	2	2	11	5	0	0	1	2	8	0
	1730	"	1013·9	969·4	..	20·9	13·3	7·4	10·1	43	..	2·6	..	..	0	0	19	3	2	4	3	1	0	1	5	12	0
	2330	"	1016·9	971·2	..	13·8	10·7	7·4	10·5	65	..	1·5	..	..	0	2	22	6	3	15	0	0	0	0	0	7	0
Dholpur	0830	176	1017·9	997·2	..	15·9	12·7	9·6	12·1	67	..	2·2	..	1·6	0	1	20	0	3	1	7	0	0	3	15	2	0
	1730	"	1015·0	994·6	..	20·5	15·0	10·3	12·6	54	..	3·1	..	4·9	0	1	24	2	1	1	5	0	1	1	14	6	0
Ajmer	0830	486	1018·7	961·7	-0·8	11·4	8·9	6·1	9·2	72	+15	1·9	+0·5	2·5	0	0	17	2	3	1	1	1	2	1	6	14	0
	1730	"	1015·6	958·6	..	21·9	13·0	4·1	8·3	32	..	2·3	..	8·0	0	0	27	6	7	3	1	1	1	4	4	4	0
Kotah	0530	257	1016·1	985·7	..	12·8	10·6	8·3	11·0	74	..	0·8	..	0·6	0	0	5	0	0	0	0	0	1	3	1	26	0
	0830	"	1017·7	987·5	-0·8	15·0	11·6	7·8	11·1	63	+6	1·5	+0·1	0·2	0	0	2	0	0	0	2	0	0	0	0	29	0
	1130	"	1017·0	987·6	..	22·3	15·1	8·6	11·2	42	..	1·5	..	2·5	0	0	15	2	1	5	3	0	0	3	1	16	0
	1730	"	1013·5	984·2	..	23·5	15·7	8·7	11·4	39	..	2·0	..	1·1	0	0	8	0	3	2	1	0	1	0	1	23	0
	2330	"	1016·2	986·1	..	16·3	12·6	9·0	11·6	62	..	1·6	..	1·2	0	0	7	1	2	2	0	0	1	1	0	24	0
Chambal	0830	351	1018·4	977·2	..	14·4	11·4	8·1	11·0	67	..	1·4	..	1·3	0	0	10	3	3	2	0	0	0	0	2	21	0
	1730	"	1013·1	973·4	..	23·4	15·6	8·4	11·4	39	..	2·4	..	6·2	0	1	29	5	15	2	1	1	2	0	4	1	0
Jhalawar	0830	321	1017·7	980·0	..	14·2	10·8	7·0	10·1	62	..	1·7	..	1·7	0	0	15	6	4	1	2	0	0	0	2	16	0
	1730	"	1012·8	976·6	..	25·0	15·7	7·5	10·1	33	..	1·7	..	4·9	0	0	27	8	11	0	2	0	0	2	4	4	0
Udaipur	0230	582	1017·2	949.3	..	10·7	9·2	7·7	10·5	82	..	0·8	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	0530	"	1017·4	949·1	..	9·4	8·3	7·2	16·1	86	..	0·9	..	0·1	0	0	1	0	0	0	0	0	0	0	1	30	0
	0830	"	1018·1	950·9	-0·4	14·6	10·8	7·3	9·6	63	+5	0·7	-0·3	0·4	0	0	2	0	0	0	0	0	1	0	1	29	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal.	Cloud amount (Oktas).		Wind speed (Km.p.h)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level.	At station level	Departure from normal.	Dry bulb.	Wet bulb.	Dew point.				Mean amount.	Departure from normal.	Mean wind speed, Km. per hour.	62 or more.	20 to 61.	1 to 19.	Wind direction								Calm.	Variable.
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Rajasthan (East)—(*Contd.*)																											
Udaipur—(*Contd.*)	1130	582	1016·1	951·1	..	22·5	14·5	7·9	10·3	40	..	1·2	..	2·8	0	0	12	0	1	5	0	0	1	2	3	19	0
	1730	"	1012·9	947·9	..	22·8	15·3	9·2	11·3	43	..	2·0	..	1·6	0	0	8	2	1	2	0	0	0	1	2	23	0
	2330	"	1017·6	949·9	..	12·0	10·1	8·4	10·9	79	..	1·1	..	0·1	0	0	1	0	0	0	0	0	1	0	0	30	0
Erinpura (Jawai Dam)	0830	295	1017·5	982·6	..	12·9	10·6	8·2	10·5	75	..	1·6	..	2·7	0	0	10	0	0	1	1	6	1	1	0	21	0
	1730	"	1013·6	979·9	..	24·1	16·7	10·6	12·6	42	..	1·9	..	4·7	0	0	18	13	2	0	0	1	0	2	0	13	0
Madhya Pradesh (West)																											
Gwalior (P.B.O.)	0230	210	1016 2	991·2	..	10·9	9·5	8·0	10·7	83	..	1·6	..	2·2	0	0	8	3	0	0	0	1	0	0	4	23	0
	0530	"	1016·4	991·3	..	9·7	8·6	7·4	10·3	86	..	1·7	..	1·5	0	0	7	1	0	0	2	1	0	0	3	24	0
	0830	"	1018·0	993·2	0	13·9	11·5	8·9	11·7	73	+12	2·0	+0·7	2·3	0	0	13	2	0	1	1	3	0	1	5	18	0
	1130	"	1017·4	993·2	..	21·0	14·3	7·7	11·0	44	..	2·1	..	7·5	0	0	28	7	2	2	5	3	0	0	9	3	0
	1730	"	1014·4	990·2	..	20·4	14·5	9·2	11·8	50	..	2·6	..	3·9	0	0	20	9	3	2	0	0	1	0	5	11	0
	2330	"	1016·9	992·0	..	12·6	10·8	9·0	11·6	80	..	1·8	..	1·9	0	0	7	1	0	0	1	0	2	0	3	24	0
Sheopur Kalan	0830	235	1018·0	990·2	..	13·4	10·9	8·1	11·1	71	..	2·0	..	3·3	0	1	18	5	5	1	3	3	1	0	1	12	0
	1730	"	1013·6	986·7	..	22·4	15·2	8·3	11·4	41	..	2·8	..	7·3	0	0	28	12	7	1	1	1	0	3	3	3	0
Guna	0530	478	1016·5	960·4	..	11·2	9·0	6·9	9·9	75	..	1·4	..	2·9	0	1	12	2	3	3	4	1	0	0	0	18	0
	0830	"	1017·6	962·1	−0·8	14·9	11·1	7·2	10·3	61	−5	1·8	+0·4	1·8	0	0	14	3	0	7	2	1	1	0	0	17	0
	1130	"	1016·3	962·3	..	22·8	14·4	7·3	10·4	37	..	1·7	..	7·0	0	0	29	3	8	6	4	4	2	1	1	2	0
	1730	"	1013·0	959·3	..	23·4	14·7	7·4	10·5	37	..	2·0	..	5·3	0	0	27	6	9	1	1	0	0	4	6	4	0
	2330	"	1016·8	961·3	..	14·4	10·7	7·0	10·2	62	..	2·1	..	4·1	0	0	18	1	4	8	3	0	0	1	1	13	0
Rajgarh	0830	382	1017·5	973·0	..	14·5	11·1	6·9	10·5	61	..	1·6	..	4·5	0	0	22	2	2	3	7	5	0	0	3	9	0
	1730	"	1012·5	969·7	..	25·4	15·7	6·5	9·9	31	..	2·0	..	7·0	0	0	30	13	5	1	0	0	1	6	4	1	0
Neemuch	0830	496	1018·2	960·9	−0·2	15·3	10·4	5·3	9·1	52	−1	1·9	+0·5	3·4	0	0	25	1	16	7	0	0	0	1	0	6	0
	1730	"	1013·2	957·9	..	24·5	14·2	4·8	8·8	28	..	2·3	..	4·9	0	0	26	3	14	1	0	0	0	7	1	5	0
Ratlam	0830	486	1017·0	960·7	..	15·9	11·0	6·3	9·1	55	..	2·2	..	9·9	0	1	21	5	11	6	0	0	0	0	0	9	0
	1730	"	1011·9	957·7	..	26·5	16·3	8·2	10·4	32	..	2·3	..	7·3	0	1	26	7	7	2	0	0	2	5	4	4	0
Alirajpur	0830	293	1016·9	982·8	..	16·1	12·5	8·8	11·6	62	..	1·8	..	1·7	0	0	13	0	1	6	5	0	0	1	0	18	0
	1730	"	1011·6	979·0	..	28·2	17·0	7·2	10·4	27	..	1·5	..	5·4	0	0	26	1	2	3	0	0	1	12	7	5	0
Indore	0530	567	1015·3	940·6	..	13·1	9·8	6·7	8·8	66	..	1·3	..	7·4	0	0	30	0	9	7	3	6	4	1	0	1	0
	0830	"	1016·8	951·8	−0·9	16·3	11·6	7·1	10·2	55	+3	1·8	+0·4	5·4	0	1	24	1	4	8	3	4	3	2	0	6	0
	1130	"	1014·9	951·7	..	24·9	15·6	8·2	11·0	36	..	2·2	..	12·1	0	3	28	2	6	5	5	8	3	1	1	0	0
	1730	"	1011·2	948·6	..	26·2	16·0	7·8	10·8	32	..	2·5	..	9·4	0	3	25	5	5	3	0	3	5	4	3	3	0
	2330	"	1015·5	950·6	..	16·5	11·7	7·4	10·3	55	..	1·8	..	9·5	0	0	31	3	11	6	0	4	5	1	1	0	0
Bhopal (Bairagarh)	0230	523	1015·0	954·9	..	15·4	11·2	7·1	10·3	59	..	1·4	..	7·8	0	0	26	2	14	2	6	1	1	0	0	5	0
	0530	"	1015·4	954·9	..	14·4	10·7	6·9	10·2	62	..	0·8	..	7·1	0	0	25	4	9	6	4	1	0	1	0	6	0
	0830	"	1017·2	957·1	−0·8	16·6	11·6	6·8	10·0	54	−6	1·5	−0·2	8·2	0	1	25	1	9	4	6	4	1	0	1	5	0
	1130	"	1015·5	955·9	..	23·9	15·1	7·8	10·8	37	..	1·4	..	11·2	0	1	30	1	8	8	6	3	4	1	0	0	0
	1730	"	1012·1	954·0	..	25·0	15·6	7·8	10·8	34	..	1·7	..	6·8	0	1	24	7	8	0	0	1	3	3	3	0	0
	2330	"	1015·6	955·8	..	17·3	12·2	7·6	10·6	54	..	1·1	..	5·5	0	0	24	6	9	2	5	1	0	1	0	7	0
Khandwa	0830	318	1016·2	979·1	−1·3	18·6	13·6	9·0	11·6	54	−6	1·7	+0·3	2·5	0	0	15	0	10	1	3	1	0	0	0	16	0
	1730	"	1011·3	976·0	..	28·8	17·9	9·4	11·7	31	..	2·5	..	4·9	0	0	22	8	4	1	4	1	2	0	2	9	0
Hoshangabad	0830	302	1017·0	981·9	−1·2	17·7	13·0	8·2	11·1	54	−6	1·9	+0·5	2·1	0	0	16	1	4	7	3	1	0	0	0	15	0
	1730	"	1012·1	978·2	..	26·8	17·7	10·1	12·8	37	..	2·1	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Betul	0830	653	1017·1	943·1	..	18·2	13·6	9·9	11·3	59	..	2·1	..	2·7	0	0	23	0	1	15	4	2	1	0	0	8	0
	1730	"	1011·6	939·6	..	24·9	16·2	9·5	12·1	38	..	2·3	..	4·1	0	0	25	5	11	1	1	1	2	1	3	6	0
Chhindwara	0830	685	1017·7	939·4	..	14·8	12·1	9·8	12·1	71	..	1·5	..	1·3	0	0	11	2	5	0	1	0	1	0	2	20	0
	1730	"	1012·0	936·6	..	24·6	16·1	9·6	12·2	39	..	3·1	•	3·9	0	0	29	2	4	1	2	3	10	2	5	2	0
Seoni	0830	619	1016·7	946·4	−0·6	18·3	13·6	9·8	11·9	57	−3	1·5	+0·1	0·3	0	0	3	0	1	1	0	1	0	0	0	28	0
	1730	"	1012·5	943·9	..	24·5	16·3	10·4	11·9	42	..	2·4	..	1·9	0	0	20	2	2	4	5	6	1	0	0	11	0
Sagar	0830	551	1017·1	954·0	−0·7	17·1	11·9	6·8	10·3	52	+2	1·6	+0·2	6·1	0	0	29	0	8	11	5	2	2	1	0	2	0
	1730	"	1012·4	951·0	..	23·9	15·3	8·2	11·1	37	..	2·3	..	4·4	0	0	30	0	8	7	2	0	1	4	8	1	0
Nowgong	0830	229	1018·6	991·4	−0·3	12·4	10·4	8·8	11·0	79	+3	2·0	+0·5	1·5	0	0	12	1	4	2	0	1	4	0	0	19	0
	1730	"	1014·2	988·0	..	22·4	15·6	9·5	12·1	44	..	2·3	..	1·8	0	0	14	3	7	0	0	1	1	0	2	17	0

Division and station.	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, Km. per hour	Wind speed, (Km.p.h.)			No. of observations									
																		Wind direction									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madhya Pradesh (East)																											
Sutna	0530	317	1016·3	978·8	..	11·3	9·3	7·0	10·0	75	..	1·4	..	2·0	0	0	14	0	0	2	3	2	0	4	3	17	0
	0830	"	1017·6	980·8	−0·5	15·5	11·9	7·6	11·1	58	−8	2·2	+0·8	1·8	0	0	16	0	1	1	8	0	3	2	1	15	0
	1130	"	1016·4	980·2	..	23·1	15·3	8·2	11·4	39	..	2·0	..	5·6	0	0	28	3	1	8	3	0	5	4	4	3	0
	1730	"	1013·3	977·4	..	23·1	15·5	8·6	11·5	40	..	2·3	..	2·5	0	0	24	1	2	1	0	1	0	0	19	7	0
	2330	"	1016·6	979·4	..	15·0	11·4	7·6	9·7	62	..	1·5	..	1·6	0	0	10	0	1	3	1	0	1	1	3	21	0
Umaria	0830	459	1017·6	964·6	..	15·4	12·1	9·4	11·7	67	0	1·2	−0·6	0·6	0	0	3	0	0	0	2	0	1	0	0	28	0
	1730	"	1012·8	961·3	..	23·5	17·1	12·8	14·9	51	..	1·8	..	1·1	0	0	10	2	4	0	0	1	1	2	0	21	0
Jabalpur	0530	393	1016·1	970·0	..	12·3	10·8	9·3	11·9	82	..	1·3	..	2·2	0	0	18	2	1	0	14	1	0	0	0	13	0
	0830	"	1017·8	972·2	−0·2	16·1	12·7	9·4	12·2	65	−8	1·3	0	3·2	0	0	25	1	3	1	13	3	2	0	2	6	0
	1130	"	1015·8	971·5	..	24·9	16·5	9·5	11·9	38	..	0·8	..	4·5	0	0	27	2	9	2	3	4	2	2	2	4	1
	1730	"	1012·5	968·5	..	25·3	17·8	12·3	14·2	44	..	2·4	..	2·3	0	0	18	3	9	0	1	1	3	0	1	13	0
	2330	"	1016·0	970·4	..	16·0	13·0	10·3	12·6	69	..	1·2	..	3·2	0	0	21	2	6	1	6	6	0	0	0	10	0
Mandla	0830	443	1018·3	966·8	..	13·9	12·3	10·8	12·9	82	..	1·4 (b)	..	0·5 (b)	0	0	4	1	0	0	0	0	0	1	2	27	0
	1730	"	1012·4	962·9	..	24·2	16·7	10·5	12·9	43	..	2·4	..	2·3	0	0	14	7	1	0	1	1	1	0	3	15	0
Pendra	0530	625	1016·2	944·4	..	13·6	10·7	7·9	10·9	69	..	0·7	..	5·2	0	0	24	10	3	0	2	3	2	0	4	7	0
	0830	"	1017·6	946·6	−0·3	17·5	12·6	8·3	11·1	56	−8	1·0	−0·6	4·2	0	0	22	8	2	1	0	3	4	2	2	9	0
	1130	"	1015·5	946·0	..	23·3	15·0	8·0	11·0	38	..	1·0	..	8·6	0	1	30	8	7	2	1	8	4	0	1	0	0
	1730	"	1013·0	943·3	..	21·9	14·7	8·8	11·5	44	..	2·7	..	6·3	0	0	30	11	2	2	1	5	7	1	1	1	0
	2330	"	1016·5	945·2	..	15·8	11·9	8·4	11·2	62	..	0·5	..	3·8	0	0	24	6	0	0	1	3	6	2	6	7	0
Ambikapur	0830	611	1018·5	948·2	..	14·4	11·6	9·1	11·7	71	..	0·4	..	3·3	0	0	17	4	4	0	0	3	4	2	0	14	0
	1730	"	1013·1	945·0	..	22·6	15·3	9·5	12·2	44	..	1·4	..	6·5	0	0	31	23	1	0	0	0	3	1	3	0	0
Champa	0830	245	1017·7	989·1	..	17·5	14·2	11·2	13·9	67	..	1·5	..	3·1	0	0	17	15	0	1	0	0	0	0	1	14	0
	1730	"	1013·0	985·3	..	25·9	17·7	10·4	13·6	41	..	1·8	..	2·1	0	0	18	13	1	0	0	1	0	2	1	13	0
Raigarh	0830	220	1017·5	991·8	..	18·4	14·5	11·0	13·8	63	..	1·2	..	3·9	0	0	28	0	26	0	2	0	0	0	0	3	0
	1730	"	1012·5	987·6	..	27·0	17·7	10·3	13·2	36	..	1·3	..	1·6	0	0	15	4	5	0	1	1	0	0	4	16	0
Raipur	0530	298	1015·1	980·4	..	15·8	12·9	10·3	12·6	70	..	0·9	..	0·7	0	0	5	0	3	0	1	1	0	0	0	26	0
	0830	"	1016·9	982·6	−0·5	19·9	14·7	10·5	10·2	54	−10	1·2	0	2·4	0	0	20	2	7	4	3	3	0	1	0	11	0
	1130	"	1015·7	982·1	..	26·0	16·8	10·5	11·8	34	..	1·0	..	4·2	0	0	26	5	5	5	4	2	2	3	0	5	0
	1730	"	1012·4	978·9	..	26·2	17·1	9·6	12·1	35	..	1·9	..	1·8	0	0	16	3	7	3	0	1	0	2	0	15	0
	2330	"	1015·1	980·9	..	20·3	14·5	9·4	11·9	50	..	0·8	..	3·4	0	0	19	1	2	4	8	2	1	1	0	12	0
Kanker	0830	402	1017·6	971·6	+0·4	18·3	15·0	12·4	14·4	69	−6	1·2	−0·5	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	"	1012·6	967·6	..	26·2	18·6	12·3	15·3	45	..	2·6	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Jagdalpur (P.B.O.)	0530	553	1016·1	952·1	..	12·4	11·6	10·9	13·1	90	..	0·9	..	0·1	0	0	1	0	1	0	0	0	0	0	0	30	0
	0830	"	1017·7	954·3	+0·2	16·2	13·5	11·5	13·3	72	−9	2·2	0	0·7	0	0	7	1	3	0	1	0	0	1	1	24	0
	1130	"	1014·7	953·4	..	25·2	16·9	11·1	13·2	41	..	2·3	..	4·7	0	0	26	1	13	9	0	1	0	0	2	5	0
	1730	"	1011·9	950·7	..	24·4	17·0	11·7	13·8	47	..	2·6	..	1·8	0	0	16	3	12	0	0	1	0	0	0	15	0
	2330	"	1016·1	952·8	..	15·8	13·6	11·8	14·0	77	..	1·1	..	0·1	0	0	1	0	0	0	1	0	0	0	0	30	0
Gujarat																											
Deesa	0830	136	1016·7	1000·6	−0·3	16·1	11·8	7·4	10·4	57	..	1·7	..	6·6	0	1	30	5	20	4	0	1	0	0	1	0	0
	1730	"	1012·8	997·3	..	26·5	17·2	8·9	12·1	35	..	1·8	..	6·5	0	0	29	11	5	0	0	1	0	5	7	2	0
Idar	0830	219	1015·8	990·5	..	19·8	14·3	9·2	11·8	51	..	1·5	..	7·7	0	1	25	2	10	7	3	1	0	0	3	5	0
	1730	"	1012·1	987·5	..	27·2	18·3	11·7	13·9	39	..	1·2	..	3·9	0	0	29	2	2	2	4	2	3	3	11	2	0
Ahmedabad	0230	55	1013·9	1007·5	..	16·7	13·7	11·0	13·3	71	..	0·7	..	7·8	0	0	27	7	11	4	1	0	0	1	3	4	0
	0530	"	1013·8	1007·3	..	15·4	12·7	10·1	12·4	72	..	1·0	..	8·8	0	0	28	4	13	6	0	0	0	0	5	3	0
	0830	"	1015·8	1009·3	−1·0	17·8	14·0	10·6	12·9	65	+5	1·7	+0·7	11·3	0	1	27	4	8	13	1	0	0	1	1	3	0
	1130	"	1015·9	1009·7	..	25·8	18·8	13·4	16·1	49	..	1·5	..	15·5	0	7	24	4	9	11	3	0	0	2	2	0	0
	1730	"	1012·2	1006·0	..	28·5	20·6	15·0	17·5	47	..	1·5	..	10·1	0	0	30	6	8	3	0	0	1	2	10	1	0
	2330	"	1014·6	1008·2	..	18·9	15·1	12·0	14·0	66	..	1·1	..	7·1	0	0	27	9	6	3	0	0	0	0	9	4	0
Dohad	0830	333	1016·2	977·6	..	17·1	12·5	7·7	10·9	55	−10	1·4	−0·1	7·7	0	0	30	1	7	14	5	2	0	1	0	1	0
	1730	"	1012·3	975·3	..	28·2	17·5	8·2	11·3	30	..	0·8	..	10·7	0	0	30	1	7	0	0	0	15	5	2	1	0
Baroda	0530	35	1013·5	1009·3	..	14·8	12·5	10·3	12·9	76	..	0·8	..	2·4	0	0	17	1	14	0	1	0	0	0	1	14	0
	0830	"	1015·5	1011·3	..	16·7	13·4	10·3	12·7	67	+3	1·5	+0·5	3·1	0	0	16	0	12	2	2	0	0	0	0	15	0
	1130	"	1015·5	1011·5	..	27·3	18·1	10·8	13·4	37	..	1·2	..	4·8	0	0	25	3	11	4	4	0	0	0	3	6	0
	1730	"	1011·8	1007·9	..	28·3	19·9	14·1	16·5	43	..	1·1	..	3·7	0	0	22	7	3	1	0	0	0	1	10	9	0
	2330	"	1014·3	1010·2	..	18·4	14·6	11·4	13·4	64	..	1·0	..	2·8	0	0	20	3	12	1	2	0	0	0	2	11	0
Baroda (Aerodrome)	0830	38	1015·6	1011·2	..	18·7	13·4	8·4	11·1	52	..	1·6	..	6·2	0	0	28	17	1	3	5	1	0	0	1	3	0
	1130	"	1015·6	1011·3	..	27·3	17·3	9·2	11·7	33	..	1·4	..	7·2	0	1	30	11	6	3	3	2	2	0	4	0	0

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas)		Mean wind speed, Km. per hour	Wind speed, (Km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Gujarat— (*Contd.*)																											
Baroda (Aerodrome)—(*Contd.*)	1730	38	1012·0	1007·7	..	29·0	18·2	9·7	12·1	31	..	1·4	..	5·2	0	0	29	8	0	1	0	0	3	2	15	2	0
Broach	0830	17	1015·0	1012·9	..	16·6	13·1	9·8	12·2	65	..	1·6	..	3·7	0	0	31	5	7	1	4	2	6	1	5	0	0
	1730	"	1011·3	1009·3	..	31·6	19·5	10·4	12·9	28	..	0·8	..	5·4	0	0	31	1	10	2	5	1	6	1	5	0	0
Surat	0530	12	1013·0	1011·6	..	16·1	14·3	10·9	13·3	64	..	1·2	..	9·8	0	1	28	16	5	5	1	0	0	0	2	2	0
	0830	"	1015·3	1013·9	−0·3	19·1	15·0	11·7	13·8	63	+5	1·4	+0·1	5·4	0	0	29	13	5	6	2	1	0	0	2	2	0
	1130	"	1015·1	1013·7	..	29·1	19·6	13·0	15·1	38	..	1·2	..	7·9	0	0	28	10	8	4	2	1	0	0	3	3	0
	1730	"	1011·1	1009·8	..	29·4	20·6	14·4	17·0	41	..	1·5	..	7·0	0	0	31	7	1	0	0	1	3	4	15	0	0
	2330	"	1013·9	1012·5	..	21·9	16·8	12·9	15·0	58	..	1·0	..	9·1	0	2	28	17	4	0	0	0	2	1	6	1	0
Saurashtra & Kutch																											
Bhuj (P.B.O.)	0230	106	1015·3	1002·9	..	15·7	12·2	9·2	11·3	64	..	0·9	..	1·1	0	0	7	1	2	0	0	2	1	1	0	24	0
	0530	"	1015·1	1002·6	..	14·1	11·0	8·4	10·7	67	..	0·7	..	2·3	0	0	12	2	4	0	1	2	3	0	0	19	0
	0830	"	1016·8	1004·3	−0·4	15·4	11·9	8·2	11·2	63	+14	1·3	+0·2	2·5	0	1	15	1	2	2	1	7	2	1	0	15	0
	1130	"	1016·9	1004·8	..	23·9	15·9	8·5	11·6	39	..	1·3	..	11·9	0	1	30	12	12	1	0	1	0	2	3	0	0
	1730	"	1013·4	1001·4	..	26·5	16·9	8·4	11·5	33	..	1·7	..	10·9	0	3	27	20	5	2	0	0	1	1	1	1	0
	2330	"	1015·9	1002·5	..	17·6	13·3	9·1	11·9	58	..	0·9	..	2·9	0	0	16	6	4	1	0	2	1	2	0	15	0
Bhuj (Aerodrome)	0830	80	1016·8	1007·3	..	15·3	13·1	10·9	13·3	76	..	1·5	..	2·6	0	1	12	2	1	0	0	0	9	1	0	18	0
	1130	"	1017·2	1007·8	..	23·7	18·8	15·5	18·0	62	..	1·1	..	12·7	0	4	26	12	11	1	0	0	1	0	4	1	1
	1730	"	1013·4	1004·2	..	26·7	21·0	16·9	20·3	59	..	1·5	..	17·5	0	12	18	9	11	1	0	0	1	1	7	1	0
Kandla	0830	5	1016·7	1016·1	..	16·4	12·5	8·4	11·3	60	..	1·5	..	7·1	0	0	30	5	1	1	0	0	1	0	22	1	0
	1730	"	1013·6	1013·0	..	26·6	17·3	9·1	12·2	36	..	1·4	..	11·9	0	2	29	11	5	1	2	2	4	1	5	0	0
Mandvi	0830	9	1016·6	1015·5	..	17·7	14·1	10·6	12·7	64	..	1·2	..	14·4	0	4	27	14	16	0	0	0	0	1	0	0	0
	1730	"	1013·6	1012·6	..	25·0	19·6	15·7	18·5	59	..	1·0	..	16·7	0	10	21	1	6	1	0	3	6	13	1	0	0
Dwarka	0830	11	1016·3	1015·0	−0·3	19·8	16·1	13·3	15·4	67	+3	1·7	+0·2	9·9	0	0	31	3	21	4	1	0	0	1	1	0	0
	1730	"	1013·5	1012·2	..	25·2	17·9	11·6	14·7	46	..	1·2	..	15·2	0	2	29	10	5	1	0	1	0	1	13	0	0
Porbander	0830	7	1015·6	1014·8	..	18·0	15·0	12·1	14·6	69	..	1·2	..	3·0	0	0	16	6	5	2	0	0	0	0	3	15	0
	1730	"	1012·6	1011·8	..	27·4	19·9	14·2	17·1	47	..	1·9	..	11·5	0	0	31	8	0	0	0	1	1	8	13	0	0
Porbander(Aerodrome)	0830	7	1015·7	1014·9	..	20·5	15·2	11·4	12·9	57	..	1·1	..	9·1	0	6	16	7	8	2	2	2	0	0	1	9	0
	1130	"	1016·2	1015·4	..	27·6	18·4	12·5	13·8	40	..	1·0	..	20·1	0	11	18	5	14	5	1	0	3	0	1	2	0
Jamnagar	0530	23	1014·3	1011·7	..	14·5	11·9	9·2	11·9	71	..	0·8	..	6·2	0	0	25	4	6	4	5	3	2	1	0	6	0
	0830	"	1016·2	1013·5	−0·5	17·0	13·3	9·8	12·4	63	+2	1·4	+0·4	6·1	0	0	27	2	5	9	5	2	3	0	1	4	0
	1130	"	1016·7	1014·1	..	24·4	17·1	11·2	13·4	45	..	1·2	..	14·6	0	7	21	3	18	5	0	0	0	1	1	3	0
	1730	"	1013·1	1010·5	..	25·9	17·3	10·2	12·7	39	..	1·2	..	14·6	0	7	23	10	9	2	0	0	0	4	5	1	0
Rajkot (Aerodrome)	0830	134	1016·2	1000·5	−0·2	16·4	11·2	4·8	9·0	48	−1	0·6	−0·8	5·2	0	0	23	7	8	3	3	1	0	0	1	8	0
	1130	"	1016·0	1000·8	..	26·1	15·6	4·9	9·1	27	..	0·6	..	18·3	0	11	20	9	15	3	1	0	1	0	2	0	0
	1730	"	1012·4	997·3	..	27·9	15·9	3·5	8·4	22	..	0·6	..	20·0	0	16	15	10	6	2	0	0	1	3	9	0	0
Surendranagar	0830	74	1016·0	1007·2	..	16·6	12·9	8·9	12·0	62	..	0·9	..	6·6	0	0	28	7	5	1	0	0	2	0	13	3	0
	1730	"	1012·2	1003·7	..	28·6	19·9	13·7	16·3	42	..	1·2	..	9·3	0	1	29	5	8	1	1	0	0	0	15	1	0
Bhavnagar	0830	17	1016·0	1014·0	−0·3	17·4	12·3	7·1	10·2	52	+4	0·7	−0·7	2·5	0	0	25	1	1	0	0	0	7	3	13	6	0
	1730	"	1012·4	1010·5	..	29·1	19·5	12·7	14·9	37	..	0·7	..	4·0	0	0	27	0	16	6	1	1	1	0	2	4	0
Bhavnagar (Aero Ireng)	0830	11	1015·5	1014·2	..	18·4	12·7	6·8	10·1	47	..	1·2	..	13·0	0	2	25	8	1	0	0	0	0	3	15	4	0
	1130	"	1015·7	1014·5	..	25·4	17·1	10·4	12·8	40	..	1·1	..	15·8	0	6	24	13	13	3	0	0	1	0	0	1	0
Mahuva	0830	16	1015·0	1013·2	..	19·4	15·4	12·0	14·3	64	..	1·2 (b)	..	3·7 (b)	0	0	19	1	11	0	1	0	0	0	6	10	0
	1730	"	1011·9	1010·1	..	28·9	22·9	19·6	23·0	59	..	1·1 (b)	..	12·0 (b)	0	0	27	0	7	8	7	2	1	0	2	2	0
Keshod	0830	51	1015·8	1009·8	..	18·4	13·3	9·0	11·3	56	..	1·6	..	13·4	0	2	29	3	14	13	1	0	0	0	0	0	0
	1130	"	1016·0	1010·2	..	26·8	17·5	11·3	12·5	37	..	1·2	..	22·7	0	17	13	6	11	9	0	0	0	0	4	1	0
	1730	"	1012·4	1006·6	..	28·4	19·3	13·7	14·9	42	..	1·2	..	20·2	0	14	17	12	4	1	1	0	1	8	4	0	0
Veraval	0230	8	1013·7	1012·8	..	18·0	13·5	8·9	11·8	58	..	0·5	..	9·1	0	1	28	17	11	0	0	0	0	0	1	2	0
	0530	"	1013·2	1012·3	..	17·6	13·1	8·6	11·5	57	..	0·7	..	10·3	0	1	26	14	12	0	0	0	0	0	1	4	0
	0830	"	1015·2	1014·3	−0·4	19·6	14·3	9·2	12·1	54	+5	1·3	+0·1	12·5	0	3	25	13	14	1	0	0	0	0	0	3	0
	1130	"	1015·5	1014·6	..	28·2	19·0	11·5	14·6	38	..	1·1	..	16·1	0	7	24	12	7	1	2	0	2	3	4	0	0
	1730	"	1012·1	1011·2	..	27·0	21·1	16·8	20·3	58	..	0·9	..	18·0	0	11	18	5	1	0	1	0	2	10	10	2	0
	2330	"	1014·7	1013·8	..	20·1	15·5	11·1	14·0	59	..	0·9	..	8·7	0	2	26	13	10	1	0	0	1	0	3	3	0
Konkan																											
Dahanu	0830	5	1013·9	1013·4	+0·2	21·2	17·7	15·1	17·5	70	−5	0·9	−1·1	7·4	0	0	31	3	4	14	10	0	0	0	0	0	0
	1730	"	1011·2	1010·7	..	26·3	22·6	20·5	24·3	72	..	1·4	..	16·7	0	4	27	29	0	0	0	0	0	0	2	0	0
Bombay (Colaba)	0830	11	1014·1	1012·8	−0·8	23·2	20·3	18·5	21·5	76	+6	1·8	+0·4	8·1	0	0	30	4	11	15	0	0	0	0	0	1	0
	1130	"	1014·2	1013·0	..	28·8	22·2	18·4	21·3	54	..	1·5	..	6·7	0	0	28	1	7	17	1	0	0	0	2	3	0
	1730	"	1011·1	1009·9	..	27·4	22·9	20·6	24·4	67	..	1·3	..	12·7	0	0	30	8	0	0	0	0	0	2	20	1	0

(b) Mean of 29 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in c.p.m. of standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km.p.h.): 62 or more	Wind speed (Km.p.h.): 20 to 61	Wind speed (Km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Konkan—(*Contd.*)																											
Bombay (Santacruz Aerodrome).	0230	8	1012·6	1011·7	..	20·7	18·1	16·9	18·6	77	..	0·5	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	0530		1012·2	1011·3	..	19·7	17·5	15·3	17·8	78	..	0·7	..	0·5	0	0	3	0	2	1	0	0	0	0	0	23	0
	0830	"	1014·3	1013·4	−0·5	22·7	18·4	15·3	17·7	64	−1	1·7	+0·3	1·9	0	0	7	1	3	3	0	0	0	0	0	21	0
	1130	"	1014·5	1013·6	..	30·2	20·4	13·9	16·1	37	..	1·9	..	5·6	0	0	25	1	10	9	4	6	0	0	1	6	0
	1730	"	1011·2	1010·3	..	28·9	22·0	17·8	20·8	52	..	1·4	..	14·4	0	3	28	7	0	0	0	1	0	1	22	0	0
	2330	"	1013·8	1012·9	..	22·6	19·2	16·7	19·6	71	..	0·8	..	0·4	0	0	3	0	2	0	0	0	0	0	1	23	0
Alibag	0830	7	1013·9	1013·1	−0·7	22·8	19·5	17·3	20·0	72	+8	2·1	+0·3	3·8	0	0	27	5	10	10	2	0	0	0	0	4	0
Harnai	0830	20	1013·0	1010·7	+0·1	25·5	20·5	17·3	20·0	61	−4	2·5	..	11·7	0	3	27	4	11	10	2	0	1	0	2	1	0
	1730	"	1010·5	1008·2	..	26·0	24·0	22·1	26·6	70	..	1·9	..	19·8	0	12	19	6	0	0	0	0	0	5	22	6	0
Ratnagiri	0830	35	1013·5	1009·5	−0·5	23·8	19·3	16·4	18·8	65	..	2·4	..	..	0	2	29	0	0	31	0	0	0	0	0	0	0
	1730	"	1011·3	1007·3	..	28·9	23·3	20·4	24·1	60	..	2·8	..	..	0	2	29	0	0	0	0	0	0	27	1	0	0
Devgad	0830	36	1013·4	1009·4	+0·6	24·2	20·5	18·1	21·2	70	0	3·7	+1·8	7·8	0	0	31	2	7	19	3	0	0	0	0	0	0
	1730	"	1010·1	1006·1	..	29·4	23·6	20·7	24·4	60	..	3·9	..	18·5	0	5	26	3	1	0	0	0	0	13	14	0	0
Vengurla	0230	9	1011·6	1010·6	..	22·0	20·3	19·3	22·5	85	..	0·7	..	1·7	0	0	11	10	0	0	0	0	0	0	1	20	0
	0530	"	1011·5	1010·5	..	20·7	19·2	18·3	21·0	87	..	0·1	..	2·5	0	0	11	9	0	0	0	0	0	0	2	20	0
	0830	"	1013·6	1012·6	..	22·7	19·8	17·9	20·7	75	..	2·0	..	2·4	0	0	15	13	1	1	0	0	0	0	0	16	0
	1130	"	1013·5	1012·5	..	31·0	21·7	16·0	18·4	41	..	2·2	..	7·2	0	0	28	3	1	3	10	0	2	0	1	3	0
	1730	"	1010·3	1009·3	..	29·4	25·4	20·2	24·0	58	..	2·4	..	5·1	0	0	24	0	0	0	0	0	9	8	7	7	0
	2330	"	1013·0	1012·0	..	23·4	21·2	19·9	23·3	81	..	1·1	..	3·0	0	0	17	15	1	0	0	0	0	0	1	11	0
Maharashtra																											
Nandurbar	0830	206	1015·6	992·0	..	22·7	15·2	8·4	11·1	41	..	2·2	..	5·9	0	0	28	0	4	20	2	0	0	1	1	1	0
	1730	"	1011·1	988·2	..	30·1	18·6	9·6	12·2	29	..	2·1	..	3·7	0	0	24	8	1	5	0	0	2	5	3	7	0
Jalgaon	0830	201	1016·3	992·9	..	18·5	13·6	9·2	11·6	54	..	2·2	..	9·2	0	0	30	0	3	23	3	0	0	1	0	1	0
	1730	"	1011·2	988·8	..	30·6	18·8	9·6	12·2	27	..	2·4	..	5·7	0	0	26	3	3	7	0	0	1	5	7	5	0
Malegaon	0830	437	1016·3	966·2	−0·5	18·7	13·9	9·6	12·1	56	−1	1·6	0	2·3	0	0	22	3	0	0	0	1	4	7	7	9	0
	1730	"	1010·7	962·6	..	29·2	18·5	10·2	12·7	31	..	2·5	..	2·1	0	0	17	3	5	1	2	1	1	1	3	11	0
Deolali	0830	571	1016·7	951·4	..	16·8	13·3	10·7	12·3	67	..	2·0	..	3·9	0	0	23	18	4	0	0	0	1	0	0	3	0
	1730	"	1010·8	948·3	..	28·7	18·1	11·5	13·6	35	..	2·0	..	7·4	0	0	28	5	6	3	0	0	6	6	2	3	0
Aurangabad	0830	581	1016·4	950·8	−0·5	19·8	14·5	10·4	12·7	54	+1	2·0	+0·3	6·3	0	0	29	0	3	22	3	0	0	0	0	3	0
	1730	"	1010·9	947·4	..	28·3	17·8	10·2	12·7	33	..	1·8	..	5·6	0	0	30	0	1	5	10	2	10	2	0	1	0
Aurangabad (Chikalthana Aerodrome).	0230	579	1015·0	948·4	..	14·2	10·6	7·1	10·2	63	..	0·7	..	0·4	0	0	2	0	1	0	1	0	0	0	0	29	0
	0530	"	1015·2	948·2	..	12·2	9·4	6·6	9·8	69	..	0·8	..	0·1	0	0	1	0	0	0	0	0	0	1	0	30	0
	0830	"	1015·8	950·3	..	19·3	13·7	9·1	11·7	52	..	1·4	..	0·8	0	0	4	0	0	1	1	0	0	0	2	27	0
	1130	"	1014·3	950·4	..	26·6	16·9	10·0	12·1	36	..	0·9	..	5·8	0	0	21	0	0	5	13	2	0	1	0	10	0
	1730	"	1010·5	947·1	..	27·6	17·3	10·0	12·2	33	..	1·7	..	1·4	0	0	8	0	1	3	4	0	0	0	0	23	0
	2330	"	1015·4	949·2	..	15·8	11·4	7·4	10·3	57	..	0·9	..	0·5	0	0	2	0	0	1	0	0	0	0	1	29	0
Ahmednagar	0830	657	1015·8	941·7	−0·6	18·7	14·2	10·9	13·0	62	+7	2·2	+0·8	2·1	0	0	21	0	1	0	13	0	3	0	4	10	0
	1730	"	1009·9	938·5	..	28·4	19·5	14·0	16·2	42	..	1·4	..	2·8	0	0	25	0	7	0	15	0	2	0	1	6	0
Parbhani	0830	423	1017·1	968·5	..	19·1	14·4	10·4	12·5	57	..	2·2	..	3·9	0	0	26	4	10	8	3	1	0	0	0	5	0
	1730	"	1011·7	964·8	..	27·6	18·7	12·5	14·4	41	..	2·8	..	2·9	0	0	26	5	13	7	1	0	0	0	0	5	0
Poona	0530	559	1014·2	950·1	..	15·4	14·1	13·1	15·0	86	..	0·8	..	0·2	0	0	2	0	0	0	0	1	0	1	0	29	0
	0830	"	1015·9	952·2	−0·6	17·7	15·1	13·3	15·3	76	+5	1·5	+0·1	0·3	0	0	3	0	0	0	1	0	2	0	0	23	0
	1130	"	1013·6	951·9	..	26·8	18·4	12·9	15·1	43	..	1·2	..	2·4	0	0	14	0	4	8	2	0	0	0	0	17	0
	1730	"	1009·8	948·6	..	27·9	18·9	13·1	15·2	41	..	2·2	..	1·4	0	0	10	0	3	5	0	0	1	1	0	21	0
	2330	"	1014·5	951·2	..	19·4	16·1	13·7	15·9	71	..	0·7	..	0·5	0	0	5	0	0	1	1	1	2	0	0	26	0
Poona (Lohagaon Aerodrome)	0230	593	1013·8	946·5	..	17·6	14·0	11·2	13·3	67	..	1·9	..	2·5	0	0	13	0	0	6	0	1	0	1	5	18	0
	0530	"	1014·1	946·4	..	16·3	13·4	10·9	13·3	71	..	1·3	..	3·0	0	0	17	2	2	5	1	0	0	3	4	14	0
	0830	"	1015·6	948·4	..	19·0	14·6	11·3	13·3	61	..	2·2	..	3·0	0	0	15	3	2	5	1	0	0	1	1	16	2
	1130	"	1013·7	948·3	..	26·8	17·4	10·7	13·0	37	..	1·9	..	10·6	0	2	28	0	0	12	16	0	0	0	1	1	0
	1730	"	1009·8	945·0	..	28·3	17·5	9·8	12·1	32	..	2·5	..	5·7	0	0	27	0	1	9	10	0	2	4	1	4	0
	2330	"	1014·4	947·5	..	19·9	15·1	11·3	13·5	59	..	1·5	..	4·4	0	0	24	0	2	6	1	0	0	2	13	7	0
Baramati	0830	551	1015·9	953·2	..	18·4	14·6	11·9	13·7	66	..	1·4	..	3·0	0	0	21	3	4	5	5	1	1	1	1	10	0
	1730	"	1009·9	949·5	..	28·5	19·5	13·8	16·1	40	..	1·5	..	5·5	0	0	30	0	4	12	8	4	2	0	0	1	0
Jeur	0830	521	1015·8	956·3	..	17·9	13·4	9·8	12·2	59	..	2·0	..	0·9	0	0	7	0	2	3	2	0	0	0	0	24	0
	1730	"	1009·9	952·9	..	29·1	18·4	10·7	13·3	33	..	1·6	..	2·5	0	0	26	0	4	12	6	0	1	2	1	5	0
Sholapur	0530	479	1014·0	959·2	..	17·7	13·5	10·3	12·5	62	..	0·9	..	8·1	0	0	27	0	6	8	11	0	0	0	0	4	0
	0830	"	1015·6	961·3	−0·4	20·3	15·2	11·4	13·5	57	+4	2·3	+0.7	6·5	0	0	31	1	4	5	17	3	0	1	0	0	0
	1130	"	1014·5	961·3	..	26·9	18·7	13·4	15·5	44	..	1·7	..	14·1	0	2	29	0	1	3	22	5	0	0	0	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, Km. per hour	Wind speed, (Km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Maharashtra (*Contd*).																											
Sholapur—(*Contd*).	1730	479	1010·2	957·7	..	29·1	18·5	11·2	13·5	33	..	2·5	..	7·8	0	0	31	6	7	2	12	4	0	0	0	0	0
	2330	"	1014·3	960·3	..	21·7	15·3	10·5	12·7	50	..	1·1	..	8·5	0	0	29	1	13	11	2	2	0	0	0	2	0
Miraj . . .	0830	554	1015·0	952·5	−0·7	19·8	15·6	12·6	14·7	63	+3	2·3	+0·5	4·6	0	0	24	0	9	11	4	0	0	0	0	7	0
	1730	"	1009·2	948·8	..	28·5	19·3	13·4	15·7	38	..	3·4	..	9·0	0	1	27	0	7	14	7	0	0	0	0	3	0
Kolhapur . .	0530	570	1013·4	948·6	..	17·1	14·2	12·0	14·1	73	..	0·1	..	3·4	0	0	19	0	3	10	1	0	4	1	0	12	0
	0830		1015·1	950·8	..	20·0	15·4	12·0	14·1	61	..	1·7	..	6·6	0	0	27	0	6	19	2	0	0	0	0	4	0
	1130	"	1013·2	950·5	..	27·0	18·6	13·2	15·3	43	..	2·0	..	17·0	0	9	22	0	3	23	4	1	0	0	0	0	0
	1730	"	1009·1	947·0	..	28·8	18·3	11·2	13·2	34	..	2·9	..	9·8	0	2	27	0	8	17	4	0	0	0	0	2	0
Vidarbha																											
Buldhana . .	0830	650	1015·4	942·2	..	19·6	13·8	9·0	11·6	51	..	1·5	..	3·3	0	0	26	0	1	0	6	0	17	0	2	5	0
	1730	"	1010·5	939·3	..	27·2	16·9	9·2	11·8	32	..	1·9	..	2·3	0	0	21	0	7	0	3	0	8	0	3	10	0
Akola . . .	0830	282	1016·2	983·6	−0·9	19·6	14·0	8·9	11·5	50	−7	0·7	−0·9	3·3	0	0	29	0	5	5	6	1	1	4	7	2	0
	1130	"	1014·8	983·1	..	27·5	17·8	9·9	12·5	32	..	1·2	..	4·8	0	0	30	1	3	5	8	5	5	2	1	1	0
	1730	"	1010·7	979·4	..	29·7	17·7	8·4	10.4	27	..	1·0	..	3·0	0	0	27	0	7	4	5	0	2	4	5	4	0
Akola (Aerodrome)	0530	309	1014·7	978·6	..	15·4	11·8	8·4	10·9	63	..	0·8	..	4·1	0	0	27	1	2	16	6	2	0	0	0	4	0
	2330	"	1014·5	979·1	..	21·3	15·0	9·5	12·0	47	..	1·2	..	4·4	0	0	28	0	0	6	15	5	1	1	0	3	0
Amravati . .	0830	370	1016·6	974·5	−0·1	21·3	15·2	9·8	12·3	48	−3	1·5	−0·1	4·8	0	0	26	1	16	7	1	0	1	0	0	5	0
	1730	"	1011·2	970·2	..	28·0	17·7	9·0	12·1	31	..	3·6	..	3·1	0	0	29	1	9	1	7	0	1	1	9	2	0
Yeotmal . . .	0830	451	1016·0	964·9	..	21·4	15·6	10·6	13·1	51	..	1·4	..	6·3	0	0	24	1	7	7	5	2	2	0	0	7	0
	1730	"	1011.7	961·6	..	27.0	17·5	9·4½	21.3	34	..	1·6	..	3·2	0	0	26	1	10	9	2	1	3	0	0	5	0
Nagpur . . .	0230	310	1014·6	978·5	..	16·2	13·8	11·7	12·6	74	..	0·3	..	5·7	0	0	31	16	3	1	1	0	1	1	8	0	0
	0530	"	1015·1	978·8	..	14·5	12·6	10·9	13·1	79	..	0·5	..	5·9	0	0	28	15	4	0	0	0	0	2	7	3	0
	0830	"	1017·1	981·2	−0·5	19·0	15·1	11·7	13·9	63	+1	1·5	−0·2	4·5	0	0	28	10	12	5	0	0	0	0	1	3	0
	1130	"	1015·4	980·6	..	27·2	19·6	14·3	16·6	46	..	1·5	..	7·6	0	0	30	2	5	10	8	2	1	1	0	1	1
	1730	"	1012·2	977·3	..	26·6	18·9	13·4	14·6	45	..	2·2	..	7·1	0	0	29	0	6	14	4	4	1	0	0	2	0
	2330	"	1015·4	979·4	..	17·9	14·4	11·3	13·4	66	..	0·8	..	4·1	0	0	26	8	3	1	1	2	4	4	3	5	0
Gondia . . .	0830	313	1017·4	981·3	..	18·7	14·8	11·5	13·7	64	..	1·2	..	3·0	0	0	26	1	16	0	4	0	0	0	3	5	2
	1730	"	1012·3	977·6	..	26·5	17·4	10·3	12·8	37	..	1·2	..	1·7	0	0	17	3	3	1	0	0	2	3	5	14	0
Brahmapuri . .	0830	229	1017·1	990·5	..	17·9	15·0	12·8	14·7	72	..	0·7(a)	..	1·5(a)	0	0	12	2	3	3	3	1	0	0	0	13	0
	1730	"	1012·4	986·7	..	27·3	18·1	11·0	13·4	37	..	0·9(a)	..	3·7(a)	0	0	22	4	8	4	3	3	0	0	0	8	0
Chanda . . .	0830	193	1016·5	994·1	−0·8	19·3	15·9	13·3	15·3	68	−4	2·4	+0·9	3·3	0	0	27	2	4	9	7	1	1	1	2	4	0
	1730	"	1012·1	990·3	..	26·6	19·1	13·8	16·1	45	..	1·9	..	1·9	0	0	20	1	3	9	7	0	0	0	0	11	0
Sironcha . .	0830	123	1017·2	1002·7	..	19·0	16·6	14·9	17·1	77	..	2·3	..	2·5	0	0	19	2	2	8	4	3	0	0	0	12	0
	1730	"	1012·6	998.7	..	27·8	20·2	15·3	17·7	47	..	2·8	..	1·8	0	0	16	1	5	5	4	1	0	0	0	15	0
Coastal Andhra Pradesh																											
Nellore . . .	0530	20	1013·0	1010·6	..	21·2	20·4	19·9	23·3	92	..	2·9	..	3·1	0	0	18	0	1	0	0	0	0	5	12	13	0
	0830	"	1015·4	1013·1	0	23·7	21·8	20·8	24·5	84	0	4·4	+0·4	3·0	0	0	29	2	2	0	0	0	1	3	21	2	0
	1130	"	1014·9	1012·6	..	28·3	22·7	19·8	22·9	60	..	6·8	..	8·0	0	0	31	5	21	5	0	0	0	0	0	0	0
	1730	"	1012·3	1010·0	..	26·5	22·2	19·9	23·3	67	..	5·3	..	4·5	0	0	31	1	22	6	2	0	0	0	0	0	0
	2330	"	1014·6	1012·2	..	22·7	21·2	20·4	24·0	87	..	2·0	..	3·0	0	0	9	1	3	3	1	0	0	0	1	22	0
Ongole . . .	0830	12	1015·7	1014·4	..	24·4	22·0	20·4	24·4	79	..	2·9	..	2·8	0	0	21	0	21	0	0	0	0	0	0	10	0
	1730	"	1011·4	1010·1	..	26·8	22·4	20·0	23·5	67	..	3·1	..	7·7	0	0	28	0	5	21	2	0	0	0	0	3	0
Rentachintala .	0830	106	1016·1	1003·9	..	23·0	19·9	18·1	20·7	74	+3	2·9	−0·3	0·6	0	0	7	1	0	5	1	0	0	0	0	24	0
	1730	"	1011·6	999·7	..	29·4	20·0	13·7	15·8	37	..	3·0	..	3·7	0	0	30	5	3	19	2	1	0	0	0	1	0
Gannavaram . .	0230	23	1013·4	1010·7	..	21·4	19·8	18·8	21·7	85	..	0·8	..	2·5	0	0	12	0	3	7	2	0	0	0	0	19	0
	0530	"	1013·5	1010·8	..	20·6	19·0	18·0	20·8	86	..	1·0	..	4·2	0	0	20	1	8	9	2	0	0	0	0	11	0
	0830	"	1015·7	1013·0	..	24·0	20·5	18·4	21·7	72	..	1·7	..	8.9	0	0	26	2	13	11	0	0	0	0	0	5	0
	1130	"	1015·0	1012·4	..	28·0	21·7	18·1	20·9	55	..	3·1	..	14·8	0	4	26	0	6	23	1	0	0	0	0	1	0
	1730	"	1012·0	1009·4	..	27·6	21·1	17·2	20·4	54	..	2·9	..	10·2	0	1	29	0	1	18	11	0	0	0	0	1	0
	2330	"	1014·8	1012·1	..	22·4	20·3	19·3	21·9	83	..	1·0 (i)	..	4·8	0	0	25	0	3	15	7	0	0	0	0	6	0
Masulipatam . .	0530	3	1013·6	1013·2	..	20·7	19·9	19·4	22·7	92	..	2·6	..	13·9	0	1	30	15	10	1	0	0	0	1	4	0	0
	0830	"	1015·9	1015·6	−0·3	23·8	21·3	19·9	23·4	79	+1	2·4	+0·4	9·2	0	0	31	11	15	3	0	0	0	0	2	0	0
	1130	"	1015·2	1014·9	..	27·6	22·9	20·4	24·2	66	..	6·0	..	14·8	0	3	28	0	7	22	2	0	0	0	0	0	0
	1730	"	1012·7	1012·4	..	25·9	22·5	20·7	24·5	73	..	4·3	..	13·0	0	1	30	0	0	11	17	3	0	0	0	0	0
	2330	"	1014·7	1014·4	..	23·8	21·5	20·3	23·8	81	..	2·6	..	12·3	0	0	27	0	3	15	8	1	0	0	0	4	0

(a) Mean of 30 days.

(i) Mean of 22 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed, (Km. p.h.): 62 or more	Wind speed, (Km. p.h.): 20 to 61	Wind speed, (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Coastal Andhra Pradesh—*(Contd.)*																											
Nidadavolu	0830	12	1016·2	1014·8	..	22·3	19·7	18·1	20·8	77	..	2·8	..	9·7	0	0	31	24	7	0	0	0	0	0	0	0	0
	1730	,,	1012·5	1011·1	..	26·9	21·0	17·8	19·9	58	..	3·7	..	13·0	0	2	29	0	0	30	1	0	0	0	0	0	0
Kakinada	0830	8	1016·1	1015·2	−0·2	26·8	22·1	19·6	22·8	65	−7	2·3	−0·3	11·7	0	0	31	0	30	1	0	0	0	0	0	0	0
	1730	,,	1012·9	1012·0	..	26·3	21·9	19·5	22·8	67	..	2·2	..	11·3	0	0	31	0	23	3	5	0	0	0	0	0	0
Visakhapatnam	0230	3	1014·0	1013·6	..	20·3	19·5	19·1	22·1	93	..	0·9	..	1·9	0	0	14	1	0	0	1	0	2	1	9	17	0
	0530	,,	1014·3	1013·9	..	19·1	18·5	18·1	21·0	94	..	1·7	..	1·3	0	0	10	1	1	0	1	0	1	0	6	21	0
	0830	,,	1016·5	1016·1	0	24·9	21·6	19·8	23·1	73	+6	2·2	−0·5	2·9	0	0	18	5	4	4	0	0	0	0	5	13	0
	1130	,,	1015·4	1015·0	..	28·9	23·3	20·4	24·1	60	..	2·3	..	9·7	0	2	29	4	6	13	7	0	1	0	0	0	0
	1730	,,	1013·1	1012·7	..	25·3	22·7	21·3	26·4	79	..	2·0	..	9·4	0	1	26	0	0	23	4	0	0	0	0	4	0
	2330	,,	1015·3	1014·9	..	21·4	20·3	19·7	22·9	90	..	1·2	..	0·7	0	0	6	2	1	0	0	0	0	0	3	25	0
Calingapatam	0830	6	1015·8	1015·1	−1·0	19·5	18·0	16·4	19·0	82	+4	3·0	+1·1	6·0	0	0	31	15	0	0	0	0	0	0	16	0	0
	1730	,,	1013·1	1012·4	..	26·2	21·5	18·9	22·1	65	..	2·3	..	7·6	0	0	31	0	1	15	15	0	0	0	0	0	0
Telangana																											
Ramagundam	0830	156	1016·3	993·2	..	20·6	16·9	14·3	16·4	68	..	2·1	..	2·7	0	0	23	19	1	2	1	0	0	0	0	8	0
	1730	,,	1012·0	994·5	..	29·0	19·1	12·0	14·0	35	..	1·3	..	3·5	0	0	25	4	14	6	1	0	0	0	0	6	0
Nizamabad	0830	381	1016·1	972·4	−0·1	18·9	15·8	13·7	15·4	71	+4	2·0	+0·4	0·2	0	0	1	0	0	0	1	0	0	0	0	30	0
	1730	,,	1011·5	969·2	..	27·8	17·9	10·1	12·5	34	..	3·0	..	2·6	0	0	23	2	15	5	1	0	0	0	0	8	0
Mahbubnagar	0830	505	1015·4	958·5	..	21·7	18·3	16·3	18·2	72	..	2·9	..	19·8	0	1	29	0	4	18	8	0	0	0	0	1	0
	1730	,,	1010·5	954·9	..	27·3	18·0	12·0	13·0	39	..	2·6	..	9·0	0	0	31	0	3	24	4	0	0	0	0	0	0
Hyderabad (Begumpet Aerodrome).	0230	545	1014·6	952·6	..	17·7	15·1	13·3	15·2	75	..	1·1	..	1·3	0	0	8	0	0	7	1	0	0	0	0	23	0
	0530	,,	1014·9	952·7	..	16·0	14·7	13·7	15·8	86	..	1·5	..	0·6	0	0	4	0	0	3	1	0	0	0	0	27	0
	0830	,,	1016·1	954·7	+0·2	20·8	17·7	15·7	18·0	73	+7	3·5	+1·4	5·5	0	0	21	0	0	7	14	0	0	0	0	10	0
	1130	,,	1014·6	954·2	..	25·5	18·7	14·5	16·7	51	..	2·9	..	11·8	0	0	31	0	4	11	15	1	0	0	0	0	0
	1730	,,	1011·4	951·3	..	26·3	17·8	12·2	14·2	42	..	3·3	..	6·0	0	0	26	0	2	18	6	0	0	0	0	5	0
	2330	,,	1015·3	953·6	..	19·1	15·7	13·3	15·4	70	..	1·5	..	1·5	0	0	8	0	3	4	1	0	0	0	0	23	0
Hakimpet	0530	613	1014·5	945·0	..	17·2	15·6	14·5	16·5	84	..	2·3	..	6·7	0	0	27	0	2	14	11	0	0	0	0	4	0
	0830	,,	1015·5	946·7	..	20·5	17·9	16·3	18·7	76	..	4·1	..	12·0	0	2	29	0	1	6	22	2	0	0	0	0	0
	1130	,,	1014·2	946·5	..	25·2	18·7	14·6	16·3	54	..	3·0	..	15·1	0	5	26	0	4	12	14	1	0	0	0	0	0
	1730	,,	1011·2	943·8	..	25·7	18·1	13·3	14·1	47	..	3·0	..	10·0	0	0	31	0	8	14	8	1	0	0	0	0	0
Hanamkonda	0830	269	1016·5	985·8	−0·2	22·1	18·9	16·9	19·4	72	+2	1·5	−0·7	4·8	0	0	25	0	1	0	4	17	3	0	0	6	0
	1730	,,	1012·5	982·4	..	27·5	19·4	13·9	15·9	43	..	1·5	..	4·8	0	0	30	7	15	2	4	1	1	0	0	1	0
Bhadrachallam	0830	111	1016·8	1003·9	..	20·5	18·2	16·9	19·1	80	..	2·3	..	3·5	0	0	18	2	11	3	2	0	0	0	0	13	0
	1730	,,	1012·4	1000·0	..	29·1	21·3	15·9	19·1	46	..	1·7	..	6·7	0	0	24	0	11	9	4	0	0	0	0	7	0
Khammameth	0830	112	1016·3	1003·4	..	21·7	18·9	17·1	19·6	75	..	2·5	..	0·7	0	0	6	2	0	3	1	0	0	0	0	25	0
	1730	,,	1011·8	999·3	..	29·3	19·8	13·1	15·4	37	..	2·8	..	3·3	0	0	24	2	1	21	0	0	0	0	0	7	0
Rayalaseema																											
Arogyavaram	0830	701	1015·4	936·9	..	19·7	17·4	15·9	18·1	79	..	4·9	..	1·9	0	0	18	3	6	3	3	1	0	0	2	13	0
	1730	,,	1010·7	933·8	..	24·6	18·2	14·2	17·0	52	..	5·3	..	4·6	0	0	31	0	25	4	2	0	0	0	0	0	0
Cuddapah	0830	130	1015·8	1001·0	+0·3	25·7	21·1	18·3	21·4	65	−11	2·5	−0·4	3·2	0	0	14	0	2	6	6	0	0	0	0	17	0
	1730	,,	1011·2	996·6	..	28·8	21·0	16·3	18·6	47	..	2·4	..	8·6	0	0	31	0	12	13	6	0	0	0	0	0	0
Anantapur	0530	350	1012·9	972·9	..	19·1	17·2	15·9	18·0	83	..	2·1	..	5·5	0	0	24	0	3	17	4	0	0	0	0	7	0
	0830	,,	1014·8	975·1	..	22·3	19·0	17·0	19·2	72	..	2·8	..	4·0	0	0	17	0	0	15	2	0	0	0	0	14	0
	1130	,,	1013·6	974·5	..	26·8	19·8	15·3	17·4	50	..	3·0	..	12·5	0	4	27	0	2	26	3	0	0	0	0	0	0
	1730	,,	1009·7	971·0	..	28·4	19·4	12·7	15·4	37	..	3·5	..	13·9	0	5	26	0	3	27	1	0	0	0	0	0	0
	2330	,,	1013·4	973·8	..	23·1	18·6	15·8	17·8	63	..	1·9	..	14·7	0	4	26	0	0	25	5	0	0	0	0	1	0
Kurnool	0830	281	1015·4	983·1	−0·5	20·0	18·2	17·1	19·4	84	+13	2·0	+0·2	0·3	0	0	1	0	0	1	0	0	0	0	0	30	0
	1730	,,	1010·8	979·8	..	30·2	20·7	14·7	16·7	39	..	2·1	..	4·8	0	0	19	0	1	17	1	0	0	0	0	12	0
Madras																											
Palayamcottai	0830	51	1013·2	1007·4	..	24·9	22·2	20·7	24·6	78	..	6·5	..	7·2	0	0	31	19	4	1	0	0	0	3	4	0	0
	1730	,,	1009·8	1004·9	..	27·7	23·0	20·5	24·3	67	..	7·0	..	7·0	0	0	31	8	13	3	1	1	2	1	2	0	0
Tuticorin	0830	4	1013·2	1012·8	..	24·5	22·1	21·4	24·6	80	..	6·3	..	18·1	0	10	21	20	10	0	0	0	0	0	1	0	0
	1730	,,	1009·9	1009·6	..	27·0	24·2	22·9	28·4	79	..	3·0	..	23·7	0	22	8	4	19	6	1	0	0	0	1	1	0
Pamban	0830	11	1012·9	1011·6	−0·4	25·4	23·9	23·3	28·5	88	+3	5·5	+1·7	12·6	0	0	31	8	4	2	1	0	0	0	16	0	0
	1730	,,	1010·1	1008·8	..	25·9	23·8	22·8	27·7	83	..	6·4	..	15·9	0	5	24	10	16	0	0	0	0	0	3	2	0
Mathurai	0830	133	1013·1	998·0	−0·9	25·0	21·5	19·6	22·8	72	−5	5·7	+1·5	3·0	0	0	31	5	25	0	0	0	0	0	1	0	0
	1730	,,	1010·0	995·0	..	27·3	22·6	20·1	23·6	65	..	5·0	..	3·0	0	0	31	8	17	5	0	0	1	0	0	0	0
Nagapattinam	0830	9	1013·5	1012·4	−0·3	24·6	22·9	21·9	26·7	86	+5	6·1	+1·1	12·7	0	5	26	14	6	1	0	0	0	0	10	0	0
	1730	,,	1010·8	1009·7	..	26·3	23·6	22·4	26·8	79	..	5·9	..	18·3	0	10	21	5	22	1	1	0	0	0	2	0	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed (Km. p.h.): Mean wind speed, Km. per hour	Wind speed (Km. p.h.): 62 or more	Wind speed (Km. p.h.): 20 to 61	Wind speed (Km. p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Madras—(*Contd.*)																											
Tiruchirapalli	0230	88	1011·7	1001·5	..	23·0	21·3	20·4	24·0	85	..	3·9	..	14·0	0	2	28	11	15	4	0	0	0	0	0	1	0
	0530	"	1011·8	1001·6	..	22·6	20·9	19·9	23·3	85	..	5·2	..	12·8	0	3	25	11	16	1	0	0	0	0	0	3	0
	0830	"	1013·8	1003·7	—0·8	24·3	21·6	20·1	23·8	78	—2	5·4	+1·6	14·0	0	2	29	11	20	0	0	0	0	0	0	0	0
	1130	"	1013·4	1003·4	..	26·8	22·4	20·1	23·8	68	..	(a) 6·3	..	(a) 9·7	0	6	24	8	20	2	0	0	0	0	0	0	0
	1730	"	1010·6	1000·6	..	26·4	22·6	20·7	24·4	71	...	6·0	..	13·9	0	2	29	3	15	12	0	0	0	0	1	0	0
	2330	"	1013·3	1003·2	..	23·6	21·9	21·1	25·1	86	..	3·8	..	12·3	0	1	28	3	23	3	0	0	0	0	0	2	0
Coimbatore	0830	409	1014·0	967·9	—0·3	22·9	19·9	18·1	20·3	74	—5	6·1	+2·3	12·9	0	0	31	1	7	14	9	0	0	0	0	0	0
	1730	"	1009·8	964·6	..	27·4	20·5	16·2	18·5	52	..	5·5	..	8·9	0	0	30	0	9	14	7	0	0	0	0	1	0
Coimbatore (Peelamedu Aerodrome)	0530	398	1012·2	966·8	..	20·3	19·1	18·5	21·1	89	..	3·9	..	6·3	0	1	26	7	9	9	0	0	0	1	1	4	0
	0830	"	1013·8	968·8	..	22·7	20·1	18·5	21·4	78	..	4·8	..	11·8	0	1	28	3	19	6	1	0	0	0	0	2	0
	1130	"	1012·7	968·3	..	26·4	20·5	16·9	19·2	57	..	5·1	..	18·1	0	3	28	0	27	4	0	0	0	0	0	0	0
	1730	"	1009·4	965·1	..	26·9	20·4	16·3	18·8	53	..	4·8	..	13·1	0	3	28	1	13	16	0	0	0	1	0	0	0
	2330	"	1012·8	967·8	..	22·7	20·1	18·5	21·4	78	..	3·2	..	7·9	0	3	18	1	3	16	0	0	0	1	0	10	0
Salem	0530	278	1011·9	980·2	..	21·5	19·4	18·1	21·2	81	..	3·9	..	4·2	0	0	23	1	7	13	2	0	0	0	0	8	0
	0830	"	1013·9	982·3	—0·6	23·5	20·2	18·3	21·0	73	—2	4·2	+1·1	6·4	0	0	29	0	11	15	3	0	0	0	0	2	0
	1130	"	1013·1	982·0	..	27·9	21·6	18·0	20·7	56	..	4·5	..	5·9	0	0	26	1	9	11	5	0	0	0	0	5	0
	1730	"	1009·7	978·7	..	28·2	21·9	18·4	21·8	56	..	4·5	..	4·5	0	0	25	0	2	18	3	2	0	0	0	6	0
	2330	"	1013·2	981·7	..	24·1	20·8	19·0	22·1	73	..	4·0	..	8·3	0	0	28	0	7	15	6	0	0	0	0	3	0
Kallakurichi	0830	127	1014·4	999·9	..	24·1	21·5	20·2	23·7	79	..	4·6	..	11·8	0	7	24	14	1	0	0	0	0	0	16	0	0
	1730	"	1010·8	996·4	..	27·2	22·3	19·6	23·0	64	..	5·2	..	11·6	0	2	29	8	21	1	0	0	0	0	1	0	0
Cuddalore	0530	12	1011·7	1010·3	..	22·5	21·4	20·8	24·5	90	..	5·2	..	1·9	0	0	14	3	4	0	0	0	0	0	2	17	0
	0830	"	1014·0	1012·6	—0·5	24·1	22·1	21·1	25·2	84	+1	5·7	+1·5	5·2	0	0	28	11	13	0	0	0	0	4	3	0	0
	1130	"	1013·5	1012·2	..	26·9	23·2	21·3	25·5	72	..	6·5	..	9·1	0	0	31	7	24	0	0	0	0	0	0	0	0
	1730	"	1011·1	1009·8	..	26·0	22·8	21·2	25·2	74	..	6·7	..	7·1	0	0	31	8	23	0	0	0	0	0	0	0	0
	2330	"	1013·4	1012·0	..	24·4	22·3	21·2	25·1	83	..	4·9	..	3·4	0	0	17	6	11	0	0	0	0	0	0	14	0
Vellore	0530	214	1013·3	988·5	..	19·5	18·6	18·0	20·8	92	..	5·3	..	0·2	0	0	1	0	1	0	0	0	0	0	0	30	0
	0830	"	1015·1	990·6	+0·2	21·9	19·9	18·7	21·7	82	—3	4·8	+1·5	1·1	0	0	10	2	5	0	0	0	0	1	2	21	0
	1130	"	1014·1	990·0	..	26·8	21·3	18·1	20·8	59	..	6·4	..	11·7	0	0	31	6	18	7	0	0	0	0	0	0	0
	1730	"	1011·0	987·0	..	27·1	20·9	17·2	19·8	55	..	5·3	..	13·5	0	4	27	1	25	4	1	0	0	0	0	0	0
	2330	"	1014·5	990·0	..	22·2	20·1	19·0	21·7	82	..	4·6	..	5·2	0	0	22	9	11	1	0	1	0	0	0	9	0
Madras	0230	16	1012·5	1010·7	..	22·7	21·6	21·0	23·8	90	..	3·0	..	6·5	0	0	30	8	3	1	0	0	0	3	15	1	0
	0530	"	1012·5	1010·7	..	22·0	21·1	20·7	24·4	92	..	2·6	..	6·9	0	1	30	9	1	0	0	0	0	2	19	0	0
	0830	"	1014·8	1013·0	—0·1	24·5	22·4	21·3	24·8	83	—1	4·2	+0·2	10·0	0	1	30	18	3	1	0	0	0	0	9	0	0
	1130	"	1014·2	1012·4	..	28·0	22·2	20·8	24·9	65	..	5·7	..	19·5	0	10	20	18	9	3	0	0	0	0	0	1	0
	1730	"	1012·1	1010·3	..	26·4	22·5	20·5	24·2	70	..	4·8	..	15·7	0	3	28	11	0	20	0	0	0	0	0	0	0
	2330	"	1014·2	1012·4	..	23·8	21·9	21·1	24·7	84	..	2·8	..	7·9	0	0	31	16	6	1	0	0	0	0	8	0	0
Madras (Nungambakkam)	0830	6	1014·3	1013·6	..	25·4	22·4	21·1	25·0	76	..	3·5	..	8·0	0	0	29	11	4	1	0	0	0	0	13	2	0
Coastal Mysore																											
Karwar	0830	4	1012·9	1012·4	—0·8	22·9	20·4	18·5	22·0	77	..	2·1	..	1·1	0	0	10	0	3	5	2	0	0	0	0	21	0
	1730	"	1009·7	1009·4	..	29·2	24·0	21·4	27·2	63	..	1·9	..	5·8	0	0	20	0	5	0	0	0	0	4	11	11	0
Honavar	0830	26	1012·9	1010·0	—0·4	24·2	19·9	17·0	19·8	66	+4	4·3	+1·3	5·2	0	0	29	1	12	16	0	0	0	0	0	2	0
	1730	"	1009·7	1006·9	..	30·2	24·3	21·1	25·6	61	..	4·3	..	3·8	0	0	29	2	2	2	0	3	6	9	5	2	0
Mangalore	0230	22	1010·5	1008·0	..	24·5	22·6	21·6	25·7	84	..	1·5	..	4·2	0	0	19	0	2	16	1	0	0	0	0	12	0
	0530	"	1010·4	1007·9	..	23·5	21·5	20·5	24·2	83	..	1·9	..	10·3	0	1	30	0	1	27	3	0	0	0	0	0	0
	0830	"	1012·4	1009·9	—0·9	26·0	21·8	19·5	22·8	67	0	2·7	+0·3	9·5	0	0	30	0	0	25	5	0	0	0	0	1	0
	1130	"	1012·0	1009·6	..	30·8	22·7	18·1	21·0	47	..	2·6	..	11·0	0	2	29	0	2	18	5	2	0	1	3	0	0
	1730	"	1009·0	1006·5	..	29·1	24·0	21·6	25·3	64	..	3·3	..	9·9	0	0	29	2	0	0	1	0	2	5	21	0	0
	2330	"	1011·8	1009·3	..	25·9	23·4	21·1	26·7	80	..	1·8	..	6·5	0	0	28	3	5	17	2	0	0	0	1	3	0
Mangalore (Bajpe Aerodrome)	0530	103	1011·0	999·2	..	22·1	20·0	19·0	21·7	82	..	3·5	..	8·5	0	0	21	0	1	16	4	0	0	0	0	10	0
	0830	"	1012·8	1001·1	..	25·1	21·1	19·0	21·9	70	..	3·0	..	14·0	0	0	26	0	1	21	6	0	0	0	0	3	0
	1730	"	1009·4	997·8	..	27·8	23·3	21·0	25·0	67	..	3·0	..	11·4	0	0	26	1	0	0	1	0	0	15	9	5	0
Mysore (North)																											
Bidar	0830	664	1015·7	941·2	..	20·3	16·2	13·5	15·4	64	+2	2·8	+0·8	13·0	0	3	28	0	0	12	12	6	1	0	0	0	0
	1730	,,	1010·9	938·2	..	25·9	16·4	9·1	10·6	35	..	3·6	..	11·7	0	0	31	1	22	7	1	0	0	0	0	0	0
Gulbarga	0830	458	1015·9	964·0	—0·2	21·8	16·4	12·6	14·4	57	—2	3·0	+1·6	9·1	0	0	31	0	7	20	4	0	0	0	0	0	0
	1730	"	1010·4	959·9	..	28·5	17·9	10·2	12·0	32	..	4·7	..	9·3	0	0	27	0	6	14	7	0	0	0	0	4	0

(a) Mean of 30 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (Km. p. h.): 62 or more	Wind speed (Km. p. h.): 20 to 61	Wind speed (Km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Mysore (North)—(Contd.)																											
Bijapur	0830	594	1015·5	948·5	—0·2	19·6	16·1	13·3	15·8	69	+8	3·1	+1·3	6·7	0	0	28	1	3	2	12	9	1	0	0	3	0
	1730	"	1009·7	944·8	..	28·3	19·4	13·9	16·1	42	..	2·9	..	4·4	0	0	29	2	6	12	5	2	0	1	1	2	0
Belgaum	0830	781	1014·7	927·8	—0·1	19·6	15·5	12·4	14·4	64	+2	..	..	2·3	0	0	17	0	2	2	4	7	2	0	0	14	0
	1730	"	1010·4	926·0	..	26·4	17·6	11·5	13·0	39	..	..	..	3·0	0	0	20	3	7	3	3	1	2	0	1	11	0
Belgaum (C.T.O.)	0830	753	1014·7	930·8	—0·2	20·0	16·5	14·2	16·5	70	+6	1·6	—0·2	3·8	0	0	25	0	5	15	4	0	0	0	1	6	0
	1730	"	1009·1	927·6	..	26·9	20·0	15·8	18·9	51	..	2·8	..	7·5	0	0	31	0	9	16	3	2	1	0	0	0	0
Belgaum (Sambre Aerodrome).	0530	761	1013·1	927·9	..	17·8	14·3	11·6	13·7	67	..	1·2	..	3·3	0	0	13	0	2	11	0	0	0	0	0	18	0
	0830	"	1014·2	929·7	..	20·6	16·5	13·9	14·8	65	..	1·8	..	7·1	0	0	23	0	3	16	4	0	0	0	0	8	0
	1130	"	1012·5	929·5	..	25·6	18·8	14·7	16·3	51	..	2·1	..	14·5	0	4	27	0	2	21	8	0	0	0	0	0	0
	1730	"	1009·0	926·7	..	27·1	18·3	12·5	15·8	41	..	2·4	..	11·3	0	1	30	0	8	19	4	0	0	0	0	0	0
Gadag	0830	650	1014·4	942·0	—0·3	22·0	17·5	14·6	16·2	63	+1	2·2	+0·4	9·3	0	0	31	0	3	21	7	0	0	0	0	0	0
	1730	"	1009·7	938·9	..	27·4	17·9	11·3	12·9	37	..	2·8	..	6·5	0	0	31	0	16	15	0	0	0	0	0	0	0
Gadag (P.B.O.)	0530	661	1013·3	938·7	..	17·5	14·8	13·2	14·9	76	..	0·8	..	6·9	0	0	26	0	0	16	10	0	0	0	0	5	0
	0830	"	1014·5	940·7	..	20·9	17·4	15·5	17·4	72	..	2·9	..	12·3	0	1	30	0	0	10	21	0	0	0	0	0	0
	1130	"	1013·2	940·5	..	25·7	18·7	15·0	16·5	52	..	2·2	..	16·9	0	4	27	0	1	14	16	0	0	0	0	0	0
	1730	"	1009·6	937·5	..	26·7	18·5	14·0	15·8	46	..	2·5	..	12·7	0	1	29	0	1	23	6	0	0	0	0	1	0
	2330	"	1013·7	939·8	..	20·5	15·7	12·9	14·4	62	..	1·2	..	9·0	0	0	29	0	2	26	1	0	0	0	0	2	0
Raichur	0830	400	1015·4	970·3	—0·1	22·4	18·6	16·1	18·2	67	+2	2·2	+0·5	6·9	0	0	30	0	4	10	13	2	0	0	1	1	0
	1730	"	1010·5	966·4	..	28·7	18·5	10·7	13·2	33	..	2·5	..	6·9	0	0	31	2	12	11	5	1	0	0	0	0	0
Mysore (South)																											
Bellary	0830	449	1015·2	964·4	—0·2	21·6	18·8	17·0	19·4	75	+8	2·9	+0·3	3·1	0	0	25	0	0	0	25	0	0	0	0	6	0
	1730	"	1009·6	960·2	..	28·8	19·7	13·4	15·7	39	..	3·9	..	3·3	0	0	29	0	0	0	29	0	0	0	0	2	0
Chitaldrug	0830	733	1014·4	932·8	—0·1	20·5	17·2	14·9	17·5	71	+3	4·5	+1·8	12·0	0	0	31	0	0	26	5	0	0	0	0	0	0
	1730	"	1009·1	929·5	..	27·0	17·8	11·5	13·6	39	..	4·7	..	8·3	0	0	31	0	0	31	0	0	0	0	0	0	0
Shimoga	0830	571	1014·3	950·0	..	19·9	17·1	15·4	18·6	76	..	2·0	..	1·0	0	0	7	1	3	3	0	0	0	0	0	24	0
	1730	"	1008·6	946·2	..	27·5	18·6	12·8	14·9	41	..	3·0	..	5·5	0	1	27	1	7	17	3	0	0	0	0	3	0
Balehonnur	0830	..	..	..	..	18·2	16·1	14·7	16·8	81	+5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hassan	0830	960	1530·3	908·6	..	19·2	16·5	14·9	16·7	76	+1	4·2	+1·0	6·5	0	0	27	0	0	21	6	0	0	0	0	4	0
	1730	"	1512·8	905·5	..	25·1	17·4	12·0	14·3	45	..	4·3	..	4·1	0	0	23	1	2	12	8	0	0	0	0	8	0
Mysore	0830	767	1014·6	929·0	—0·1	19·4	17·3	15·9	17·9	81	+7	3·1	—0·3	12·4	0	0	31	3	2	0	4	6	9	1	6	0	0
	1730	"	1008·9	925·8	..	26·3	18·1	12·5	13·9	43	..	4·0	..	13·8	0	3	28	0	13	12	4	1	0	0	1	0	0
Bangalore (Central Observatory).	0230	921	1509·5	911·0	..	17·4	16·0	15·1	17·2	87	..	3·8	..	10·9	0	0	31	0	3	25	3	0	0	0	0	0	0
	0830	"	1529·7	912·9	+0·1	18·6	16·1	14·4	16·3	77	—1	4·9	+1·4	14·4	0	2	29	0	11	19	1	0	0	0	0	0	0
	1130	"	1587·1	912·5	..	23·8	16·9	12·1	14·1	49	..	4·4	..	15·7	0	5	26	0	6	22	3	0	0	0	0	0	0
	1730	"	1513·3	909·9	..	24·3	16·9	11·7	13·6	46	..	4·6	..	12·4	0	0	30	0	3	18	9	0	0	0	0	1	0
Bangalore (Aerodrome)	0530	897	1507·9	913·5	..	16·9	16·0	15·4	17·5	91	..	4·8	..	8·6	0	1	22	0	3	20	0	0	0	0	0	8	0
	0330	"	1531·5	915·5	..	19·1	16·7	15·1	17·1	79	..	5·5	..	12·1	0	1	26	0	3	24	0	0	0	0	0	4	0
	1130	"	1510·8	915·2	..	24·8	17·9	13·3	15·5	50	..	4·9	..	14·9	0	4	25	1	0	27	1	0	0	0	0	2	0
	1730	,,	1516·7	912·5	..	25·4	18·1	13·3	15·4	48	..	4·9	..	13·9	0	5	24	0	2	24	3	0	0	0	0	2	0
	2330	,,	1526·7	915·9	..	19·1	17·0	15·5	18·0	80	..	2·8	..	9·2	0	0	25	0	1	24	0	0	0	0	0	6	0
Kerala (Including Laccadives)																											
Kozhikode	0530	5	1010·5	1010·0	..	23·6	22·2	21·3	25·5	86	..	3·2	..	5·4	0	0	31	0	11	18	1	1	0	0	0	0	0
	0330	,,	1011·9	1011·4	—1·0	25·7	22·4	20·8	24·5	74	—3	3·7	+1·0	5·3	0	0	31	0	1	30	0	0	0	0	0	0	0
	1130	,,	1012·0	1011·5	..	31·0	24·4	21·2	25·3	56	..	4·2	..	7·8	0	0	31	0	1	3	2	3	11	9	2	0	0
	1730	,,	1009·3	1008·8	..	30·1	24·9	22·5	27·4	64	..	4·2	..	11·1	0	1	30	0	0	0	0	0	3	17	11	0	0
	2330	,,	1011·8	1011·3	..	26·4	23·6	22·3	26·9	78	..	2·6	..	6·0	0	0	31	3	22	4	1	0	0	0	1	0	0
Palghat	0830	97	1012·9	1001·9	..	25·4	21·7	19·8	22·6	71	..	4·7	..	13·7	0	0	31	0	0	28	2	1	0	0	0	0	0
	1730	,,	1009·2	998·3	..	29·5	22·2	18·0	20·9	52	..	4·8	..	8·4	0	0	28	0	0	26	1	1	0	0	0	3	0
Fort Cochin	0330	3	1012·0	1011·7	—0·9	26·9	24·0	22·6	27·7	78	+5	6·3	+3·7	2·0	0	0	10	0	3	7	0	0	0	0	0	21	0
	1730	,,	1008·9	1008·6	..	28·6	24·7	22·8	27·5	72	..	5·7	..	4·9	0	0	22	1	1	0	0	0	3	9	8	9	0
Cochin (Naval Air Station).	0230	3	1010·9	1010·6	..	24·9	23·3	21·6	27·2	87	..	4·3	..	1·6	0	1	10	0	4	4	3	0	0	0	0	20	0
	0530	,,	1010·7	1010·4	..	23·8	22·5	21·8	26·1	89	..	3·5	..	2·1	0	0	15	1	11	3	0	0	0	0	0	16	0
	0830	,,	1012·0	1011·7	..	26·2	22·8	21·0	25·1	73	..	4·5	..	3·5	0	0	27	1	15	10	0	1	0	0	0	4	0
	1130	,,	1011·9	1011·6	..	29·8	23·8	20·8	24·6	59	..	4·7	..	5·8	0	0	29	3	9	5	1	1	4	3	3	2	0
	1730	,,	1009·6	1009·3	..	29·2	24·1	21·5	25·9	64	..	5·3	..	9·1	0	2	28	1	2	0	1	2	3	16	5	1	0
	2330	,,	1011·9	1011·6	..	25·8	24·0	23·1	28·4	85	..	4·2	..	1·8	0	1	10	0	5	4	0	1	0	1	0	20	0

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew po in	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed, (Km. p. h.): 62 or more	Wind speed, (Km. p. h.): 20 to 61	Wind speed, (Km. p. h.): 1 to 19	No. of observations: Wind directio n: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Kerala (Including Laccadives)—(*Contd.*)																											
Alleppey	0830	4	1011·7	1011·3	..	27·5	24·2	22·8	27·4	79	..	5·2	..	5·5	0	0	31	0	3	14	13	1	0	0	0	0	0
	1730	,,	1008·8	1008·4	..	29·9	25·3	23·5	29·1	73	..	5·4	..	14·1	0	1	30	0	1	1	1	0	3	5	20	0	0
Punalur	0830	34	1012·1	1007·8	..	23·5	21·9	20·9	25·0	86	..	3·7	..	0·6	0	0	4	1	1	1	0	1	0	0	0	27	0
	1730	,,	1009·1	1004·8	..	29·7	23·4	20·1	23·7	58	..	4·4	..	4·7	0	0	27	1	4	10	6	3	1	1	1	4	0
Trivandrum	0230	64	1009·7	1002·4	..	24·7	23·3	22·5	27·5	87	..	4·7	..	2·9	0	0	21	2	5	6	3	0	0	0	5	10	0
	0530	,,	1009·6	1002·3	..	24·0	22·4	21·5	25.8	87	..	3·8	..	3·4	0	0	26	2	16	2	1	1	0	0	4	5	0
	0830	,,	1011·7	1004·4	−0·8	25·6	23·3	22·2	26·9	81	+1	4·7	+1·1	2·5	0	0	21	3	10	5	1	1	0	0	1	10	0
	1130	,,	1011·3	1004·0	..	30·1	24·6	21·9	26·3	62	..	5·6	..	3·8	0	9	26	1	7	2	3	6	2	2	3	5	0
	1730	,,	1009·1	1001·9	..	28·1	24·3	22·6	27·3	73	..	5·7	..	3·6	0	0	26	0	4	0	0	3	14	2	3	5	0
	2330	,,	1011·5	1004·2	..	25·5	23·8	23·1	28·2	86	..	5·1	..	2·7	0	0	23	8	6	2	3	0	1	1	2	8	0
Trivandrum (Aerodrome)	0830	8	1011·6	1010·7	..	26·1	23·4	22·0	26.5	79	..	5·1	..	3·9	0	0	21	3	7	7	0	1	1	1	1	10	0
Hill Stations excluding Kashmir																											
Walong (R)	0830																										
(R)	1730																										
Kohima	0830	1406	1560·6	865·8	..	13·6	10·3	6·9	9·9	63	..	1·1	..	..	0	0	31	4	1	3	8	11	1	0	2	0	1
	1730	,,	1538·4	863·5	..	12·4	11·2	10·1	12·7	87	..	3·3	..	..	0	0	31	5	0	0	0	0	4	9	13	0	0
Aijal*	0830	1097																									
	1730	,,																									
Shillong	0830	1500	1529·8	853·2	+0·3	12·8	9·2	5·3	9·0	61	—8	1·2	−0·2	0.8	0	0	4	0	0	0	0	1	2	0	0	27	1
	1730	,,	1502·8	850·4	..	12·0	10·8	9·6	12·1	86	..	8·0	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
Cherrapunji	0830	1313	1525·3	871.7	−0.2	14·2	12·2	10·3	12·9	81	+21	0.5	−1·3	3·2	0	0	31	1	6	12	2	0	10	0	0	0	0
	1730	,,	1498·0	868·7	..	13·1	12·0	10·6	13·2	89	..	..	..	3·1	0	0	31	0	1	6	4	0	20	0	0	0	0
Darjiling (Raj Bhawan)	0830	2127	1551·2	793·5	+3·0	8·0	6·2	4·4	8·5	79	+13	4·6	+2·0	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	1527·3	790·8	..	7·3	6·3	5·4	8·8	89	..	6·2	..	0.1	0	0	1	0	0	0	0	0	0	0	1	30	0
Kalimpong	0830	1209	1506·5	881·0	+2·7	11·3	9·7	8·6	10·8	83	+10	2·1	−0.1	2·7	0	0	28	0	0	0	0	0	0	0	28	3	0
	1730	,,	1489·2	879·1	..	11·8	10·1	8·9	11·3	81	..	3·2	..	2·5	0	0	26	0	0	0	25	0	0	0	1	5	0
Katmandu	0830	1337	1546·6	871·8	..	7·6	6·9	6·1	9·7	92	+6	6·5	+0·4	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1730	,,	1514·9	868·2	..	13·1	10·4	7·9	10·5	71	..	3·0	..	0·7	0	0	6	3	0	0	0	0	0	0	3	25	0
Mukteswar (Kumaon)	0830	2311	3132·2	774·2	+0·2	6·9	2·2	−6.5	4.2	45	+6	2·5	+0·2	9.0	0	1	23	0	7	5	1	1	3	4	3	7	0
	1730	,,	3120·1	773·1	..	7·7	4·6	0·4	6·6	62	..	2·6	..	8·3	0	0	23	0	2	1	1	1	2	13	3	8	0
Nainital	0830	1953	1521·8	806·6	..	5·0	2·2	−2.2	5·0	64	..	2·6	..	4·1	0	0	25	2	0	3	1	0	0	18	1	6	0
	1730	,,	1499·8	805·2	..	7·2	4·7	1·1	6·0	69	..	3·5	..	4·0	0	1	27	1	1	1	1	3	3	18	0	3	0
Tapoban (R)	0830																										
Badrinath	0830																										
Lokpal	0830																										
Mussooree	0830	2042	1513·9	793·2	−0·8	7·6	4·5	2·3	6.5	61	+16	3·4	+0·8	3·5	0	0	25	5	2	0	5	6	1	0	6	6	
	1730	,,	1502·6	796·6	..	7·9	6.4	4.9	8·5	80	..	4·7	..	2·3	0	0	20	1	1	0	4	8	4	0	2	11	
Simla	0830	2202	1515·3	782·7	−0 4	6·6	1·7	−7.9	3·7	43	+9	3·7	+0·9	2·3	0	0	24	1	0	0	11	10	1	0	1	7	0
	1730	,,	1500·9	781.4	..	7·0	4·0	−0.2	6·3	64	..	4·6	..	3·0	0	0	31	3	10	3	9	4	1	0	1	0	
Dalhousie	0830	1959	1465.2	801.0	..	6·8	2.5	−4.0	5·0	48	..	2·6	..	1.2	0	0	6	0	6	0	0	0	0	0	0	25	
	1730	,,	1463·2	801.1	..	8·0	5 ·5	1·9	7·3	68	..	3·3	..	0.6	0	0	2	0	0	0	1	1	0	0	0	29	
Dharamshala	0830	1212	1548·5	885·6	..	10·8	7·6	4·2	7·8	67	.	3·6	..	1·9	0	0	20	5	6	0	0	1	5	3	0	11	0
	1730	,,	1548·2	884·8	..	12·9	9·9	7.0	9·0	67	..	4·9	..	3·2	0	0	31	0	4	0	1	2	13	9	2	0	0
Abu	0830	1195	1515.0	884.4	−0.4	12.9	9.3	5.3	9.0	61	+17	0.8	−0.6	0.7	0	0	2	0	1	0	0	0	1	0	0	29	0
	1730	,,	1508.2	883.1	..	17·2	11.9	6.9	10.6	52	..	1.2	..	2.3	0	0	7	3	2	0	0	0	1	0	1	24	0
Pachmarhi	0830	1075	1539·0	898·2	−0 1	14·2	11·9	9·8	12·3	77	+15	1·5	−0·2	1·4	0	0	11	0	0	0	2	4	3	2	0	20	0
	1730	,,	1528·6	895·8	..	22·1	15·2	10·2	12·2	47	..	1·8	..	3·0	0	0	19	7	1	0	0	0	1	4	6	12	0
Mahabaleshwar	0830	1382	1533·7	865·5	+0·2	16·9	12·9	9·4	12·0	62	+7	2·2	+0.8	10·9	0	0	31	0	1	14	13	3	0	0	0	0	0
	1730	,,	1516·6	863·6	..	20·6	15·7	12·0	14·4	58	..	2·0	..	9,9	0	0	31	0	6	5	5	0	1	0	14	0	0
Nandi Hills	0830	..	..	..	..	17·6	16·8	16·1	18·4	90	..	6·8	..	..	..	..	..	0	4	3	0	0	12	7	0	0	0
Mercara	0830	1152	1522·8	887·9	+0·5	16·9	15·5	14·4	16·6	86	+3	2·9	−1·3	10·3	0	0	31	0	15	16	0	0	0	0	0	0	0
	1730	,,	1508·1	885·7	..	22·8	17·3	13·3	15·7	57	..	2·5	..	6·4	0	0	31	0	15	16	0	0	0	0	0	0	0
Kodaikanal	0530	2343	3135·3	770·7	..	10·5	9·1	6·8	10·6	85	..	6·5	..	11·4	0	5	25	3	13	5	6	1	0	0	2	1	0
	0830	,,	3162·7	772·7	+1·0	12·7	10·7	8·6	11·5	81	+17	5·5	+2·0	11·7	0	4	25	2	9	5	12	0	0	0	1	2	0
	1130	,,	3168·6	772·7	..	15·0	12·3	10·0	12·6	76	..	5·8	..	9·7	0	3	26	2	5	9	11	0	0	0	2	2	0
	1730	,,	3144·5	771·0	..	12·8	11·5	10·5	12·8	87	..	5.8	..	9·1	0	2	27	2	9	6	11	0	0	0	1	2	0
	2330	,,	3155·9	772·5	..	11·2	9·9	7·9	11·4	86	..	6·2	..	12·2	0	5	23	1	15	5	4	0	0	0	3	3	0

Closed during winter months.

(R) Register not received.

* Temporarily closed.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean temperature in °C: Dry bulb	Mean temperature in °C: Wet bulb	Mean temperature in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Mean wind speed, Km. per hour	Wind speed (km.p.h.): 62 or more	Wind speed (km.p.h.): 20 to 61	Wind speed (km.p.h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hill Stations excluding Kashmir *(Contd.)*																											
Ootacamund	0830	2249	1523·9	780·8	+0·4	12·4	9·6	7·5	9·8	72	+8	2·7	−0·3	3·9	0	1	9	1	3	4	1	0	0	0	1	21	0
	1730	,,	1501·5	780·3	..	14·9	12·3	10·7	12·3	76	..	4·5	..	2·0	0	0	6	0	1	3	1	0	0	0	1	25	0
Coonoor	0830	1747	1522·8	828·4	..	16·7	13·1	10·4	12·7	69	−3	4·5	+0·3	2·4	0	0	19	0	0	2	12	5	0	0	0	12	0
Sikkim																											
Lachen	0830	..	..	..	..	6·3	3·4	0	6·0	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tibet																											
Yatung (Chumbi)	0830	..	..	..	..	−1·3	−2·1	−3·7	4·7	85	+2	0	−1·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lhasa (R)	0830	3685																									
Ceylon																											
Colombo	0830	7	1011·7	1010·9	−0·7	24·8	23·4	22·8	27·9	88	+2	5·7	+1·3	9·9	0	1	29	11	13	3	2	0	0	0	1	1	0
	1730	,,	1009·2	1008·4	..	25·8	23·9	23·2	28·2	85	..	7·1	..	8·5	0	5	21	4	8	1	2	1	5	2	3	5	0
Trincomalee	0830	3	1011·6	1011·	−0·3	26·1	24·1	23·3	28·3	84	−1	6·4	+1·6	18·5	1	10	19	14	12	1	0	0	1	1	1	1	0
	1730	,,	1009·4	1009	..	26·5	24·2	23·1	27·9	82	..	6·9	..	21·6	0	21	9	12	15	1	1	0	0	1	0	1	0
Batticoloa (R)	0830	3																									
(R)	1730	,,																									
Hambantota	0830	15	1011·4	1009·7	0	25·7	23·8	22·9	28·0	86	−1	5·8	+2·1	18·9	0	19	12	12	13	1	0	0	1	3	1	0	0
	1730	,,	1009·0	1007·3	..	26·2	24·3	23·4	28·8	85	..	7·2	..	22·0	0	20	11	6	17	0	1	0	3	4	0	0	0
Mannar	0830	4	1012·6	1012·2	..	25·7	23·8	23·0	28·0	86	..	7·0	..	13·0	0	3	28	7	19	2	2	0	0	0	1	0	0
	1730	,,	1010·0	1009·6	..	26·5	24·0	22·0	27·8	81	..	7·0	..	14·9	0	5	26	8	19	1	0	0	0	0	3	0	0
Hydrometeorological Observatories																											
Damodar Catchment																											
Bokaro	0830	239	1018·2	990·1	..	15·0	12·0	9·1	11·6	67	..	1·0	..	2·0	0	0	17	2	0	0	1	1	5	5	3	14	0
	1730	,,	1013·3	986·0	..	22·0	15·1	8·7	11·5	43	..	1·7	..	4·0	0	0	27	16	2	0	1	0	0	2	6	4	0
Hazaribagh	0830	615	1016·9	947·0	..	17·4	12·8	8·9	11·0	58	..	0·5	..	4·4	0	0	25	3	0	3	2	4	2	1	10	6	0
	1730	,,	1039·9	944·0	..	18·0	12·7	8·1	10·4	53	..	0·9	..	3·5	0	0	20	0	2	1	5	2	4	2	4	11	0
Tilaiya	0830	..	..	..	..	17·1	12·9	8·8	11·5	59	..	0·5	..	5·1	0	0	18	0	1	2	1	0	6	7	1	13	0
	1730	..	..	.	..	21·2	14·2	7·4	10·7	41	..	0·8	..	5·1	0	0	22	2	0	0	0	0	0	4	16	9	0
Ramgarh	0830	..	..	.	..	15·9	12·3	8·9	11·4	63	..	0·6	..	2·3	0	0	23	1	1	0	0	0	6	8	7	8	0
	1730	..	..	.	..	21·1	15·0	9·8	12·1	49	..	1·3	..	0·7	0	0	7	1	0	0	0	0	0	0	6	24	0
Panchet Hills	0830	..	..	..	..	18·6	13·9	9·5	12·1	56	..	0·6	..	2·8	0	0	27	1	1	2	1	0	19	0	3	4	0
	1730	..	..	..	..	22·4	15·2	8·6	11·4	42	..	1·2	..	2·5	0	0	26	12	3	1	0	1	1	2	6	5	0
Durgapur	0830	..	..	..	..	20·2	15·3	11·5	13·4	56	..	0·3	..	12·5	0	4	27	6	2	4	2	2	1	5	9	0	0
	1730	..	..	..	..	22·5	16·4	11·6	13·7	50	..	1·1	..	6·1	0	0	25	6	1	3	0	0	1	7	7	6	0
Mahanadi Catchment																											
Baramul	0830	64	1017·6	1010·0	..	19·0	16·7	14·8	17·1	73	..	0·6	..	1·6	0	0	7	1	3	0	1	1	1	0	0	24	0
	1730	,,	1013·3	1005·9	..	22·9	19·0	16·6	18·8	70	..	1·8	..	0·9	0	0	4	2	0	0	0	1	0	1	0	27	0
Hirakud	0830	159	1017·6	999·2	..	20·7	16·8	13·8	16·0	65	..	0·9	..	2·8	0	0	23	4	8	1	6	1	1	1	1	8	0
	1730	,,	1013·3	995·2	.	25·0	18·4	13·0	15·8	50	..	0·9	..	0·8	0	0	7	0	0	0	3	0	1	1	2	24	0
						(f)	(f)	(f)	(f)	(f)																	
Khijrawan	0830	..	..		.	19·8	16·1	14·3	15·5	71	..	0·9	..	..	..	..	..	6	10	2	0	4	6	0	3	0	0
	1730	..	..	.		24·9	18·8	13·8	16·9	54	..	0·8	..	..	..	..	..	4	13	1	0	3	4	1	5	0	0
Sonepur	0830	..	..	..		23·9	19·0	15·9	18·0	62	..	..	..	7·3	0	0	23	9	2	0	3	3	6	0	0	8	0
Ginabahar	0830	..	..	..		19·0	14·1	9·4	12·1	55	..	..	..	..	..	..	..	..	..								..
Bhimkund	0830	..	..	..	.	19·5	16·0	13·2	15·4	68	..	2·3	..	2·5	0	0	17	3	0	0	0	0	0	1	13	14	0
	1730	..	..	..	..	23·6	17·3	12·7	14·6	51	..	7·7	..	0·2	0	0	2	0	0	0	0	0	2	0	0	29	0
Narbada Catchment																											
Punasa (R)	0830																										
(R)	1730																										
Bagra Tawa	0830	..	..	..		18·4	13·4	9·0	11·3	55	..	(b) 1·0	..	(b) 7·4	0	0	24	4	11	0	1	2	4	2	0	5	0
						(c)	(c)	(c)	(c)	(c)		(c)		(c)													
	1730	..	..	..		26·0	17·9	11·5	13·9	42	..	1·2	..	1·9	0	0	8	0	9	0	1	1	3	0	0	20	0
Thikri	0830	..	..	.	..	21·3	15·4	10·8	12·9	52	..	1·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sabarmati Catchment																											
Jhadol	0830	..	..	..	..	15·4	11·2	7·2	10·1	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dharoi	0830	..	..	..	.	17·4	12·4	7·2	10·3	52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..		26·7	16·7	8·3	10·9	31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(R) Register not received. (b) Mean of 29 days. (c) Mean of 28 days. (f) Mean of 25 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres	Mean pressure in millibars: At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars: At station level	Mean pressure in millibars: Departure from normal	Mean tempera in °C: Dry bulb	Mean tempera in °C: Wet bulb	Mean tempera in °C: Dew point	Vapour pressure in mbs.	Relative humidity %	Cloud amount (Oktas): Departure from normal	Cloud amount (Oktas): Mean amount	Cloud amount (Oktas): Departure from normal	Wind speed, Mean wind speed, Km. per hour	Wind speed, (km. p. h.): 62 or more	Wind speed, (km. p. h.): 20 to 61	Wind speed, (km. p. h.): 1 to 19	No. of observations: Wind direction: N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Hydrometeorological Observatories (*Contd.*)																											
Ganga Catchment																											
Mukhim	0830	..	..	..	..	9·9	5·5	0·4	6·2	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	9·7	6·3	3·0	7·5	62	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tehri (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gandak Catchment																											
Gorkha	0830	..	..	..	..	12·9	11·2	9·6	12·1	81	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·6	11·4	9·8	11·9	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pokhara	0830	..	..	..	..	13·0	11·5	10·1	12·5	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·5	13·2 (b)	11·5 (b)	13·6 (b)	77 (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nawakot	0830	..	..	..	..	13·6	12·1	11·0	13·1	83	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	15·2	12·3 (d)	10·0 (d)	12·2 (d)	70 (d)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jomosom	0830	..	..	..	..	2·8	0·4 (b)	−2·8 (b)	5·0 (b)	67 (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	7·1	3·5	−0·7	5·8	58	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tinure	0830	..	..	..	..	7·1	3·8	−0·2	5·9	59	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	9·8	7·4	5·1	8·8	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment (Trans Himalayan Region)																											
Dailekh	0830	..	..	..	..	11·9	9·2	6·4	9·6	69	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	12·6	9·3	5·9	9·3	64	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gogra Catchment																											
Dandeldhura	0830	..	..	..	..	9·3	5·0	−0·2	6·0	51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	9·9	6·6	3·3	7·7	63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Munsiyari (R)	0830																										
(R)	1730																										
Sallyana	0830	..	..	..	..	13·3 (b)	9·9 (c)	6·6 (c)	9·8 (c)	64 (c)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	12·6	9·9 (b)	7·3 (b)	10·3 (b)	70 (b)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Baiwal	0830	..	..	..	..	18·2	14·1 (a)	10·6 (a)	12·8 (a)	61 (a)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	20·9	17·8	15·8	17·9	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bagmati Catchment																											
Katmandu	0830	1333	1529·2	871·6	..	7·3	6·6	6·3	9·6	94	..	6·5	..	0	0	0	0	0	0	0	0	0	0	0	0	31	0
	1130	"	1525·9	870·6	..	15·3	11·0	7·0	10·0	59	..	3·2	..	1·0	0	0	10	1	3	2	2	1	0	0	1	21	0
	1730	"	1502·9	868·4	..	12·6	10·1	7·6	10·6	72	..	5·0	..	0·8	0	0	7	4	0	0	0	0	0	0	3	24	0
Kosi Catchment																											
Chautara	0830	..	..	..	..	10·1	8·7	7·3	10·4	84	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	13·5	10·2	7·4	10·3	66	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Okhaldunga (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1130	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Barahkshetra	0830	146	1018·3	1001·1	..	14·8	13·5	12·5	14·4	87	..	2·6	..	6·5	0	1	24	0	4	3	2	0	8	3	5	6	0
	1130	"	1016·5	999·6	..	20·5	16·5	13·6	15·5	65	..	3·0	..	7·5	0	0	28	0	0	0	1	0	15	12	0	3	0
	1730	"	1014·2	997·1	..	17·7	15·9	14·6	16·7	82	..	3·4	..	6·6	0	0	26	0	1	17	6	0	1	1	0	5	0
Anghung	0830	..	..	..	..	13·7	11·6	9·9	12·0	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplejung	0830	..	..	..	..	9·3	8·1	6·9	10·1	85	..	4·7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1130	..	..	..	..	13·0	10·0	7·6	10·3	71	..	4·9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	10·7	8·2	5·9	9·3	74	..	4·8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Taplethok	0830	..	..	..	..	11·3	9·1	6·9	10·0	74	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wallungchung Gola (R)	0830	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhojpur	0830	..	..	..	..	11·9	9·5	7·6	10·3	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	10·6	9·3	8·4	10·9	85	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chainpur	0830	..	..	..	..	12·2	10·2	8·1	10·9	77	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(R)	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tista Catchment																											
Gangtok	0830	1812	1531·0	822·0	..	8·5	6·9	5·4	9·0	82	..	4·2	..	2·7	0	0	22	6	7	0	0	3	1	1	4	9	0
	1130	"	1517·1	821·0	..	11·6	9·5	7·6	10·5	77	..	4·7	..	4·7	0	0	31	1	1	0	1	4	14	8	2	0	0
	1730	"	1502·6	819·4	..	9·1	8·0	6·8	10·1	86	..	6·3	..	3·2	0	0	26	1	1	6	10	5	2	0	1	5	0
Geyzing	0830	..	..	..	..	11·5	9·5	7·9	10·6	78	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	..	..	..	..	11·3	9·5	7·9	10·7	80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(a) Mean of 30 days. (b) Mean of 29 days. (R) Register not received. (c) Mean of 28 days. (d) Mean of 27 days.

Addenda to Table III—Summary of Observations at Fixed Hours-January-December 1957 (1878-1879 Saka)

Division and station	Hour of observation I.S.T.	Barometer cistern above m. metres.	Mean pressure in millibars. At mean sea level or height in g.p.m. of nearest standard isobaric level	Mean pressure in millibars. At station level	Mean pressure in millibars. Departure from normal	Mean temperature in °C. Dry bulb	Mean temperature in °C. Wet bulb	Mean temperature in °C. Dew point	Vapour pressure in mbs.	Departure from normal	Cloud amount (Oktas). Mean amount	Cloud amount (Oktas). Departure from normal	Mean wind speed, km. per hours	Wind speed (km.p.h.) 62 or more	Wind speed (km.p.h.) 20 to 61	Wind speed (km.p.h.) 1 to 19	No. of observations. Wind direction N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
JANUARY																											
Kerala (Including Laccadives)																											
Minicoy	0530	2	1010·4	1010·2	..	23·2	21·5	20·7	24·3	86	..	1·	..	3·8	0	0	19	7	8	1	1	0	0	0	2	12	0
	0830	,,	1012·4	1012·2	−0·5	25·9	23·1	21·8	25·9	79	+5	3·2	+0·3	5·4	0	0	25	11	10	2	1	0	0	1	0	6	0
	1130	,,	1012·6	1012·4	..	28·8	24·4	22·4	26·8	68	..	3·4	..	9·6	0	0	31	10	12	4	2	0	0	0	3	0	0
	1730	,,	1009·6	1009·4	..	27·9	23·7	21·6	26·0	69	..	3·6	..	8·3	0	0	30	11	10	3	1	1	0	0	4	1	0
	2330	,,	1012·2	1012·0	..	25·0	22·4	21·2	24·9	80	..	2·1	..	5·3	0	0	21	6	12	2	0	0	0	0	1	10	0
Amini Divi	0830	4	1012·9	1012·4	..	26·6	23·5	21·9	26·5	76	+3	2·5	−0·4	10·4	0	1	30	15	7	2	0	0	0	1	6	0	0
FEBRUARY																											
Bihar																											
Motihari	0830	66	1014·5	1006·8	−0·3	17·7	14·2	11·3	13·4	67	−9	1·1	−0·6	2·2	0	0	21	0	0	3	0	0	0	18	0	7	0
	1730	,,	1011·5	1003·8	..	19·8	15·0	11·0	13·1	59	..	0·4	..	1·6	0	0	15	0	0	1	0	0	0	13	11	13	0
Kerala (Including Laccadives)																											
Minicoy	0530	2	1010·9	1010·7	..	24·7	22·8	21·9	26·3	85	..	2·7	..	3·1	0	0	14	10	1	0	0	0	0	0	3	14	0
	0830	,,	1012·9	1012·7	0	26·8	24·0	22·7	27·6	75	+1	4·2	+1·4	5·6	0	0	22	9	5	2	0	1	0	0	5	6	0
	1130	,,	1012·6	1012·4	..	28·7	24·7	22·8	27·9	71	..	4·1	..	9·7	0	0	26	11	3	3	2	0	0	0	7	2	0
	1730	,,	1010·0	1009·8	..	28·2	24·5	22·7	27·7	72	..	3·1	..	8·4	0	0	28	15	4	1	0	0	0	7	0	1	0
	2330	,,	1012·0	1011·8	..	25·5	23·5	22·5	27·3	83	..	2·9	..	5·2	0	0	17	8	2	0	0	0	0	0	7	11	0
Amini Divi	0830	4	1013·0	1012·5	..	27·3	24·5	23·3	28·6	78	+5	4·2	+1·5	10·9	0	2	26	18	2	0	0	0	0	0	8	0	0
MARCH																											
Orissa																											
Bolangir *	0830	190	..	..	..	27·1	21·6	17·4	21·2	56	..	5·1	..	4·1	0	0	23	1	3	4	7	4	1	1	2	1	0
†	1730	,,	..	..	..	30·7	21·9	16·4	19·0	43	..	5·1	..	4·1	0	0	25	3	7	4	1	1	2	3	4	0	0
Chota Nagpur																											
Daltonganj	0830	221	1014·3	989·0	+1·9	22·3	16·8	12·4	14·7	54	0	3·3	+2·1	1·8	0	0	11	2	0	1	1	0	1	5	1	20	0
	1730	,,	1009·1	984·7	..	28·2	17·7	9·5	11·7	33	..	3·7	..	7·9	0	1	25	3	1	1	2	1	0	6	12	5	0
Kerala (Including Laccadives)																											
Minicoy	0530	2	1010·4	1010·2	..	25·2	23·5	22·7	27·6	86	..	2·5	..	5·1	0	0	22	12	7	0	0	0	0	0	3	9	0
	0830	,,	1012·4	1012·2	+0·4	27·6	24·7	23·5	29·2	78	+6	3·7	+0·9	6·4	0	0	29	16	5	4	0	1	0	0	3	2	0
	1130	,,	1012·9	1012·7	..	29·5	25·4	23·5	28·9	70	..	3·4	..	8·7	0	0	30	11	8	4	2	0	0	1	4	1	0
	1730	,,	1009·7	1009·5	..	28·9	25·2	23·5	29·0	72	..	4·0	..	6·8	0	0	29	16	10	1	0	0	0	0	2	2	0
	2330	,,	1012·1	1011·9	..	26·2	24·2	23·2	28·5	83	..	1·7	..	4·1	0	0	21	12	7	0	0	0	0	0	2	10	0
Amini Divi	0830	4	1012·8	1012·3	..	28·0	24·2	22·3	27·3	71	−2	4·1	+1·6	8·5	0	0	29	18	1	0	0	0	0	0	10	2	0
APRIL																											
Gangetic West Bengal																											
Purulia	0830	255	1009·2	981·2	..	30·4	18·7	9·8	12·1	29	..	2·1	..	3·4	0	0	30	0	0	0	1	5	8	2	14	0	0
	1730	..	1003·6	976·4	..	35·8	20·1	7·5	10·6	19	..	2·4	..	1·9	0	0	16	2	1	0	0	0	2	6	5	14	0
Orissa																											
Bolangir **	0830	190	..	..	..	29·9	24·4	21·1	26·3	58	..	..	..	3·0	0	0	19	0	0	0	2	4	5	4	4	0	0
††	1730	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chota Nagpur																											
Daltonganj	0830	221	1009·4	984·8	+1·6	29·6	19·4	11·9	14·4	36	−3	2·2	+0·9	3·4	0	0	16	1	2	2	3	0	0	4	4	14	0
	1730	,,	1004·2	980·2	..	35·9	20·1	7·4	10·8	18	..	2·7	..	9·5	0	0	29	1	1	0	1	0	1	3	22	1	0
Kerala (Including Laccadives)																											
Minicoy	0530	2	1009·1	1008·9	..	25·9	24·5	24·0	29·6	89	..	3·4	..	2·0	0	0	13	7	3	0	0	0	0	1	12	17	0
	0830	,,	1011·1	1010·9	+0·5	28·8	25·9	24·6	31·2	78	+6	4·3	+0·9	4·9	0	0	27	11	7	2	0	0	1	1	5	3	0
	1130	,,	1011·5	1011·3	..	30·5	26·5	24·8	31·4	72	..	4·2	..	7·7	0	0	28	10	4	6	1	0	2	0	5	2	0
	1730	,,	1008·3	1008·1	..	30·0	26·4	24·8	31·5	74	..	4·2	..	6·3	0	0	29	17	5	0	0	0	2	1	4	1	0
	2330	,,	1010·9	1010·7	..	26·7	25·0	24·2	30·3	87	..	2·7	..	2·8	0	0	16	8	2	0	0	0	1	2	3	14	0
Amini Divi	0830	4	1011·3	1010·9	..	30·1	27·1	26·1	33·5	81	+10	3·4	0	8·6	0	0	28	13	0	0	0	0	0	7	8	2	0
MAY																											
Gangetic West Bengal																											
Purulia	0830	255	1003·9	976·6	..	35·0	22·2	13·9	16·4	30	..	1·6	..	3·1	0	0	28	2	0	0	0	3	9	3	11	3	0
	1730	,,	998·2	971·6	..	40·2	22·3	9·6	10·8	17	..	2·9	..	2·7	0	0	21	3	0	0	1	1	1	2	13	10	0

*Observations for 24 days.

†Observations for 25 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %	Departure from normal	Cloud amount (Oktas).		Mean wind speed, km. per hour	Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb]	Wet bulb	Dew point				Mean amount	Departure from normal		62 or more	20 to 61	1 to 19	Wind direction								Calm	Variable
																		N	NE	E	SE	S	SW	W	NW		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
MAY *(contd.)*																											
Chota Nagpur																											
Daltonganj	0830	221	1004·1	980·0	+0·9	35·3	22·6	14·6	17·0	31	—9	2·5	+1·1	4·6	0	1	17	0	1	0	2	1	1	5	8	13	0
	1730	,,	998·9	975·3	..	39·7	23·6	12·2	15·9	21	..	2·9	..	9·4	0	0	29	0	1	0	1	1	1	5	20	2	0
Kerala (Including Laccadives)																											
Minicoy	0530	2	1007·7	1007·5	..	27·7	25·4	24·4	30·6	82	..	4·9	..	11·1	0	4	23	3	0	0	0	0	1	9	14	4	0
	0830	,,	1009·7	1009·5	—0·3	28·9	25·8	24·4	30·7	77	+1	5·6	+1·3	10·6	0	1	29	2	1	0	0	0	0	10	17	1	0
	1130	,,	1010·1	1009·9	..	30·1	26·5	24·9	31·7	75	..	5·2	..	11·7	0	1	30	4	0	0	1	0	1	5	20	0	0
	1730	,,	1007·1	1006·9	..	29·8	26·3	25·0	31·4	75	..	5·5	..	13·4	0	5	26	2	1	0	1	0	0	7	20	0	0
	2330	,,	1009·4	1009·2	..	28·2	25·6	24·7	30·8	81	..	4·7	..	11·1	0	2	28	1	0	0	0	0	1	11	17	1	0
Amini Divi	0830	4	1009·3	1008·9	..	29·8	26·3	24·9	31·4	75	+2	5·1	+0·5	13·1	0	6	21	7	2	0	0	0	0	3	15	4	0
JUNE																											
Orissa																											
Bolangir *	0830	190	..	..	..	31·2	27·2	25·5	32·8	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
**	1730	,,	..	..	..	36·8	29·3	26·5	34·6	57	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chota Nagpur—																											
Daltonganj	0830	221	999·7	975·6	+0·6	33·0	24·9	20·3	24·8	50	—10	4·4	+0·9	1·3	0	0	11	0	0	2	1	0	6	2	0	19	0
	1730	,,	995·2	971·5	..	36·3	24·2	16·7	20·3	37	..	5·0	..	4·1	0	0	26	2	1	3	3	2	6	4	5	4	0
Kerala (Including Laccadives)																											
Minicoy	0530	2	1007·9	1007·7	..	27·1	25·3	24·3	30·9	85	..	7·1	..	17·8	0	6	24	0	0	0	0	0	3	25	2	0	0
	0830	,,	1009·3	1009·1	—0·3	27·8	25·5	24·7	30·7	83	+2	7·1	+1·5	14·8	0	10	20	0	0	0	0	0	5	22	3	0	0
	1130	,,	1009·6	1009·4	..	29·3	26·5	25·1	32·3	79	..	6·8	..	18·1	0	9	21	0	0	0	0	0	4	21	5	0	0
	1730	,,	1007·6	1007·4	..	28·2	26·0	25·2	31·8	83	..	7·0	..	18·6	0	4	26	0	0	0	0	0	3	22	5	0	0
	2330	,,	1009·7	1009·5	..	27·2	25·4	24·6	31·1	86	..	5·8	..	18·4	0	13	17	0	0	0	0	0	3	23	4	0	0
Amini Divi	0830	4	1007·9	1007·5	..	27·9	25·6	24·6	30·9	82	0	6·8	+0·5	20·3	0	19	11	0	0	0	0	3	5	19	2	1	0
JULY																											
Orissa																											
Bolangir	0830	190	1001·3	980·2	.	27·3	24·6	23·5	28·6	80	..	7·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	,,	998·7	977·7	.	28·6	25·8	24·7	30·9	80	..	6·6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chota Nagpur																											
Daltonganj	0830	221	999·4	974·6	+0·1	28·5	25·9	24·7	31·3	80	0	7·1	+2·1	4·2	0	0	20	0	1	5	0	3	3	6	2	11	0
	1730	,,	996·5	972·2	.	29·2	26·3	25·1	31·8	82	..	7.3	..	3·5	0	0	21	1	1	4	2	4	1	7	1	10	0
Uttar Pradesh (East)																											
Azamgarh	0830	78	998·8	990·2	..	29·3	27·8	27·6	36·5	89	..	6·6	..	5·2	0	0	29	0	1	21	2	1	0	4	0	2	0
	1730	,,	995·4	986·5	..	30·6	28·0	27·6	35·9	85	..	6·3	..	1·7	0	0	12	0	1	8	1	0	0	2	0	19	0
Varanasi (Banaras)	0830	76	999·0	990·6	+0·2	29·7	27·0	25·9	33·4	79	—1	5·4	—0·9	7·9	0	0	24	0	3	4	4	1	6	2	4	7	0
	1730	,,	996·1	987·8	..	30·7	27·3	25·9	33·4	76	..	6·4	..	7·8	0	0	26	2	8	2	2	0	6	2	4	5	0
Fatehpur	0830	114	998·4	986·0	.	29·4	26·8	25·4	33·5	80	—1	5·5	—0·3	0·9	0	0	5	0	0	2	1	0	0	1	1	26	0
	1730	,,	995·6	983·0	.	31·6	27·0	25·2	31·7	71	..	5·7	..	0·5	0	0	3	0	1	2	0	0	0	0	0	28	0
Bahraich	0830	124	998·5	984·7	—0·3	28·8	26·7	25·7	33·2	84	+4	5·9	+1·4	4·9 (g)	0	0	21	0	1	4	11	2	3	0	0	3	0
	1730	,,	996·1	982·5	..	31·5	27·2	25·4	32·5	71	..	5·3	..	3·8 (b)	0	0	20	0	3	0	14	0	1	1	1	9	0
Punjab (India) (Including Delhi)																											
Ambala	0830	272	997·6	967·6	—0·7	29·0	25·9	24·5	30·8	78	+2	3·3	—1·5	7·7	0	0	28	0	5	1	16	1	2	0	3	3	0
	1730	,,	994·3	965·0	.	34·0	27·3	24·4	30·7	62	..	3·2	..	5·7	0	0	20	0	1	0	10	1	4	0	4	11	0
Chandigarh	0830	34	998·0	960·0	..	29·8	25·9	24·1	30·1	73	..	4·1	..	1·7	0	0	18	0	0	1	16	0	0	0	1	13	0
	1730	,,	995 0	957·4	..	33·6	26·1	22·3	27·1	58	..	1·6	..	2·1	0	0	27	1	0	2	12	0	2	0	10	4	0
Ludhiana	0830	24	996·6	969·8	—1·0	30·7	26·1	24·4	30·2	70	—2	3·2	—0·7	2·0	0	1	29	1	4	6	11	1	2	4	1	1	0
	1730	,,	993·6	964·8	..	36·8	28·1	24·9	30·9	59	..	3·0	..	3·9	0	2	28	3	2	7	3	5	2	3	5	1	0
Jammu and Kashmir																											
Leh	0530	3514	3066·4	664·0	..	11·1	5·5	—1·8	5·3	42	..	2·8	..	5·6 (a)	0	0	21	5	14	0	1	0	0	1	0	9	0
	0830	,,	3076·4	664·6	+0·3	15·7	7·8	—0·7	6·2	35	—18	3·1	—0·6	0·6	0	0	2	0	1	0	0	1	0	0	0	29	0
	1730	,,	3011·7	661·0	..	21·8	11·8	1·8	7·1	31	..	2·8	..	6·5	0	0	28	3	0	0	1	4	8	10	2	3	0
Jammu	0830	,,	..	..	..	29·1	23·0	19·7	22·7	61	—9	3·9	—0·2	10·9	0	2	29	2	20	0	0	0	6	0	3	0	0
Rajasthan (West)																											
Churu	0830	291	998·4	966·4	..	29·5	25·3	23·6	28·8	71	..	3·8	..	22·2	0	0	30	0	1	3	1	2	2	19	2	1	0
	1730	,,	995·0	963·6	..	35·1	25·7	21·6	25·0	52	..	4·8	..	14·7	0	1	30	5	3	2	2	2	4	11	1	1	0

* Mean of 17 days ** Mean of 23 days. (g) Mean of 24 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity +	Departure from normal	Cloud amount (Oktas).		Wind speed (km.p.h.)			No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point				Mean amount	Departure from normal	Mean wind speed, km. per hour	62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
JULY *(contd.)*																											
Rajasthan (East)																											
Alwar	0830	271	998·0	968·6	..	29·7	26·7	25·5	31·9	77	..	4·8	..	2·0	0	0	5	0	0	0	1	0	2	0	0	26	2
	1730	,,	995.6	966·2	..	32·7	28·2	26·7	34·1	70	..	4·5	..	2·4	0	0	15	1	0	9	1	0	0	3	1	16	0
Sikar	0830	433	998·5	951·4	..	27·1	25·1	23·9	30·6	82	..	4·5	..	2·8	0	0	30	1	1	0	1	3	11	7	6	1	0
	1730	,,	995·0	948·4	..	32·4	26·5	23·8	30·0	64	..	5·5	..	2·9	0	0	31	1	4	1	2	2	9	9	3	0	0
Dholpur	0830	176	998·1	978·7	..	30·2	26·6	25·3	32·2	78	..	4·0	..	8·4	0	1	26	4	0	2	1	6	4	8	2	2	0
	1730	,,	995·1	975·8	..	31·9	27·2	24·7	31·1	69	..	5·5	..	(d) 10·0	0	1	24	3	0	5	2	2	4	6	3	2	0
Kerala (Including Laccadives)																											
Minicoy	0530	2	1009·2	1009·0	..	26·9	24·5	23·4	28·7	82	..	6·3	..	19·5	0	11	20	0	0	0	0	0	1	27	3	0	0
	0830	,,	1010·4	1010·2	+0·3	27·8	25·1	23·9	29·5	80	+1	5·8	+0·5	16·7	0	7	24	0	0	0	0	0	0	27	4	0	0
	1130	,,	1010·7	1010·5	..	29·0	25·8	24 3	30·7	76	..	6·2	..	18·2	0	13	18	0	0	0	0	0	0	24	7	0	0
	1730	,,	1008·6	1008·4	..	28·3	25·4	24·1	31·0	78	..	6·8	..	17·5	0	10	21	0	0	0	0	0	1	24	6	0	0
	2330	,,	1010·9	1010·7	..	27·2	24·9	23·6	29·7	83	..	5·9	..	17·4	0	13	18	0	0	0	0	0	1	23	7	0	0
Amini Divi	0830	4	1009·1	1008·7	..	28·0	25·1	23·7	29·5	78	—5	6·1	—0·1	27·6	0	27	4	0	0	0	0	0	5	24	2	0	0
Hill Stations exluding Kashmir.																											
Lokpal	0830	..	..	..	..	6·7	6.3	5·2	7·0	90	..	..	..	(k) ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Abu	0830	1195	1424·0	873·0	—0·2	20·3	19·9	19·7	22.8	96	+3	6·0	+1·1	7·7	0	0	18	1	0	1	0	1	10	5	0	2	0
	1730	,,	1418·0	872·2	..	23·2	21·4	20·4	24·7	85	..	6·1	..	(m) 6·6	0	0	16	0	1	1	3	2	8	1	0	2	0
Hydrometeorological Observatories.																											
Sabarmati Catchment																		..	..	..	..	..	..	..	..	..	..
Jhadol	0830	..	..	..		25·6	22·7	21·8	27·6	85	..	..	..	..	..	..	..										
AUGUST																											
Chota Nagpur																											
Daltonganj	0830	221	1001·6	977·1	+0·5	28·9	26·1	24·8	31·6	78	—5	4·3	—0·7	3·3	0	0	19	0	3	5	3	0	0	6	2	12	0
	1730	,,	998·3	973·9	..	29·4	26·2	24·7	31·3	77	..	7·6	..	2·9	0	0	19	1	3	8	0	1	1	3	2	12	0
Uttar Pradesh (East)																											
Azamgarh	0830	78	1001·3	993·1	..	29·1	27·3	27·0	34·8	89	..	5·6	..	(a)	..	..	..	0	0	25	0	0	0	3	0	3	0
	1730	,,	998·1	989·5	..	29·8	28·1	27·2	37·2	86	..	5·6	..	5·2	..	..	..	0	1	5	0	0	0	0	0	25	0
Ballia	0830	64	..	..	..	28·7	26·9	26·0	34·9	89	..	(g) 6·1	..	0·9 (g) 4·7	0	0	23	0	2	7	8	2	2	2	0	1	0
	1730	,,	..	..	..	31·2	27·6	26·1	33·3	76	..	5·5	..	(h) 9·1	0	0	18	0	7	3	7	0	0	1	0	5	0
Varanasi (Banaras)	0830	76	1001·6	993·1	+0·7	29·2	27·4	26·0	33·6	86	+2	6·1	—0·4	6·7	0	0	23	1	2	7	3	2	5	0	3	8	0
	1730	,,	997·9	989·4	..	30·7	27·6	26·9	35·4	78	..	5·6	..	6·5	0	2	23	7	5	4	1	0	4	0	4	6	0
Lakhimpur Kheri	0830	47	1002·1	985·7	..	28·2	26·9	26·4	35·3	91	..	5.5	..	2·0	0	0	11	0	0	8	3	0	0	0	0	20	0
	1730	,,	998·4	982·2	..	30·3	27·6	26·6	35·1	78	..	5·2	..	1·1	0	0	10	0	0	8	2	0	0	0	0	21	0
Bahraich	0830	124	1002·1	998·4	+1·3	29·1	26·7	25·9	33·3	83	+1	4·9	+0·4	6·1	0	0	25	1	1	16	6	0	0	0	1	6	0
	1730	,,	998·5	985·1	..	28·3	27·3	25·9	33·7	78	..	4·5	..	3·7	0	0	18	3	0	9	3	1	0	0	2	13	0
Uttar Pradesh (West)																											
Roorkee	0830	274	1001·6	971·2	+0·6	28·3	25·8	24·7	31·3	83	+1	4·9	—0·4	1·6	0	0	17	0	0	0	17	0	0	0	0	14	0
	1730	,,	998·2	968·2	..	31·1	26·9	25·1	32·1	71	..	4·5	..	0·9	0	0	9	0	0	0	8	0	0	0	1	22	0
Punjab (India) (Including Delhi)																											
Ludhiana	0830	247	1000·9	973·9	+0·9	29·1	26·6	25·6	32·1	84	+9	4·1	+0·4	4·1	0	0	28	2	2	3	6	3	5	5	1	3	1
	1730	,,	997·6	970·8	..	31·8	27·4	25·9	32·3	71	..	3·4	..	4·1	0	0	23	3	6	4	2	3	1	1	1	8	0
Rajasthan (West) Jaisalmer	0830	242	1000·3	973·5	..	27·9	24·2	22·4	27·2	73	..	2·1	..	19·2	0	0	29	0	1	0	1	1	25	0	1	2	0
	1730	,,	996·7	970·7	..	34·9	26·0	21·3	26·6	47	..	2·5	..	16·5	0	0	30	0	4	0	3	2	20	0	1	1	0
Rajasthan (East)																											
Alwar	0830	271	1000·6	971·0	..	28·9	26·0	24·7	30·8	79	..	4·7	..	1·5	0	0	13	1	1	3	0	1	1	5	0	18	1
	1730	,,	997·8	967·9	..	31·5	27·4	25·6	33·3	73	..	4·8	..	1·4	0	0	15	4	0	7	0	3	0	1	0	16	0
Dholpur	0830	176	997·1	981·5	..	28·3	26·1	24·9	32·0	83	..	5·5	..	7·0	0	0	28	0	4	2	5	5	7	3	2	3	0
	1730	,,	995·8	977·9	..	30·4	26·8	25·1	32·6	74	..	5·5	..	(a) 8·7	0	0	30	1	3	1	6	3	4	6	6	0	0
Kerala (Including Laccadives).																											
Minicoy	0530	2	1009·4	1009·2	..	26·5	24·4	23·5	29·4	83	..	6·2	..	16·5	0	15	16	0	0	0	0	0	0	21	10	0	0
	0830	,,	1010·9	1010·7	0	27·3	24·8	23·6	29·3	81	+2	6·4	+1·7	14·7	0	9	22	0	0	0	0	0	0	19	12	0	0
	1130	,,	1011·2	1011·0	..	28.5	25.3	23.9	29.6	77	..	5·8	..	15·6	0	13	18	0	0	0	0	0	0	19	12	0	0

(a) Mean of 30 days. (g) Mean of 24 days. (k) Mean of 20 days. (h) Mean of 23 days. (m) Mean of 18 days.

(d) Mean of 27 days.

Division and station	Hour of observation I.S.T.	Height of barometer cistern above mean sea level in metres.	Mean pressure in millibars.			Mean temperature in °C			Vapour pressure in mbs.	Relative humidity %		Cloud amount (Oktas).		Wind speed (km.p.h.)				No. of observations									
			At mean sea level or height in g.p.m. of nearest standard isobaric level	At station level	Departure from normal	Dry bulb	Wet bulb	Dew point			Departure from normal	Mean amount	Departure from normal	Mean wind speed, km. per hour	62 or more	20 to 61	1 to 19	Wind direction									
																		N	NE	E	SE	S	SW	W	NW	Calm	Variable
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
AUGUST (*contd.*)—																											
Kerala (Including Laccadives) (*Contd.*)—																											
Minicoy (*contd.*)	1730	2	1008	1008·7	..	28·0	25·2	23·8	30·1	78	..	6·5	..	15·6	0	9	22	0	0	0	0	0	0	20	11	0	0
	2330	,,	1011	1011·0	..	26·9	24·6	23·8	28·8	83	..	5·3	..	16·2	0	6	25	0	0	0	0	0	1	21	9	0	0
Amini Divi.	0830	4	1009	1009·4	..	27·6	25·1	23·9	29.6	81	−2	5·8	+0·1	30·1	0	30	1	0	0	0	0	0	0	20	11.	0	0
Hill Stations excluding Kashmir.																											
Abu	0830	1195	1448.4	875·4	+0·5	19·9	19·2	18·9	21·7	96	+3	6·5	−0·8	5·4	0	0	20	0	0	1	1	1	8	8	1	11	0
	1730	,,	1437·1	874·0	..	23·0	21·0	20·0	23·2	80	..	6·4	..	7·6	0	0	26	0	2	1	2	2	15	3	1	5	0
SEPTEMBER																											
Uttar Pradesh (East)																											
Lakhimpur Kheri	0830	147	1005·7	989·2	..	27·1	25·0	24·1	30·5	86	..	3·6	..	3·8	0	0	14	0	0	2	9	0	2	1	0	16	0
	1730	,,	1002·7	986·3	..	29·3	25·6	23·9	29·6	74	..	3·3	..	1·2	0	0	5	0	0	0	4	0	0	0	1	25	0
Bahraich	0830	124	1005·7	991·9	+0·7	27·9	25·3	23·9	29·7	79	+1	3·3	+0·5	3·6	0	0	22	1	0	7	8	0	2	2	2	8	0
	1730	,,	1002·0	988·8	..	29·7	25·7	23·9	29·7	72	..	2·5	..	2·5	0	0	16	0	0	4	3	1	3	5	0	14	0
Punjab (India) (Including Delhi)																											
Ambala	0830	272	1005·6	975·1	+0·4	25·2	22·9	21·1	25·9	81	+7	1·9	−0·6	3·2	0	0	20	0	1	0	9	0	0	0	10	10	0
	1730	,,	1003·1	973·1	..	30·0	24·1	21·1	25·4	62	..	2·3	..	3·5	0	0	16	0	0	0	3	0	2	1	10	14	0
Ludhiana	0830	247	1005·9	978·4	+0·9	26·9	23·3	21·5	25.3	74	+2	2·3	+0·5	1·9	0	0	18	6	3	3	0	0	2	4	0	12	0
	1730	,,	1003·5	979·1	..	30·8	25·3	23·0	27·1	66	..	1·9	..	4·0	0	0	26	7	3	2	0	0	1	8	4	4	1
Jammu and Kashmir																											
Leh	0530	3514	3111·6	666·7	..	5·4	1·1	−5·4	4·5	49	..	2·7	..	5·0 (b)	0	0	19	12	6	1	0	0	0	0	0	10	0
	0830	,,	3114·0	667·4	+0·2	11·1	5·4	−1·6	5·7	41	−9	3·0	+0·1	0	0	0	0	0	0	0	0	0	0	0	0	30	0
	1730	,,	3058·3	664·3	..	15·7	7·8	−0·4	6·2	36	..	3.4	..	7·3	0	0	24	1	0	0	0	2	11	7	3	6	0
Rajasthan (East)																											
Dholpur	0830	176	1014·8	991·9	..	24·3	23·8	22·3	26·9	95	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1730	,,	1012·1	987·5	..	30·4	25·0	22·7	27·6	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kerala (Including Laccadives) Minicoy	0530	2	1010·8	1010·6	..	26·3	23·8	22·7	27·5	80	..	4·6	..	11·6	0	0	30	1	0	0	0	0	0	11	18	0	0
	0830	,,	1012·4	1012·2	+1·1	27·6	24·5	23·1	28·3	77	−2	4·5	+0·3	11·6	0	0	30	2	0	0	0	0	0	9	19	0	0
	1130	,,	1012·6	1012·4	..	28·7	25·1	23·5	29·0	72	..	4·2	..	13·9	0	2	28	2	0	0	0	0	0	6	22	0	0
	1730	,,	1009·9	1009·7	..	28·1	24·8	23·2	28·6	75	..	3·7	..	12·7	0	1	28	1	0	0	0	0	0	6	22	1	0
	2330	,,	1012·5	1012·3	..	26·7	24·1	23·1	27·9	80	..	3·7	..	12·3	0	0	30	1	0	0	0	0	0	7	22	0	0
Amini Divi.	0830	4	1011·9	1011·4	..	27·9	24·6	22·9	28·0	78	−3	4·2	−0·8	16·2	0	10	19	1	0	0	0	0	0	6	22	1	0
OCTOBER																											
Kerala (Including Laccadives) Minicoy	0530	2	1010·0	1009·8	..	25·4	23·8	23·1	28·2	87	..	5·8	..	8·4	0	0	26	1	1	0	1	1	7	11	4	5	0
	0830	,,	1012·0	1011·8	+0·4	27·3	24·8	23·7	29·3	81	+4	5·3	+1·1	8·7	0	1	28	1	1	0	0	2	5	14	6	2	0
	1130	,,	1012·1	1011·9	..	29·0	25·6	24·1	30·1	75	..	5·9	..	9·1	0	0	30	1	1	0	0	2	6	13	7	1	0
	1730	,,	1009·6	1009·4	..	27·8	24·8	23·6	29·2	79	..	6·0	..	8·9	0	0	30	0	1	0	2	0	6	15	6	1	0
	2330	,,	1011·6	1011·4	..	23·2	24·3	23·4	28·9	85	..	5·2	..	9·7	0	0	30	1	2	0	0	2	7	12	5	1	0
Amini Divi.	0830	4	1011·4	1010·9	..	27·9	24·8	23·8	28·9	79	0	5·3	+0·4	7·1	0	2	23	4	2	4	1	2	5	5	2	6	0
NOVEMBER																											
Kerala (Including Laccadives) Minicoy	0530	2	1010·7	1010·5	..	25·1	23·9	23·3	28·9	89	..	4·9	..	6·1	0	0	26	1	8	4	2	5	3	1	2	4	0
	0830	,,	1012·8	1012·6	+1·0	27·1	24·9	23·9	29·8	82	+4	5·3	+1·3	6·6	0	0	27	2	6	8	1	4	3	2	1	3	0
	1130	,,	1012·6	1012·4	..	29·1	25·9	24·5	30·8	77	..	5·1	..	7·5	0	1	28	4	2	8	5	4	2	2	2	1	0
	1730	,,	1010·1	1009·9	..	27·8	25·1	23·9	29·5	79	..	6·4	..	7·9	0	2	26	3	6	5	2	3	3	2	4	2	0
	2330	,,	1012·3	1012·1	..	25·8	24·3	23·7	29·2	88	..	4·3	..	6·7	0	0	26	2	9	3	2	4	3	1	2	4	0
Amini Divi	0830	4	1012·6	1012·1	..	27·5	25·2	24·3	30·4	82	+7	5·4	+1·5	7·6	0	0	29	6	8	0	5	1	3	2	1	1	0
DECEMBER																											
Kerala (Including Laccadives) Minicoy	0530	2	1010·0	1009·8	..	25·3	23·7	22·9	27·8	87	..	4·7	..	7·2	0	1	25	7	7	2	2	1	1	1	5	5	0
	0830	,,	1012·1	1011·9	−0·3	27·1	24·6	23·5	28·9	81	+7	4·9	+1·6	7·0	0	0	28	11	7	2	2	1	0	0	5	3	0
	1130	,,	1012·2	1012·0	..	29·2	25·4	23·7	29·9	72	..	4·7	..	7·8	0	1	25	7	11	3	2	1	1	0	6	0	0
	1730	,,	1009·5	1009·3	..	28·1	24·7	23·2	28·5	75	..	5·3	..	6·6	0	0	29	7	11	5	0	2	1	0	3	2	0
	2330	,,	1011·9	1011·7	..	25·8	24.0	23·2	28·4	85	..	4·5	..	6·5	0	0	29	5	14	4	1	1	1	2	1	2	0
Amini Divi.	0830	4	1012·3	1011·8	..	27·3	24·4	23·1	28.4	78	+9	4·0	+1·0	9·0	0	0	30	19	6	2	1	0	0	0	2	1	0

(b) Mean of 29 days.

EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

TABLE III (A)—EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Bay Islands																					
Maya Bundar .	33·9	16·8	13·7	31·7	17·8	17·5	33·9	18·9	9·4	36·1	18·9	67·8	35·0	17·2	184·7	36·1	21·1	213·4	31·7	21·1	112·3
	1953	1957	1955	1956	1954	1953	1955	1955	1953	1955	1953	1953	1952	1952	1955	1952	1956	1955	1956	1954	1954
Long Island .	31·7	18·3	32·5	32·2	15·6	47·5	33·9	19·4	2·8	36·1	21·1	100·3	34·9	21·1	186·2	33·3	21·1	209·8	33·3	21·1	111·3
	1955	1953	1954	1954	1953	1957	1953	1955	1954	1953	1956	1953	1957	1955	1955	1957	1955	1955	1953	1956	1953
Port Blair . .	32·2	16·7	208·3	33·3	17·2	131·1	34·4	17·8	67·1	36·1	20·6	206·8	36·1	20·6	264·9	35·6	19·4	258·3	32·8	18·3	148·6
	1949	1940	1922	1954	1949	1902	1886	1949	1881	1889	1939	1922	1889	1939	1891	1933	1939	1908	1941	1941	1914
Car Nicobar .	31·1	16·1	104·1	35·0	16·1	82·5	32·8	16·8	53·3	33·9	19·4	99·6	33·9	21·1	129·0	32·2	21·7	127·0	31·7	21·2	103·4
	1954	1956	1954	1954	1956	1956	1953	1957	1953	1954	1956	1956	1952	1952	1955	1953	1956	1955	1957	1957	1957
Nancowry .	33·9	21·7	74·9	33·9	20·0	91·2	35·0	21·1	49·0	36·7	20·6	79·0	36·1	18·9	119·4	32·2	21·1	120·4	31·1	21·7	139·2
	1954	1956	1953	1954	1956	1956	1954	1956	1954	1952	1952	1956	1952	1952	1954	1953	1956	1957	1954	1956	1952
Kondul . . .	30·0	20·6	168·7	30·0	19·4	90·2	31·7	21·7	69·9	32·2	22·2	95·8	35·0	21·7	133·3	31·6	21·7	201·2	33·1	21·1	86·9
	1953	1956	1953	1956	1953	1953	1955	1954	1956	1957	1955	1955	1957	1956	1956	1957	1955	1954	1957	1954	1957
Assam (Including Manipur, Tripura)																					
Pasighat . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Digboi . .	24·8	5·6	52·3	29·4	8·4	13·4	31·6	10·0	40·1	35·0	13·8	66·0	36·1	17·4	55·6	37·2	20·6	95·8	35·8	21·1	118·4
	1957	1956	1956	1956	1957	1957	1957	1957	1956	1956	1957	1957	1956	1957	1957	1956	1957	1957	1957	1956	1956
Dibrugarh .	27·8	5·0	35·6	30·6	4·4	46·5	33·9	6·1	55·9	35·6	12·2	197·1	36·7	16·7	118·1	38·9	15·6	202·2	37·8	20·0	164·6
	1946	1940	1911	1942	1905	1917	1923	1903	1915	1937	1920	1913	1947	1909	1948	1905	1910	1931	1956	1908	1902
Dibrugarh .	26·1	3·9	24·6	30·0	6·1	55·9	32·8	8·3	55·1	33·9	13·9	58·7	34·4	16·1	69·1	36·7	20·0	112·8	37·2	21·5	97·0
(Mohanbari Aerodrome).	1952	1953	1956	1952	1953	1954	1955	1957	1955	1952	1954	1954	1956	1957	1953	1953	1955	1951	1952	1957	1955
North Lakhimpur .	26·7	2·8	26·9	29·4	6·1	21·3	31·7	8·1	74·2	32·8	14·4	99·6	35·0	17·6	176·5	35·0	20·9	90·7	36·1	20·6	199·9
	1955	1956	1957	1956	1956	1957	1955	1957	1955	1956	1957	1954	1956	1957	1954	1956	1957	1955	1956	1954	1956
Sibsagar . .	28·9	3·3	43·7	30·6	2·8	42·9	35·6	7·2	113·0	36·1	12·8	148·6	42·8	16·7	188·2	37·8	19·4	189·2	38·9	20·6	218·9
	1942	1917	1945	1942	1905	1892	1945	1917	1892	1937	1912	1913	1945	1893	1931	1881	1907	1903	1883	1909	1929
Jorhat . . .	26·7	6·1	34·0	31·1	8·3	12·5	33·9	8·9	48·3	34·5	15·0	50·8	35·0	16·1	119·9	35·6	20·6	83·3	36·1	21·7	87·4
	1955	1956	1954	1954	1956	1957	1954	1957	1954	1957	1957	1954	1955	1955	1957	1957	1955	1957	1956	1956	1956
Golaghat . .	26·1	7·2	16·5	30·6	9·4	17·8	35·6	12·8	37·6	35·0	16·1	45·7	37·2	17·8	134·6	35·6	19·9	76·2	35·6	18·3	111·5
	1956	1957	1957	1954	1954	1954	1954	1954	1956	1956	1954	1957	1954	1957	1957	1957	1957	1957	1957	1957	1956
Gohpur .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tezpur . .	27·8	5·6	29·5	31·7	6·1	38·6	36·7	10·0	62·0	38·3	13·3	100·1	38·3	17·2	148·1	36·7	19·4	136·7	36·7	21·7	142·7
	1907	1945	1907	1952	1905	1940	1923	1927	1912	1938	1905	1946	1937	1955	1904	1953	1907	1904	1936	1956	1947
Tezpur (P.B.O.) .	27·2	6·1	33·3	31·7	8·3	18·5	34·2	11·1	39·9	36·7	16·1	52·3	35·3	18·3	112·8	36·1	20·6	71·1	36·3	21·7	88·1
	1952	1953	1957	1952	1953	1957	1957	1952	1955	1952	1955	1954	1957	1955	1957	1953	1955	1955	1957	1956	1955
Majbat . .	..	..	29·7	..	..	14·0	..	..	44·5	..	..	68·6	..	..	97·6	..	..	136·4	..	..	95·5
	..	..	1957	..	..	1957	..	..	1955	..	..	1956	..	..	1957	..	..	1956	..	..	1954
Chaparmukh .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

X = Highest Maximum Temperature.

N = Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Bay Islands
32.2	20.6	109.7	31.7	21.1	104.9	31.7	20.0	64.8	35.0	21.1	87.6	30.4	19.4	54·9	1952	1952	Maya Bandar.
1953	1953	1956	1955	1954	1954	1955	1955	1957	1953	1954	1953	1957	1955	1953			
36.7	21.7	147.3	32.7	21.4	124.7	32.2	21.1	122.2	32.2	20.6	119.1	31.7	17.2	53.9	1952	1952	Long Island.
1952	1956	1956	1957	1957	1957	1952	1956	1952	1953	1954	1953	1954	1953	1952			
31.7	21.1	173.2	31.7	21.7	178.1	35.6	19.4	153.2	31.7	20.0	147.3	32.2	18.9	295.7	1881	1881	Port Blair.
1932	1952	1934	1888	1954	1904	1906	1912	1926	1957	1949	1901	1896	1955	1937			
31.7	21.1	111.3	33.3	20.6	104.7	31.7	21·1	198.4	31.1	20.0	122.2	35.6	16.7	158.8	1952	1952	Car Nicobar.
1954	1956	1952	1951	1952	1953	1953	1957	1955	1955	1956	1955	1955	1952	1957			
31.7	21.7	115.3	31.7	21.1	77.0	33.9	21.7	57.9	33.3	21·1	83.3	34.4	20.6	87.3	1952	1952	Nancowry.
1953	1956	1956	1951	1956	1955	1953	1954	1952	1953	1955	1955	1953	1954	1957			
31.7	21.1	99.1	31.1	21.7	113.0	30.8	22.2	162.6	30.6	21.1	93.5	30.6	21.7	82.3	1952	1952	Kondul.
1957	1955	1954	1957	1954	1953	1957	1954	1952	1957	1955	1952	1955	1954	1955			
																	Assam (Including Manipur, Tripura).
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Pasighat.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
37.2	23.2	88.9	35.0	22.2	55.9	34.4	15.0	157.5	28.9	11·7	12.9	27.4	7.8	25.4	1956	1956	Digboi.
1956	1957	1957	1956	1957	1957	1956	1957	1956	1957	1956	1956	1957	1956	1957			
37.8	21.1	223.5	36.1	16.1	182.1	36.1	15.0	104.7	32.2	8.9	53.3	28.3	5.6	56.1	1901	1901	Dibrugarh.
1956	1903	1920	1956	1905	1941	1907	1943	1913	1942	1933	1932	1943	1918	1931			
36.7	22.2	98·0	36.1	20.6	140.5	35.0	14.4	78.0	31.7	9.4	31.8	27.8	5.0	22.9	1951	1951	Dibrugarh. (Mohanbari Aerodrome).
1953	1956	1952	1951	1954	1954	1955	1957	1953	1952	1953	1957	1951	1955	1951			
36.7	21.7	81.8	36.1	21.7	155.2	35.0	10·6	115.1	31.7	10.0	45.7	28.3	3.3	23.6	1954	1954	North Lakhimpur.
1957	1956	1955	1954	1956	1954	1955	1955	1956	1951	1954	1957	1954	1955	1954			
37.8	18.3	154.4	36.1	19.4	182.4	35.6	15·0	99·6	32·2	9·4	53·9	28·3	4.4	36.3	1831	1871	Sibsagar.
1931	1944	1929	1947	1890	1902	1938	1938	1925	1896	1928	1930	1953	1916	1936			
37.2	22.2	68.3	36.1	22.2	51.3	35.6	15.6	56.1	30.6	10.0	20.1	27.8	5.0	10.9	1951	1951	Jorhat.
1955	1956	1955	1955	1957	1957	1955	1957	1956	1955	1953	1955	1953	1954	1954			
36.7	17.2	92.2	35.0	22·2	51·8	34·4	17·8	50·5	28·9	8.8	36.3	26.1	7.8	25.4	1954	1954	Golaghat.
1957	1957	1956	1957	1954	1957	1956	1954	1955	1957	1957	1955	1955	1956	1957			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	Gohpur.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
37.2	21.1	166.6	36.7	21.1	102.9	36.1	15.6	140 7	33.3	10.6	59.9	28.3	6.7	19.3	1901	1901	Tezpur.
1953	1945	1952	1909	1915	1917	1956	1941	1909	1952	1953	1901	1951	1925	1907			
36.7	23.3	149.6	36.1	21.7	121.7	35.0	17.2	112.8	31.1	11.7	41.1	28.3	7.2	19.1	1951	1951	Tezpur (P.B.O.).
1953	1956	1952	1953	1953	1953	1956	1957	1952	1952	1953	1951	1951	1955	1953			
..	..	115.4	..	..	69.6	..	..	70.6	..	..	17.0	..	..	27.9	..	1954	Majbat.
..	..	1957	..	..	1956	..	..	1955	..	..	1956	..	..	1956			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Chaparmukh.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T. .. = Information not available

TABLE III (A)—EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Assam (Including Manipur, Tripura) (*contd.*)																					
Tangla	..	..	31·0	..	..	29·3	..	..	48·3	..	..	80·5	..	..	63·0	..	..	120·9	..	..	81·5
	..	..	1957	..	..	1957	..	..	1955	..	..	1954	..	..	1954	..	..	1956	..	..	1955
Gauhati	28·9	5·0	41·1	35·0	6·1	53·3	38·3	6·1	56·1	0·0	12·8	75·7	38·3	16·1	185·4	36·7	18·9	194·3	37·2	20·6	232·9
	1955	1925	1945	1951	1932	1914	1909	1906	1915	1939	1907	1955	1937	1955	1941	1952	1955	1956	1914	1955	1933
Gauhati (Kaikuchi Aerodrome)	27·2	5·6	39·1	32·2	6·1	16·5	37·2	10·3	49·8	38·9	14·4	100·3	37·7	17·2	82·5	36·7	21·1	173·7	35·6	22·8	102·9
	1952	1953	1957	1956	1951	1957	1954	1957	1955	1957	1952	1955	1957	1955	1952	1952	1955	1953	1951	1955	1951
Rangiya	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Goalpara	27·2	6·1	72·4	31·7	7·2	14·0	37·2	10·2	29·0	38·2	14·6	91·4	37·6	16·7	141·7	36·7	16·1	137·2	35·6	22·2	195·8
	1955	1955	1957	1956	1956	1957	1954	1957	1955	1957	1957	1956	1957	1955	1954	1957	1955	1957	1956	1955	595
Dhubri	29·4	6·1	51·1	32·2	2·8	59·9	38·3	10·0	07·9	41·1	12·2	197·6	40·0	15·9	26·3	35·6	13·9	368·3	35·0	22·2	185·7
	1955	1905	1945	1901	1905	1904	1909	1906	1885	1939	1905	1948	1909	1957	1944	1940	1955	1909	1933	951	1908
Dhubri (Rupsi Aerodrome)	26·1	7·6	55·4	20·7	6·8	11·2	34·5	11·1	0	40·2	15·0	20·3	38·3	19·6	69·9	34·3	21·2	64·8	33·8	23·5	60·0
	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Tura	27·2	7·2	7·4	31·7	10·0	32·3	35·0	12·2	45·0	38·3	15·6	101·1	37·2	16·7	93·3	33·9	18·9	167·4	33·9	21·7	229·1
	1954	1953	1953	1956	1956	1954	1955	1952	1955	1952	1951	1952	1951	1952	1952	1952	1955	1956	1951	1956	1951
Agartala	28·9	3·9	50·1	33·9	6·1	41·4	37·8	10·0	46·0	40·0	16·1	141·2	37·4	16·1	123·4	34·4	21·1	196·6	33·9	22·2	136·9
	1956	1955	1957	1955	1956	1953	1955	1957	1955	1956	1955	1955	1957	1955	1956	1955	1955	1956	1956	1957	1954
Silchar	30·0	5·6	00·1	32·8	5·0	90·4	37·8	8·3	245·4	39·4	13·9	165·1	38·9	15·6	290·3	37·8	20·0	27·3	39·4	21·1	254·7
	1946	1899	1911	1952	1905	927	1901	1927	1922	937	1935	1934	1937	1886	1893	1900	1921	1913	1896	897	1915
Silchar (Kumbhigram Aerodrome).	..	.	..	..	..		..	..	..	.	..	..	..	..	..	..	..	..	..	..	..
Imphal	24·4	—1·7	30·5	27·2	..	..	31·1	3·3	27·4	4·4	9·2	61·2	32·8	13·9	120·1	31·7	18·9	69·1	32·2	19·4	76·5
	1955	1954	1957	1956	..	..	1955	1954	1955	954	1957	1955	1955	1955	1956	1957	1955	1957	1956	1956	1954
Haflong	23·1	7·2	43·0	27·8	8·1	65·8	31·7	10·7	34·5	31·7	12·9	164·1	35·6	15·4	107·4	32·2	18·3	20·7	31·1	18·9	99·8
	1957	1956	1957	1956	1957	1955	1955	1957	1955	956	1957	1955	1956	1957	1956	1955	1955	1955	1957	1956	1956
Lumding	28·8	3·9	27·7	33·9	4·4	54·5	37·8	8·4	33·2	39·6	10·6	34·8	40·0	17·2	110·2	37·2	20·0	135·6	37·2	17·8	114·3
	1952	1956	1957	1952	1956	957	1954	1957	1956	1957	1951	1956	1954	1955	1956	1957	1953	1957	1953	1955	1956
Sub-Himalayan West Bengal																					
Cooch Behar (C.W.O.)	27·8	3·9	34·0	31·1	7·1	16·3	36·7	10·6	20·1	39·4	13·9	27·2	39·1	16·7	134·4	35·6	19·4	199·4	35·0	23·8	59·1
	1954	1955	1957	1954	1957	954	1955	1954	1955	1954	1955	1954	1957	1955	1954	1953	1955	1954	1953	1957	1954
Jalpaiguri	28·9	5·0	37·6	31·1	2·2	71·9	36·1	7·8	68·6	40·0	10·6	152·4	39·4	16·1	161·0	37·2	17·0	234·9	37·2	22·2	90·4
	1931	1937	1809	1931	905	914	1945	1906	1926	1932	1905	1945	1899	1910	1938	1927	1957	1903	1933	1949	1892
Bagdogra	28·9	3·9	37·1	31·7	5·0	3·8	36·7	9·4	43·7	41·7	12·2	86·1	39·4	13·9	137·7	36·7	21·1	135·4	36·7	21·7	87·5
	1954	1955	1954	1955	1956	955	195	1957	1956	1952	1951	1952	1957	1955	1956	1952	1957	1954	1951	1956	1957
Malda	28·9	4·4	69·1	33·9	3·9	45·0	41·7	7·2	53·9	43·3	11·1	63·0	43·9	18·3	195·1	44·4	20·0	167·9	37·8	21·1	181·4
	1902	1937	1957	1952	1905	942	1941	1898	1926	1956	1953	1892	1957	1945	1938	1953	1955	1945	1897	1906	1945
Gangetic West Bengal																					
Dum Dum	31·1	7·8	27·2	35·6	8·9	17·0	40·6	12·2	22·9	42·8	18·1	53·1	42·5	19·4	27·4	41·8	21·7	129·0	35·0	22·5	137·2
	1956	1954	1957	1952	1956	1957	1955	1957	1956	1954	1957	1955	1957	1952	1951	1957	1953	1956	1953	1957	1953

X=Highest Maximum Temperature. N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Assam (Including Manipur, Tripura)—*(contd.)*
..	..	103.9	..	..	62.7	..	..	29.2	..	..	86.4	..	..	20.6	..	1954	Tangla.
..	..	1954	..	..	1957	..	..	1954	..	..	1956	..	..	1954			
37.8	21.1	187.7	37.2	20.0	133.9	35.6	15.6	93.2	32.2	10.6	36.8	29.4	5.0	21.3	1906	1906	Gauhati.
1933	1955	1938	1928	1955	1949	1955	1921	1951	1950	1926	1924	1955	1918	1957			
36.1	22.8	87.6	35.9	21.7	89.7	34.4	15.2	60.2	32.5	11.1	19.8	30.9	7.2	16.5	1951	1951	Gauhati. (Kaikuchi Aerodrome).
1953	1955	1954	1957	1956	1953	1955	1957	1951	1957	1954	1956	1957	1955	1952			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Rangiya.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
37·8	21.4	104.9	36.1	18.3	69.3	36.1	16.1	50.5	31.2	12.2	25.9	31.1	7.2	19.6	1954	1954	Goalpara.
1957	1957	1957	1956	1955	1955	1956	1954	1954	1957	1954	1956	1955	1955	1955			
35.6	21.7	196.9	35.0	21.7	254.0	33.9	17.2	155.2	31.1	11.7	82.5	27.8	7.8	17.3	1891	1881	Dhubri.
1942	1957	1924	1906	1930	1911	1956	1902	1919	1905	1903	1952	1944	1922	1894			
36.1	15.1	195.8	34.1	21.7	28.0	32.8	15.6	18.3	29.8	14.9	3.8	26.8	9.8	0	1957	1957	Dhubri. (Rupsi Aerodrome).
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..			
35.6	21.7	284.7	35.0	20.6	127.5	32.8	15.6	164.3	32.8	12.2	39.4	30.6	10.6	5.3	1951	1951	Tura·
1957	1955	1956	1951	1956	1955	1955	1954	1953	1952	1951	1952	1951	1954	1956			
36.4	22.8	238.8	35.0	21.7	115.6	35.0	14.9	82.8	32.8	10.6	104.7	30.0	7.2	10.9	1953	1953	Agartala.
1957	1955	1955	1954	1956	1956	1955	1957	1956	1955	1953	1955	1953	1955	1956			
38.3	19.4	154.9	38.3	18.9	178.6	36.7	15.6	186.2	35.0	10.6	174.2	31.7	6.1	100.8	1881	1881	Silchar.
1900	1906	1890	1887	1890	1939	1944	1914	1912	1900	1902	1955	1945	1913	1883			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			Silchar. (Kumbhigram Aerodrome).
32.9	18.9	64.5	32.2	16.1	29.2	31.7	9.2	52.8	28.3	5.6	46.0	23.9	—0.6	6.3	1954	1954	Imphal.
1957	1955	1957	1955	1956	1955	1955	1957	1954	1955	1957	1955	1956	1955	1955			
33.2	20.0	100.3	32.2	18.8	85.3	31.1	13.2	222.0	26.7	11.1	234.2	23.9	8.3	35.6	1954	1954	Haflong.
1957	1956	1954	1954	1957	1957	1956	1957	1954	1956	1954	1955	1957	1955	1954			
38.3	21.1	118.9	37.2	20.0	91.7	35.0	14.7	107.9	32.2	9.4	101.6	27.2	6.1	21.1	1951	1951	Lumding.
1953	1956	1952	1951	1953	1954	1956	1957	1952	1951	1953	1955	1957	1955	1957			
																	Sub-Himalayan West Bengal
36.3	22.8	315.5	35.6	22.2	244.1	35.0	15.1	47.7	30.6	11.1	0	29.4	6.7	4.3	1953	1953	Cooch Behar (C.W.O.).
1957	1954	1957	1953	1954	1953	1955	1957	1953	1955	1953	..	1953	1954	1953			
37.2	21.1	220.0	36.1	21.1	347.7	35.6	15.6	244.3	33.3	9.4	92.7	30.0	5.6	53.9	1891	1886	Jalpaiguri.
1933	1918	1901	1933	1944	1886	1926	1947	1909	1952	1914	1924	1951	1918	1932			
36.7	22.1	202.3	36.1	20.6	148.3	33.9	13.3	91.4	33.3	8.9	20.3	31.1	4.4	5.3	1951	1951	Bagdogra.
1957	1957	1957	1951	1956	1953	1956	1955	1956	1952	1953	1952	1951	1955	1956			
36.7	22.8	188.0	36.1	21.7	215.9	35.6	15.0	173.7	33.3	8.3	64.3	29.4	5.0	32.8	1896	1886	Malda.
1957	1948	1918	1896	1940	1953	1932	1908	1894	1896	1934	1930	1951	1896	1913			
																	Gangetic West Bengal
35·5	23·9	83·3	35·6	23·3	214·4	35·9	16·7	57·7	33·9	12·2	40·9	30·6	10·0	15·2	1951	1951	Dum Dum.
1957	1957	1954	1957	1952	1956	1957	1954	1952	1952	1954	1951	1954	1955	1954			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.

..—Information not available.

TABLE III (A)—EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Gangetic West Bengal—*(contd.)*																					
Calcutta	31·7	6·7	46·7	36·7	7·2	80·8	41·1	10·0	69·9	43·3	16·1	107·4	42·5	18·3	156·2	43·9	21·1	303·5	36·7	22·8	183·6
	1944	1899	1943	1952	1950	1906	1941	1898	1907	1954	1905	1918	1957	1887	1893	1924	1900	1908	1920	1940	1905
Barrackpore	30·9	10·4	39·9	32·4	9·4	20·1	36·8	11·0	4·3	40·8	17·3	16·8	42·7	23·7	16·5	41·1	19·9	29·2	33·8	24·8	48·0
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Saugor Island	30·6	7·8	41·4	33·9	7·2	77·0	38·3	12·2	125·7	39·4	17·2	78·7	38·3	17·8	202·7	40·0	19·4	359·2	36·1	21·7	354·1
	1931	1899	1948	1952	1950	1885	1934	1906	1907	1908	1942	1921	1908	1893	1932	1929	1925	1927	1920	1954	1913
Sandheads	..	..	33·0	..	..	55·4	..	..	62·7	..	..	72·6	..	..	87·9	..	..	334·0	..	..	290·8
	..	..	1944	..	..	1937	..	..	1940	..	..	1911	..	..	1950	..	..	1940	..	..	1921
Contai	30·0	9·4	20·8	37·2	10·0	29·0	38·9	14·7	23·4	40·6	20·0	23·1	39·1	17·2	109·2	38·8	21·1	207·5	34·4	21·7	128·5
	1956	1955	1953	1951	1953	1954	1951	1957	1951	1952	1956	1952	1957	1951	1956	1957	1952	1956	1954	1952	1957
Midnapore	32·8	6·1	54·6	37·2	5·6	66·0	42·8	11·1	79·5	45·6	17·2	78·2	46·7	19·4	145·3	47·2	20·0	276·9	37·2	22·2	162·3
	1946	1934	1957	1922	1950	1931	1953	1925	1920	1938	1953	1949	1943	1950	1956	1942	1950	1950	1926	1943	1929
Purulia	30·0	7·8	12·7	35·0	7·2	22·9	41·7	13·5	35·3	43·9	16·1	26·4	45·6	20·0	28·5	45·6	20·6	61·5	36·7	17·8	148·3
	1951	1954	1953	1952	1956	1956	1955	1957	1956	1954	1955	1952	1955	1952	1954	1953	1956	1951	1954	1953	1951
Bankura	..	..	33·0	..	..	18·3	..	..	33·5	..	..	38·9	..	..	45·2	..	..	60·7	..	..	86·9
	..	..	1957	..	..	1953	..	..	1956	..	..	1952	..	..	1951	..	..	1957	..	..	1957
Burdwan	36·7	6·1	43·7	37·8	4·4	84·1	41·7	10·0	115·8	45·0	16·1	116·8	46·1	18·3	244·3	45·6	20·0	175·3	38·9	20·0	299·2
	1951	1934	1944	1896	1905	1938	1941	1928	1887	1897	1886	1909	1916	1882	1893	1926	1953	1928	1897	1953	1905
Krishnagar	34·4	3·9	51·8	37·8	3·9	73·7	42·2	7·8	87·4	45·0	13·9	114·5	44·4	16·7	138·4	42·6	20·0	209·8	37·2	22·2	244·3
	1912	1934	1898	1896	1886	1943	1941	1898	1886	1954	1886	1946	1957	1893	1918	1957	1907	1890	1949	1955	1905
Asansol	31·7	5·6	51·6	36·1	5·0	43·4	41·7	11·1	44·2	45·0	16·1	46·7	47·2	18·3	127·0	47·2	20·6	174·5	40·0	19·4	269·7
	1939	1934	1944	1952	1950	1927	1941	1923	1949	1954	1950	1945	1944	1927	1938	1926	1922	1957	1926	1947	1943
Suri	31·1	6·7	132·3	33·3	8·3	14·2	41·1	12·7	22·3	44·4	17·8	20·1	45·8	19·4	24·6	45·0	20·0	73·7	34·4	22·2	131·8
	1955	1956	1957	1955	1956	1957	1955	1957	1956	1956	1955	1955	1957	1956	1955	1955	1955	1956	1957	1955	1955
Berhampore	31·1	3·1	69·6	36·7	5·0	60·7	42·2	8·9	62·2	45·0	15·6	54·6	46·1	16·7	155·7	44·4	19·4	202·4	38·3	22·2	221·0
	1939	1933	1957	1926	1950	1937	1941	1898	1887	1954	1936	1893	1916	1882	1915	1953	1884	1898	1897	1955	1900
Orissa																					
Baripada	32·2	..	7·9	36·1	..	46·3	40·6	..	33·5	44·6	..	24·4	46·8	..	45·5	43·8	..	181·1	34·5	..	66·3
	1956	..	1957	1956	..	1957	1956	..	1956	1957	..	1956	1957	..	1956	1957	..	1956	1957	..	1957
Balasore	33·3	7·2	85·1	38·3	6·7	76·2	40·6	11·7	70·4	45·0	16·7	71·4	46·7	19·4	221·5	46·1	20·0	217·2	38·3	20·0	347·2
	1934	1934	1908	1934	1905	1923	1955	1927	1897	1892	1905	1947	1895	1893	1887	1926	1900	1956	1897	1913	1940
Chandbali	32·8	8·3	35·1	37·8	10·0	36·3	40·6	13·9	41·1	43·3	17·2	52·3	43·9	17·8	186·4	46·7	18·3	164·3	36·7	21·7	321·8
	1950	1934	1948	1934	1942	1940	1954	1952	1940	1947	1943	1944	1942	1931	1936	1942	1931	1936	1929	1946	1941
Cuttack	35·6	7·8	61·0	38·9	10·6	98·0	42·8	14·4	99·1	43·9	17·2	94·5	47·7	20·6	142·7	47·2	21·7	205·7	40·0	21·1	210·8
	1882	1923	1919	1896	1934	1917	1902	1906	1911	1954	1905	1899	1957	1946	1893	1948	1955	1925	1897	1943	1943
Bhubaneswar	32·2	9·4	35·6	37·2	10·6	33·8	40·6	16·1	25·4	43·9	19·4	34·3	43·9	21·1	94·5	45·0	21·7	91·4	36·1	21·7	78·7
	1956	1952	1953	1953	1956	1954	1956	1952	1957	1954	1952	1952	1953	1954	1955	1952	1955	1954	1952	1952	1956
Puri	32·8	10·6	53·1	35·0	11·7	107·9	38·9	15·6	57·9	41·1	18·9	82·0	42·2	16·7	171·7	39·4	19·4	200·4	36·7	21·7	301·5
	1946	1893	1921	1954	1955	1897	1899	1906	1919	1947	1946	1919	1943	1893	1893	1949	1908	1895	1938	1944	1918
Gopalpur	32·8	10·0	47·2	36·7	11·7	134·4	40·0	15·6	95·8	38·9	19·4	55·1	43·3	20·0	126·5	41·1	21·1	171·7	38·3	20·6	200·9
	1946	1899	1908	1954	1934	1937	1956	1925	1957	1940	1955	1894	1915	1948	1940	1929	1939	1914	1957	1929	1936
Koraput	29·4	6·1	53·3	31·7	6·7	10·2	36·1	10·6	35·6	37·2	15·0	53·9	38·9	17·2	38·9	40·0	17·8	143·0	31·1	16·1	232·7
	1955	1957	1953	1953	1956	1957	1953	1952	1954	1956	1956	1956	1956	1955	1951	1953	1955	1953	1952	1957	1951

X = Highest Maximum Temperature. N—Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Gangetic West Bengal (*contd.*)
36·1	23·3	253·0	36·1	22·2	369·1	35·6	17·2	172·2	33·9	10·6	85·1	30·7	7·2	53·1	1881	1881	Calcutta.
1944	1935	1888	1939	1940	1900	1957	1954	1882	1952	1883	1950	1957	1910	1883			
36·3	24·3	81·5	35·4	24·1	118·6	34·3	18·5	8·9	30·8	12·8	0	29·9	9·9	0	1957	1957	Barrackpore.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..			
36·7	21·1	232·4	36·1	22·2	174·5	33·9	17·2	321·6	32·8	12·2	113·3	29·4	9·4	91·9	1881	1881	Saugor Island.
1903	1953	1954	1921	1950	1899	1918	1898	1933	1944	1883	1955	1907	1896	1947			
..	..	176·3	..	..	137·2	..	..	155·2	..	..	132·6	..	..	144·8	..	1911	Sandheads.
..	..	1946	..	..	1946	..	..	1931	..	..	1915	..	..	1909			
36·7	22·8	130·1	35·0	22·2	100·3	34·2	18·3	200·7	32·8	13·9	64·8	31·1	10·0	29·7	1951	1951	Contai.
1951	1954	1954	1951	1956	1957	1957	1954	1955	1952	1953	1955	1956	1955	1954			
36·1	21·7	201·2	36·1	21·7	149·3	35·6	15·6	325·1	33·9	10·0	111·3	31·7	6·7	62·0	1921	1886	Midnapore.
1947	1955	1891	1957	1952	1948	1951	1954	1942	1937	1934	1941	1957	1937	1914			
35·0	17·2	78·7	36·1	17·2	107·7	35·6	16·7	48·8	32·2	11·1	55·4	30·1	9·4	7·4	1951	1951	Purulia.
1954	1953	1952	1955	1953	1953	1951	1954	1953	1952	1952	1955	1957	1952	1956			
..	..	61·7	..	..	97·0	..	..	74·7	..	..	57·1	..	..	7·4	..	1951	Bankura.
..	..	1952	..	..	1956	..	..	1956	..	..	1953	..	..	1954			
36·1	21·7	260·6	37·8	20·0	304·8	36·7	16·1	180·3	35·6	10·6	106·9	31·7	7·2	69·6	1881	1881	Burdwan.
1915	1954	1909	1928	1953	1956	1951	1933	1942	1896	1883	1916	1951	1883	1934			
36·7	21·1	165·3	37·2	21·1	293·9	36·7	14·4	176·0	36·1	8·3	151·1	32·2	5·0	37·3	1886	1886	Krishnagar.
1957	1949	1926	1955	1887	1900	1957	1935	1945	1952	1934	1889	1954	1937	1954			
37·2	21·7	189·2	36·1	20·0	269·0	36·7	15·0	99·1	36·1	8·3	99·1	31·7	6·7	29·7	1921	1916	Asansol
1932	1933	1935	1941	1946	1946	1932	1938	1929	1955	1926	1930	1946	1937	1929			
36·5	22·8	116·3	34·9	20·6	238·3	35·5	17·0	52·6	31·4	13·0	19·5	29·6	7·8	29·0	1955	1955	Suri.
1957	1955	1956	1957	1956	1956	1957	1957	1956	1957	1957	1956	1957	1955	1956			
37·1	21·7	183·4	38·9	21·7	182·9	37·8	16·1	286·3	35·0	8·3	75·2	32·2	6·7	33·5	1881	1881	Berhampore.
1957	1933	1939	1947	1956	1900	1951	1954	1917	1952	1934	1930	1951	1935	1913			
																	Orissa
35·8	..	104·4	36·1	..	97·5	35·9	..	74·4	33·3	..	10·2	32·6	..	0	1956	1956	Baripada.
1957	..	1957	1957	..	1957	1957	..	1956	1957	..	1956	1957	..	..			
35·6	21·7	190·5	35·6	22·2	189·5	36·1	15·6	323·3	34·4	8·9	184·7	31·7	6·7	78·7	1891	1886	Balasore.
1955	1933	1926	1922	1919	1899	1925	1926	1941	1896	1892	1950	1944	1897	1947			
35·0	22·2	147·8	35·6	21·7	320·8	35·6	17·8	169·7	33·9	11·7	207·8	32·8	8·3	49·5	1931	1931	Chandbali.
1954	1933	1946	1951	1956	1950	1951	1952	1952	1949	1952	1950	1949	1939	1947			
37·2	21·7	320·8	36·7	21·7	249·2	38·9	16·7	292·6	35·0	10·6	194·6	33·3	8·9	54·9	1881	1881	Cuttack.
1880	1943	1933	1901	1933	1891	1886	1926	1899	1896	1937	1950	1954	1922	1909			
35·0	21·7	107·7	35·0	22·2	106·9	35·1	16·1	188·2	35·0	12·8	156·0	32·7	9·4	10·9	1952	1952	Bhubaneswar.
1952	1953	1954	1957	1955	1955	1957	1954	1954	1952	1953	1955	1957	1955	1954			
36·7	21·7	187·7	36·1	17·2	210·8	36·1	16·7	316·2	33·9	13·9	242·8	32·8	10·6	88·9	1891	1891	Puri.
1899	1898	1896	1901	1893	1934	1899	1901	1928	1914	1926	1915	1896	1895	1909			
37.2	19.4	229.9	36.7	20·6	196.9	36.3	16.7	281.7	33.5	12.2	261.6	32.2	10.0	105.7	1891	1881	Gopalpur.
1928	1911	1940	1920	1917	1886	1957	1897	1923	1957	1926	1923	1951	1902	1909			
28.9	15.6	143.5	29.4	16.7	91.4	30.6	10.6	92.5	28.9	8.3	43.7	27.8	5.0	16.8	1951	1951	Koraput.
1955	1957	1957	1955	1957	1954	1957	1954	1955	1957	1955	1951	1957	1955	1952			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.

..—Information not available.

TABLE III (A)—EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and Station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Orissa—(*contd.*)																					
Titilagarh	31·7	6·1	27·4	37·8	10·0	24·1	42·2	13·9	26·7	45·0	18·6	17·0	46·7	21·1	76·7	47·2	22·2	103·9	37·2	21·7	114·8
	1957	1954	1953	1953	1956	1956	1955	1952	1954	1956	1957	1955	1956	1951	1956	1955	1957	1955	1952	1956	1955
Bolangir	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angul	33·9	6·7	48·8	37·2	8·9	71·1	42·2	10·6	42·7	45·6	16·1	65·5	46·1	18·9	84·3	46·1	21·1	156·0	37·8	21·7	243·8
	1930	1923	1906	1934	1956	1932	1953	1906	1907	1941	1920	1928	1947	1910	1946	1942	1954	1925	1912	1945	1932
Keonjhar*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sambalpur	33·9	4·4	90·7	37·8	5·6	55·1	43·3	11·1	46·2	45·6	14·4	45·2	47·2	20·6	07·9	46·7	19·4	254·4	40·6	18·3	401·3
	1889	1954	1957	1896	1950	1901	1888	1954	1951	1942	1905	1909	1948	1951	1891	1955	1903	1882	1902	1910	1869
Jharsuguda	31·7	6·1	42·4	35·6	8·3	26·4	42·8	11·7	58·7	44·4	15·8	31·7	46·7	21·1	33·0	46·1	21·1	159·0	34·8	22·2	117·9
	1955	1954	1953	1956	1956	1957	1955	1956	1951	1956	1957	1952	956	1955	1956	1955	1955	1956	1957	1956	195 2
Chota Nagpur																					
Jamshedpur	31·1	6·7	11·0	35·6	8·9	17·8	41·7	11·7	33·8	43·9	17·2	32·3	44·9	21·7	30·7	45·6	21·7	214·1	36·7	23·3	187·5
	1952	1953	1957	1956	1951	1956	1955	1954	1951	1954	1955	1952	1957	1951	1955	1953	1956	1953	1954	1955	1952
Jamshedpur (P.B.O.)	31·1	6·7	15·0	36·1	8·9	20·1	42·2	11·7	33·8	44·4	18·2	32·3	45·8	21·7	38·1	46·1	22·8	108·5	36·7	21·7	187·5
	1952	1955	1954	1952	1951	1956	1955	1951	1951	1956	1957	1952	1957	1951	1955	1955	1956	1952	1954	1956	1952
Chaibasa	33·3	4·4	75·2	37·2	6·7	75·7	42·2	11·7	43·9	45·0	15·6	80·3	46·7	18·3	58·4	46·1	20·0	131·3	41·1	21·7	194·8
	1911	1934	1901	1911	1934	1906	1955	1927	1891	1941	1944	1946	1948	1938	1893	1953	1932	1919	1926	1943	1929
Ranchi	31·1	3·9	52·1	33·9	2·8	78·5	39·4	7·8	82·3	41·7	10·7	58·7	43·3	15·6	104·7	42·8	14·8	165·6	38·3	19·4	215·9
	1931	1946	1945	1956	1950	1913	1955	1898	1891	1938	1957	1944	1948	1952	1914	1955	1957	1898	1902	1951	1896
Ranchi (C.W.O.)	27·2	7·2	10·2	33·3	6·9	20·3	36·7	10·4	44·7	40·6	18·3	0	42·8	21·7	34·0	40·3	21·1	38·1	32·1	21·1	49·8
	1956	1956	1956	1956	1957	1956	1956	1957	1956	1956	1956	..	1956	1956	1956	1957	1956	1956	1957	1956	1956
Daltonganj	32·2	0	77·2	35·6	0·6	50·5	42·8	5·6	36·8	45·0	11·7	38·6	46·7	17·8	62·2	46·7	20·0	174·0	43·3	19·4	290·8
	1902	1923	1945	1914	1905	1908	1931	1898	1927	1898	1907	1914	1956	1932	1904	1897	1900	1907	1902	1928	1920
Hazaribagh	30·6	2·2	68·1	33·3	3·3	63·5	38·9	6·7	44·2	41·7	13·9	60·5	43·9	16·1	84·1	43·3	20·0	249·2	38·9	20·6	221·7
	1881	1933	1945	1896	1905	1927	1892	1898	1946	1956	1944	1925	1897	1878	1887	1953	1944	1911	1901	1940	1953
Dhanbad	28·9	9·9	17·3	31·7	9·9	9·2	37·3	13·3	10·2	42·9	19·7	0	45·1	23·9	2·8	43·4	21·9	44·2	34·2	21·6	36·8
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957
Bihar																					
Purnea	28·9	1·7	86·4	34·4	1·7	59·7	40·6	6·7	40·6	43·3	11·7	114·3	43·9	15·6	220·5	42·8	17·8	268·2	36·7	21·1	204·2
	1902	1955	1957	1896	1891	1882	1941	1927	1950	1891	1905	1925	1916	1885	1887	1924	1906	1881	1942	1921	1916
Forbesganj	27·8	2·2	40·4	33·3	6·7	2·5	38·9	9·4	13·2	42·8	12·8	24·6	42·9	17·8	121·4	40·1	20·6	80·0	35·7	21·7	196·9
	1956	1955	1957	1955	1955	1955	1955	1957	1956	1954	1955	1955	1957	1956	1954	1957	1955	1954	1957	1954	1956
Darbhanga	28·9	1·1	57·7	33·3	1·1	43·9	40·6	7·2	36·3	43·9	11·7	60·5	43·3	17·2	74·4	43·3	20·0	243·8	38·3	21·7	199·6
	1932	1933	1957	1943	1905	1949	1941	1906	1897	1922	1912	1899	1916	1948	1923	1931	1955	1883	1942	1945	1926
Motihari	28·3	2·2	54·6	35·6	0	66·0	40·0	5·6	55·4	42·2	8·9	67·3	44·4	15·0	104·1	43·3	19·4	234·2	42·8	21·7	254·8
	1902	1905	1900	1896	1905	1889	1941	1945	1891	1954	1905	1899	1903	1952	1890	1935	1903	1919	1955	1953	1935
Muzaffarpur	..	..	15·2	..	..	8·9	..	..	5·1	..	..	30·5	..	..	23·4	..	..	99·1	..	..	129·5
	..	..	1956	..	..	1952	..	..	1956	..	..	1952	..	..	1953	..	..	1952	..	..	1957
Chapra	..	..	48·3	..	..	15·0	..	..	9·4	..	..	17·0	..	..	27·9	..	..	135·4	..	..	120·9
	..	..	1957	..	..	1951	..	..	1957	..	..	1953	..	..	1953	..	..	1952	..	..	1952

X—Highest Maximum Temperature.

*Observatory started in May, 1957.

N—Lowest Minimum Temperature

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Orissa—(*cont.d.*)
35.0	21.7	130.8	35.0	21.7	147.1	36.1	15.0	59.7	33.3	10.6	13.7	31.7	8.3	3.3	1951	1951	Titilagarh
1954	1951	1955	1953	1956	1952	1951	1954	1951	1956	1952	1951	1956	1957	1954			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Bolangir.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
36.1	21.1	257.3	35.6	21.7	148.8	35.6	14.4	117.9	33.9	8.9	99.1	31.7	7.2	22.9	1906	1906	Angul.
1945	1956	1931	1943	1950	1939	1918	1926	1929	1918	1910	1915	1957	1937	1909			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			Keonjhar*
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
35.0	21.1	265.9	36.1	20.6	200.9	36.1	12.8	173.7	33.9	7.8	106.2	32.2	4.4	39.1	1881	1881	Sambalpur.
1954	1956	1934	1930	1921	1955	1920	1921	1936	1946	1926	1930	1902	1902	1885			
34.5	22.2	124.5	34.8	21.7	95.0	36.1	13.9	110.2	33.1	11.1	22.1	31.1	6.1	10.4	1954	1951	Jharsuguda.
1957	1956	1953	1957	1956	1955	1957	1954	1952	1957	1956	1953	1957	1955	1954			
																	Chota Nagpur
35.6	23.3	169.2	35.0	21.1	120.9	35.6	15.0	12.2	32.7	8.9	69.1	31.1	7.2	12.5	1951	1951	Jamshedpur.
1957	1955	1953	1951	1956	1957	1951	1954	1954	1957	1952	1953	1954	1955	1956			
35.1	22.8	92.5	35.0	20.6	129.1	35.6	15.0	54.4	32.3	8.9	28.5	31.3	7.2	12.7	1951	1951	Jamshedpur (P. B. O.)
1957	1955	1951	1951	1956	1957	1951	1957	1955	1957	1952	1951	1957	1955	1956			
37.2	21.1	200.7	35.6	21.1	155.5	36.6	13.9	214.6	33.9	7.8	82.0	31.1	5.0	38.1	1911	1891	Chaibasa.
1947	1913	1941	1946	1950	1953	1957	1954	1912	1937	1934	1941	1957	1913	1907			
33.3	19.4	147.3	35.6	16.1	152.9	35.1	10.6	231.1	32.2	5.6	79.5	30.0	4.4	32.3	1891	1891	Ranchi.
1945	1939	1945	1944	1949	1893	1957	1949	1941	1896	1949	1930	1950	1955	1928			
31.7	21.1	66.5	32.0	19.4	113.6	31.9	14.5	32.8	28.6	10.6	7.4	27.8	7.3	7.6	1956	1956	Ranchi (C. W. O.)
1957	1957	1957	1957	1957	1957	1957	1957	1956	1957	1956	1956	1957	1957	1956			
37.2	20.6	193.0	37.2	17.2	187.5	37.2	10.0	75.2	33.9	5.0	74.9	31.1	1.7	41.9	1896	1896	Daltonganj.
1903	1916	1907	1897	1899	1946	1899	1921	1937	1918	1912	1924	1956	1913	1940			
33.7	20.0	180.1	33.3	17.8	147.1	33.3	11.1	120.4	31.7	4.4	95.0	29.4	3.9	39.4	1878	1881	Hazaribagh.
1957	1942	1888	1945	1950	1898	1957	1934	1917	1896	1879	1924	1950	1945	1885			
35.6	23.2	69.3	34.5	22.2	59.6	34.9	17.7	1.5	32.2	14.3	0	30.0	10.7	0	1957	1957	Dhanbad.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..			
																	Bihar
37.3	21.7	239.3	37.2	19.4	318.5	35.6	10.0	158.0	32.8	7.2	114.8	30.6	3.3	53.3	1881	1881	Purnea.
1957	1909	1918	1923	1890	1898	1957	1891	1929	1952	1883	1932	1953	1883	1913			
39.0	21.1	133.6	36.8	20.6	96.0	35.7	12.8	108.5	33.3	9.4	32.0	31.1	5.0	3.1	1954	1954	Forbesganj.
1957	1955	1955	1957	1955	1956	1957	1957	1956	1955	1954	1956	1955	1955	1957			
37.5	21.1	264.4	36.7	19.4	266.7	36.1	14.4	186.7	33.3	7.2	49.0	29.4	4.4	25.1	1881	1881	Darbhanga.
1957	1912	1913	1944	1896	1925	1938	1914	1949	1943	1926	1912	1943	1908	1929			
37.2	21.7	203.2	37.2	20.0	214.6	36.1	12.8	158.2	35.6	7.2	50.0	28.9	1.7	33.8	1884	1886	Motihari.
1953	1884	1915	1953	1890	1898	1954	1895	1893	1955	1949	1932	1955	1896	1932			
..	..	193.5	..	..	99.1	..	..	54.6	..	..	8.9	..	..	6.9	..	1951	Muzaffarpur.
..	..	1957	..	..	1956	..	..	1953	..	..	1952	..	..	1957			
..	..	138.9	..	..	96.0	..	..	57.4	..	..	44.7	..	..	13.2	..	1951	Chapra.
..	..	1952	..	..	1953	..	..	1953	..	..	1956	..		1956			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T. ..=Information not available.

TABLE III (A)—EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Bihar (*contd.*)																					
Arrah	..	..	103·1	..	..	20·1	..	..	76·5	..	..	69·9	..	..	31·7	..	..	105·4	..	..	107·9
	..	..	1957		..	1954	..	..	1957	..	..	1953	..	..	1952	..	..	1953	..	..	1955
Patna	28·9	2·8	57·4	34·4	2·2	40·6	40·6	7·8	53·1	43·3	14·4	46·7	45·6	17·2	109·2	46·1	20·0	350·5	41·7	21·1	177·8
	1939	1933	1957	1896	1905	1949	1941	1906	1881	1956	1905	1893	1941	1932	1887	1931	1912	1897	1903	1931	1893
Patna (Aerodrome)	28·3	3·9	51·8	34·4	6·1	12·7	40·0	10·4	7·4	43·3	16·1	32·8	44·4	17·8	23·4	45·6	21·1	90·4	36·7	23·3	130·6
	1955	1956	1957	1952	1951	1954	1955	1957	1951	1956	1953	1953	1953	1954	1952	1953	1952	1953	1956	1956	1957
Dehri	29·4	6·1	22·6	34·4	8·3	17·0	41·1	12·2	16·0	44·4	17·2	27·9	46·7	20·6	5·3	46·1	20·8	87·4	41·1	22·2	115·6
	1954	1956	1955	1952	1956	1952	1953	1957	1956	1956	1955	1951	1951	1955	1956	1953	1957	1951	1954	1951	1953
Gaya	31·7	3·3	66·0	35·6	3·9	49·8	41·7	8·3	37·6	45·0	14·4	41·4	46·7	17·2	54·1	47·2	18·3	229·6	43·3	16·7	209·8
	1939	1955	1901	1896	1950	1889	1941	1945	1891	1938	1886	1933	1948	1893	1904	1931	1913	1883	1926	1886	1886
Jamui	29·4	5·0	24·1	35·0	7·2	10·9	40·0	10·1	24·4	44·4	16·8	21·8	45·1	20·0	62·7	45·6	22·2	68·6	37·2	21·1	122·4
	1956	1955	1953	1952	1956	1955	1953	1957	1952	1956	1957	1953	1957	1955	1952	1953	1953	1956	1951	1952	1951
Dumka	31·1	4·4	75·7	36·1	5·0	77·5	42·2	8·3	70·6	45·0	15·9	47·0	46·7	17·2	106·2	46·7	20·0	170·9	40·6	21·1	146·3
	1911	1945	1957	1952	1905	1940	1953	1906	1891	1951	1905	1946	1916	1934	1914	1926	1922	1927	1897	1945	1921
Bhagalpur	29·4	6·7	91·2	33·3	8·9	8·6	40·0	12·1	5·1	43·9	13·3	17·5	44·4	16·1	31·7	43·9	21·1	94·5	36·7	22·9	82·3
	1952	1956	1957	1956	1951	1955	1954	1957	1952	1956	1955	1952	1951	1955	1951	1953	1957	1952	1951	1956	1956
Sabour	28·9	0·6	99·6	33·3	2·8	41·7	41·1	3·9	34·3	43·3	13·3	47·5	44·4	16·1	49·5	46·1	19·4	170·2	37·8	22·8	145·0
	1946	1934	1957	1949	1950	1942	1941	1945	1940	1956	1957	1912	1951	1934	1938	1931	1934	1950	1941	1956	1934
Uttar Pradesh (East)																					
Gonda	28·9	1·1	52·6	33·3	3·3	41·4	41·1	5·6	40·1	44·4	13·9	71·4	45·6	18·3	104·1	46·7	16·7	127·8	41·7	20·0	215·4
	1946	1933	1953	1952	1934	1935	1941	1945	1944	1938	1955	1933	1948	1932	1956	1942	1936	1938	1957	1949	1955
Nautanwa	27·8	2·8	33·0	31·7	5·2	15·7	38·9	10·4	9·7	43·3	13·9	1·5	44·0	16·7	83·8	43·9	20·6	182·6	42·1	22·2	154·9
	1956	1955	1957	1956	1957	1956	1955	1957	1957	1956	1955	1956	1957	1955	1956	1955	1957	1955	1957	1957	1955
Gorakhpur	30·0	1·7	72·4	36·1	2·8	33·0	41·7	8·3	47·2	43·9	12·2	67·3	45·0	16·7	110·2	46·1	16·1	208·5	40·6	18·9	189·5
	1937	1933	1883	1896	1905	1949	1941	1927	1891	1956	1905	1887	1906	1937	1956	1935	1949	1932	1926	1953	1937
Azamgarh	28·9	3·3	38·9	35·0	3·3	37·6	43·3	10·6	28·2	44·4	16·1	14·2	45·6	19·4	17·3	46·7	21·7	81·5	41·1	21·1	186·7
	1952	1955	1957	1952	1950	1949	1949	1954	1952	1951	1953	1955	1953	1949	1949	1953	1955	1950	1954	1953	1955
Ballia	26·7	3·9	39·6	31·0	5·0	1·0	36·6	8·9	6·1	42·2	13·9	0	44·7	20·6	0	44·2	21·6	48·3	36·4	20·7	49·5
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..	1957	1957	1957	1957	1957	1957
Varanasi (Banaras)	31·1	2·8	65·0	36·1	1·7	67·1	41·1	6·7	37·1	44·4	11·1	34·5	47·2	18·9	51·6	47·2	20·6	159·5	45·0	23·0	288·3
	1882	1955	1942	1884	1905	1949	1955	1906	1940	1951	1905	1928	1884	1926	1889	1901	1914	1890	1957	1919	1914
Varanasi (Banaras) (Babatpur Aerodrome).	29·4	1·7	12·7	34·4	5·9	21·3	31·3	10·0	11·9	43·9	16·7	5·1	46·1	21·7	17·8	46·1	22·8	75·7	40·6	22·1	166·4
	1952	1955	1957	1952	1957	1954	1953	1954	1957	1954	1955	1957	1952	1955	1956	1953	1956	1955	1954	1957	1955
Allahabad (Bamrauli).	31·1	2·2	70·9	36·1	1·1	51·3	41·7	7·2	33·8	45·0	12·8	26·4	47·2	17·2	35·6	47·8	19·4	176·0	45·6	22·2	209·3
	1934	1936	1900	1896	1905	1898	1931	1906	1950	1931	1905	1933	1922	1924	1917	1901	1930	1916	1901	1955	1920
Banda	32·2	2·8	24·6	35·6	3·3	36·8	41·1	10·6	20·1	45·0	16·1	5·1	47·8	21·1	29·0	46·7	21·7	80·5	43·3	21·7	157·7
	1950	1955	1955	1956	1950	1954	1953	1952	1950	1954	1955	1951	1950	1951	1951	1954	1957	1953	1949	1949	1951
Fatehpur.	32·2	1·1	46·5	35·0	2·8	49·8	41·7	8·3	52·8	45·0	14·4	37·1	47·2	20·0	17·0	46·7	21·1	74·7	43·3	21·7	175·3
	1943	1935	1934	1956	1950	1942	1953	1935	1950	1948	1946	1935	1952	1948	1948	1955	1947	1955	1943	1949	1932
Kanpur	31·1	1·7	48·5	35·6	0·6	59·2	42·8	7·2	61·7	45·6	11·1	25·9	47·2	17·8	25·4	47·2	20·6	133·3	45·0	21·7	167·6
	1939	1950	1893	1930	1905	1942	1941	1945	1944	1938	1905	1928	1941	1909	1913	1931	1922	1916	1903	1948	1924

X—Highest Maximum Temperature.

N—Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Bihar (contd.)
..	..	127.0	..	..	121.9	..	..	43.7	..	..	51.3	..	..	3.1	..	1951	Arrah.
..	..	1953	..	..	1952	..	..	1955	..	..	1956	..	..	1956			
38.3	21.7	165.3	37.8	20.0	366.0	36.1	15.0	158.2	33.9	8.3	63.7	30.6	6.1	73.7	1881	1881	Patna.
1903	1923	1914	1928	1890	1918	1932	1954	1894	1952	1934	1915	1951	1902	1929			
36.1	21.7	95.0	37.2	22.2	109.2	35.6	12.2	39.4	33.3	7.8	35.6	30.6	5.6	19.6	1951	1951	Patna (Aerodrome).
1957	1952	1953	1951	1957	1953	1951	1954	1956	1952	1952	1956	1951	1952	1957			
35.0	23.3	82.5	35.6	22.8	61.2	35.6	14.7	19.3	33.9	9.4	64.0	31.7	7.2	10.9	1951	1951	Dehri.
1954	1953	1952	1951	1956	1957	1951	1957	1954	1951	1952	1956	1952	1955	1956			
38.9	21.7	258.6	38.3	20.6	200.4	37.2	12.8	116.6	35.0	8.3	81.8	31.1	3.9	49.0	1881	1881	Gaya.
1935	1934	1942	1928	1890	1946	1918	1954	1894	1896	1953	1924	1929	1945	1885			
36.7	23.3	57.1	36.1	21.7	92.2	35.6	15.2	98.5	33.8	8.3	22.9	29.4	6.1	4.6	1951	1951	Jamui.
1957	1953	1955	1951	1956	1953	1951	1957	1956	1957	1952	1956	1954	1955	1956			
37.2	21.1	191.5	36.7	20.0	266.9	36.1	13.3	158.7	35.0	6.7	115.1	30.6	5.0	35.6	1891	1886	Dumka.
1938	1948	1888	1938	1956	1935	1957	1954	1890	1896	1934	1930	1954	1935	1913			
38.5	21.7	123.7	37.2	21.7	95.0	36.3	16.1	129.5	34.4	11.1	37.1	30.6	8.3	8.4	1951	1951	Bhagalpur.
1957	1957	1955	1956	1953	1953	1957	1954	1956	1952	1952	1956	1951	1952	1954			
37.4	22.8	106.9	37.8	21.7	136.7	35.6	13.3	155.5	33.4	6.1	37.3	29.4	3.3	7.9	1931	1931	Sabour.
1957	1933	1932	1933	1956	1942	1957	1954	1956	1957	1934	1956	1955	1942	1936			
																	Uttar Pradesh (East)
37.2	16.7	306.6	37.8	18.9	174.2	37.2	12.2	145.0	33.9	5.6	32.5	28.9	2.8	29.5	1932	1932	Gonda.
1939	1956	1938	1932	1950	1953	1951	1957	1933	1940	1934	1932	1951	1954	1950			
40.0	22.8	116.8	37.8	21.1	203.2	36.4	14.3	92.7	32.8	7.2	5.6	30.0	5.0	9.7	1954	1954	Nautanwa.
1956	1955	1955	1954	1954	1956	1957	1957	1956	1954	1954	1956	1955	1954	1957			
37.2	21.1	284.5	37.2	17.8	239.5	36.7	12.8	218.7	33.9	6.7	55.9	29.4	2.8	28.7	1881	1881	Gorakhpur.
1953	1944	1912	1954	1912	1930	1938	1895	1894	1952	1953	1956	1951	1913	1929			
36.7	22.8	130.6	38.3	18.9	210.8	37.8	13.3	41.9	36.1	6.7	40.9	31.1	5.0	12.5	1949	1949	Azamgarh.
1957	1955	1953	1951	1950	1956	1951	1954	1949	1951	1952	1956	1954	1954	1950			
36.8	20.7	35.6	36.1	19.6	65.3	36.1	10.4	1.3	32.8	5.8	0	27.6	6.3	1.8	1957	1957	Ballia.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957			
40.0	22.2	321.6	38.3	17.8	349.5	39.4	11.7	138.9	35.6	6.7	74.9	32.8	2.2	53.1	1881	1881	Varanasi (Banaras).
1903	1955	1940	1938	1912	1943	1896	1919	1900	1941	1926	1927	1956	1913	1929			
36.4	23.3	95.8	36.1	22.2	106.7	35.6	12.8	33.0	33.3	6.1	140.5	28.9	5.0	11.9	1952	1952	Varanasi (Banaras). (Babatpur Aerodrome).
1957	1956	1953	1952	1957	1953	1952	1954	1956	1952	1952	1956	1954	1955	1953			
40.0	21.1	335.3	39.4	18.3	266.2	40.6	11.7	163.3	35.6	5.6	96.0	31.1	2.2	54.6	1881	1881	Allahabad (Bamrauli).
1903	1953	1953	1928	1912	1938	1896	1898	1894	1918	1941	1956	1946	1902	1886			
37.2	21.7	138.7	37.8	20.9	109.7	38.3	13.2	61.0	37.8	11.1	61.0	30.0	5.0	34.8	1949	1949	Banda.
1957	1957	1957	1951	1957	1954	1957	1957	1956	1951	1957	1956	1950	1955	1950			
39·4	21·7	191·8	38·3	19·4	125·0	38·9	12·8	84·3	35·6	6·1	12·2	31·1	2·2	39·4	1932	1932	Fatchpur.
1945	1953	1953	1932	1944	1939	1951	1952	1933	1944	1937	1936	1946	1945	1950			
40·6	21·7	235·2	40·0	16·1	233·9	40·6	11·1	136·1	36·1	5·0	59·2	31·1	1·7	40·6	1891	1891	Kanpur.
1903	1948	1915	1932	1896	1915	1896	1895	1894	1940	1948	1911	1940	1902	1950			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs I.S.T.

..—Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Uttar Pradesh (East) (*Contd.*)																					
Lucknow	30·6	1·1	95·3	35·0	1·7	61·5	41·7	7·2	28·2	45·6	12·8	129·5	47·2	17·8	103·4	48·3	19·4	229·1	45·6	21·7	311·7
	1943	1946	1883	1921	1905	1928	1945	1945	1940	1898	1903	1909	1944	1886	1891	1901	1886	1886	1903	1950	1947
Lucknow (Amausi Aerodrome)	28·3	0·6	34·8	33·3	4·4	22·1	39·4	6·1	25·4	43·3	12·8	1·0	45·0	19·4	40·6	45·6	21·1	65·0	41·7	22·8	133·1
	1952	1955	1953	1952	1957	1954	1955	1954	1952	1954	1953	1953	1956	1953	1956	1953	1957	1955	1954	1953	1953
Hardoi	28·9	2·8	54·9	32·8	5·0	35·1	38·9	9·4	40·6	43·3	13·9	6·3	45·0	20·6	26·9	48·3	20·6	134·1	41·7	22·8	153·9
	1952	1955	1957	1952	1951	1954	1953	1954	1957	1954	1955	1951	1954	1955	1956	1951	1954	1952	1951	1955	1953
Lakhimpur Kheri	27·8	2·8	49·8	32·8	5·1	36·6	39·4	10·0	19·8	43·3	15·0	4·6	45·0	20·6	46·7	45·0	20·6	91·9	40·6	22·2	148·3
	1952	1955	1954	1953	1957	1954	1953	1954	1957	1954	1951	1952	1953	1955	1956	1953	1955	1952	1951	1954	1954
Bahraich	28·9	0·6	57·7	34·4	0·6	49·5	40·6	5·6	50·5	44·4	11·1	61·0	45·6	15·6	88·9	46·7	18·3	269·5	44·4	20·6	186·2
	1946	1936	1953	1952	1905	1905	1941	1945	1914	1954	1943	1909	1953	1944	1938	1953	1914	1929	1902	1900	1955
Uttar Pradesh (West)																					
Orai	30·0	3·3	30·3	33·9	2·2	22·9	41·1	8·9	22·1	43·9	12·2	5·3	46·7	19·4	7·6	46·7	15·6	234·9	43·9	20·6	110·0
	1952	1957	1957	1952	1951	1954	1955	1957	1951	1956	1954	1952	1954	1951	1953	1955	1957	1952	1951	1950	1953
Jhansi	33·3	1·7	45·0	37·8	0·6	36·8	43·3	7·2	42·2	45·6	14·4	18·3	47·2	20·0	40·6	47·8	20·6	162·3	45·6	21·7	239·5
	1946	1935	1921	1930	1929	1944	1892	1945	1950	1914	1935	1933	1947	1947	1943	1924	1922	1942	1900	1936	1927
Agra	31·1	—2·2	49·5	35·6	—1·7	51·8	42·8	5·6	36·3	45·0	11·7	32·5	47·2	16·7	32·3	48·3	19·4	97·3	45·6	21·1	152·7
	1946	1935	1957	1897	1929	1915	1892	1945	1957	1941	1940	1944	1943	1926	1926	1889	1922	1886	1919	1951	1886
Agra (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mainpuri	30·6	—1·7	31·5	34·4	—0·6	60·2	41·7	5·0	33·3	45·6	11·1	29·7	47·8	15·6	37·6	47·8	18·9	191·0	45·6	18·3	135·9
	1946	1927	1929	1922	1905	1898	1945	1945	1957	1948	1903	1914	1943	1955	1938	1948	1949	1952	1903	1934	1927
Aligarh	30·6	0·6	40·6	32·2	1·7	45·0	41·7	3·9	24·6	44·4	10·9	30·5	46·1	17·8	39·4	46·1	18·6	144·3	43·9	20·6	164·6
	1946	1935	1944	1936	1950	1954	1945	1945	1934	1948	1957	1933	1954	1957	1941	1955	1957	1933	1948	1957	1942
Bareilly	29·4	0·6	61·0	32·8	0	95·3	40·0	5·0	79·3	43·9	11·1	38·1	46·7	16·1	40·1	46·1	19·4	218·4	43·9	20·0	251·2
	1943	1905	1921	1884	1905	1915	1945	1945	1926	1952	1905	1909	1884	1898	1956	1948	1912	1908	1903	1931	1882
Meerut	27·2	1·7	33·0	31·1	2·8	56·4	87·8	8·3	54·6	42·2	12·2	30·5	45·0	19·1	12·7	44·4	19·4	39·6	42·8	22·2	146·1
	1952	1951	1954	1956	1950	1949	1955	1954	1951	1953	1955	1946	1954	1957	1953	1955	1951	1953	1949	1955	1953
Najibabad	24·4	0·6	48·0	32·8	2·8	48·3	36·7	2·2	37·1	40·6	11·7	17·8	43·4	16·1	30·5	44·4	18·3	40·6	41·6	21·7	131·8
	1956	1955	1953	1956	1956	1954	1953	1952	1942	1956	1955	1953	1957	1955	1956	1955	1954	1954	1957	1957	1956
Roorkee	28·3	—1·1	101·6	31·7	—2·2	111·0	38·9	2·8	109·5	43·3	7·2	38·3	46·1	14·4	57·7	46·7	16·1	148·8	45·0	21·1	228·9
	1898	1935	1883	1956	1905	1930	1945	1945	1955	1897	1905	1949	1884	1907	1910	1932	1900	1906	1931	1955	1889
Dehra Dun	26·1	—1·1	79·5	29·4	—1·1	106·2	37·2	—2·2	81·5	40·6	7·8	39·1	42·8	12·8	79·3	43·9	13·9	188·0	40·6	18·3	294·6
	1946	1945	1945	1956	1905	1949	1892	1945	1926	1892	1944	1898	1944	1947	1940	1902	1907	1925	1931	1902	1890
Punjab (India) (Including Delhi)																					
New Delhi	29·4	—0·6	116·8	33·3	1·7	104·1	41·1	4·4	62·2	45·6	11·7	40·9	47·2	18·3	30·5	46·7	18·9	235·5	45·0	21·7	142·7
	1946	1935	1885	1934	1950	1942	1945	1945	1915	1941	1940	1909	1944	1952	1885	1945	1932	1936	1931	1943	1882
Hissar	30·6	—3·9	58·4	34·4	—2·2	46·0	45·6	2·8	39·4	45·6	8·3	22·6	48·3	14·4	41·1	47·8	17·8	69·1	47·2	20·6	104·1
	1952	1929	1948	1956	1929	1937	1945	1945	1927	1949	1918	1944	1944	1948	1916	1954	1922	1939	1947	1952	1923
Karnal	27·2	1·7	32·5	31·7	2·2	45·7	36·7	7·0	33·5	42·8	11·2	26·4	45·0	17·6	21·1	45·0	19·0	68·6	42·9	20·6	131·1
	1952	1955	1957	1956	1950	1954	1953	1957	1956	1952	1957	1955	1952	1957	1951	1955	1957	1954	1957	1955	1950
Patiala	27·8	0·6	36·6	33·3	1·7	59·2	37·8	6·7	27·4	42·8	12·8	11·4	46·7	17·2	16·8	46·1	19·4	70·4	45·0	22·2	238·0
	1952	1951	1953	1956	1950	1949	1953	1957	1951	1953	1951	1957	1954	1955	1950	1955	1952	1954	1951	1956	1949

X —Highest Maximum Temperature.

N—Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Tempera-ture	Rainfall	
																	Uttar Pradesh (East) (*cont'd.*)
38·9	21·7	177·8	39·4	17·8	250·2	40·0	11·1	123·9	35·0	5·6	48·3	33·3	1·7	50·5	1881	1881	Lucknow.
1911	1956	1881	1920	1899	1915	1896	1895	1949	1951	1926	1927	1896	1902	1885			
36·9	22·2	93·0	36·1	19·7	148·6	37·2	10·6	40·6	33·9	3·9	4·8	28·9	2·2	4·6	1952	1952	Lucknow. (Amausi Aerodrome).
1957	1956	1955	1956	1957	1957	1952	1957	1954	1952	1952	1956	1954	1954	1957			
36·8	22·2	197·4	36·7	16.7	172·7	37·8	11·1	87·1	33·9	6·1	7·9	27·8	3·3	15·7	1950	1950	Hardoi.
1957	1953	1956	1951	1950	1957	1952	1954	1955	1951	1952	1951	1955	1954	1950			
36·7	22·2	131·1	36·1	18·9	59·7	35·0	12·8	164·9	35·3	6·1	5·3	27·8	4·4	14·2	1950	1950	Lakhimpur Kheri.
1952	1957	1957	1956	1950	1957	1953	1954	1956	1957	1952	1951	1953	1950	1950			
38·3	21·1	325·9	38·3	18·3	236·2	37·8	12·2	171·5	33·3	5·0	78·0	31·7	1·7	81·0	1896	1896	Bahraich.
1903	1956	1938	1907	1912	1919	1907	1935	1945	1951	1952	1927	1896	1913	1956			
																	Uttar Pradesh (West)
37·8	20·0	232·4	37·8	17·8	76·2	38·3	11·1	57·9	34·4	4·4	8·1	30·6	2·2	45·0	1950	1950	Orai
1957	1950	1957	1951	1950	1957	1951	1957	1956	1953	1950	1951	1954	1950	1950			
42·2	21·7	249·7	40·6	18·3	261·6	40·6	12·2	119·6	36·1	5·0	62·2	32·8	2·2	24·4	1881	1881	Jhansi
1911	1939	1930	1913	1942	1910	1913	1957	1903	1941	1938	1927	1940	1937	1924			
42·2	20·8	149·9	40·6	17·2	286·0	41·1	9·4	169·7	36·1	2·8	45·7	30·0	-0·6	26·7	1881	1881	Agra
1918	1957	1952	1920	1935	1939	1920	1939	1910	1909	1926	1911	1954	1926	1923			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Agra (Aerodrome)
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
42·2	21·7	256·3	40·6	16·7	186·4	40·6	10.6	178·3	36·1	4·4	31·7	31·1	-1·1	59·2	1896	1896	Mainpuri
1918	1947	1949	1905	1942	1931	1896	1932	1903	1948	1938	1927	1956	1926	1923			
40·6	20·1	155·7	40·0	18·9	161·8	41·7	11·7	138·7	36·1	5·0	14·0	32·8	2·2	17·8	1932	1932	Aligarh.
1941	1957	1957	1938	1935	1947	1952	1949	1955	1944	1937	1951	1948	1945	1935			
40·6	21·1	224·3	38·3	16·7	206·8	38·3	8·9	179·6	36·1	5·6	63·0	29·4	1·7	37·6	1881	1881	Bareilly.
1918	1916	1948	1932	1899	1912	1918	1887	1884	1920	1934	1904	1889	1913	1923			
38·3	21·7	96·0	37·8	19·4	143·3	37·8	11·7	113·0	33·3	5·6	12·5	27·8	2·2	17·8	1945	1945	Meerut.
1954	1956	1952	1951	1950	1955	1951	1955	1954	1952	1952	1951	1955	1949	1957			
36·7	20·9	118·9	35·6	18·3	175·3	35·0	10·0	160·5	33·9	3·3	11·4	26·7	—0·6	25·9	1952	1952	Najibabad.
1956	1957	1956	1956	1957	1957	1953	1954	1956	1952	1956	1956	1955	1956	1957			
39·4	20·6	192·8	38·3	15·6	266·7	38·3	8·9	231·7	33·9	2·8	58·2	28·3	—0·6	58·2	1881	1881	Roorkee.
1918	1914	1889	1899	1944	1888	1899	1953	1956	1952	1934	1911	1889	1902	1923			
37·2	19·4	332·2	34·4	14·4	212·6	36·1	9·4	137·4	30·6	2·8	78·7	26·1	0	108·5	1881	1881	Dehra Dun.
1949	1932	1951	1938	1940	1924	1907	1938	1956	1952	1938	1911	1944	1954	1923			
																	Punjab (India) (Including Delhi).
40·0	22·2	181·6	40·6	17·8	176·5	39·4	9·4	172·7	35·0	3·9	20·8	28·9	—1·1	53·3	1881	1881	New Delhi.
1945	1939	1891	1938	1944	1904	1951	1937	1954	1943	1938	1925	1948	1945	1894			
43·3	21·7	346·7	42·2	15·6	259·1	41·7	8·3	122·7	36·7	2·8	17·3	30·6	—1·1	38·1	1916	1916	Hissar.
1918	1918	1926	1938	1923	1917	1951	1949	1917	1943	1926	1928	1953	1945	1924			
40·6	20·3	167·6	38·3	6·7	117·6	39·3	11·1	130·3	34·4	5·6	17·5	27·2	0·6	17·8	1949	1949	Karnal.
1952	1957	1952	1951	1949	1950	1957	1957	1956	1953	1953	1951	1954	1954	1957			
40·0	21·6	168·7	40·6	18·3	82·0	38·9	10·0	81·0	33·3	4·4	52·1	28·3	0·6	21·3	1948	1948	Patiala.
1954	1957	1955	1951	1950	1957	1951	1948	1955	1952	1952	1951	1953	1954	1957			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.

..Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AN

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Punjab (India) (Including Delhi) (*contd.*)—																					
Ambala . .	28·9	—1·1	104·9	33·3	—0·6	146·8	41·7	3·9	103·9	45·0	10·0	82·0	47·8	14·4	85·1	47·8	19·4	105·9	46·7	19·4	162·3
	1946	1947	1953	1956	1905	1898	1945	1945	1956	1941	1944	1935	1944	1920	1913	1923	1939	1954	1903	1956	1945
Ambala (Aerodrome)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chandigarh . .	24·6	0	33·0	32·8	1·7	42·4	35·0	6·1	38·9	40·0	12·2	21·8	43·3	15·0	9·4	43·3	17·8	54·4	41·6	18·3	105·4
	1957	1955	1957	1954	1956	1954	1955	1956	1956	1956	1955	1957	1954	1955	1955	1955	1956	1955	1957	1956	1955
Ludhiana . .	28·9	—1·7	119·6	33·3	—1·1	71·9	41·1	3·9	89·9	46·1	8·9	55·9	48·3	15·6	31·2	47·8	18·3	108·7	47·8	16·1	163·1
	1910	1935	1911	1956	1905	1942	1945	1945	1951	1941	1905	1944	1944	1924	1913	1932	1952	1894	1881	1901	1893
Ferozepur . .	27·2	0	45·2	33·3	0·6	29·0	37·2	5·0	55·1	43·9	10·6	15·0	47·2	14·4	29·0	46·7	18·3	42·4	45·1	21·1	119·6
	1952	1955	1957	1953	1951	1954	1955	1951	1957	1952	1955	1955	1954	1955	1951	1954	1952	1953	1957	1953	1951
Amritsar . .	25·0	—1·7	35·5	32·2	—0·6	25·9	35·6	3·9	39·4	43·3	8·8	15·2	46·1	13·3	24·6	46·7	16·7	33·5	45·6	20·6	146·3
	1952	1955	1957	1953	1950	1950	1953	1954	1951	1949	1957	1951	1954	1955	1951	1953	1952	1956	1954	1955	1948
Pathankot . .	26·1	0	65·5	29·4	3·3	49·3	33·9	6·1	83·1	41·1	7·2	29·2	44·4	12·2	24·4	45·6	18·3	94·0	43·4	17·2	192·0
	1952	1956	1954	1956	1955	1954	1953	1954	1956	1953	1955	1955	1952	1955	1952	1953	1957	1956	1957	1955	1954
Pathankot (Aerodrome)* . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Himachal Pradesh																					
Bilaspur . .	24·6	1·8	27·7	25·6	2·4	2·5	30·7	6·4	35·6	35·0	11·3	23·9	41·2	14·8	14·7	40·6	17·8	49.8	41·8	21·3	85·3
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Mandi . . .	23·9	—2·8	26·2	27·8	0·2	10·2	29·4	5·0	38·3	37·2	6·7	26·7	40·6	10·6	22·6	41·7	15·6	63·5	39·4	16·1	90·2
	1956	1955	1957	1956	1957	1955	1956	1957	1955	1956	1955	1955	1956	1955	1956	1954	1956	1956	1954	1955	1954
Jammu and Kashmir																					
Srinagar . .	17·2	—14·4	147·8	20·6	—20·0	66·3	25·6	—5·6	70·1	31·1	0	65·3	35·6	2·8	52·8	5·8	7·2	65·8	38·3	10·6	66·3
	1902	1893	1930	1940	1895	1906	1931	1895	1920	1946	1905	1957	1936	1920	1931	1946	1935	1907	1946	1919	1931
Gulmarg . .	..	..	..	..	..	..	..	..	..	..	..	..	..	—1·7	..	29·4	—3·9	83·3	29·4	2·8	83·6
	..	..	..	..	..	..	..	..	..	..	..	..	..	1955	..	1922	1935	1921	1918	1907	1903
Sonamarg . .	..	..	88·9	..	..	77·2	..	..	78·0	..	..	55·9	..	..	53·3	..	..	48·3	..	..	39·1
	..	..	1950	..	..	1951	..	..	1951	..	..	1953	..	..	1955	..	..	1948	..	..	1948
Dras . . .	5·0	—42·8	63·5	6·7	—43·3	105·4	10·0	—33·9	104·9	18·3	—25·0	65·8	25·0	—15·0	80·5	30·6	—10·0	22·9	33·9	0·6	36·8
	1907	1909	1943	1928	1911	1928	1903	1911	1930	1946	1905	1928	1910	1947	1940	1906	1947	1935	1905	1907	1901
Kargil . . .	6·7	—32·8	61·0	17·8	—31·7	64·5	18·3	—25·0	104·4	25·6	—11·7	76·2	32·8	—6·1	59·7	40·0	—0·6	17·8	43·3	5·0	24·1
	1940	1919	1943	1914	1920	1930	1941	1916	1930	1923	1919	1922	1917	1920	1940	1914	1921	1921	1912	1918	1929
Leh . . .	8·3	—28·3	24·4	12·8	—25·6	16·8	19·4	—19·4	16·0	23·9	—12·8	22·1	28·9	—4·4	22·3	33·9	—1·1	11·7	33·3	0·6	23·6
	1916	1899	1893	1953	1943	1903	1908	1903	1930	1941	1903	1896	1893	1886	1951	1882	1886	1892	1883	1929	1882
Skardu . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gurez . . .	..	..	76·2	..	..	63·5	..	..	63·5	..	..	35·6	..	..	50·8	..	..	63·5	..	..	45·7
	..	..	1954	..	..	1949	..	..	1949	..	..	1956		..	1949	..	..	1949	..	..	1953
Gilgit . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Misgar . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jammu . .	26·7	0·6	94·7	31·7	1·1	110·7	37·2	4·4	88·9	43·9	10·0	66·0	46·1	15·0	33·0	47·2	18·3	114·8	45·0	16·1	179·1
	1926	1945	1932	1947	1929	1914	1945	1945	1915	1941	1918	1914	1954	1914	1930	1953	1936	1953	1951	1951	1917

X—Highest Maximum Temperature. *Observatory started in October 1957. N—Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UP TO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Punjab (India) (Including Delhi) (*contd.*)
43·9	20·0	228·9	40·6	15·6	224·8	39·4	8·3	138·4	35·6	2·8	135·1	29·4	—0·6	47·5	1896	1896	Ambala.
1918	1939	1896	1951	1912	1945	1941	1898	1916	1947	1926	1951	1944	1913	1924			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Ambala (Aerodrome).
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
37·4	18·9	75·9	36·1	17·2	234·9	35·2	9·4	63·7	32·0	4·4	13·5	26·7	1·1	28·7	1954	1954	Chandigarh.
1957	1956	1955	1956	1955	1955	1957	1955	1955	1957	1957	1957	1955	1955	1957			
44·4	20·8	184·9	41·7	15·6	206·5	40·0	9·4	354·3	35·0	2·2	25·4	29·4	—1·1	60·5	1881	1881	Ludhiana.
1884	1957	1887	1905	1940	1883	1941	1932	1955	1909	1937	1957	1944	1930	1894			
40·0	21·3	116·8	39·4	18·3	183·6	39·4	8·3	63·3	35·0	4·4	42·7	28·3	—1·7	44·5	1950	1950	Ferozepur.
1955	1957	1953	1954	1953	1950	1952	1952	1955	1951	1956	1951	1953	1950	1957			
40·0	19·3	79·8	40·6	17·2	122·4	38·3	8·3	190·5	32·2	—0·6	19·3	26·7	—2·8	20·3	1948	1948	Amritsar.
1954	1957	1956	1949	1953	1954	1951	1953	1955	1952	1949	1951	1953	1950	1953			
36·2	18·9	150·4	36·7	15·6	137·2	36·7	10·6	277·9	32·2	5·6	26·7	26·1	1·1	30·0	1951	1951	Pathankot.
1957	1952	1956	1952	1953	1954	1952	1955	1955	1952	1955	1951	1955	1955	1957			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Pathankot (Aerodrome)*
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			**Himachal Pradesh**
35·4	20·0	68·6	35·4	16·1	103·4	32·8	9·7	25·4	29·0	7·0	34·8	23·9	3·4	25·9	1957	1957	Bilaspur.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			
34·2	16·6	146·3	33·9	14·9	96·5	31·6	6·7	74·7	27·3	2·8	26·4	25·0	—2·2	24·1	1945	1945	Mandi.
1957	1957	1954	1956	1957	1954	1957	1954	1955	1957	1956	1957	1955	1954	1957			
																	Jammu and Kashmir.
36·7	10·0	67·3	35·0	4·4	102·4	33·9	—1·7	59·9	23·9	0·6	39·8	18·3	—11·7	64·5	1891	1891	Srinagar.
1946	1932	1929	1934	1940	1928	1931	1934	1917	1946	1957	1957	1901	1902	1904			
26·7	2·8	115·3	25·0	—2·8	90·9	..	—5·6	..	..	..	..	..	..	..	1901	1901	Gulmarg.
1922	1951	1929	1934	1940	1905	..	1957	..	..	..	..	..	..	..			
..	..	22·1	..	..	251·2	..	..	31·7	..	..	29·2	..	..	54·4	..	1948	Sonamarg.
..	..	1952	..	..	1954	..	..	1949	..	..	1949	..	..	1950			
31·7	—2·2	38·6	29·4	—5·6	58·4	25·0	—20·0	88·9	15·0	—29·4	61·7	9·4	—45·0	81·5	1901	1901	Dras.
1907	1913	1944	1906	1906	1928	1916	1937	1917	1902	1911	1946	1904	1910	1921			
40·6	5·6	25·4	38·3	—0·6	20·3	32·2	—10·6	54·9	20·0	—9·4	15·2	12·2	—10·6	53·6	1911	1911	Kargil.
1912	1920	1923	1914	1920	1941	1916	1917	1917	1915	1937	1918	1941	1937	1941			
32.2	2.8	51.3	30.6	—4.4	25.9	25.6	—7.8	39.1	20.0	—13.9	6.6	12.8	—25.6	15.2	1881	1881	Leh.
1946	1941	1933	1883	1940	1893	1916	1923	1955	1929	1934	1946	1891	1937	1944			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			Skardu.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
..	..	63.0	..	..	162.6	..	..	165.1	..	..	16.5	..	..	101.6	..	1948	Gurez.
..	..	1956	..	..	1953	..	..	1949	..	..	1950	..	..	1948			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Gilgit.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Misgar.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
41.7	17.8	228.6	38.3	15.0	184.1	37.2	12.2	160.0	31.7	6.7	40.1	27.2	3.3	66.8	1911	1911	Jammu.
1918	1912	1926	1954	1950	1950	1951	1914	1955	1951	1949	1928	1944	1914	1924			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S. T. . . .—Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Jammu and Kashmir —(*contd.*)																					
Gund	..	..	50·8	..	..	31·7	..	..	37·3	..	..	39·6	..	..	58·4	..	..	24·9	..	..	23·6
	..	..	1957	..	..	1956	..	..	1957	..	..	1956	..	..	1957	..	..	1957	..	..	1956
Pandras	..	..	4·1	..	..	12·7	..	..	5·1	..	..	25·9	..	..	13·2	..	..	24·6	..	..	12·9
	..	..	1956	..	..	1957	..	..	1957	..	..	1956	..	..	1956	..	..	1957	..	..	1957
Panamik	..	..	4·3	..	..	4·8	..	..	4·1	..	..	2·5	..	..	5·1	..	..	6·3	..	..	5·1
	..	..	1957	..	..	1957	..	..	1956	..	..	1957	..	..	1957	..	..	1957	..	..	1957
Khangral	..	..	0·5	..	..	1·3	..	..	1·5	..	..	2·0	..	..	22·9	..	..	2·5	..	..	22·9
	..	..	1956	..	..	1956	..	..	1956	..	..	1957	..	..	1957	..	..	1956	..	..	1957
Digar	..	..	7·6	..	..	6·1	..	..	1·8	..	..	12·7	..	..	5·1	..	..	2·5	..	..	23·9
	..	..	1957	..	..	1956	..	..	1956	..	..	1957	..	..	1957	..	..	1957	..	..	1956
Khalatse	..	..	2·3	..	..	1·5	..	..	1·3	..	..	1·0	..	..	0	..	..	1·5	..	..	76·7
	..	..	1956	..	..	1957	..	..	1957	..	..	1957	..	..	..	..	..	1957	..	..	1956
Mulbik	..	..	17·8	..	..	12·7	..	..	20·3	..	..	20·3	..	..	2·5	..	..	19·2	..	..	30·5
	..	..	1956	..	..	1957	..	..	1956	..	..	1957	..	..	1956	..	..	1956	..	..	1957
Rajasthan (West)																					
Sri Ganganagar	36·1	—2·2	35·1	35·0	—2·8	28·2	41·1	0·6	47·0	46·1	8·3	22·3	40·4	11·7	48·0	50·0	18·3	99·1	46·7	21·7	86·1
	1948	1945	1948	1953	1950	1948	1942	1945	1957	1941	1940	1944	1944	1945	1951	1934	1952	1938	1948	1952	1956
Churu	27·5	1·7	15·0	28·6	2·1	0	35·3	9·9	13·8	39·8	11·5	0	44·3	19·2	4·3	44·2	21·1	17·0	44·8	22·8	76·0
	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957
Bikaner	31·1	—2·2	25·4	37·2	—2·2	46·7	42·8	—0·6	43·9	47·2	8·3	31·0	49·4	16·7	48·3	48·9	17·8	110·7	47·2	20·6	134·1
	1952	1954	1912	1953	1950	1906	1924	1898	1911	1925	1953	1944	1914	1930	1883	1897	1888	1894	1901	1931	1920
Jaisalmer	30·6	—4·4	7·6	37·8	—2·2	5·3	40·0	6·1	8·9	43·9	10·6	1·5	47·8	20·4	16·0	44·7	20·5	19·8	45·0	21·7	98·0
	1952	1949	1957	1953	1951	1952	1949	1954	1955	1949	1953	1951	1956	1957	1951	1957	1957	1953	1951	1955	1954
Phalodi	31·1	—3·3	41·1	37·8	0·6	23·4	41·7	1·7	12·9	44·4	12·2	5·1	47·2	19·4	33·8	46·7	20·6	84·8	45·6	22·2	105·2
	1946	1942	1944	1953	1951	1948	1945	1915	1948	1948	1953	1944	1956	1944	1953	1944	1945	1945	1947	1950	1948
Jodhpur	32·8	—2·2	40·1	38·3	—0·6	22·6	41·7	5·0	20·6	46·1	9·4	26·7	48·9	17·2	38·1	47·8	19·4	152·7	45·6	19·4	194·1
	1932	1905	1948	1953	1920	1939	1946	1908	1926	1925	1918	1919	1932	1909	1916	1901	1914	1917	1901	1926	1943
Barmer	33·3	—1·7	59·9	39·4	4·0	23·6	43·3	8·9	24·6	45·6	12·2	23·1	48·9	16·7	36·6	46·7	18·9	55·1	44·4	19·4	124·5
	1949	1935	1945	1943	1957	1939	1946	1945	1940	1949	1945	1933	1932	1931	1945	1946	1931	1933	1939	1936	1944
Rajasthan (East)																					
Alwar	28.3	2.8	30.4	34.4	4.4	0	37.8	10.0	15.7	42.2	16.1	1.8	50.6	22.8	9.4	48.8	26.7	38.6	42.8	22.8	55.3
	1956	1956	1957	1956	1956	..	1956	1956	1956	1956	1956	1957	1956	1956	1957	1956	1956	1957	1957	1956	1957
Sikar	30.6	—2.2	19.1	36.1	—2.8	16.5	39.4	4.4	10.9	43.9	8.3	5.3	47.8	15.6	12.9	43.9	20.6	53.3	44.4	21·7	129.3
	1949	1955	1957	1953	1951	1954	1949	1956	1956	1949	1955	1953	1956	1955	1950	1948	1954	1955	1947	1956	1957
Jaipur	31.7	—2.2	37.1	36.7	—2.2	57.1	42.8	3.3	33.8	44.4	9.4	20.6	47.8	15.6	30.2	47.2	20.6	87.1	46.7	20.6	165.9
	1932	1905	1957	1953	1905	1954	1892	1898	1926	1914	1905	1944	1932	1920	1930	1897	1934	1920	1901	1931	1888
Jaipur (Sanganer Aerodrome)	28.9	0	45.2	36.1	3.3	12.5	38.9	8.3	14.0	42.8	12.8	6.3	46.1	18.3	7.4	45.6	20.1	24.4	43.1	22.2	96.8
	1952	1954	1957	1953	1956	1952	1953	1956	1957	1953	1955	1952	1956	1955	1955	1954	1957	1957	1957	1957	1957
Dholpur	27.8	3.3	3.8	33.3	4.4	0.8	43.3	8.9	26.7	42.8	15.0	5.6	46.1	21.6	9.4	46.1	23.9	76.2	42.2	23.3	102.6
	1956	1956	1956	1956	1957	1956	1955	1957	1957	1957	1957	1957	1956	1957	1957	1955	1955	1955	1957	1956	1957

+—Highest Maximum Temperature. N—Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UP TO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Jammu and Kashmir—(*contd.*)
..	..	49.3	..	..	19.0	..	..	38.6	..	..	11.7	..	..	7.9	..	1955	Gund.
..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	1955			
..	..	73.7	..	..	10.7	..	..	25.4	..	..	7.6	..	..	2.5	..	1955	Pandras.
..	..	1957	..	..	1955	..	..	1955	..	..	1957	..	..	1957			
..	..	16.5	..	..	1.8	..	..	3.8	..	..	2.3	..	..	2.3	..	1955	Panamik.
..	..	1957	..	..	1957	..	..	1957	..	..	1956	..	..	1956			
..	..	12.7	..	..	25.4	..	..	48.3	..	..	0.8	..	..	1.0	..	1955	Khangral.
..	..	1957	..	..	1957	..	..	1955	..	..	1957	..	..	1957			
..	..	20.8	..	..	7.6	..	..	38.1	..	..	2.5	..	..	12.2	..	1955	Digar.
..	..	1956	..	..	1957	..	..	1955	..	..	1957	..	..	1957			
..	..	17.5	..	..	1.8	..	..	25.4	..	..	4.6	..	..	0	..	1955	Khalatse.
..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	..			
..	..	30.5	..	..	1.3	..	..	165.1	..	..	4.5	..	..	7.6	..	1955	Mulbik.
..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	1957			
																	Rajasthan (West)
42.8	21.7	146.1	42.8	15.6	99.3	41.1	6.7	7·9	37.2	1.7	18.5	30.0	—1.7	20.8	1934	1937	Sri Ganganagar.
1946	1950	1948	1939	1944	1945	1952	1949	1956	1943	1938	1951	1953	1950	1957			
41.4	23.7	25.2	37.7	18.9	5.8	37.9	10.6	12.7	35.1	5.2	7.6	28.2	0.9	1.0	1957	1957	Churu.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			
43.3	21.1	142.0	43.9	19.4	165.6	42.2	7.8	95.8	37.2	0.6	41.9	32.2	—2.8	30.0	1881	1881	Bikaner.
1899	1889	1909	1915	1924	1945	1951	1949	1917	1943	1937	1951	1954	1950	1892			
43.3	21.7	104.4	43.3	21.0	26.9	42.2	8.3	3.1	37.8	5.0	22.1	32.8	1.1	6.3	1948	1948	Jaisalmer.
1957	1955	1955	1949	1957	1953	1951	1949	1954	1950	1956	1957	1953	1955	1957			
43.1	21.7	72.4	40.6	20.1	63.5	42.2	8.9	24.1	36.7	5.0	13.5	32.2	0.6	10.2	1941	1941	Phalodi.
1957	1956	1953	1951	1957	1954	1941	1949	1956	1943	1946	1957	1953	1945	1942			
42.9	20.6	184.4	42.8	17.8	215.9	42.2	10.0	142.0	37.2	5.6	26.9	33.3	—0.6	22.9	1891	1891	Jodhpur.
1957	1927	1927	1915	1908	1924	1920	1949	1917	1957	1938	1893	1953	1945	1937			
43.3	20.0	25.5	42.8	16.7	55.4	42.8	13.9	18.0	38.2	6.7	3.8	34.4	3.3	14.0	1931	1931	Barmer.
1957	1941	1944	1951	1935	1955	1951	1933	1956	1957	1946	1936	1944	1936	1942			
																	Rajasthan (East)
39·4	21·7	60·7	38·8	21·7	78·0	40·6	16·7	91·7	35·0	10·6	3·1	27·8	..	8·1	1956	1956	Alwar.
1957	1957	1956	1957	1956	1957	1957	1956	1956	1957	1957	1957	1956	..	1956			
4 0·0	21·1	89·7	39·4	16·7	67·1	40·6	6·7	49·5	34·2	2·2	22·1	30·6	—1·7	20·3	1946	1946	Sikar.
1957	1955	1947	1954	1957	1955	1951	1949	1955	1957	1946	1951	1953	1954	1946			
14·7	21·1	179·1	41·7	17·0	187·5	40·0	6·9	114·3	36·1	3·3	32·3	31·1	0·6	41·4	1881	1881	Jaipur.
1957	1954	1932	1899	1957	1924	1899	1957	1924	1909	1938	1893	1953	1945	1924			
1911	18·9	103·6	37·8	17·1	77·2	37·8	11·7	59·4	34·0	6·7	6·9	30·0	1·7	0	1952	1952	Jaipur. (Sanganer Aerodrome).
38·3	1953	1957	1954	1957	1956	1952	1955	1956	1957	1956	1957	1954	1955	..			
1955	21·1	83·8	37·2	20·9	54·6	38·2	11·1	105·4	35·0	3·9	0	31·3	2·2	3·1	1955	1955	Dholpur.
39·0	1955	1956	1956	1957	1955	1957	1957	1955	1957	1956	..	1957	1955	1956			

R— Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T. .. —Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AN

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Rajasthan (East) (*Contd.*)																					
Ajmer . .	31.7	—2.2	46.5	35.6	—1.1	33.0	41.7	2.2	42.4	43.3	9.4	38.1	45.6	15.6	43.2	45.6	17.2	119.4	44.4	20.0	148.1
	1902	1935	1948	1953	1905	1907	1892	1898	1932	1896	1886	1909	1912	1881	1925	1901	1944	1917	1901	1931	1943
Kotah . . .	33.9	1.7	35.8	38.3	2.2	50.8	42.8	7.2	17.8	45.6	14.4	25.9	47.8	18.9	53.3	47.8	21.1	132.1	46.1	22.2	249.2
	1912	1929	1915	1943	1929	1915	1945	1945	1944	1925	1905	1933	1944	1930	1917	1945	1941	1917	1901	1939	1945
Chambal . .	30.0	0	8.4	35.0	0.5	5.1	38.9	5.6	29.7	42.8	14.4	0	46.1	15.6	9.9	44.4	16.3	38.1	41.7	20.6	191.5
	1957	1956	1957	1956	1957	1956	1956	1956	1957	1956	1956	..	1956	1957	1957	1955	1957	1956	1957	1956	1956
Jhalawar .	32.8	—0.6	47.7	36.7	1.7	11.4	41.7	5.0	14.2	44.4	14.4	34.8	46.7	18.9	27.2	46.1	21.1	252.0	42.2	20.6	246.6
	1932	1935	1941	1953	1934	1942	1945	1943	1957	1942	1955	1933	1932	1955	1936	1945	1950	1945	1931	1955	1947
Udaipur . .	30.6	1.7	49.5	36.7	1.1	14.0	38.3	7.4	20.1	41·7	10.6	26.9	43.9	16.4	9.9	41.7	19.4	64.8	37.8	21.1	105.9
	1952	1954	1953	1953	1957	1948	1949	1957	1954	1948	1955	1953	1956	1957	1949	1955	1955	1945	1948	1954	1950
Erinpura (Jawai Dam).	30.0	5.0	36.8	36.1	3.4	2.5	39.4	9.4	16.8	41.1	14.4	0	44.4	22.1	1.0	42.8	20.6	32.0	38.1	22.8	35.6
	1956	1956	1957	1955	1957	1955	1955	1956	1957	1956	1955	..	1956	1957	1955	1955	1957	1955	1957	1956	1956
Madhya Pradesh (West)																					
Gwalior (P.B.O.) .	31.7	—1.1	40.1	36.7	0.6	20.6	41.7	7.2	14.5	45.6	12.8	15.2	48.3	20.6	41.9	47.2	21.1	162.6	43.9	22.8	149.9
	1943	1954	1957	1949	1950	1954	1945	1945	1956	1944	1953	1943	1947	1957	1953	1945	1944	1952	1948	1942	1947
Sheopur Kalan .	31.7	0.6	21.6	37.2	1.9	20.8	40.0	7.2	29.7	43.9	13.9	7.6	47.8	21.1	15.7	46.7	22.2	89.1	42.2	22.2	187.2
	1952	1954	1957	1953	1957	1954	1955	1956	1956	1953	1955	1952	1954	1954	1957	1954	1955	1955	1951	1953	1957
Guna . . .	31.7	—2.2	30.5	36.1	—1.1	40.6	41.1	5.0	59.9	43.3	11.1	3.6	46.1	17.8	44.7	46.1	20.0	191.5	41.7	20.6	195.6
	1946	1934	1941	1953	1950	1942	1945	1945	1950	1948	1940	1953	1954	1937	1938	1945	1944	1945	1931	1941	1957
Rajgarh . .	30.6	2.8	10.7	35.6	2.2	2.0	40.0	8.9	19.3	43.3	14.4	1.0	45.6	22.3	27.4	43.6	22.8	26.9	41.2	22.2	153.7
	1956	1956	1956	1956	1957	1956	1956	1957	1957	1956	1956	1957	1956	1957	1956	1957	1957	1956	1957	1956	1956
Neemuch .	32.8	—1.1	68.3	36.7	—0.6	44.7	41.7	4.4	50.0	44.4	8.9	31.5	46.7	13.9	49.3	46.1	15.6	172.7	42.2	14.4	152.4
	1898	1905	1891	1887	1886	1915	1892	1904	1923	1925	1905	1888	1912	1920	1883	1897	1885	1933	1901	1910	1943
Ratlam . .	31.7	5.0	18.0	37.8	5.6	8.1	41.1	9.4	19.8	41.7	15.0	10.2	43.9	21.1	21.6	42.2	21.1	98.8	36.7	20.0	132.8
	1952	1952	1953	1953	1951	1956	1952	1957	1954	1953	1955	1957	1956	1956	1956	1953	1952	1951	1957	1951	1954
Alirajpur .	32.2	7.3	2.3	37.2	3.7	0.5	40.0	9.8	0	42.8	17.2	0	42.8	21.7	26.7	39.2	21.5	69.1	34.7	21.7	120.9
	1957	1957	1956	1956	1957	1956	1956	1957	..	1956	1956	..	1956	1956	1956	1957	1957	1956	1957	1956	1957
Indore . .	32.2	—1.1	80.5	36.7	—2.8	32.0	41.1	5.0	19.3	43.3	7.8	51.1	45.6	16.7	99.1	45.0	18.9	127.0	38.3	18.9	293.4
	1938	1935	1920	1953	1929	1888	1892	1898	1944	1896	1905	1895	1916	1881	1886	1897	1949	1895	1931	1910	1913
Bhopal (Bairagarh)	32.2	0.6	34.3	36.1	1.7	15.5	40.0	7.8	35.1	43.3	12.2	13.5	45.6	19.4	72.6	43.9	19.5	120.9	40.6	19.4	218.2
	1934	1935	1948	1953	1950	1944	1945	1945	1936	1942	1935	1937	1947	1933	1956	1945	1957	1945	1931	1946	1939
Khandwa . .	35·6	1·7	49·5	38·9	0·6	48·3	43·3	6·1	27·4	46·1	11·1	26·2	47·2	17·2	71·1	45·6	18·7	153·2	40·0	20·0	240·5
	1932	1946	1920	1953	1929	1928	1892	1898	1881	1896	1905	1891	1947	1881	1956	1942	1957	1940	1900	1941	1927
Hoshangabad .	32·2	3·3	40·1	37·8	6·1	36·6	41·1	10·6	41·9	45·0	16·1	48·3	46·1	20·0	35·8	45·6	21·1	178·8	41·1	18·9	238·8
	1950	1935	1919	1953	1950	1917	1953	1935	1957	1942	1951	1890	1954	1947	1893	1953	1946	1895	1931	1951	1898
Betul . . .	30·6	2·8	10·9	37·2	1·1	3·6	38·9	8·8	34·5	41·7	15·0	23·1	43·3	19·2	23·1	42·2	15·0	73·7	34·4	20·0	129·8
	1950	1953	1957	1953	1950	1950	1953	1957	1957	1954	1955	1957	1954	1957	1957	1953	1949	1951	1951	1954	1954
Chhindwara . .	30·0	3·3	22·3	35·6	2·8	37·9	38·3	8·9	13·7	41·1	15·6	15·2	42·8	20·6	47·7	42·2	18·3	73·9	34·4	20·0	91·4
	1950	1951	1955	1953	1950	1950	1953	1957	1954	1949	1955	1957	1957	1956	1956	1955	1949	1956	1952	1952	1954
Seoni . . .	32·8	2·8	49·5	37·2	3·3	70·1	40·6	6·1	42·2	43·9	11·7	41·9	44·4	15·0	74·2	45·0	17·8	279·4	37·8	17·8	276·1
	1882	1937	1943	1896	1911	1898	1899	1910	1936	1942	1905	1937	1954	1917	1918	1942	1928	1884	1931	1941	1929

N=Lowest Minimum Temperature.

Highest Maximum Temperaute.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Rajasthan (East)—(*contd.*)
40·0	20·6	164·6	40·6	16·1	156·2	38·9	7·8	119·4	35·0	2·8	33·0	31·1	0·6	56·6	1881	1881	Ajmer.
1883	1935	1928	1915	1950	1924	1951	1889	1956	1901	1926	1893	1890	1936	1913			
41·1	18·9	172·2	40·6	20·0	185·4	41·1	13·4	98·0	37·2	7·8	54·1	33·9	3·9	30·0	1901	1901	Kotah.
1911	1947	1955	1951	1933	1926	1930	1957	1930	1901	1926	1927	1941	1926	1927			
37·2	15·6	109·7	40·6	14·4	104·1	37·2	8·3	45·5	37·2	3·3	1·0	30·6	−1·1	1·0	1955	1955	Chambal.
1955	1957	1956	1956	1957	1955	1957	1955	1955	1957	1956	1957	1957	1955	1956			
37·8	18·3	184·7	38·9	17·0	125·2	40·0	10·6	76·2	35·6	5·6	66·0	33·3	2·2	44·2	1931	1931	Jhalawar.
1955	1954	1942	1951	1957	1935	1951	1934	1956	1941	1956	1933	1941	1945	1947			
35·5	18·9	105·7	37·8	15·6	183·9	37·2	9·9	41·9	35·0	5·6	38·1	31·7	0·6	5·3	1947	1947	Udaipur.
1957	1950	1957	1951	1950	1950	1951	1957	1956	1951	1956	1948	1954	1950	1956			
38·3	22·3	180·9	35·6	21·1	152·9	36·9	12·8	22·1	34·7	10·0	0·8	29·9	6·7	3·8	1955	1955	Erinpura. (Jawai Dam).
1957	1957	1957	1956	1955	1955	1957	1957	1957	1957	1956	1957	1957	1957	1957			
																	Madhya Pradesh (West)
38·3	21·1	108·5	37·2	18·3	159·0	39·4	8·9	150·6	35·6	3·9	11·7	31·1	0	31·7	1941	1941	Gwalior (P.B.O.)
1954	1955	1954	1951	1942	1945	1951	1952	1955	1941	1946	1946	1954	1945	1952			
38·9	21·1	86·1	38·3	17·4	69·1	40·6	10·2	100·8	37·3	6·1	19·1	31·7	0·6	10·2	1951	1951	Sheopur Kalan.
1955	1953	1952	1951	1957	1954	1951	1957	1956	1957	1956	1951	1953	1954	1956			
36·7	19·4	181·6	36·7	16·7	298·5	38·3	8·3	63·5	34·4	2·8	64·5	31·7	−0·6	35·6	1931	1931	Guna.
1955	1952	1934	1932	1942	1947	1951	1957	1956	1951	1940	1946	1941	1950	1946			
34·9	20·6	142·2	35·6	15·0	116·8	37·0	9·4	36·6	34·6	4·4	0	31·7	0	57·1	1955	1955	Rajgarh.
1957	1956	1956	1955	1956	1955	1957	1955	1955	1957	1956	..	1957	1955	1956			
37·8	18·3	186·0	38·9	17·2	177·5	39·4	10·6	102·1	35·6	5·0	51·6	31·7	0·6	22·3	1881	1881	Neemuch.
1899	1913	1957	1951	1902	1947	1899	1890	1955	1901	1938	1934	1953	1929	1892			
35·0	20·0	153·4	37·8	16·1	255·3	38·3	12·8	162·3	34·4	9·4	15·7	32·2	6·1	4·3	1948	1948	Ratlam.
1954	1956	1957	1951	1954	1950	1951	1952	1955	1951	1956	1951	1954	1955	1950			
32·3	20·6	140·6	34·4	20·0	111·8	37·3	12·8	143·0	35·4	7·2	3·1	32·2	6·1	50·8	1955	1955	Alirajpur.
1957	1956	1957	1956	1956	1955	1957	1956	1955	1957	1956	1957	1957	1955	1956			
35·0	18·9	209·8	37·2	16·7	136·7	37·8	8·9	78·5	35·0	5·6	64·5	32·8	1·1	45·0	1881	1881	Indore.
1899	1952	1928	1899	1902	1933	1899	1890	1938	1925	1938	1936	1896	1936	1928			
35·0	19·4	188·5	36·1	17·2	233·2	37·8	11·7	123·7	33·3	6·1	68·3	32·8	3·3	31·7	1931	1931	Bhopal (Bairagarh).
1932	1956	1944	1951	1951	1947	1951	1943	1955	1951	1941	1936	1941	1936	1935			
39·4	19·4	203·2	40·6	17·8	195·1	40·6	9·4	146·6	37·2	6·1	84·8	34·4	2·8	95·8	1881	1881	Khandwa.
1951	1943	1957	1899	1942	1882	1899	1890	1924	1951	1949	1936	1896	1929	1886			
35·6	19·4	294·1	37·2	17·8	207·0	37·2	12·2	98·3	35·0	3·9	86·4	32·2	4·4	109·7	1931	1881	Hoshangabad.
1950	1943	1919	1954	1942	1950	1951	1952	1943	1951	1952	1912	1953	1938	1928			
32·2	18·9	127·8	32·2	17·4	125·0	33·9	8·3	92·7	32·2	5·6	90·7	30·6	3·3	21·6	1948	1948	Betul.
1950	1951	1953	1951	1957	1954	1952	1952	1951	1948	1956	1956	1952	1955	1950			
33·3	18·2	101·3	34·9	16·3	151·1	34·1	10·6	75·2	31·1	5·6	120·7	29·4	3·3	10·9	1949	1949	Chhindwara.
1950	1957	1955	1957	1957	1955	1957	1952	1955	1957	1956	1956	1957	1955	1956			
35·6	17·2	281·9	35·0	16·1	208·0	36·1	10·6	124·5	33·9	6·7	116·8	31·7	3·3	68·3	1881	1881	Seoni.
1899	1917	1913	1944	1942	1947	1899	1910	1916	1899	1939	1946	1899	1936	1909			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.

..—Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Madhya Pradesh (West) *(contd.)*—																					
Sagar	31·7	1·7	84·1	35·0	1·1	43·2	41·1	7·2	60·9	43·9	10·6	23·9	45·6	17·8	58·2	45·6	18·3	235·5	41·1	16·1	284·5
	1912	1934	1887	1953	1929	1951	1892	1898	1957	1896	1926	1937	1914	1920	1903	1897	1922	1890	1931	1904	1904
Nowgong	32·2	—1·7	46·5	36·7	—0·6	48·0	41·7	5·0	25·9	45·0	11·7	40·6	47·2	13·9	31·0	46·7	18·4	462·8	45·6	21·2	232·7
	1946	1935	1921	1934	1905	1946	1931	1945	1913	1948	1905	1909	1947	1932	1913	1954	1957	1897	1931	1957	1902
Madhya Pradesh (East)																					
Sutna	32·2	0·6	81·3	35·0	1·1	49·3	41·1	4·4	43·9	45·0	12·2	52·8	46·7	18·3	33·5	47·8	19·4	562·6	45·0	17·8	209·5
	1946	1933	1955	1956	1905	1936	1945	1949	1893	1896	1918	1946	1947	1933	1914	1954	1929	1882	1931	1929	1894
Umaria	34·4	0	61·2	36·7	0·6	55·6	40·0	5·0	43·4	44·4	12·8	31·5	45·6	18·3	27·7	45·6	20·0	209·8	38·3	20·6	178·3
	1943	1933	1939	1954	1950	1950	1955	1945	1941	1942	1951	1937	1954	1937	1957	1945	1948	1946	1954	1939	1946
Jabalpur	32·8	1·1	63·7	37·2	0	55·6	41·1	3·3	39·6	45·0	10·6	50·3	46·7	17·2	73·7	46·1	19·4	185·2	41·7	20·6	342·9
	1946	1946	1919	1953	1905	1898	1892	1898	1927	1942	1905	1935	1954	1937	1885	1889	1922	1882	1902	1930	1915
Mandla	30·6	0·6	38·3	35·6	2·7	15·7	39·4	7·8	29·7	42·8	11·1	19·3	45·0	16·8	20·1	44·4	21·1	43·4	38·3	21·1	148·1
	1954	1954	1953	1953	1957	1953	1955	1957	1951	1954	1956	1951	1954	1957	1956	1955	1956	1955	1954	1955	1953
Pendra	30·0	3·3	45·0	34·4	1·7	42·9	39·4	8·9	70·9	42·8	13·3	67·8	43·9	17·8	55·9	43·9	16·7	242·1	37·2	18·3	166·6
	1946	1937	1933	1953	1929	1917	1955	1906	1956	1942	1930	1926	1928	1933	1925	1942	1915	1946	1954	1942	1953
Ambikapur	27·8	1·1	20·1	33·3	3·9	48·0	38·3	8·2	21·8	41·1	12·8	21·3	43·3	18·9	51·1	43·3	21·0	51·3	35·6	20·6	109·2
	1956	1954	1954	1954	1956	1956	1955	1957	1952	1956	1955	1951	1956	1951	1956	1955	1957	1956	1954	1951	1954
Champa	32·2	7·8	64·0	36·7	8·3	25·4	41·7	13·2	88·1	45·0	18·3	13·2	47·2	20·5	37·6	47·2	21·7	96·5	39·4	21·7	142·0
	1950	1954	1945	1953	1950	1956	1955	1957	1951	1952	1957	1945	1948	1957	1956	1953	1949	1956	1954	1946	1952
Raigarh	32·8	7·8	39·4	37·2	9·4	23·4	42·2	13·9	61·0	45·0	19·2	29·2	46·7	22·8	40·4	47·2	22·8	139·7	36·7	22·2	178·8
	1955	1951	1953	1955	1956	1956	1955	1957	1951	1956	1957	1951	1956	1956	1956	1953	1956	1955	1952	1955	1952
Raipur	35·0	5·0	55·4	37·8	5·0	57·4	43·3	8·3	55·9	46·1	15·0	38·3	47·2	14·4	80·3	47·2	16·1	202·7	38·9	20·0	213·1
	1955	1908	1921	1899	1893	1917	1892	1898	1906	1942	1905	1909	1935	1904	1904	1931	1884	1919	1931	1884	1884
Kanker	32·8	3·9	53·3	35·0	3·9	52·8	40·0	10·0	48·3	43·3	15·6	44·2	44·4	17·8	45·7	46·1	17·8	245·9	35·0	18·9	289·1
	1931	1946	1943	1953	1934	1950	1942	1948	1957	1942	1944	1951	1953	1945	1932	1931	1936	1940	1954	1940	1951
Jagdalpur (P.B.O.)	33·1	4·4	40·6	36·7	5·0	120·4	40·6	9·4	45·7	43·3	13·9	54·4	46·1	17·2	64·3	44·4	17·2	133·1	35·6	19·4	180·9
	1957	1913	1926	1953	1943	1919	1953	1948	1927	1941	1943	1939	1912	1917	1925	1953	1913	1940	1920	1941	1934
Gujarat																					
Deesa	35·6	—2·2	28·2	40·6	—0·6	31·5	46·1	5·6	24·1	46·1	10·0	24·1	50·0	17·8	68·6	48·3	20·6	102·4	43·9	19·4	252·2
	1932	1935	1940	1953	1929	1941	1892	1905	1911	1897	1905	1923	1912	1920	1920	1897	1943	1956	1902	1887	1908
Idar	30·7	7·8	5·8	32·2	9·7	0	36·4	10·2	0	41·1	17·9	0·5	41·2	20·7	1·3	41·1	22·4	48·0	37·0	22·4	51·6
	1957	1957	1957	1957	1957	..	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Ahmedabad	36.1	3.3	30.7	40.6	2.2	26.4	43.9	9.4	12.2	46.1	12.8	21.6	47.8	19.4	46.2	47.2	19.4	130.8	42.2	21.1	414.8
	1912	1954	1948	1953	1920	1917	1908	1908	1940	1896	1955	1947	1916	1920	1917	1897	1920	1937	1902	1908	1927
Dohad	33.9	0	11.9	39.4	2.2	20.6	41.7	9.4	22.3	43.3	15.0	15.2	45.0	20.0	122.7	44.4	21.1	90.4	38.3	20.6	145.5
	1949	1935	1953	1953	1950	1942	1945	1945	1944	1933	1935	1946	1932	1933	1938	1945	1957	1940	1939	1947	1952
Baroda	35.6	—1.1	15.2	41.7	1.7	31.7	43.3	6.7	10.4	45.0	11.7	0	46.7	18.9	71.4	45.6	21.5	94.0	40.0	21.1	183.4
	1952	1935	1953	1953	1950	1933	1949	1936	1954	1956	1955	..	1955	1939	1947	1945	1957	1934	1939	1943	1941
Baroda (Aerodrome)	35.6	5.0	14.0	40.6	3.9	3.1	41.7	10.9	2.8	43.9	14.4	0.3	46.1	21.6	40.9	43.3	21.2	65.3	38.3	22.2	111.5
	1952	1954	1953	1953	1950	1954	1956	1957	1954	1956	1955	1957	1955	1957	1956	1953	1957	1954	1949	1952	1956
Broach	36.9	5.6	7.9	42.8	6.1	2.5	43.3	11.5	14.0	45.6	16.1	0.3	47.8	21.2	80.5	44.4	22.3	109.2	37.8	22.8	195.1
	1957	1954	1953	1953	1957	1954	1956	1957	1954	1956	1955	1954	1955	1957	1956	1953	1957	1954	1951	1954	1954

X=Highest Maximum Temperature. N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Madhya Pradesh (West) *(contd.)*
35·6	19·4	274·3	38·3	16·7	159·3	37·8	11·7	78·7	34·4	6·1	105·2	31·7	4·4	73·9	1881	1881	Sagar.
1899	1956	1908	1881	1926	1947	1899	1890	1927	1909	1926	1902	1896	1926	1886			
38·3	20·6	247·4	39·4	17·2	169·2	39·4	8·4	127·0	35·6	3·9	75·2	32·8	0	84·6	1881	1881	Nowgong.
1945	1957	1903	1929	1944	1906	1930	1957	1926	1929	1941	1910	1929	1926	1886			
																	Madhya Pradesh (East)
36·1	21·1	299·7	37·2	16·7	178·1	38·3	10·0	152·4	35·5	5·0	84·6	32·2	1·1	47·7	1881	1881	Sutna.
1932	1954	1919	1932	1912	1951	1896	1890	1882	1957	1941	1956	1948	1937	1929			
35·0	20·0	302·0	34·4	17·8	126·5	35·2	9·4	83·8	32·9	3·9	79·5	31·7	0·6	41·1	1932	1932	Umaria.
1945	1951	1953	1941	1944	1933	1957	1933	1937	1957	1937	1946	1941	1937	1940			
35·0	18·3	320·5	35·0	16·7	251·7	36·7	7·8	121·9	33·9	3·9	93·5	32·8	0·6	68·1	1881	1881	Jabalpur.
1954	1929	1923	1941	1899	1926	1941	1881	1916	1956	1889	1956	1941	1902	1885			
33·3	19·9	157·8	33·9	17·4	148·1	35·0	7·8	121·4	32·2	3·3	65·8	30·0	1·1	28·5	1950	1950	Mandla.
1954	1957	1957	1951	1957	1955	1951	1952	1951	1957	1950	1956	1953	1955	1950			
32·8	18·3	262·1	32·8	17·8	150·4	33·9	11·7	91·4	31·7	6·1	58·4	30·0	3·9	37·1	1906	1906	Pendra.
1925	1910	1953	1938	1935	1926	1920	1933	1915	1909	1926	1924	1941	1936	1906			
33·3	21·1	98·8	32·2	19·4	84·8	33·3	9·4	30·0	29·6	4·4	6·6	28·3	1·7	9·4	1950	1950	Ambikapur.
1954	1956	1951	1955	1951	1954	1957	1954	1956	1957	1952	1956	1950	1955	1956			
35·1	22·2	171·5	35·0	21·1	96·0	36·2	15·5	63·5	33·3	10·0	41·1	31·1	8·3	17·5	1945	1945	Champa.
1957	1957	1953	1954	1950	1955	1957	1957	1955	1946	1950	1946	1954	1955	1954			
35·1	22·2	169·4	35·7	21·1	94·2	36·2	15·0	40·9	33·3	10·0	4·6	31·8	7·8	6·1	1950	1950	Raigarh.
1957	1953	1952	1957	1950	1954	1957	1954	1951	1951	1950	1956	1957	1955	1954			
36·7	20·0	370·3	37·2	18·3	148·6	37·8	13·9	148·6	35·6	8·3	70·4	32·2	3·9	52·1	1881	1881	Raipur.
1883	1939	1910	1899	1902	1905	1899	1933	1900	1935	1883	1930	1941	1902	1909			
33·9	20·0	195·3	33·3	18·9	257·3	34·5	11·7	112·8	32·8	7·2	58·4	31·1	3·9	17·8	1931	1931	Kanker.
1947	1939	1937	1951	1950	1936	1957	1954	1938	1946	1939	1950	1943	1934	1940			
33·9	16·7	203·2	35·0	17·8	163·8	34·4	11·1	136·9	33·3	5·6	102·9	32·2	3·9	38·3	1911	1911	Jagdalpur (P.B.O.).
1922	1920	1931	1913	1950	1911	1913	1941	1933	1946	1912	1924	1946	1945	1952			
																	Gujarat
41·1	21·1	306·1	42·2	17·2	349·5	42·8	10·6	92·7	37·6	5·0	28·7	36·1	1·7	14·0	1881	1881	Deesa.
1902	1948	1907	1951	1912	1893	1925	1889	1917	1957	1938	1896	1935	1903	1927			
34·7	21·6	91·2	35·8	18·6	0·8	38·6	15·7	0	36·7	15·2	1·3	32·6	9·6	2·0	1957	1957	Idar.
1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957			
38·9	21·7	150·6	41·7	21·7	257·8	42·8	14·4	52·8	38·9	10·0	53·3	35·6	6·1	14·0	1896	1896	Ahmedabad.
1911	1929	1906	1951	1945	1950	1920	1955	1917	1901	1956	1947	1899	1954	1927			
36·1	21·1	295·4	38·9	17·8	265·4	40·0	11·7	177·0	36·1	8·9	45·0	34·4	5·0	7·4	1931	1931	Dohad
1932	1956	1933	1951	1950	1945	1951	1935	1954	1953	1938	1934	1953	1936	1931			
37·2	22·8	238·0	41·1	18·9	372·1	41·7	11·7	138·4	38·3	7·2	48·3	36·1	3·3	3·6	1933	1933	Baroda.
1947	1953	1956	1951	1938	1945	1951	1955	1940	1951	1938	1934	1941	1937	1933			
35·6	21·7	277·1	41·1	21·1	73·4	41·1	13·3	71·1	37·8	10·6	16·8	35·0	6·7	0	1949	1949	Baroda (Aerodrome).
1949	1956	1956	1951	1957	1954	1951	1954	1954	1951	1956	1957	1952	1954	..			
35·6	22·8	154·9	41·7	21·1	304·8	41·7	14·4	55·9	38·9	11·7	0·8	37·2	8·3	0·5	1951	1951	Broach.
1954	1952	1956	1951	1957	1954	1952	1954	1956	1957	1953	1956	1952	1955	1954			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.

..=Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Gujarat—(*contd.*)																					
Surat . . .	38.3	4.4	43.7	41.7	5.6	38.1	43.9	10.6	8.1	45.6	15.0	97.8	45.6	19.4	48.8	45.6	21.7	260.1	38.9	20.6	459.2
	1952	1929	1920	1953	1929	1898	1945	1898	1954	1952	1903	1947	1956	1888	1917	1901	1916	1922	1902	1889	1941
Saurashtra & Kutch																					
Bhuj (P.B.O.) .	36.1	1.7	14.0	38.9	1.1	61.5	43.9	8.3	30.0	45.6	13.9	67.1	47.8	16.7	186.9	46.1	16.1	129.8	40.0	19.4	352.0
	1902	1935	1935	1953	1929	1942	1892	1905	1915	1893	1945	1881	1886	1916	1933	1901	1902	1910	1902	1924	1950
Bhuj (Aerodrome) .	31.7	3.9	0.5	37.2	4.3	0	40.0	11.1	2.0	42.2	13.9	0	45.6	21.7	29.2	41.7	24.4	21.8	37.6	20.6	85.9
	1957	1956	1957	1955	1957	..	1956	1957	1957	1954	1955	..	1955	1957	1955	1954	1956	1956	1957	1954	1957
Kandla. . .	30.6	9.8	4.6	33.9	7.7	0	37.8	14.3	3.8	42.2	18.3	0	43.3	22.1	3.1	37.2	24.3	105.9	35.3	22.4	129.0
	1957	1957	1954	1956	1957	..	1957	1957	1955	1956	1955	..	1956	1957	1957	1957	1957	1956	1957	1957	1956
Mandvi . .	29.3	7.8	0.8	35.6	8.9	0	36.7	13.2	1.5	38.9	15.0	0	41.7	21.1	0	35.0	25.0	20.8	33.3	21.1	93.5
	1957	1956	1957	1955	1957	..	1955	1957	1955	1956	1956	..	1956	1957	..	1955	1956	1956	1957	1956	1956
Dwarka . .	34.0	6.1	20.3	35.6	8.3	64.0	38.3	7.8	42.4	41.1	17.2	24.4	42.2	20.0	7.6	37.8	22.8	230.9	36.1	18.3	273.8
	1957	1929	1919	1920	1901	1906	1955	1905	1911	1932	1903	1915	1903	1909	1933	1951	1936	1956	1951	1952	1933
Porbander . .	34.1	9.4	8.1	38.9	8.7	6.3	40.0	13.2	0	42.8	18.9	2.0	43.3	22.7	0.5	35.0	23.9	129.8	32.8	22.8	189.0
	1957	1953	1954	1955	1957	1954	1956	1957	..	1956	1955	1957	1955	1957	1956	1956	1953	1957	1957	1954	1956
Porbander (Aerodrome)*	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jamnagar . .	33.9	1.7	19.8	37.2	2.2	29.5	40.0	8.3	38.6	42.8	12.8	19.3	44.4	16.7	92.7	42.2	17.2	337.8	38.9	19.4	335.0
	1933	1935	1929	1926	1929	1906	1946	1905	1904	1901	1903	1915	1903	1918	1933	1951	1917	1920	1902	1950	1929
Rajkot (Aerodrome)	36.1	—0.6	13.2	40.0	1.1	21.3	43.9	6.1	21.6	44.4	10.0	29.2	47.8	16.1	117.3	45.0	20.0	218.9	40.6	19.4	375.2
	1932	1935	1935	1953	1893	1888	1892	1905	1911	1949	1903	1947	1919	1907	1917	1897	1913	1893	1900	1941	1950
Surendranagar .	33.3	7.2	2.0	38.3	7.4	0	41.1	12.9	0	42.8	13.9	0	46.7	22.8	11.9	43.3	22.8	61.2	39.4	22.8	78.7
	1956	1954	1957	1955	1957	..	1956	1957	..	1956	1955	..	1955	1956	1957	1955	1955	1955	1954	1956	1954
Bhavnagar . .	35.0	0.6	43.7	39.4	2.8	16.5	43.3	8.3	35.8	45.0	12.8	306.6	46.7	19.4	87.4	45.0	20.6	219.7	40.0	21.7	195.6
	1926	1929	1920	1953	1929	1909	1910	1905	1951	1900	1903	1947	1912	1917	1933	1901	1903	1913	1949	1910	1957
Bhavnagar (Aerodrome)	33.9	6.1	7.6	37.8	6.7	2.0	41.1	13.1	9.9	43.3	14.4	0	45.0	22.2	5.3	43.3	20.0	61.7	38.3	23.3	195.5
	1952	1954	1953	1953	1957	1956	1953	1957	1954	1954	1955	..	1955	1957	1956	1953	1954	1957	1952	1956	1957
Mahuva . .	33.1	7.8	2.5	41.1	10.6	0	42.8	12.5	11.4	45.0	13.9	1.5	43.9	20.0	0.5	40.6	22.8	116.8	35.6	22.2	167.9
	1957	1954	1953	1953	1956	..	1956	1957	1954	1954	1955	1956	1956	1957	1956	1953	1955	1956	1955	1956	1957
Keshod . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Veraval . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	34·4	4·4	12·9	38·3	4·4	16·8	42·8	9·4	19·1	42·8	13·9	124·7	41·1	18·9	123·2	37·2	20·0	108·0	33·9	21·1	289·6
	1933	1905	1926	1953	1893	1923	1945	1892	1911	1954	1903	1947	1955	1909	1917	1954	1931	1957	1902	1892	1945
Konkan																					
Dahanu . . .	34·4	8·3	8·9	37·8	8·9	3·6	38·9	12·8	0	40·6	19·3	59·9	38·3	20·6	15·7	38·3	15·0	306·1	35·0	21·1	431·0
	1957	1945	1948	1949	1950	1954	1946	1945	..	1955	1957	1947	1944	1947	1956	1951	1948	1953	1947	1947	1956
Bombay (Colaba) .	35·0	11·7	49·3	38·3	11·7	41·7	39·4	16·7	34·3	40·6	20·0	37·3	36·1	22·8	126·2	37·2	21·1	408·9	35·6	21·7	304·8
	1952	1935	1926	1949	1929	1917	1945	1905	1918	1955	1905	1947	1944	1951	1893	1901	1936	1886	1902	1945	1923
Bombay . . . (Santacruz Aerodrome)	35·6	10·0	0·5	39·4	10·0	8·9	41·7	14·1	0·8	42·2	18·3	1·5	37·2	20·6	54·4	36·7	22·2	305·6	32·6	21·8	310·6
	1952	1953	1954	1953	1950	1954	1956	1957	1951	1952	1951	1951	1951	1951	1951	1951	1954	1953	1957	1957	1953
Alibag . . .	33·9	9·4	9·7	37·8	11·7	4·1	39·4	15·6	2·8	40·0	18·9	8·4	36·1	21·7	103·1	34·4	18·3	225·0	31·7	20·0	295·9
	1954	1934	1948	1943	1950	1940	1945	1945	1940	1955	1937	1947	1944	1943	1938	1932	1945	1940	1951	1949	1953

X = Highest Maximum Temperature. N = Lower Minimum Temperature. *Observatory Started in February 1957.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Gujarat—(*contd.*)
37·2	21·1	228·9	41·1	20·6	389·4	41·1	14·4	257·1	39·4	10·6	148·3	38·9	6·7	42·2	1881	1881	Surat.
1932	1887	1933	1951	1884	1945	1952	1893	1894	1951	1881	1946	1953	1903	1933			
																	Saurashtra & Kutch
38·3	20·0	199·4	42·8	17·8	170·2	42·2	11·1	118·6	37·8	7·2	53·3	34·4	3·3	36·8	1881	1881	Bhuj (P.B.O.)
1948	1956	1917	1951	1923	1926	1951	1949	1917	1901	1916	1896	1954	1917	1937			
37·8	22·2	70·4	39·1	19·4	44·5	37·8	13·7	55·9	37·2	9·4	2·0	33·9	4·4	3·6	1954	1954	Bhuj (Aerodrome)
1954	1956	1956	1957	1954	1954	1955	1957	1956	1957	1956	1957	1954	1955	1956			
35·6	23·3	185·9	38·3	22·6	64·8	37·8	18·9	11·4	37·2	15·0	3·8	31·1	9·4	0·8	1955	1951	Kandla.
1957	1956	1956	1957	1957	1953	1955	1955	1956	1957	1956	1957	1955	1955	1957			
34·4	22·8	175·3	35·6	22·8	51·6	38·3	17·3	32·8	34·4	13·9	0	30·1	8·3	1·8	1954	1954	Mandvi.
1957	1956	1956	1955	1956	1955	1955	1957	1956	1957	1956	..	1957	1955	1955			
32·8	21·7	302·3	39·4	22·2	135·9	40·0	16·7	138·4	37·2	12·2	355·1	33·9	8·3	28·5	1901	1901	Dwarka.
1954	1908	1933	1929	1909	1921	1951	1949	1917	1901	1938	1951	1932	1903	1937			
32·8	22·8	89·7	36·1	22·8	94·7	39·4	17·2	32·8	38·2	13·3	6·1	36·7	10·0	4·6	1952	1952	Porbander.
1954	1956	1954	1955	1954	1956	1953	1952	1956	1957	1952	1957	1953	1954	1954			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			Porbander (Aerodrome)*
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
37·8	20·6	248·9	41·7	16·1	133·3	40·6	14·4	37·3	37·2	8·9	48·5	34·4	3·9	42·7	1901	1901	Jamnagar.
1954	1924	1954	1951	1923	1947	1952	1954	1915	1901	1938	1948	1955	1930	1929			
37·8	20·6	233·2	40·6	16·7	184·7	41·7	12·2	70·1	38·3	7·2	99·8	36·1	−2·8	22·9	1881	1881	Rajkot (Aerodrome).
1947	1913	1900	1911	1912	1945	1925	1949	1917	1929	1917	1888	1886	1903	1929			
36·7	21·7	198·1	38·9	21·9	80·3	38·9	16·1	15·2	37·2	11·1	7·6	34·4	5·0	1·3	1953	1953	Surendranagar.
1955	1956	1953	1957	1957	1956	1957	1954	1956	1953	1956	1957	1953	1955	1957			
38·9	21·7	125·0	41·1	20·6	242·3	41·1	13·3	233·9	38·3	6·1	105·7	35·0	5·0	25·9	1891	1891	Bhavnagar.
1902	1903	1946	1951	1935	1947	1951	1916	1931	1948	1938	1936	1941	1908	1909			
36·1	22·8	96·3	40·6	21·1	102·9	41·7	17·2	128·5	36·7	12·2	0·5	34·6	9·4	2·5	1951	1951	Bhavnagar (Aerodrome.)
1952	1956	1956	1951	1952	1954	1951	1954	1956	1951	1956	1957	1957	1955	1957			
34·4	21·1	77·2	36·7	19·9	80·0	38·9	15·6	71·1	36·2	13·3	5·3	35·0	9·4	17·3	1952	1952	Mahuva.
1954	1952	1957	1957	1957	1954	1952	1954	1956	1957	1953	1956	1952	1954	1954			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Keshod.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
33·3	22·8	270·0	36·7	20·6	277·4	40·0	13·3	173·7	3·87	10·0	89·9	35·6	7·2	25·7	1891	1891	Veraval.
1932	1956	1933	1955	1946	1926	1952	1949	1917	1951	1950	1896	1953	1950	1902			
																	Konkan
31·7	20·6	335·0	33·9	21·1	225·5	36·1	17·2	93·5	36·7	15·6	256·5	35·6	11·1	0·5	1944	1944	Dahanu.
1947	1951	1945	1944	1954	1956	1953	1954	1951	1947	1955	1948	1952	1945	1954			
32·2	21·7	287·0	35·0	20·0	548·1	36·6	20·6	148·6	36·2	17·8	122·7	35·0	12·8	24·4	1881	1881	Bombay (Colaba).
1948	1943	1881	1929	1947	1930	1957	1954	1917	1957	1881	1927	1952	1929	1884			
31·1	19·4	256·0	35·6	21·7	132·8	37·0	16·7	117·1	36·3	13·3	23·1	35·1	10·6	9·1	1949	1949	Bombay. (Santacruz Aerodrome).
1954	1950	1954	1951	1953	1954	1957	1952	1955	1957	1950	1957	1957	1949	1954			
32·8	21·1	204·0	32·8	21·1	396·2	37·2	18·3	115·8	36·7	15·6	106·7	34·4	13·9	12·5	1931	1931	Alibag.
1932	1949	1954	1951	1947	1949	1936	1954	1938	1941	1950	1948	1957	1949	1933			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I. S. T.

..=Information not available

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AN

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Konkan—(*contd.*)																					
Harnai	33·3	15·6	8·6	33·3	13·9	1·0	37·2	16·1	0	36·1	17·8	31·5	37·2	20·0	157·0	34·4	16·1	254·8	32·2	17·8	242·6
	1946	1945	1945	1954	1950	1948	1946	1945	..	1949	1950	1955	1955	1950	1956	1953	1945	1951	1948	1950	1948
Ratnagiri	36·7	12·2	23·4	38·3	13·3	32·0	38·9	16·1	31·7	36·1	16·1	25·9	37·8	21·7	91·2	35·0	19·4	309·9	32·8	20·6	304·3
	1912	1935	1888	1920	1901	1917	1922	1910	1900	1938	1905	1937	1883	1913	1893	1913	1939	1953	1900	1919	1900
Devgad	34·4	15·6	12·2	35·0	17·2	0·5	37·2	18·7	12·2	37·2	20·6	23·6	35·0	22·8	119·4	37·2	13·3	176·5	31·7	21·1	210·3
	1952	1945	1947	1952	1950	1954	1948	1957	1947	1956	1953	1947	1954	1951	1949	1948	1945	1951	1957	1954	1948
Vengurla	35·6	14·4	0	38·9	12·8	0	36·7	15·0	0·3	40·0	20·6	17·0	36·1	22·8	107·7	33·9	20·0	198·4	31·2	21·7	237·7
	1955	1953	..	1952	1950	..	1954	1950	1954	1956	1955	1954	1949	1956	1955	1953	1956	1956	1957	1956	1951
Maharashtra																					
Nandurbar	34·4	8·9	43·9	40·6	13·3	0	43·3	16·1	2·5	44·4	18·9	3·3	46·1	21·7	76·2	42·8	22·2	80·0	35·6	21·1	89·9
	1957	1954	1955	1955	1953	..	1956	1955	1954	1954	1955	1954	1955	1956	1956	1953	1956	1953	1956	1952	1957
Jalgaon	35·6	1·7	11·2	40·6	3·9	21·8	43·9	9·4	23·9	46·1	15·6	15·7	47·8	22·2	35·1	46·1	21·7	115·1	39·4	21·1	110·7
	1939	1945	1956	1953	1943	1941	1953	1948	1938	1949	1944	1951	1947	1956	1956	1953	1955	1956	1951	1938	1941
Malegaon	35·0	0·6	38·1	39·4	0·6	43·4	45·6	5·6	14·7	44·4	9·4	20·3	46·7	16·7	104·4	44·4	17·8	111·0	37·8	18·3	158·5
	1932	1935	1888	1953	1929	1936	1889	1898	1915	1925	1905	1945	1916	1881	1903	1915	1932	1914	1920	1953	1896
Deolali	32·8	5·0	1·3	37·8	—0·6	1·5	40·0	7·2	7·4	42·2	11·1	13·7	42·2	17·8	57·7	40·0	20·0	49·5	32·8	20·0	157·0
	1950	1954	1955	1953	1950	1954	1953	1957	1955	1956	1955	1951	1955	1955	1951	1955	1952	1957	1951	1951	1952
Aurangabad	37·2	3·9	51·6	37·8	2·2	36·3	42·2	8·9	23·4	45·0	10·0	24·6	45·6	17·2	53·3	43·9	17·2	182·1	37·8	18·3	139·7
	1924	1945	1920	1953	1911	1894	1892	1898	1915	1896	1908	1937	1905	1924	1918	1923	1901	1953	1897	1904	1916
Aurangabad (Chikalthana Aerodrome)	32·2	3·9	3·3	37·2	5·0	3·1	40·0	7·1	20·3	41·7	16·1	7·9	42·2	20·0	30·0	42·2	20·0	94·2	35·0	20·0	84·1
	1955	1954	1955	1954	1957	1952	1955	1957	1954	1953	1956	1954	1954	1952	1956	1953	1954	1955	1952	1956	1953
Khandala	..	..	19·1	..	..	15·2	..	..	1·3	..	..	26·4	..	..	62·2	..	..	267·2	..	..	420·1
	..	..	1940	..	..	1937	..	..	1951	..	..	1937	..	..	1951	..	..	1953	..	..	1941
Ahmednagar	36·1	2·2	51·6	38·9	2·8	42·9	40·6	7·8	88·4	42·8	10·6	71·9	43·3	16·1	119·9	43·3	18·3	177·3	37·2	17·8	174·0
	1897	1945	1941	1897	1911	1894	1934	1892	1938	1949	1926	1937	1919	1917	1915	1920	1907	1931	1955	1944	1911
Parbhani	33·3	4·4	43·4	38·3	6·1	34·8	41·7	11·6	46·5	43·9	17·2	36·8	45·6	21·1	56·6	45·6	20·0	87·9	37·8	20·4	171·5
	1955	1945	1926	1953	1949	1928	1953	1957	1927	1949	1955	1939	1954	1956	1916	1953	1951	1940	1950	1957	1923
Poona	35·0	1·7	22·3	38·9	3·9	16·3	42·8	7·2	35·1	43·3	10·6	51·1	43·3	13·9	82·5	41·7	17·2	97·0	35·6	18·9	114·3
	1938	1935	1948	1953	1934	1892	1892	1908	1954	1897	1903	1896	1889	1888	1927	1897	1920	1906	1915	1920	1905
Poona (Lohagaon Aerodrom)	32.8	8.3	0	37.8	8.9	0	40.0	11.1	42.9	41.7	12.2	14.2	41.7	15.0	59.1	39.4	18.9	83.8	32.8	20.0	78.5
	1952	1954	..	1953	1956	..	1953	1955	1954	1956	1955	1955	1952	1955	1957	1953	1953	1954	1952	1956	1956
Baramati	33.3	9.4	0	36.1	8.6	0	40.0	11.2	3.8	42.2	13.3	22.6	42.8	19.4	33.0	40.0	20.0	70.4	33.3	20.0	37.1
	1955	1955	..	1956	1957	..	1956	1957	1955	1956	1955	1955	1954	1956	1957	1954	1956	1955	1955	1956	1956
Jeur	33.9	5.7	0.5	38.3	5.0	18.5	41.1	10.4	4.8	42.2	15.0	23.6	42.8	20.6	49.0	43.3	18.9	81.5	36.1	18.9	88.1
	1950	1957	1955	1953	1950	1952	1953	1957	1957	1956	1955	1957	1954	1955	1956	1953	1951	1953	1952	1956	1956
Sholapur	36.7	4.4	48.8	39.4	6.1	34.3	43.9	12.2	39.6	44.4	13.9	48.0	45.6	16.1	56·1	44.4	17.2	143.8	38.9	18.3	160.3
	1897	1945	1943	1886	1911	1928	1892	1886	1893	1889	1905	1907	1939	1885	1952	1953	1922	1882	1912	1914	1907
Miraj	33.9	5.0	46.5	37.2	6.7	8.6	40.6	11.2	13.2	42.2	15.0	115.1	42.2	18.9	108.2	42.2	19.4	64.8	35.0	17.2	61.0
	1950	1945	1941	1953	1944	1941	1949	1957	1938	1942	1944	1937	1940	1937	1938	1934	1956	1955	1932	1945	1943
Kolhapur	33.3	8.9	14.7	36.7	10.6	4.3	40.0	12.8	48.5	41.7	15.6	34.5	40.6	18.3	66.0	39.4	18.9	95.0	31.7	18.9	151.6
	1952	1946	1947	1953	1949	1952	1953	1957	1948	1956	1955	1946	1953	1946	1947	1953	1956	1955	1952	1955	1959

X=Highest Maximum Temperature.

N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Konkan—(*contd.*)
32·2	20·6	176·0	31·7	21·1	308·6	35·0	19·4	176·5	35·6	18·3	72·6	33·9	18·9	15·2	1944	1944	Harnai.
1947	1950	1947	1951	1947	1949	1950	1946	1947	1951	1946	1946	1944	1949	1954			
31·1	21·1	204·2	34·4	20·6	236·7	37·2	17·8	221·0	37·2	15·6	243·8	36·1	14·4	33·8	1881	1881	Ratnagiri.
1939	1931	1885	1896	1898	1938	1888	1903	1938	1918	1955	1912	1896	1954	1931			
31·7	19·4	130·8	32·2	21·1	235·2	35·0	19·4	141·0	36·1	17·2	67·1	34·4	16·1	16·5	1945	1945	Devgad.
1948	1945	1948	1953	1945	1948	1946	1952	1951	1951	1952	1946	1953	1949	1954			
30·6	21·7	175·8	32·8	21·3	125·5	35·6	17·8	122·4	35·6	14·4	25·4	35·0	10·6	1·3	1949	1949	Vengurla.
1950	1956	1950	1952	1957	1955	1953	1950	1951	1951	1950	1956	1955	1954	1954			
																	Maharashtra.
38·9	21·1	62·2	36·1	20·6	124·5	38·9	16·7	70·4	37·2	11·7	10·7	35·0	10·6	4·1	1952	1952	Nandurbar.
1954	1956	1956	1955	1952	1954	1952	1952	1955	1957	1956	1956	1953	1954	1956			
37·2	20·0	119·1	38·9	15·6	111·8	38·3	10·0	98·8	36·5	5·6	59·9	35·0	1·7	22·3	1937	1937	Jalgaon.
1947	1942	1942	1951	1942	1937	1951	1952	1943	1957	1950	1946	1953	1937	1947			
37·2	16·1	115·3	38·3	16·1	132·1	40·0	10·6	109·7	36·7	5·6	105·2	35·0	3·3	39·4	1881	1881	Malegaon.
1899	1899	1897	1899	1942	1894	1899	1933	1935	1908	1910	1912	1896	1929	1884			
33·3	19·4	143·3	33·3	17·8	86·9	35·7	9·4	54·6	32·8	6·7	23·9	32·8	5·0	14·0	1950	1950	Deolali.
1950	1956	1956	1955	1954	1954	1957	1954	1956	1957	1955	1956	1953	1954	1954			
36·1	17·2	134·6	36·7	16·1	245·1	37·8	12·2	68·8	35·6	7·2	157·5	34·4	5·0	92·7	1896	1891	Aurangabad.
1950	1935	1903	1896	1901	1891	1911	1903	1901	1896	1910	1946	1896	1902	1942			
33·3	18·3	69·3	33·8	17·8	77·7	35·2	8·3	31·7	33·4	5·6	19·8	32·8	3·9	9·1	1952	1952	Aurangabad (Chikalthana Aerodrome).
1954	1956	1956	1957	1952	1954	1957	1952	1955	1957	1956	1956	1953	1954	1954			
..	..	475·0	..	..	308·4	..	..	263·7	..	..	188·7	..	..	16·0	..	1933	Khandala.
..	..	1956	..	..	1942	..	..	1938	..	..	1948	..	..	1942			
36·7	16·1	147·3	36·7	14·4	148·8	37·2	10·6	89·1	35·6	5·6	124·7	33·3	3·3	69·1	1891	1891	Ahmednagar.
1899	1913	1957	1912	1896	1902	1899	1914	1943	1898	1892	1948	1953	1926	1942			
36·7	20·0	139·7	35·6	18·9	217·2	36·7	10·0	168·9	33·9	8·3	79·0	32·8	6·7	32·3	1944	1916	Parbhani.
1950	1953	1934	1951	1950	1923	1946	1954	1955	1953	1956	1936	1953	1945	1937			
35·0	17·2	108·7	36·1	16·1	132·3	37·8	11·1	149·1	36·1	7·2	96·8	35·0	4·4	41·1	1881	1881	Poona.
1950	1920	1956	1951	1901	1938	1899	1910	1892	1896	1939	1934	1896	1940	1942			
31·1	17·2	103·6	37·2	15·6	55·1	36·1	12·8	106·9	33·3	9·4	76·2	33·3	7·8	8·1	1950	1950	Poona. (Lohagaon Aerodrome).
1954	1956	1956	1951	1952	1955	1951	1950	1951	1953	1955	1951	1954	1954	1954			
32·2	17·8	106·2	35·6	17·8	105·4	36·2	12·8	75·4	32·8	9·4	46·2	32·2	8·3	14·0	1954	1954	Baramati.
1957	1956	1956	1955	1957	1957	1957	1954	1957	1955	1955	1956	1954	1956	1954			
37·2	17·4	52·8	36·1	17·2	67·8	36·3	12·2	56·1	33·9	8·9	29·7	32·8	6·7	43·2	1950	1950	Jeur.
1950	1957	1956	1951	1956	1954	1957	1952	1956	1951	1955	1956	1952	1956	1954			
37·8	15·0	191·0	37·2	18·3	169·9	38·3	12·8	125·5	36·1	7·8	127·8	34·4	6·7	97·5	1881	1881	Sholapur.
1899	1956	1940	1899	1946	1895	1896	1882	1957	1915	1881	1896	1896	1945	1886			
34·4	17·8	150·9	35·6	15·6	93·7	36·1	12·2	101·3	33·9	8·3	114·1	34·4	7·2	19·8	1931	1931	Miraj.
1941	1949	1932	1951	1935	1946	1942	1937	1956	1952	1950	1955	1941	1954	1933			
32·2	18·9	116·3	35·0	17·8	74·4	34·7	13·9	67·6	33·3	11·1	89·1	32·2	8·9	17·5	1946	1946	Kolhapur.
1950	1956	1956	1951	1957	1956	1957	1952	1953	1951	1955	1955	1954	1956	1947			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.

..=Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AN

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Vidarbha																					
Buldhana	32.8	10.0	30.7	36.7	4.4	1.3	38.9	14.8	26.2	41.1	18.4	11.2	42.2	20.0	30.2	41.7	19.4	70.9	34.4	18.9	122.9
	1956	1953	1955	1953	1950	1952	1953	1957	1955	1956	1957	1953	1954	1956	1956	1953	1955	1953	1952	1949	1953
Akola	35.6	3.9	49.0	40.0	2.2	42.2	44.4	5.6	38.6	46.1	11.1	58.7	47.8	18.3	44.7	47.2	20.0	188.0	40.6	20.6	188.5
	1930	1937	1922	1953	1887	1907	1892	1908	1957	1942	1905	1937	1947	1947	1943	1923	1916	1955	1900	1941	1894
Amravati	35.0	6.1	59·2	38.9	5.0	51.6	43.9	8.9	51.6	46.1	12.8	66.3	46.7	18.3	47.2	46.7	19.4	155.2	39.4	18.9	230.1
	1889	1934	1911	1953	1887	1928	1892	1898	1957	1898	1905	1937	1954	1917	1887	1923	1916	1927	1931	1890	1888
Yeotmal	33.3	9.4	18.3	37.8	7.2	31.2	41.7	14.4	29.7	43.3	17.8	46.7	46.1	20.0	48.3	45.6	20.6	104.4	38.3	20.0	91.7
	1950	1954	1955	1953	1950	1950	1953	1957	1957	1955	1955	1952	1954	1955	1956	1953	1955	1953	1950	1953	1955
Nagpur.	35.0	3.9	50.3	38.9	5.0	51.6	45.0	8.3	45.0	46.1	13.9	59.4	47.8	19.4	58.4	47.2	20.0	315.0	40.6	19.4	219.2
	1900	1937	1948	1887	1950	1942	1892	1898	1881	1942	1905	1937	1954	1917	1909	1931	1919	1911	1897	1942	1898
Gondia	31.7	6.7	42.4	37.2	6.7	48.3	41.7	11.7	34.3	43.3	18.3	25.9	46.1	22.2	13.2	45.6	21.7	216.7	37.2	21.7	141.8
	1950	1951	1948	1951	1950	1947	1953	1952	1951	1952	1957	1953	1954	1951	1956	1953	1957	1955	1951	1952	1957
Brahmapuri	30.4	9.6	0	34.6	7.8	18.0	36.3	13.5	47.5	41.6	18.6	17.0	43.4	19.7	43.7	43.3	20.5	53.1	33.2	18.7	80.8
	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Chanda	35.6	2.8	39.4	39.4	3.9	94.2	44.4	7.2	68.8	46.1	11.7	65.3	48.3	18.9	44.5	47.2	20.0	182.1	40.6	17.8	191.3
	1900	1899	1924	1951	1905	1898	1892	1898	1893	1942	1905	1914	1912	1919	1903	1931	1919	1887	1897	1954	1887
Sironcha	33.3	7.8	3.3	37.8	10.6	10.9	41.7	13.9	95.0	44.4	21.1	20.8	46.7	21.1	26.4	46.7	22.2	81.3	38.9	21.1	165.3
	1955	1951	1953	1953	1957	1952	1953	1952	1951	1956	1957	1953	1954	1955	1955	1953	1955	1953	1951	1957	1956
Coastal Andhra Pradesh																					
Nellore	35.6	15.0	94.2	39.4	16.1	116.8	43.9	17.2	59.2	45.6	20.6	73.7	46.7	21.7	185.9	46.7	21.1	83.8	45.6	22.2	95.3
	1936	1946	1906	1927	1891	1928	1892	1910	1944	1895	1934	1900	1892	1947	1952	1894	1912	1903	1951	1943	1950
Ongole	33.9	14.4	27.9	38.3	14.4	5.3	43.3	18.3	52.3	44.4	20.6	16.8	46.1	16.1	102.6	46.1	23.3	71.1	40.0	21.2	80.3
	1946	1946	1953	1954	1945	1948	1953	1945	1951	1956	1950	1956	1956	1949	1949	1953	1957	1946	1952	1957	1956
Rentachintala	35.0	10.6	3.8	39.4	12.8	21.3	44.4	15.6	28.5	46.1	18.3	69.1	47.2	18.3	67.3	47.2	21.7	101.6	40.6	21.7	87.6
	1953	1946	1948	1954	1949	1956	1953	1952	1950	1941	1937	1948	1948	1955	1940	1953	1947	1947	1952	1956	1953
Gannavaram	34.4	15.6	8.4	37.8	16.1	10.2	43.3	17.2	46.7	44.4	22.6	77.5	46.7	21.1	43.4	46.7	20.6	93.2	39.4	21.5	99.6
	1952	1955	1956	1954	1956	1952	1953	1952	1957	1956	1957	1953	1956	1955	1955	1953	1951	1956	1952	1957	1956
Masulipatam	33.3	13.9	76.2	37.2	14.4	96.5	42.2	16.7	150.4	44.4	18.3	101.3	47.8	19.4	82.5	46.1	20.0	133.3	41.7	19.4	115.6
	1946	1945	1908	1927	1889	1901	1892	1906	1926	1892	1926	1942	1906	1893	1904	1924	1947	1915	1897	1893	1935
Nidadavolu	32·8	14·4	0·8	35·6	15·0	5·8	37·2	20·0	5·3	42·8	22·8	21·8	46·7	22·8	57·7	43·8	23·3	59·9	34·3	22·1	53·9
	1956	1956	1957	1956	1956	1956	1956	1956	1957	1956	1957	1956	1956	1957	1957	1957	1957	1956	1957	1957	1956
Kakinada	32·8	14·4	78·2	37·8	15·6	45·0	38·9	17·2	71·6	42·8	18·9	61·0	46·7	21·1	109·7	47·2	21·7	501·4	41·7	21·1	127·0
	1950	1946	1921	1896	1918	1893	1934	1906	1905	1947	1942	1937	1934	1917	1914	1923	1940	1941	1897	1938	1947
Visakhapatnam	32·2	12·8	132·1	36·7	13·3	64·5	38·3	14·4	64·5	38·7	18·3	73·9	43·3	20·0	145·3	43·9	21·1	166·1	38·3	21·7	145·0
	1900	1956	1908	1922	1956	1901	1956	1952	1926	1957	1930	1925	1953	1904	1955	1906	1953	1929	1899	1904	1951
Calingapatam	33·9	12·2	25·4	37·8	12·8	83·1	38·9	16·1	84·3	41·7	18·3	63·5	43·9	20·6	307·3	43·9	22·2	188·2	38·9	21·7	205·7
	1911	1937	1908	1922	1918	1923	1946	1952	1940	1947	1930	1956	1916	1951	1914	1923	1949	1935	1911	1919	1956
Telangana																					
Ramagundam	33·9	9·4	10·9	38·9	9·4	5.1	42·8	14·4	21·1	44·4	20·0	30·5	47·2	21·1	65·5	47·2	21·7	140·7	40·0	21·1	119·9
	1957	1953	1953	1951	1949	1952	1953	1952	1951	1956	1956	1956	1948	1949	1957	1953	1955	1953	1950	1950	1956
Nizamabad	35·6	5·0	59·7	38·3	6·1	72·4	43·3	11·1	43·9	44·4	12·8	76·2	47·2	18·3	71·1	46·1	16·7	246·4	40·4	14·4	157·5
	1928	1899	1943	1954	1911	1928	1928	1892	1950	1942	1905	1937	1923	1917	1922	1931	1902	1914	1904	1931	1898

X=Highest Maximum Temparature. N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Vidarbha
35·0	19·4	95·3	32·8	18·8	117·3	33·9	14·4	50·0	32·2	11·7	38·1	31·1	11·1	19·6	1948	1948	Buldhana.
1950	1956	1950	1951	1957	1954	1951	1957	1951	1957	1949	1948	1957	1951	1950			
37·8	18·3	224·5	40·0	17·2	230·9	40·0	10·0	110·5	36·1	5·6	112·3	36·7	3·9	65·0	1881	1881	Akola.
1950	1944	1900	1899	1904	1945	1899	1889	1887	1899	1912	1936	1896	1883	1885			
36·7	15·6	168·1	38·3	17·2	234·9	39·4	12·8	90·2	35·6	8·9	78·0	33·9	8·3	55·6	1881	1881	Amravati.
1902	1944	1944	1899	1893	1933	1899	1889	1940	1899	1884	1931	1913	1937	1885			
35·6	19·4	165·6	34·4	20·0	101·3	35·4	13·9	85·9	32·8	10·0	8·1	31·7	10·0	13·7	1949	1949	Yeotmal.
1950	1955	1952	1951	1957	1955	1957	1952	1952	1957	1950	1956	1952	1950	1950			
37·8	18·3	200·7	38·9	18·3	182·6	38·3	11·7	164·6	35·6	6·7	81·5	33·9	5·6	45·7	1881	1881	Nagpur.
1899	1939	1895	1899	1904	1883	1899	1952	1936	1899	1912	1946	1941	1936	1884			
34·4	18·3	148·1	34·4	20·6	95·0	35·3	13·3	106·7	33·9	8·9	54·6	31·1	7·2	13·2	1946	1946	Gondia.
1947	1953	1947	1951	1952	1956	1957	1952	1949	1957	1950	1948	1957	1955	1956			
32·8	19·6	58·7	34·6	19·4	31·3	35·6	16·3	7·6	33·1	..	0	37·2	..	0	1957	1957	Brahmapuri.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	..	1957	..	..			
37·2	18·3	179·6	37·2	18·3	193·0	37·8	11·7	164·1	36·1	7·2	70·9	33·9	3·9	54·6	1881	1881	Chanda.
1954	1954	1951	1899	1904	1945	1899	1882	1936	1950	1950	1881	1933	1883	1884			
36·1	18·9	247·4	35·2	21·7	99·8	36·9	14·4	115·8	33·9	10·6	1·8	32·2	10·0	0	1950	1950	Sironcha.
1950	1954	1953	1957	1951	1957	1957	1954	1957	1957	1950	1956	1957	1953	..			
																	Coastal Andhra Pradesh
40·6	21·7	75·2	41·1	21·7	133·6	39·4	18·9	444·0	36·7	16·7	356·9	35·0	14·4	189·2	1891	1891	Nellore.
1899	1912	1923	1899	1945	1909	1900	1895	1950	1915	1939	1936	1909	1895	1902			
38·3	21·7	66·0	38·9	21·7	232·7	37·8	18·3	184·9	35·0	16·7	258·3	33·9	16·1	87·4	1945	1945	Ongole.
1950	1956	1949	1952	1949	1949	1951	1947	1953	1952	1955	1946	1951	1948	1952			
39·4	21·7	92·2	38·3	22·2	154·9	38·1	16·7	153·2	36·1	12·2	71·6	34·4	10·0	53·3	1936	1936	Rentachintala.
1950	1952	1944	1946	1953	1954	1957	1950	1945	1951	1950	1956	1951	1936	1952			
36·7	22·2	83·8	36·7	18·2	143·3	36·1	18·3	134·1	35·0	16·7	46·0	33·9	15·0	10·7	1951	1950	Gannavaram.
1952	1954	1955	1957	1957	1954	1951	1952	1956	1951	1955	1956	1951	1953	1952			
38·3	21·7	135·6	37·8	20·6	116·6	37·2	18·9	502·4	34·4	13·9	355·6	32·2	14·4	159·3	1881	1881	Masulipatam.
1920	1952	1886	1888	1895	1954	1888	1895	1949	1891	1934	1938	1951	1937	1947			
33.9	22.4	66.5	34.9	22.2	40.9	36.5	21.1	146.3	33.2	15.6	47.5	31.7	13.3	0	1955	1955	Nidadavolu.
1956	1957	1957	1957	1956	1956	1957	1955	1955	1957	1955	1957	1956	1956	..			
37.8	21.7	146.1	37.2	21.7	285.7	37.2	17.2	281.9	33.9	15.6	276.3	32.2	13.9	130.3	1896	1881	Kakinada.
1902	1955	1937	1920	1955	1956	1907	1949	1936	1951	1910	1923	1899	1902	1882			
37.8	21.1	121.4	37.8	22.2	148.6	36.8	17.8	260.9	33.9	15.0	270.5	32.8	12.8	191.3	1896	1901	Visakhapatnam.
1941	1907	1957	1939	1953	1914	1957	1952	1928	1942	1929	1923	1951	1955	1909			
36.7	22.2	192.5	36.7	22.2	310.6	35.6	16.7	155.5	33.9	13.3	280.4	31.7	12.2	221.7	1911	1906	Calingapatam.
1923	1912	1912	1920	1930	1911	1950	1952	1921	1914	1926	1923	1951	1937	1909			
																	Telangana
36.7	21.7	89.4	36.1	21.7	73.9	38.4	15.6	84.6	35.0	11.1	65.3	33.9	10.6	3.1	1947	1947	Ramagundam.
1949	1956	1953	1955	1951	1947	1957	1954	1947	1949	1952	1949	1956	1952	1952			
37.8	17.2	157.7	37.2	17.2	215.5	38.9	11.7	196.9	35.6	7.2	80.0	35.0	4.4	49.8	1891	1891	Nizamabad.
1899	1901	1944	1920	1903	1929	1951	1921	1939	1926	1929	1936	1920	1897	1918			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I. S. T.

.. =Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Telangana—(*contd.*)																					
Mahbubnagar .	32·2	12·7	0	36·1	11·7	0	40·0	15·6	2·5	42·2	20·0	65·5	43·3	21·1	79·3	43·3	20·6	59·7	36·8	19·4	104·4
	1956	1957	..	1954	1956	..	1953	1952	1954	1956	1957	1957	1956	1955	1952	1953	1955	1954	1957	1952	1956
Hyderabad (Begumpet Aerodrome.)	35·0	6·1	93·2	37·2	8·9	42·9	42·2	13·2	103·1	43·3	16·1	60·7	44·4	19·4	65·0	43·9	17·8	122·7	37·2	19·4	109·2
	1929	1946	1922	1951	1911	1912	1892	1957	1928	1941	1917	1937	1935	1917	1905	1931	1922	1914	1918	1931	1916
Hakimpet . .	30·6	12·2	0	35·0	13·9	6·6	38·3	16·7	10·2	40·6	18·4	25·9	43·3	18·9	32·5	42·2	18·9	106·9	33·3	19·9	84·3
	1954	1955	..	1954	1956	1957	1956	1957	1954	1956	1957	1956	1956	1957	1955	1953	1954	1955	1953	1957	1957
Hanamkonda .	35·0	8·9	58·4	37·8	10·6	45·7	42·2	15·0	71·1	44·4	17·8	83·6	46·7	17·2	75·7	46·1	21·1	197·6	38·9	17·8	227·8
	1921	1945	1924	1954	1911	1936	1953	1906	1928	1942	1957	1937	1928	1917	1940	1953	1953	1914	1920	1911	1903
Bhadrachallam .	33·3	11·1	2·5	38·3	11·7	2·0	42·8	15·6	25·4	43·9	18·3	30·0	46·7	21·7	35·6	46·1	20·6	78·7	39·4	21·7	73·9
	1956	1957	1953	1954	1956	1952	1953	1952	1954	1956	1956	1956	1956	1955	1956	1953	1954	1956	1952	1954	1956
Khammameth .	35·0	9·4	11·4	38·9	11·7	39·6	43·3	16·1	47·0	45·0	18·9	63·0	47·2	21·1	46·5	46·7	21·7	92·7	39·4	21·1	299·7
	1950	1946	1941	1954	1943	1946	1953	1952	1944	1941	1945	1945	1947	1948	1953	1953	1950	1953	1952	1948	1954
Rayalaseema																					
Arogyavaram .	30·0	11·7	19·3	33·9	11·7	22·6	37·2	12·8	18·0	38·3	18·3	50·0	38·9	15·6	80·5	37·2	18·9	64·8	34·4	16·7	100·1
	1953	1956	1947	1954	1947	1950	1953	1955	1957	1956	1957	1956	1947	1946	1951	1953	1957	1951	1946	1952	1954
Cuddapah . .	37·8	11·7	84·8	40·6	14·4	51·6	43·3	17·8	131·3	45·0	17·8	116·6	46·1	19·4	115·1	45·0	17·8	152·4	40·6	17·2	103·9
	1897	1912	1896	1897	1948	1901	1903	1935	1915	1906	1907	1898	1906	1896	1940	1923	1944	1957	1897	1943	1894
Anantapur . .	33·3	12·2	5·1	37·2	13·3	10·9	40·6	15·0	25·9	42·2	18·3	67·1	42·2	18·9	76·5	41·7	20·6	59·9	36·7	21·1	43·2
	1956	1949	1947	1948	1947	1947	1953	1951	1951	1956	1950	1956	1953	1951	1955	1953	1953	1957	1952	1956	1953
Kurnool . .	36·1	8·3	41·1	38·9	11·1	66·8	41·7	12·8	50·0	44·4	16·1	42·2	45·6	19·4	165·6	44·4	20·0	81·3	38·3	20·6	132·1
	1897	1891	1915	1899	1943	1928	1925	1921	1893	1896	1905	1957	1921	1955	1952	1898	1935	1901	1915	1903	1893
Madras																					
Palayamcottai .	33·3	18·5	54·6	36·2	20·0	53·1	41·7	21·1	83·3	41·7	22·2	74·9	42·2	22·8	47·0	42·2	21·7	10·7	38·3	23·3	34·3
	1957	1957	1951	1957	1956	1950	1953	1956	1954	1956	1955	1947	1953	1956	1949	1953	1955	1957	1954	1953	1949
Tuticorin . .	33·3	18·9	21·6	30·0	18·3	0·8	32·8	21·1	62·2	38·3	22·2	35·1	41·1	21·7	33·3	38·3	21·7	11·4	37·2	23·3	21·1
..	1955	1956	1956	1955	1956	1957	1955	1956	1957	1956	1955	1955	1956	1955	1955	1956	1956	1956	1957	1954	1954
Pamban . .	33·3	20·0	127·5	33·3	19·4	88·9	35·0	20·6	63·0	37·2	20·6	81·3	36·7	21·1	102·6	37·2	20·6	55·6	35·0	21·7	130·8
	1902	1956	1902	1906	1939	1902	1953	1899	1938	1930	1949	1954	1923	1891	1930	1913	1897	1940	1921	1957	1916
Mathurai . .	34·4	15·6	152·4	38·3	16·1	188·0	41·7	17·2	100·3	41·7	19·4	166·4	41·7	17·8	99·6	42·2	17·8	105·4	40·6	19·4	124·5
	1936	1907	1921	1906	1884	1929	1882	1909	1947	1935	1909	1891	1956	1920	1882	1935	1897	1927	1884	1891	1893
Nagapattinam .	31·7	16·1	245·1	35·6	15·6	125·0	40·0	16·7	126·5	41·7	20·0	151·6	42·8	20·6	164·1	41·7	20·6	79·3	41·7	21·7	113·0
	1899	1912	1923	1898	1884	1938	1953	1894	1923	1908	1894	1931	1898	1901	1930	1884	1882	1935	1898	1936	1916
Tiruchirapalli .	35·6	14·4	114·8	40·0	13·9	137·9	42·2	15·6	80·8	42·8	18·3	160·5	43·3	19·4	183·1	43·9	20·0	73·4	41·1	21·7	94·7
	1925	1884	1909	1906	1884	1891	1892	1896	1906	1896	1937	1889	1896	1955	1930	1888	1911	1894	1921	1951	1916
Coimbatore . .	35·0	11·7	141·5	36·7	12·8	64·8	38·9	15·6	83·8	40·0	17·8	54·9	39·4	18·3	85·6	38·3	18·3	132·6	35·6	16·7	103·6
	1887	1912	1900	1899	1910	1922	1900	1930	1915	1906	1899	1954	1952	1893	1930	1895	1893	1941	1898	1911	1924
Coimbatore . . (Peelamedu Aerodrome).	35·9	12·2	14·2	35·6	14·4	49·0	38·3	15·6	17·0	38·9	18·3	58·4	39·4	15·6	69·3	35·1	18·3	23·4	33·3	16·1	39·1
	1957	1949	1954	1954	1953	1950	1955	1949	1951	1956	1949	1955	1952	1949	1957	1957	1949	1956	1952	1949	1949
Salem . . .	37·2	12·8	65·8	39·4	11·1	65·8	41·7	14·4	80·8	42·8	18·3	95·5	42·8	18·3	103·6	41·7	20·0	115·6	40·6	18·9	125·5
	1925	1907	1943	1926	1907	1893	1892	1934	1884	1908	1887	1929	1931	1893	1930	1912	1885	1902	1923	1887	1952
Kallakurichi . .	32·9	15·0	29·7	37·2	15·6	52·8	41·7	17·2	51·3	41·7	20·6	21·1	42·8	20·6	165·9	40·6	21·7	66·3	40·0	21·7	108·7
	1957	1950	1956	1950	1950	1950	1953	1951	1950	1956	1950	1955	1956	1955	1957	1954	1956	1956	1952	1951	1955

X=Highest Maximum Temperature.
N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Telangana—(*contd.*)
34.4	20.0	69.3	34.4	19.4	79.0	35.1	16.1	68.6	32.7	12.8	21.1	31.7	12.2	1.3	1952	1952	Mahbubnagar.
1953	1956	1957	1952	1954	1955	1957	1952	1952	1957	1955	1955	1953	1956	1956			
36.1	19.4	190.5	36.1	17.8	153.2	36.7	13.3	117.1	33.9	7.8	95.5	33.3	7.2	44.5	1891	1896	Hyderabad (Begumpet Aerodrome.)
1950	1955	1954	1927	1942	1908	1896	1954	1903	1909	1939	1927	1930	1945	1918			
32.8	20.0	141.2	35.6	17.8	121.7	31.7	15.0	67.3	30.0	12.8	28.7	31.2	12.8	8.4	1952	1952	Hakimpet.
1954	1956	1955	1956	1954	1954	1954	1954	1957	1953	1955	1956	1957	1955	1954			
37.2	19.4	190.5	38.3	19.4	304.8	37.8	15.0	136.4	34.4	9.4	92.7	33.9	8.3	42.4	1901	1901	Hanamkonda.
1920	1905	1924	1920	1904	1908	1920	1952	1957	1920	1904	1916	1920	1902	1929			
35.6	21.1	83.8	36.3	22.1	58.7	37.6	15.6	68.6	34.1	12.2	44.5	32.8	10.0	40.4	1952	1952	Bhadrachallam.
1952	1952	1955	1957	1957	1952	1957	1952	1953	1957	1953	1956	1957	1956	1952			
36.1	21.1	107.2	37.2	20.6	152.4	37.4	16.7	130.8	33.9	11.7	86.4	33.3	10.0	17.8	1941	1941	Khammameth.
1950	1947	1950	1957	1942	1947	1957	1952	1941	1951	1941	1946	1951	1945	1947			
																	Rayalaseema
33.9	18.9	56.9	33.9	16.1	88.7	32.8	15.0	157.7	31.1	12.2	51.8	29.4	11.7	72.4	1945	1945	Arogyavaram.
1951	1957	1951	1952	1949	1956	1948	1947	1954	1947	1950	1946	1951	1951	1946			
40.0	19.4	176.0	39.4	19.4	173.5	38.9	16.7	134.6	36.1	13.9	104.7	35.6	11.7	85.1	1891	1881	Cuddapah.
1899	1921	1910	1907	1920	1906	1922	1943	1921	1927	1939	1943	1930	1945	1883			
36.7	21.2	77.5	36.1	19.4	100.6	35.0	15.6	78.5	34.4	12.8	99.3	32.2	12.2	22.6	1946	1946	Anantapur.
1949	1957	1949	1957	1954	1953	1950	1950	1946	1951	1950	1948	1951	1951	1952			
37.8	20.6	121.9	37.8	19.4	200.1	38.3	13.9	146.3	36.1	10.0	80.5	34.4	6.7	71.1	1891	1886	Kurnool.
1899	1929	1955	1899	1892	1888	1898	1950	1916	1896	1950	1903	1929	1902	1906			
																	Madras
38.9	23.3	39.4	40.0	22.8	40.6	38.3	21.7	64.5	36.1	21.1	93.5	35.6	20.0	88.9	1950	1945	Palayamcottai.
1953	1954	1956	1952	1954	1946	1955	1956	1948	1953	1955	1953	1952	1956	1946			
37.8	23.9	14.7	37.2	23.9	12.2	36.7	21.7	167.4	34.4	20.6	134.6	31.7	19.4	188.2	1954	1954	Tuticorin.
1957	1956	1956	1956	1955	1955	1955	1957	1957	1955	1954	1956	1955	1955	1955			
34.4	22.2	73.9	35.0	20.6	108.5	35.0	21.1	133.6	33.3	21.6	137.7	33.9	18.9	218.7	1891	1891	Pamban.
1945	1954	1937	1940	1930	1901	1940	1891	1932	1944	1957	1896	1906	1953	1955			
40·0	20·6	112·3	39·4	20·0	154·2	38·3	18·9	128·8	36·1	17·2	169·7	35·0	16·7	165·6	1881	1881	Mathurai.
1891	1912	1910	1928	1908	1946	1934	1911	1909	1948	1909	1921	1951	1920	1955			
40·6	20·6	125·7	37·8	20·6	78·7	37·2	20·6	396·2	35·0	16·7	365·5	33·9	16·7	366·8	1881	1881	Nagapattinam
1898	1913	1900	1907	1897	1921	1908	1891	1930	1948	1951	1918	1909	1886	1931			
40·6	20·6	110·0	40·6	20·6	84·3	38·9	18·9	319·0	36·7	16·7	298·2	35·6	14·4	135·6	1881	1881	Tiruchirapalli.
1888	1935	1944	1929	1908	1897	1906	1891	1930	1923	1884	1939	1926	1883	1931			
35·6	17·2	59·4	35·6	17·8	75·7	36·1	15·0	107·4	34·4	13·9	104·7	35·0	12·2	109·7	1881	1881	Coimbatore.
1889	1921	1916	1914	1954	1912	1918	1911	1891	1892	1901	1957	1899	1883	1930			
33·3	16·1	52·1	35·6	16·7	116·8	35·0	16·1	50·8	32·8	14·4	81·3	32·2	12·8	37·6	1948	1948	Coimbatore. (Peelamedu Aerodrome).
1953	1949	1950	1955	1948	1950	1949	1948	1957	1952	1954	1957	1950	1951	1954			
38·9	19·4	176·3	38·9	18·9	250·2	37·8	15·6	165·6	35·6	12·8	121·9	35·6	12·8	131·3	1881	1881	Salem.
1885	1909	1939	1891	1887	1885	1918	1911	1916	1948	1901	1882	1926	1945	1884			
38·3	21·1	73·9	38·4	20·0	83·6	37·2	18·9	113·0	36·7	16·1	125·2	33·3	16·1	83·3	1948	1948	Kallakurichi.
1951	1956	1951	1957	1956	1956	1951	1950	1956	1948	1954	1948	1950	1954	1952			

R = Heaviest Rainfall in 24 hours ending at 0830 hrs. I. S. T.
.. = Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Madras (*contd.*)																					
Cuddalore . .	31·7	13·3	130·3	36·1	14·4	119·4	38·9	16·1	183·1	42·2	19·4	120·4	43·3	21·1	572·0	42·8	21·1	82·5	40·6	18·9	100·8
	1951	1894	1920	1898	1918	1930	1953	1898	1933	1908	1939	1939	1953	1950	1943	1905	1898	1921	1895	1911	1949
Vellore . .	33·9	11·7	69·1	37·8	12·8	67·3	40·6	14·4	49·8	43·9	17·8	83·1	44·4	19·4	214·4	42·8	20·6	94·2	40·6	20·6	125·2
	1936	1946	1922	1945	1922	1906	1953	1934	1915	1908	1950	1951	1906	1902	1943	1935	1922	1938	1902	1910	1910
Madras . .	32·8	13·9	212·9	36·7	15·0	123·2	40·6	16·7	64·5	42·8	20·0	96·3	45·0	21·1	214·9	43·3	20·6	59·2	41·1	21·7	116·3
	1894	1905	1915	1927	1934	1929	1953	1908	1925	1908	1939	1945	1910	1886	1943	1948	1909	1931	1915	1947	1910
Madras (Nungambakkam).	30·6	16·1	62·7	35·0	16·7	27·9	40·0	18·3	2·8	41·1	21·1	100·3	42·2	21·1	244·3	42·2	22·7	30·7	39·4	22·2	68·3
	1953	1950	1955	1950	1951	1955	1953	1954	1950	1956	1950	1951	1953	1952	1952	1953	1957	1956	1951	1954	1954
Coastal Mysore																					
Karwar . .	36·1	14·1	0	36·6	15·6	0	36·1	17·7	16·8	38·9	21·0	28·7	32·8	22·8	173·7	32·2	21·7	199·4	30·0	21·1	161·0
	1954	1957	..	1957	1953	..	1954	1957	1954	1956	1957	1954	1957	1956	1955	1957	1955	1953	1957	1953	1953
Honavar . .	36·1	15·6	18·5	37·2	15·6	1·5	37·8	18·8	19·8	35·0	20·6	62·0	35·0	21·1	238·5	33·9	21·1	292·6	32·2	21·1	227·3
	1946	1946	1943	1943	1947	1947	1948	1957	1954	1956	1951	1956	1941	1950	1955	1948	1954	1946	1949	1956	1953
Mangalore . .	36·1	16·7	40·6	37·8	16·7	36·1	37·2	18·3	82·8	35·6	20·0	117·1	36·7	18·9	360·9	34·4	20·0	252·0	31·7	20·6	268·2
	1957	1911	1943	1920	1911	1917	1955	1911	1946	1921	1954	1939	1921	1911	1909	1923	1920	1897	1954	1931	1900
Mangalore . . (Bajpe Aerodrome).	36·6	17·9	0	35·3	20·1	0	33·9	20·1	0	35·0	22·2	3·3	34·6	22·3	76·5	32·2	21·2	133·6	30·0	21·9	207·8
	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Mysore (North)																					
Bidar . . .	33·9	3·9	51·3	37·2	9·4	29·2	41·7	12·8	36·3	42·2	12·2	110·5	43·3	6·7	86·9	42·8	10·0	184·9	36·1	11·1	245·9
	1925	1901	1906	1926	1950	1928	1910	1925	1938	1946	1918	1907	1931	1918	1943	1953	1918	1943	1924	1900	1955
Gulbarga . .	36·1	6·7	42·4	38·3	11·1	57·1	42·8	12·8	72·6	43·9	13·3	79·3	45·0	18·3	124·7	45·0	12·8	144·8	37·2	17·2	108·5
	1897	1937	1922	1903	1911	1929	1892	1910	1938	1923	1902	1907	1912	1892	1952	1923	1910	1928	1920	1920	1897
Bijapur . .	39·4	7·2	89·1	41·1	8·9	23·6	41·1	13·3	39·9	42·2	16·1	66·0	42·8	17·8	90·2	42·2	17·2	51·1	36·7	16·1	102·1
	1948	1945	1922	1943	1930	1928	1910	1910	1938	1931	1905	1933	1951	1940	1956	1923	1903	1957	1901	1902	1953
Belgaum . .	33·3	7·2	48·3	37·2	6·7	24·9	39·4	10·0	39·9	39·5	12·8	68·6	40·6	15·6	129·5	37·2	16·1	137·4	31·7	17·2	192·8
	1929	1946	1906	1892	1901	1956	1892	1957	1887	1957	1955	1892	1892	1917	1955	1953	1912	1939	1902	1912	1943
Belgaum (C.T.O.)	32·0	9·9	0	34·6	11·7	40·9	37·2	10·4	33·5	39·4	12·8	69·1	38·6	18·3	129·5	32·2	18·9	132·3	27·2	17·8	102·4
	1957	1957	..	1957	1956	1956	1956	1957	1956	1956	1955	1956	1957	1957	1955	1955	1955	1955	1955	1955	1955
Belgaum (Sambre Aerodrome)	32·8	10·6	0	36·0	10·6	15·5	38·3	9·4	13·7	40·0	14·4	30·2	39·4	17·2	63·7	38·3	18·3	94·2	30·0	18·3	67·3
	1956	1956	..	1957	1954	1956	1953	1957	1954	1956	1955	1954	1953	1955	1955	1953	1956	1955	1953	1956	1954
Gadag . . .	34·4	11·1	21·1	37·2	11·1	16·8	40·0	15·0	61·7	41·1	17·2	53·3	41·7	18·9	81·8	40·6	19·4	68·8	34·4	18·9	54·4
	1938	1951	1935	1948	1950	1937	1953	1940	1948	1941	1935	1957	1939	1952	1943	1953	1956	1944	1951	1934	1932
Raichur . . .	35·6	10·0	49·8	38·3	12·8	49·3	42·8	16·7	23·9	43·3	16·1	95·8	45·6	18·3	87·9	43·3	16·1	118·1	38·3	17·8	87·1
	1897	1899	1926	1897	1929	1923	1892	1936	1955	1927	1936	1901	1928	1927	1952	1898	1896	1901	1915	1899	1907
Mysore (South)																					
Bellary . . .	36·7	10·6	46·2	39·4	12·2	59·9	42·8	14·4	26·7	43·9	16·1	77·0	43·9	18·3	162·3	42·2	18·9	85·3	38·3	19·4	102·9
	1897	1891	1884	1897	1891	1917	1892	1885	1930	1909	1905	1956	1897	1890	1940	1915	1956	1915	1915	1930	1953
Chitaldrug .	33·9	11·1	104·1	36·1	13·3	88·9	38·9	16·1	17·8	39·4	17·2	105·7	41·7	16·7	181·6	37·8	17·2	118·4	34·4	19·9	114·8
	1900	1918	1918	1931	1947	1944	1925	1955	1915	1941	1904	1956	1931	1951	1955	1935	1906	1897	1932	1957	1910
Shimoga .	33·3	9·5	1·0	37·2	10·6	2·3	38·9	11·7	29·2	38·3	17·8	114·5	38·3	18·3	89·4	36·1	18·3	52·7	31·7	19·4	111·0
	1952	1957	1953	1953	1953	1956	1953	1951	1955	1957	1951	1956	1953	1954	1957	1953	1956	1957	1952	1956	1953

X=Highest Maximum Temperature.
N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Madras (*contd.*)
39·4	20·6	134·6	38·3	20·0	135·6	38·9	18·9	208·3	35·0	16·7	309·9	35·0	11·1	426·5	1891	1891	Cuddalore.
1923	1899	1892	1891	1899	1911	1899	1899	1895	1915	1901	1913	1895	1933	1931			
39·4	21·1	106·2	38·3	20·0	122·9	37·8	15·6	170·9	35·0	13·9	299·0	33·9	12·2	152·9	1901	1901	Vellore.
1901	1952	1909	1908	1936	1921	1954	1911	1943	1952	1921	1930	1909	1950	1901			
40·0	20·6	91·7	38·9	20·6	100·3	38·9	16·7	233·7	34·4	15·0	236·2	32·8	13·9	261·6	1881	1881	Madras.
1918	1935	1950	1883	1884	1881	1920	1889	1888	1952	1901	1922	1909	1895	1901			
38·9	21·7	92·2	37·8	22·2	104·9	36·7	20·6	119·4	35·0	16·7	164·6	31·7	16·1	113·8	1949	1949	Madras (Nungambakkam).
1953	1957	1955	1952	1956	1956	1951	1952	1954	1951	1954	1951	1951	1949	1952			
																	Coastal Mysore
29·4	21·7	136·7	30·6	21·1	118·9	34·3	18·3	175·3	35·0	15·6	71·6	33·9	14·4	5·8	1952	1952	Karwar.
1954	1955	1955	1955	1954	1955	1957	1952	1954	1953	1952	1955	1957	1956	1952			
31·8	19·4	152·9	32·2	20·6	127·5	37·2	18·3	132·1	36·7	15·6	65·8	37·2	16·1	25·1	1939	1939	Honavar.
1957	1955	1940	1951	1950	1954	1940	1950	1944	1941	1950	1957	1949	1945	1947			
32·2	20·6	232·4	31·7	21·1	184·7	34·4	20·0	181·6	35·6	18·3	99·6	35·0	16·7	153·2	1911	1881	Mangalore.
1932	1911	1931	1955	1950	1900	1941	1933	1913	1941	1950	1927	1953	1950	1933			
29·3	20·9	89·9	30·3	21·3	18·0	33·2	21·5	23·6	33·6	19·0	51·0	34·6	19·4	1·0	1957	1957	Mangalore. (Bajpe Aerodrome).
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			
																	Mysore (North)
36·1	9·4	144·3	36·7	8·9	203·2	36·7	8·3	128·3	36·1	6·1	138·4	32·8	2·8	81·8	1896	1896	Bidar.
1924	1900	1947	1924	1918	1949	1901	1900	1903	1918	1900	1896	1923	1918	1906			
37·8	18·3	100·3	37·2	17·8	147·3	37·8	10·0	147·3	35·6	7·8	64·8	34·4	5·6	66·5	1891	1891	Gulbarga.
1899	1920	1910	1926	1954	1928	1899	1905	1893	1940	1945	1948	1920	1945	1906			
35·6	16·7	121·2	36·7	16·1	143·8	37·2	12·2	96·0	35·0	8·3	113·0	33·3	6·7	34·5	1896	1896	Bijapur.
1902	1906	1954	1896	1901	1949	1896	1897	1957	1896	1904	1922	1936	1897	1942			
31·7	15·7	279·4	33·9	15·0	106·7	33·3	12·2	101·6	32·8	9·4	101·1	31·7	8·9	165·1	1881	1881	Belgaum.
1932	1957	1914	1886	1902	1937	1896	1906	1957	1918	1955	1917	1941	1951	1902			
27·8	17·8	110·0	30·6	16·3	55·1	31·1	15·6	82·5	31·1	9·4	44·2	31·1	8·9	0	1955	1955	Belgaum (C.T.O.).
1956	1956	1956	1955	1957	1955	1956	1956	1955	1956	1955	1957	1956	1956	..			
28·9	15·6	86·4	30·6	16·0	27·2	31·6	13·9	91·4	30·0	10·6	49·0	31·1	7·8	2·0	1952	1952	Belgaum (Sambre Aerodrome).
1954	1956	1956	1955	1957	1955	1957	1954	1957	1957	1955	1956	1952	1954	1954			
34·4	18·7	80·0	37·8	17·2	95·0	34·4	15·6	171·5	37·2	12·2	82·0	32·8	11·7	56·4	1931	1931	Gadag.
1948	1957	1957	1951	1952	1931	1948	1950	1947	1947	1939	1956	1953	1948	1933			
37·8	17·2	107·7	38·3	19·4	130·8	37·2	15·6	158·7	35·0	11·7	87·6	36·1	10·0	52·1	1891	1896	Raichur.
1915	1908	1914	1897	1948	1949	1920	1943	1916	1920	1924	1919	1899	1945	1903			
																	Mysore (South)
37·8	19·4	105·7	37·8	19·4	127·5	38·9	15·0	111·3	37·6	11·7	162·1	35·6	10·6	33·5	1881	1881	Bellary.
1883	1933	1950	1913	1919	1956	1896	1889	1904	1957	1910	1903	1913	1926	1925			
32·8	18·4	109·2	35·0	15·0	95·5	33·9	15·6	132·1	32·8	8·3	87·4	32·8	8·3	109·2	1896	1896	Chitaldrug.
1932	1957	1939	1905	1910	1933	1905	1943	1930	1931	1945	1925	1930	1945	1933			
30·0	16·1	49·8	33·3	16·1	45·7	31·7	11·7	62·2	33·3	8·3	55·1	32·2	8·9	43·4	1950	1950	Shimoga.
1950	1954	1953	1951	1952	1950	1954	1952	1956	1953	1950	1956	1952	1951	1952			

R—Heaviest Rainfall in 24 hours ending at 0830 hrs. I. S. T.

..=Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Mysore (South) (*contd.*).																					
Balehonnur	32·8	10·0	8·4	32·8	11·1	32·3	35·0	12·2	58·7	35·0	13·9	102·6	34·4	15·6	218·4	32·8	15·6	172·7	28·9	13·9	219·2
	1953	1946	1947	1951	1940	1952	1949	1940	1936	1950	1952	1956	1942	1952	1955	1953	1943	1941	1945	1955	1953
Hassan	32·2	7·3	59·7	35·0	8·3	50·3	36·7	9·4	57·9	37·2	14·4	72·9	37·8	14·4	143·8	34·4	16·1	94·5	31·1	15·0	82·5
	1955	1899	1921	1906	1898	1941	1934	1898	1954	1942	1905	1899	1906	1923	1903	1953	1936	1941	1905	1918	1929
Mysore	32·8	11·1	26·4	36·1	12·2	59·4	37·8	13·3	47·5	38·3	16·1	133·3	37·8	15·6	184·4	37·2	15·0	68·6	33·3	17·2	71·6
	1936	1953	1926	1931	1946	1917	1931	1933	1923	1931	1918	1921	1936	1904	1957	1926	1936	1915	1899	1956	1918
Bangalore (Central Observatory)	32·2	7·8	65·8	34·4	9·4	67·3	37·2	11·1	50·8	38·3	14·4	90·7	38·9	16·7	153·9	37·8	16·7	101·6	33·3	16·1	105·4
	1925	1884	1908	1926	1884	1901	1925	1884	1911	1931	1894	1939	1931	1945	1909	1926	1890	1891	1914	1882	1949
Bangalore (Aerodrome)	30·6	11·7	11·9	34·4	12·2	28·5	36·1	11·7	18·5	37·2	17·2	58·9	36·7	16·7	68·6	35·6	16·7	70·6	32·2	16·1	66·3
	1954	1956	1954	1954	1950	1950	1953	1950	1954	1956	1950	1953	1956	1949	1952	1953	1950	1949	1952	1953	1952
Kerala (Including Laccadives).																					
Kozhikode	35·6	17·2	104·4	35·6	16·1	150·1	35·0	19·4	83·3	35·6	21·1	143·3	37·2	20·0	268·5	33·9	20·6	250·2	32·2	21·1	264·2
	1952	1913	1909	1952	1925	1945	1954	1896	1936	1952	1938	1899	1920	1937	1932	1948	1956	1941	1931	1956	1922
Palghat	36·1	15·6	31·5	38·9	18·9	29·7	40·6	20·6	78·7	41·7	20·6	90·4	39·4	20·6	236·2	35·6	20·6	99·1	32·2	20·6	107·7
	1953	1946	1948	1954	1954	1952	1956	1951	1948	1950	1943	1954	1952	1955	1957	1948	1956	1955	1945	1956	1949
Fort Cochin	33·3	17·8	133·3	33·9	19·4	105·4	33·9	21·1	101·9	33·9	21·7	160·5	33·3	21·1	253·2	32·2	20·6	185·4	31·7	21·1	213·9
	1955	1929	1921	1945	1932	1899	1949	1954	1922	1957	1943	1956	1952	1939	1933	1935	1935	1900	1953	1943	1910
Cochin (Naval Air Station)	33·1	19·1	28·8	32·9	21·1	73·7	33·3	22·8	7·5	34·0	21·7	177·0	34·0	22·2	140·7	31·3	21·7	118·9	30·5	20·6	110·7
	1957	1957	1957	1957	1956	1956	1956	1956	1957	1957	1956	1956	1957	1956	1957	1957	1956	1956	1957	1956	1957
Alleppey	35·0	18·3	38·1	35·0	20·0	59·7	36·7	21·1	69·9	35·0	21·1	274·3	34·4	20·6	134·6	34·4	21·1	227·3	31·7	20·6	150·6
	1957	1957	1951	1956	1953	1947	1949	1955	1947	1946	1948	1950	1952	1955	1950	1948	1956	1948	1953	1950	1949
Punalur	36·1	15·7	0	37·6	17·4	13·7	37·1	17·9	28·2	37·7	20·2	61·0	37·1	22·8	80·2	32·4	21·9	110·4	32·1	21·0	88·6
	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Trivandrum	34·4	18·9	52·1	35·0	18·9	88·1	35·6	20·6	78·7	35·0	21·7	129·8	35·2	21·7	277·9	34·4	20·0	154·7	31·7	21·1	151·6
	1957	1950	1918	1955	1946	1927	1953	1956	1954	1954	1956	1937	1957	1956	1926	1953	1956	1944	1956	1956	1910
Trivandrum (Aerodrome)	33·9	18·3	8·6	32·8	18·3	47·2	35·0	20·0	16·5	34·4	21·1	82·3	34·3	22·2	65·0	31·1	21·1	94·2	32·2	21·7	52·3
	1955	1956	1956	1957	1956	1957	1956	1956	1957	1956	1956	1956	1957	1956	1957	1956	1956	1957	1956	1956	1957
Minicoy	32·8	17·8	126·2	32·2	17·2	57·1	32·8	19·4	54·6	35·6	21·7	121·2	36·7	21·7	238·5	33·9	22·2	148·6	31·7	21·1	154·9
	1948	1953	1926	1948	1946	1944	1941	1955	1936	1942	1950	1950	1932	1956	1949	1935	1945	1926	1953	1938	1929
Amini Divi	36·7	18·9	74·2	35·0	19·4	18·0	37·2	20·6	32·0	37·2	20·0	121·9	37·2	21·7	161·0	35·6	21·1	211·1	33·3	21·7	180·3
	1950	1912	1918	1952	1923	1902	1950	1950	1923	1956	1923	1901	1947	1941	1933	1948	1930	1909	1945	1910	1907
Hill Stations excluding Kashmir																					
Walong	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kohima	18·9	5·0	21·6	22·2	5·0	14·7	26·7	7·1	36·1	32·2	9·4	33·6	31·7	12·8	74·9	28·9	15·0	105·9	28·9	15·6	74·9
	1954	1956	1957	1954	1956	1954	1957	1957	1953	1956	1957	1955	1957	1952	1956	1955	1953	1957	1952	1956	1954
Aijal	25·0	3·9	42·4	27·8	3·9	32·5	31·1	5·6	72·6	33·3	10·6	76·2	33·1	13·3	123·7	31·1	9·4	85·1	30·6	14·4	148·6
	1954	1945	1945	1942	1950	1946	1945	1947	1946	1938	1953	1951	1944	1952	1942	1938	1944	1944	1945	1941	1946
Shillong	21·1	—2·8	52·3	24·4	—2·8	41·1	28·9	—0·6	189·5	30·0	6·7	117·9	30·1	5·6	169·7	28·3	11·7	415·3	28·3	15·0	205·7
	1944	1937	1957	1952	1950	1914	1924	1906	1929	1954	1946	1932	1957	1941	1914	1924	1930	1934	1932	1956	1952

X=Highest Maximum Temperature.
N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Mysore (South) (*contd.*).
29·4	16·1	179·8	30·6	13·3	83·3	29·4	12·8	85·6	29·4	10·0	55·9	30·0	8·3	56·9	1931	1931	Balehonnur.
1947	1951	1949	1936	1935	1955	1951	1952	1943	1951	1934	1932	1945	1937	1937			
31·1	15·6	79·8	32·2	13·9	90·4	32·2	11·7	135·9	31·1	8·3	115·8	31·1	6·7	80·8	1896	1896	Hassan
1932	1925	1897	1905	1906	1931	1905	1897	1902	1927	1904	1925	1926	1907	1906			
33·9	16·7	95·3	33·3	15·0	129·3	32·8	13·9	111·5	32·2	11·1	105·2	31·7	10·6	78·5	1896	1896	Mysore.
1899	1928	1910	1936	1906	1940	1905	1917	1902	1918	1901	1915	1923	1945	1952			
33·3	14·4	162·1	33·3	15·0	124·7	32·2	13·3	116·8	31·1	10·6	114·5	31·1	8·9	67·3	1881	1881	Bangalore. (Central Observatory).
1899	1882	1890	1951	1883	1912	1934	1889	1935	1923	1889	1916	1926	1883	1941			
31·1	15·0	54·4	32·8	15·6	69·1	31·7	14·4	169·2	31·7	11·7	83·6	30·1	11·1	20·8	1948	1948	Bangalore. (Aerodrome).
1951	1948	1954	1951	1954	1953	1957	1950	1953	1953	1950	1950	1957	1954	1952			
																	Kerala (Including Laccadives)
32·2	20·6	204·5	33·9	21·1	179·1	34·4	20·0	189·2	34·1	16·1	192·3	34·8	16·1	115·1	1891	1881	Kozhikode.
1953	1950	1924	1952	1954	1955	1897	1917	1940	1929	1901	1925	1957	1895	1942			
31·7	20·6	109·5	35·6	20·6	86·9	35·0	20·6	76·2	35·6	17·2	65·8	34·4	16·7	89·7	1943	1943	Palghat.
1947	1946	1956	1955	1954	1944	1945	1954	1953	1952	1954	1948	1954	1945	1946			
32·2	21·1	155·7	31·1	21·1	111·8	32·2	21·1	236·2	32·8	19·4	121·4	32·9	19·4	154·7	1926	1881	Fort Cochin.
1929	1946	1947	1955	1950	1936	1930	1943	1884	1953	1944	1920	1957	1945	1946			
30·3	21·9	71·9	30·7	21·7	55·1	34·1	22·2	138·4	32·8	22·2	69·9	34·2	18·9	11·4	1956	1956	Cochin. (Naval Air Station).
1957	1957	1956	1957	1956	1957	1957	1956	1957	1957	1956	1957	1957	1956	1956			
31·7	21·1	139·2	32·2	21·7	134·1	32·8	21·1	163·1	34·4	20·6	132·3	35·0	17·8	82·5	1944	1944	Alleppey.
1949	1948	1947	1951	1950	1955	1946	1950	1945	1949	1954	1945	1951	1944	1947			
31·4	21·3	37·6	34·3	19·4	21·1	34·4	20·4	98·5	34·0	17·4	63·5	34·4	20·8	49·1	1957	1957	Punalur.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			
32·8	20·6	102·4	33·3	21·1	125·5	33·3	21·1	215·9	33·9	18·9	162·8	34·4	18·9	148·8	1931	1889	Trivandrum.
1953	1946	1932	1946	1950	1907	1940	1950	1908	1954	1944	1948	1955	1945	1919			
31·1	21·1	21·8	32·8	21·7	116·8	31·7	21·7	82·8	32·2	**20·6**	114·8	32·8	18·3	41·7	1954	1954	Trivandrum. (Aerodrome).
1956	1955	1957	1955	1956	1955	1957	1955	1955	1954	1954	1955	1957	1955	1955			
31·7	21·1	200·7	32·2	21·7	107·7	33·3	19·4	128·3	32·2	17·2	132·1	32·2	18·3	87·5	1896	1896	Minicoy.
1934	1934	1930	1937	1954	1916	1931	1945	1910	1947	1942	1907	1957	1955	1898			
32·8	22·2	241·8	33·9	21·7	217·7	34·4	10·6	133·6	35·0	18·3	88·9	35·0	18·9	119·4	1896	1896	Amini Divi.
1905	1925	1909	1940	1950	1915	1947	1928	1928	1949	1910	1932	1910	1908	1925			
																	Hill Stations excluding Kashmi .
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Walong.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
30·6	17·1	102·1	27·8	15·9	95·3	27·2	12·1	83·8	24·5	8·3	68·8	19·4	6·1	5·1	1952	1952	Kohima.
1957	1957	1954	1956	1957	1953	1956	1957	1954	1957	1952	1955	1954	1954	1953			
29·4	12·8	137·4	29·4	15·6	136·1	27·8	8·9	71·9	28·3	8·3	73·4	26·7	5·6	57·9	1938	1938	Aijal.
1944	1946	1943	1949	1941	1938	1947	1947	1947	1943	1942	1942	1947	1947	1945			
29·2	14·4	118·1	27·8	11·7	226·1	27·2	5·6	296·2	25·6	1·1	96·0	22·8	−1·7	41·1	1906	1906	Shillong.
1957	1932	1916	1946	1940	1927	1938	1921	1946	1943	1937	1950	1918	1929	1926			

R = Heaviest Rainfall in 24 hours ending at 0830 hrs. I. S. T.

.. = Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AN

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Hill Stations excluding Kashmir (*contd.*)																					
Cherrapunji	26·7	1·1	85·3	28·9	0·6	91·9	30·6	0·6	306·1	28·3	3·9	462·3	27·8	3·3	812·0	27·8	11·7	973·8	28·3	11·7	838·2
	1913	1911	1929	1913	1950	1907	1913	1912	1910	1938	1911	1922	1923	1917	1916	1942	1910	1956	1937	1910	1910
Mawsynram	..	..	38·1	..	..	45·7	..	..	85·1	..	..	316·5	..	..	450·5	..	..	613·4	..	..	619·8
	..	..	1957	..	..	1955	..	..	1953	..	..	1956	..	..	1956	..	..	1956	..	..	1956
Darjiling (Raj Bhawan)	18·9	—3·9	134·6	17·2	—5·0	42·9	23·3	—0·6	72·9	26·7	1·1	135·1	23·9	5·6	232·9	26·7	8·3	454·1	25·0	3·9	194·8
	1952	1953	1957	1955	1905	1940	1935	1908	1951	1910	1933	1916	1916	1939	1887	1902	1938	1950	1919	1944	1924
Kalimpong	26·1	0·6	40·6	26·1	3·3	45·0	27·8	4·6	42·4	30·6	8·3	69·6	29·4	10·0	122·4	30·6	14·4	302·0	28·9	15·2	195·8
	1956	1945	1957	1956	1945	1940	1923	1957	1948	1939	1944	1948	1955	1955	1938	1931	1956	1950	1937	1957	1939
Katmandu	25·0	—2·8	36·6	28·3	—1·1	27·4	33·3	1·1	47·2	37·2	4·4	43·4	37·5	9·4	55·6	37·2	13·9	108·5	32·8	16·1	167·4
	1946	1955	1942	1922	1931	1944	1938	1948	1943	1954	1945	1949	1957	1934	1956	1924	1922	1950	1937	1928	1954
Mukteswar(Kumaon)	19·4	—6·1	81·3	23·9	—7·8	76·5	25·0	—3·3	67·8	27·8	—1·7	49·0	29·4	3·3	71·4	30·0	6·7	220·7	30·6	9·4	159·5
	1910	1953	1945	1953	1905	1905	1908	1907	1914	1956	1937	1919	1956	1920	1916	1901	1903	1921	1901	1930	1907
Nainital	18·3	—5·6	77·5	21·7	—2·2	69·1	21·7	1·1	60·2	26·1	3·9	35·6	27·8	10·6	208·3	28·3	11·1	141·2	26·1	14·4	223·5
	1957	1953	1953	1953	1957	1954	1956	1957	1954	1954	1957	1953	1956	1957	1956	1953	1957	1956	1954	1955	1957
Tapoban	18·9	—4·4	30·5	26·7	—2·2	5·3	26·7	0·6	38·1	29·4	0·6	38·1	31·7	6·1	31·7	32·2	7·2	35·6	31·7	7·2	48·3
	1957	1955	1955	1955	1956	1953	1955	1957	1955	1956	1957	1955	1956	1957	1957	1955	1957	1957	1957	1957	1957
Badrinath	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lokpal	14·0	—16·1	77·5	0	—13·9	35·6	—3·3	—10·6	17·8	0	—11·1	34·3	10·0	—7·8	38·6	11·1	—3·3	31·7	11·1	1·7	49·5
	1957	1955	1955	1956	1957	1955	1957	1957	1957	1957	1957	1957	1956	1955	1957	1956	1955	1956	1955	1956	1954
Jamuna Chetty	..	..	48·3	..	..	57·1	..	..	58·4	..	..	38·1	..	..	50·8	..	...	76·7	..	..	144·8
	..	..	1956	..	..	1954	..	..	1952	..	..	1957	..	..	1957	..	..	1956	..	..	1957
Mussooree	21·1	—5·0	90·9	23·3	—6·7	82·0	26·1	—2·2	62·0	28·9	—0·6	43·2	34·4	5·6	50·0	31·7	5·3	139·9	29·4	12·2	196·9
	1949	1935	1943	1953	1950	1949	1945	1945	1944	1956	1944	1942	1949	1947	1943	1935	1957	1936	1949	1939	1942
Kharsali	..	..	77·5	..	..	59·7	..	..	77·7	..	..	67·3	..	..	77·0	..	..	41·7	..	..	102·6
	..	..	1954	..	..	1954	..	..	1956	..	..	1957	..	..	1957	..	..	1952	..	..	1957
Rana	..	..	50·8	..	..	55·1	..	..	90·4	..	...	62·2	..	..	74·9	..	..	75·7	..	..	95·3
	..	..	1956	..	..	1954	..	..	1956	..	..	1957	..	..	1957	..	..	1956	..	..	1957
Simla	18·9	—10·6	78·7	20·6	—8·3	63·5	23·9	—5·6	63·0	28·3	—1·1	39·6	30·0	4·4	97·8	30·6	7·8	122·2	27·8	10·0	167·1
	1949	1945	1888	1953	1950	1908	1945	1933	1901	1941	1905	1890	1944	1924	1883	1932	1922	1906	1954	1932	1922
Dharampore	..	..	81·3	..	..	81·3	..	..	104·1	..	..	78·7	..	..	56·9	..	..	91·4	..	..	147·3
	..	..	1957	..	..	1954	..	..	1955	..	..	1957	..	..	1957	..	..	1953	..	..	1952
Kyelang	..	..	57.1	..	..	49·5	..	..	68·6	..	..	50·3	..	..	33·5	..	..	40·6	..	..	78·0
	..	..	1951	..	..	1956	..	..	1947	..	..	1951	..	..	1955	..	..	1948	..	..	1951
Gondla	..	..	55·4	..	..	49·5	..	..	90·2	..	..	61·7	..	..	105·4	..	..	35·6	..	..	104·7
	..	..	1955	..	..	1955	..	..	1952	..	..	1957	..	..	1951	..	..	1955	..	..	1951
Kothi	..	..	82·3	..	..	57·7	..	..	89·7	..	..	74·2	..	..	110·5	..	..	69·1	..	..	107·9
	..	..	1956	..	..	1955	..	..	1955	..	..	1957	..	..	1957	..	..	1955	..	..	1951
Koksar	..	..	70·6	..	..	77·7	..	..	129·5	..	..	61·0	..	..	141·7	..	..	107·7	..	..	97·5
	..	..	1954	..	..	1957	..	..	1953	..	..	1954	..	..	1957	..	..	1955	..	..	1955
Dalhousie	21·7	—5·0	134·6	29·4	—2·8	134·6	29·4	0·9	96.5	29·4	1·1	112·3	33·3	6·7	53·9	34·4	8·9	97·3	32.8	11·7	232·6
	1952	1953	1950	1953	1957	1949	1953	1952	1948	1956	1955	1951	1952	1955	1955	1953	1952	1956	1953	1955	1957

X=Highest Maximum Temperature.
N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station.
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Hill Stations excluding Kashmir (*contd.*)
29·2	12·8	682·7	28·9	12·8	632·2	29·4	10·0	590·5	26·7	6·7	332·2	23·3	3·9	189·7	1906	1906	Cherrapunji.
1957	1943	1932	1906	1925	1951	1938	1947	1919	1915	1946	1917	1951	1929	1926			
..	..	685·8	..	..	532·1	..	..	309·9	..	..	156·2	..	..	12·7	..	1951	Mawsynram.
..	..	1956	..	..	1951	..	..	1952	..	..	1952	..	..	1954			
26·7	8·3	237·5	26·7	10·0	492·8	23·3	4·4	334·5	22·2	—0·6	219·7	20·0	—1·7	31·2	1891	1881	Darjiling (Raj Bhawan).
1957	1946	1915	1900	1940	1899	1944	1913	1929	1943	1951	1912	1947	1905	1885			
30·9	10·0	141·7	29·1	13·9	206·0	28·3	8·9	206·3	26·1	3·9	50·8	26·7	—0·6	29·0	1921	1926	Kalimpong.
1957	1955	1950	1957	1924	1929	1944	1944	1929	1956	1944	1948	1953	1922	1934			
33·3	16·1	101·6	33·3	13·3	71·4	33·3	5·6	47·5	29·4	0·6	28·5	28·3	—2·8	15·2	1914	1935	Katmandu.
1939	1954	1945	1938	1940	1936	1938	1934	1937	1931	1938	1948	1917	1954	1937			
26·1	11·1	203·7	25·6	6·7	254·5	25·0	1·7	182·4	21·7	—1·1	45·2	21·7	—5·0	90·7	1901	1901	Mukteswar (Kumaon).
1928	1919	1948	1946	1940	1914	1909	1913	1910	1953	1918	1927	1944	1954	1957			
25·1	12·8	189·7	23·3	10·6	313·7	22·3	5·6	300·7	21·1	2·8	15·2	21·2	—1·1	153·7	1953	1953	Nainital.
1957	1956	1954	1956	1953	1957	1957	1957	1956	1953	1956	1957	1957	1955	1957			
27·8	10·0	45·7	27·8	11·1	35·6	26·7	4·4	81·3	21·7	3·9	2·0	21·1	0	7·0	1953	1953	Tapoban.
1956	1957	1954	1956	1957	1957	1956	1956	1955	1955	1956	1957	1956	1955	1957			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Badrinath.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
10·6	2·2	43·2	10·0	—2·2	55·4	8·9	—7·8	66·0	8·9	—12·2	38·9	2·2	—16·7	66·5	1951	1951	Lokpal.
1957	1956	1957	1957	1951	1951	1952	1954	1956	1952	1957	1954	1953	1952	1956			
..	..	121·9	..	..	63·5	..	..	83·8	..	..	30·0	..	..	57·1	..	1951	Jamuna Chetty.
..	..	1955	..	..	1956	..	..	1955	..	..	1951	..	..	1957			
25·6	12·2	302·3	27·2	6·1	199·6	25·6	3·3	198·1	25·0	1·1	30·5	31·7	—3·9	111·0	1926	1926	Mussooree
1957	1937	1931	1946	1940	1947	1951	1945	1956	1952	1937	1928	1953	1954	1957			
..	..	77.5	..	..	84·6	..	..	129·8	..	..	3·8	..	..	34·8	..	1951	Kharsali.
..	..	1952	..	..	1955	..	..	1956	..	..	1951	..	..	1953			
..	..	100·3	..	..	65·3	..	..	85·1	..	..	30·2	..	..	63·8	..	1951	Rana.
..	..	1953	..	..	1955	..	..	1956	..	..	1956	..	..	1957			
27·8	10·6	227·1	25·0	5·0	135·9	23·9	2·8	113·0	21·1	—1.1	68·8	20·0	—6·1	76·5	1896	1881	Simla.
1951	1957	1901	1946	1940	1892	1938	1904	1884	1952	1911	1894	1932	1937	1923			
..	..	165·1	..	..	213·4	..	..	199·4	..	..	130·8	..	..	21.1	..	1947	Dharampore.
..	..	1954	..	..	1955	..	..	1956	..	..	1951	..	..	1956			
..	..	45·2	..	..	128·3	..	..	63·5	..	..	43·7	..	..	26·7	..	1947	Kyelang.
..	..	1953	..	..	1950	..	..	1956	..	..	1951	..	..	1956			
..	..	63·5	..	..	123·2	..	..	158·7	..	..	82·5	..	..	48·5	..	1951	Gondla.
..	..	1957	..	..	1954	..	..	1955	..	..	1951	..	..	1953			
..	..	85·1	..	..	102·4	..	..	99·3	..	..	50·8	..	..	63·7	..	1951	Kothi.
..	..	1952	..	..	1954	..	..	1955	..	..	1951	..	..	1953			
..	..	69·1	..	..	70·6	..	..	167·6	..	..	46·2	..	..	45·7	..	1952	Koksar.
..	..	1952	..	..	1954	..	..	1955	..	..	1957	..	..	1957			
26·2	11·7	198·1	26·1	10·6	188·2	26·1	3·9	287·0	25·0	3·1	97·8	23·9	—3·3	110·5	1947	1947	Dalhousie.
1957	1957	1951	1956	1953	1947	1952	1957	1955	1952	1957	1957	1952	1954	1957			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T.
..=Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Hill Stations excluding Kashmir *(contd.)*																					
Dharamshala	21·1	0·6	66·5	25·0	0	65·0	27·8	4·4	72·4	32·8	8·8	52·8	36·7	11·1	74.9	37·8	14·5	85·1	35·3	16·7	179·3
	1952	1954	1953	1953	1951	1954	1953	1955	1956	1953	1957	1957	1952	1951	1956	1953	1957	1956	1957	1955	1953
Abu	26·1	—1·1	37·9	28·9	0	40·6	33·3	3·9	27·2	36·7	10·0	22·6	38·3	11·1	92·7	38·3	13·9	343·1	32·8	16·1	460·5
	1932	1929	1888	1943	1950	1906	1892	1945	1927	1948	1926	1900	1881	1892	1917	1897	1940	1945	1939	1910	1943
Pachmarhi	27·8	—1·1	94·2	31·7	—0·6	52·1	36·1	3·3	55·1	40·0	8·9	38·6	40·6	15·0	35·3	40·6	15.6	201·9	35·0	16·1	338·3
	1946	1935	1957	1953	1929	1928	1892	1906	1936	1942	1905	1935	1954	1933	1933	1889	1931	1916	1912	1941	1882
Mahabaleshwar	28·9	6·1	22·1	31·1	3·9	29·0	33·9	9·4	33·0	36·1	11·1	95·0	34·4	13·9	57·9	32·2	12·8	310·4	23·9	13·8	324·1
	1938	1945	1943	1953	1942	1938	1953	1940	1955	1934	1955	1937	1948	1955	1956	1953	1943	1936	1951	1957	1950
Nandi Hills	25·6	8·9	32·8	28·3	10·0	6·3	30·6	13·3	35·6	32·2	13·3	54·6	32·8	13·3	167·6	30·0	12·2	99·1	25·6	12·8	176·8
	1954	1946	1954	1954	1947	1952	1953	1955	1951	1956	1949	1955	1950	1955	1948	1953	1948	1956	1952	1952	1951
Mercara	31·7	9·4	30·0	31·7	8·9	31·7	33·3	10·6	55·4	33·9	10·6	87·6	35·0	9·4	174·0	30·0	10·0	206·3	28·9	14·4	364·5
	1954	1946	1906	1911	1936	1950	1921	1955	1928	1896	1955	1915	1902	1955	1909	1939	1955	1941	1955	1956	1924
Kodaikanal	24·4	2·8	194·8	24·4	4·4	158·7	26·7	4·4	106·7	26·1	8·3	123·7	27·8	7·8	131·1	23·9	5·0	60·5	22·2	8·9	79·3
	1916	1950	1943	1914	1955	1925	1926	1955	1947	1925	1950	1955	1923	1955	1955	1906	1912	1947	1918	1910	1924
Ootacamund	23·9	—1·7	114·8	26·7	0	51·6	25·6	5·0	56·9	27·2	5·0	84·1	26·7	4·4	184·4	25·0	6·7	133·1	21·1	6·7	102·4
	1952	1921	1909	1945	1953	1917	1949	1957	1911	1942	1944	1947	1941	1917	1955	1944	1951	1941	1949	1908	1902
Coonoor	25·6	1·7	196·6	26·7	2·8	207·5	26·7	5·0	157·5	27·8	8.9	137·7	29·4	11·1	193·0	27·8	9·4	97·3	25·0	11·1	41·9
	1942	1946	1943	1945	1939	1936	1943	1949	1951	1956	1944	1951	1931	1951	1957	1953	1936	1939	1952	1955	1942
Sikkim																					
Thangu	..	..	81·3	..	..	38·1	..	..	27·2	..	..	24·4	..	..	101·6	..	..	20·3	..	..	33·0
	..	..	1957	..	..	1956	..	..	1957	..	..	1955	..	..	1954	..	..	1952	..	..	1952
Chungthang	..	..	34.3	..	..	76.2	..	..	86.4	..	..	68.6	..	..	65.3	..	..	75.7	..	..	75.7
	..	..	1951	..	..	1956	..	..	1956	..	..	1955	..	..	1951	..	..	1955	..	..	1955
Lachen	..	..	66.0	..	..	30.5	..	..	43.2	..	..	30.5	..	..	33.0	..	..	45.7	..	..	52.6
	..	..	1957	..	..	1957	..	..	1956	..	..	1955	..	..	1956	..	..	1952	..	..	1952
Tibet																					
Yatung (Chumbi)	10.6	—18.3	53.3	19.4	—18.3	7.6	19.4	—13.3	55.1	21.1	—10.6	27.9	22.2	—8.9	25.4	23.3	—4.4	25.4	22.2	—2.2	38.3
	1956	1956	1957	1952	1953	1952	1953	1954	1957	1954	1954	1953	1954	1954	1953	1954	1954	1954	1953	1954	1954
Lhasa	20.0	—16.1	0	20.0	—13.3	25.4	22.2	—11.1	9·1	24.4	—4.4	7.6	28.3	—2.8	19.3	30.6	2.8	33.5	29.4	5.6	55.4
	1949	1946	..	1952	1948	1946	1953	1957	1948	1947	1957	1947	1955	1949	1948	1956	1947	1952	1952	1956	1955
Ceylon																					
Colombo	34.4	15.0	116.1	35·6	16.1	132.6	35.6	17.8	97·5	33.9	18.9	210.1	32.8	20.6	289.6	32.2	21.1	144.8	32.8	21.7	184.1
	1932	1950	1954	1950	1956	1915	1945	1934	1947	1950	1952	1949	1957	1955	1936	1953	1949	1953	1942	1950	1916
Trincomalee	30.6	18.9	208.5	32.2	18.3	107.9	36.7	20.0	240·3	38.9	21.1	141.0	38.3	21.1	271.5	38.3	20.6	79.5	36.7	21.7	99.8
	1945	1953	1921	1945	1947	1937	1953	1947	1944	1956	1945	1955	1953	1931	1930	1953	1938	1911	1947	1946	1926
Batticoloa	30.0	17.2	156.2	32.2	17.2	129.8	33.9	20.0	109.5	35·6	21.7	76.2	37.2	22.2	64.0	37.2	22.8	25.4	36.7	21.7	67.3
	1954	1945	1951	1948	1953	1957	1951	1945	1950	1949	1945	1951	1956	1952	1945	1956	1956	1956	1953	1955	1955
Hambantota	32.8	18.3	121.9	33.3	18.3	101.9	34.4	18.9	94.0	34·4	21.1	110.5	35.6	21.7	259.8	37.2	21.1	68.6	35.6	20.6	80.5
	1942	1945	1913	1941	1939	1938	1952	1946	1941	1936	1932	1939	1946	1943	1940	1946	1944	1951	1936	1954	1953
Mannar	31.1	18.9	115.1	32.8	18.9	83.6	35.0	20.0	65.0	36.1	20.6	50.0	36.1	22.2	76.7	35.0	23.9	36.3	33.9	22.2	31.2
	1956	1956	1949	1954	1957	1951	1948	1951	1945	1956	1950	1954	1957	1950	1949	1946	1956	1956	1947	1952	1947

X=Highest Maximum Temperature. N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Hill Stations excluding Kashmir (*contd.*)
29·5	16·2	188·5	29·4	14·4	255·0	28·3	10·4	196·9	24·4	7·2	38·1	22·2	1·7	57·9	1951	1951	Dharamshala.
1957	1957	1957	1951	1953	1955	1953	1957	1955	1953	1951	1957	1953	1954	1957			
31.1	15.0	484.9	31.1	15.0	469.1	31.7	10.6	148.1	28.9	6.1	43.7	27.8	—0.6	25.4	1881	1881	Abu
1883	1913	1941	1929	1909	1950	1941	1947	1917	1929	1938	1896	1941	1929	1898			
30·0	15·0	458·7	35·6	12·8	350·3	31·7	6·7	164·1	28·3	2·2	99·1	27·8	—1·1	63·0	1881	1881	Pachmarhi.
1899	1939	1913	1931	1940	1932	1920	1933	1955	1957	1912	1912	1941	1926	1885			
26·7	13·9	339·9	27·8	12·2	327·1	30·6	11·1	191·5	28·9	10·0	148·6	28·3	8·3	39·6	1931	1929	Mahabaleshwar.
1950	1957	1956	1951	1935	1930	1957	1931	1938	1950	1955	1948	1953	1940	1933			
25·6	13·3	119·4	26·1	12·2	121·9	25·1	12·2	89·7	24·4	8·9	80·0	25·0	8·3	68·1	1945	1945	Nandi Hills.
1947	1947	1946	1951	1949	1946	1957	1948	1946	1953	1945	1946	1945	1954	1946			
26·7	12·2	194·6	27·2	12·2	103·4	28·3	10·6	151·6	27·8	10·6	86·4	28·9	9·4	85·9	1891	1881	Mercara.
1951	1920	1884	1951	1935	1938	1899	1948	1887	1918	1947	1925	1903	1937	1902			
21·1	8·3	118·9	21·7	8·9	104·1	21·1	6·1	147·1	21·7	3·9	197·1	22·8	2·8	133·1	1901	1901	Kodaikanal.
1905	1913	1935	1928	1907	1914	1914	1935	1930	1927	1901	1948	1910	1922	1903			
21·7	6·7	60·5	22·8	5·0	65·3	21·7	0	102·4	23·3	—1·1	209·8	23·9	—1·1	152·9	1901	1901	Ootacamund.
1948	1957	1909	1951	1946	1951	1957	1943	1916	1952	1949	1939	1948	1947	1941			
24·4	8·9	70·6	24·4	8·9	73·1	25·6	6·1	139·9	24·4	3·3	163·1	25·6	2·2	228·6	1931	1931	Coonoor.
1944	1953	1933	1934	1935	1955	1941	1933	1938	1938	1942	1948	1941	1956	1952			
																	Sikkim
..	..	18·5	..	..	33·5	..	..	31·7	..	..	20·3	..	..	15·2	..	1951	Thangu.
..	..	1954	..	..	1953	..	..	1953	..	..	1951	..	..	1957			
..	..	99·1	..	..	57·1	..	..	107·9	..	..	31·7	..	..	16·0	..	1951	Chungthang.
..	..	1954	..	..	1951	..	..	1953	..	..	1951	..	..	1957			
..	..	57·9	..	..	39·4	..	..	38·6	..	..	22·1	..	..	30·5	..	1951	Lachen.
..	..	1952	..	..	1951	..	..	1953	..	..	1951	..	..	1954			
																	Tibet.
22·2	—1·7	58·7	22·8	—2·8	40·6	20·6	—4·4	53·3	18·9	—10·0	30·5	13·9	—13·9	12·7	1952	1952	Yatung (Chumbi).
1953	1954	1954	1954	1955	1952	1955	1955	1956	1952	1952	1956	1952	1952	1957			
29·4	5·6	53·3	28·9	0·6	30·5	26·1	—6·7	12·7	22.8	—10·6	2·0	17·2	—14·4	0	1946	1946	Lhasa.
1951	1956	1955	1952	1951	1957	1952	1947	1946	1957	1953	1951	1952	1949	..			
																	Ceylon.
33·9	21·7	126·0	31·7	21·1	153·4	31·7	20·6	256·3	32·2	18·9	210·3	32·8	17·2	114·3	1928	1911	Colombo.
1944	1954	1933	1952	1950	1937	1957	1938	1930	1956	1947	1934	1939	1939	1946			
36·7	21·1	107·4	36·7	21·1	128·5	36·7	21·1	154·2	34·4	18·3	200·4	32·2	20·0	322·8	1928	1911	Trincomalee.
1950	1955	1930	1957	1946	1919	1948	1951	1952	1948	1944	1923	1941	1937	1949			
36·7	21·7	68·1	37·8	22·2	63·7	35·0	21·7	82·0	32·8	20·0	116·3	32·2	20·0	192·0	1945	1945	Batticoloa.
1957	1955	1950	1954	1956	1956	1946	1953	1945	1955	1953	1946	1946	1956	1951			
35·0	20·6	74·9	35·0	21·7	84·1	34·4	21·1	91·4	35·6	18·9	134·4	32·2	18·3	159·5	1930	1911	Hambantota.
1955	1933	1917	1949	1949	1927	1955	1933	1924	1938	1941	1944	1956	1937	1923			
33·9	22·8	49·8	33·9	22·2	35·1	33·3	21·7	149·6	32·2	21·7	125·7	30·6	20·6	205·5	1945	1945	Mannar.
1953	1945	1948	1951	1953	1951	1957	1954	1954	1956	1949	1954	1952	1957	1957			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T. ..=Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AT

Sub-division and station	January			February			March			April			May			June			y		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Hydrometeorological Observatories—																					
Damodar Catchment—																					
Bokaro	30.0	2.8	49.5	35.0	2.2	20.6	41.1	8.2	30.5	43.3	14.3	46.2	45.0	17.2	35.6	45.0	21.1	70.9	36.7	22.8	216.1
	1956	1956	1953	1952	1950	1953	1955	1957	1957	1956	1957	1951	1956	1951	1956	1953	1953	1950	1952	1956	1953
Hazaribagh (s)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tilaiya	26.9	8.6	55.4	29.3	7.9	7.4	36.2	10.1	29.7	41.0	17.5	0	43.4	23.3	1.5	42.4	24.1	69.6	33.9	23.4	87.4
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	1957	1957
Ramgarh	30.6	2.2	25.7	35.6	4.8	40.4	41·1	7.8	18.3	43.9	13.9	22.6	46.1	19.4	23.6	46.1	21.7	76.2	42.2	22.2	88.1
	1956	1955	1953	1952	1957	1953	1955	1957	1957	1956	1953	1952	1956	1951	1956	1955	1952	1953	1951	1951	1957
Panchet Hills	30.6	6.7	41.7	34.4	8.9	14.2	41.1	12.2	15.7	45·0	16.4	11.9	46.5	20.6	33.5	46.1	22.2	90.9	35.8	21.7	129.0
	1954	1955	1954	1956	1956	1956	1955	1954	1956	1956	1957	1956	1957	1956	1956	1953	1953	1957	1957	1957	1953
Durgapur	29.4	12.3	14.7	32.8	12.2	16.5	38.1	15.1	0	43.6	25.4	0	45.8	..	0	43.6	25.3	132.1	35.6	23.5	53.9
	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..	1957	..	..	1957	1957	1957	1957	1957	1957
Asansol (s)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dhanwar	..	..	49.5	..	..	5.6	..	..	11.2	..	..	9.7	..	..	38.1	..	..	88.9	..	..	126.0
	..	..	1957	..	..	1957	..	..	1957	..	..	1953	..	..	1952	..	..	1956	..	..	1955
Dumri	..	..	10.7	..	..	10.2	..	..	13.2	..	..	13.5	..	..	70.6	..	..	69.9	..	..	95.5
	..	..	1956	..	..	1956	..	..	1955	..	..	1951	..	..	1954	..	..	1957	..	..	1957
Bishungarh	..	..	55·9	..	..	10·7	..	..	27·4	..	..	35·6	..	..	46·0	..	..	83·3	..	..	114·3
	..	..	1953	..	..	1954	..	..	1957	..	..	1952	..	..	1954	..	..	1951	..	..	1951
Palganj (Giridih)	..	..	53·9	..	..	11·2	..	..	37·1	..	..	42·9	..	..	88·7	..	..	85·3	..	..	85·1
	..	..	1957	..	..	1957	..	..	1957	..	..	1952	..	..	1956	..	..	1957	..	..	1957
Chandwa	..	..	52·1	..	..	25·4	..	..	26·9	..	..	23·6	..	..	26·7	..	..	68·6	..	..	91·9
	..	..	1955	..	..	1953	..	..	1951	..	..	1951	..	..	1956	..	..	1952	..	..	1957
Maithon	..	..	23·4	..	..	15·7	..	..	11·4	..	..	0·8	..	..	7·9	..	..	87·9	..	..	49·3
	..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	1957
Mahanadi Catchment																					
Baramul	32·2	6·1	1·0	36·7	7·4	38·1	41·7	10·4	13·7	43·3	15·8	15·5	45·6	20·6	36·1	45·0	20·6	200·7	40·0	21·7	74·2
	1955	1955	1957	1955	1957	1956	1955	1957	1956	1956	1957	1955	1956	1955	1956	1955	1957	1956	1957	1955	1957
Hirakud	32·2	10·0	21·6	36·1	10·0	36·1	42·2	14·9	15·0	45·0	18·7	10·4	46·7	22·2	24·1	46·7	22·8	106·7	34·4	22·2	76·2
	1955	1956	1957	1956	1956	1956	1955	1957	1957	1956	1957	1957	1956	1955	1956	1955	1955	1957	1957	1955	1956
Khijrawan	31·1	6·8	0	34·3	7·7	14·7	36·2	11·8	40·9	39·9	..	34·3	42·2	..	31·7	47·6	..	23·9	44·9	..	58·7
	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957
Sonepur	32·2	9·4	0·2	38·3	9·4	33·0	42·2	15·0	15·0	43·9	19·1	10·9	46·7	18·8	25·4	46·7	22·8	68·8	35·0	16·1	79·5
	1955	1955	1957	1955	1956	1957	1955	1955	1957	1956	1957	1955	1956	1957	1955	1955	1956	1956	1955	1957	1955
Ginabahar	31·1	5·0	12·7	35·0	5·6	17·3	40·6	8·9	16·5	42·8	14·4	6·3	45·6	20·6	34·3	45·0	21·1	64·3	33·9	20·6	93.5
	1956	1955	1957	1956	1956	1956	1955	1957	1957	1956	1957	1957	1956	1956	1956	1955	1957	1955	1956	1955	1956
Bhimkund	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

(s)—Departmental observatory at same station, hence extremes not compiled.

X=Highest Maximum Temperature. N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station.
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Hydrometeorological Observatories
																	Damodar Catchment
35·2	22·2	106·9	35·0	18·9	118·1	35·2	11·7	45·2	33·9	5·0	23·4	31·7	2·8	9·9	1950	1950	Bokaro.
1957	1953	1953	1955	1950	1952	1957	1954	1956	1950	1952	1953	1950	1955	1954			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Hazaribagh
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
34·7	22·4	156·2	32·9	23·1	53·1	32·9	14·0	32·5	30·6	11·2	0	28·8	6·2	0	1957	1957	Tilaiya.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..			
35·6	21·1	169·9	35·1	18·3	174·2	37·8	10·8	81·5	34·2	4·4	17·3	31·6	1·7	56·4	1950	1950	Ramgarh.
1952	1953	1953	1957	1950	1954	1956	1957	1952	1957	1952	1953	1957	1955	1950			
36·1	23·4	82·8	35·6	21·7	195·1	35·8	15·0	36·8	33·3	9·9	43·2	31·7	6·7	12·5	1950	1950	Panchet Hills.
1957	1957	1953	1955	1953	1956	1953	1954	1956	1957	1957	1955	1953	1955	1954			
36·7	23·8	33·0	35·3	24·3	64·0	35·3	25·6	5·8	33·3	13·3	0	30·0	10·4	0	1957	1957	Durgapur.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	..			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Asansol (s)
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
..	..	59·7	..	..	161·3	..	..	44·5	..	..	1·0	..	..	14·2	..	1951	Dhanwar.
..	..	1957	..	..	1954	..	..	1952	..	..	1956	..	..	1956			
..	..	171·5	..	..	109·2	..	..	41·9	..	..	9·1	..	..	8·1	..	1950	Dumri.
..	..	1956	..	..	1954	..	..	1956	..	..	1953	..	..	1954			
..	..	142.2	..	..	78.7	..	..	39.6	..	..	15.7	..	..	9.7	..	1950	Bishungarh.
..	..	1953	..	..	1954	..	..	1956	..	..	1956	..	..	1956			
..	..	76.7	..	..	104.7	..	..	52.1	..	..	29.7	..	..	23.6	..	1950	Palganj (Giridih)
..	..	1955	..	..	1954	..	..	1956	..	..	1956	..	..	1954			
..	..	85.1	..	..	76.2	..	..	49.5	..	..	15.7	..	..	6.6	..	1951	Chandwa.
..	..	1953	..	..	1953	..	..	1954	..	..	1956	..	..	1954			
..	..	16.5	..	..	67.3	..	..	2.0	..	..	0	..	..	0	..	1957	Maithon.
..	..	1957	..	..	1957	..	..	1957	..	..	..	..	..	..			
																	Mahanadi Catchment
41.1	18.9	56.6	34.4	21.5	196.6	35.6	17.1	101.3	33.3	10.6	39.4	32.2	5.0	0	1955	1955	Baramul
1957	1957	1957	1957	1957	1956	1957	1957	1956	1957	1955	1955	1957	1955	..			
35.0	22.8	133.9	34.4	22.8	281.9	36.4	17.4	91.4	32.3	12.8	5.8	31.4	7.2	0	1955	1955	Hirakud.
1957	1956	1955	1957	1955	1955	1957	1957	1956	1957	1955	1956	1957	1955	..			
32.1	..	76.2	32.4	..	40.6	34.4	16.2	32.3	30.8	10.0	0	30.8	10.2	0	1957	1957	Khijrawan.
1957	..	1957	1957	..	1957	1957	1957	1957	1957	1957	..	1957	1957	..			
35.6	20.5	160.5	35.6	14.7	287.8	35.8	19.4	29.5	33.3	12.8	2.0	32.2	7.8	0	1955	1955	Sonepur.
1957	1957	1956	1956	1957	1955	1957	1956	1955	1956	1955	1955	1957	1955	..			
35.0	21.7	198.1	34.5	20.8	73.1	35.6	11.4	36.8	32.6	6.1	9.1	31.1	3.9	5.1	1955	1955	Ginabahar.
1957	1957	1956	1957	1957	1955	1957	1957	1955	1957	1956	1956	1956	1955	1956			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Bhimkund.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I.S.T. .. =Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Hydrometeorological Observatories —(*contd.*)																					
Narbada Catchment																					
Punasa . .	32·8	5·6	19·3	40·0	6·1	18·8	42·2	10·7	3·8	45·0	15·0	9·7	47·2	19·4	56·6	46·1	21·7	103·9	37·8	21·2	78·5
	1954	1954	1955	1953	1951	1952	1955	1957	1957	1953	1954	1957	1954	1954	1956	1953	1956	1956	1953	1957	1952
Bagra Tawa . .	32·2	2·8	31·2	37·8	4·2	15·5	41·7	9·1	25·4	43·9	13·9	10·4	47·2	20·6	29·0	46·1	20·6	88·1	37·8	17·2	139·7
	1956	1954	1951	1953	1957	1955	1953	1957	1957	1954	1955	1957	1954	1955	1956	1953	1955	1951	1953	1956	1953
Thikri . . .	35·0	5·6	20·3	39·4	2·2	8·4	42·8	10·6	0	45·6	16·1	2·0	47·8	22·2	26·9	45·6	20·0	93·5	39·4	21·1	107·9
	1950	1953	1953	1953	1950	1949	1953	1957	..	1949	1955	1952	1951	1952	1949	1953	1952	1953	1950	1955	1950
Sabarmati Catchment																					
Jhadol . . .	28·3	—1·3	3·1	33·9	0·6	7·6	37·8	5·3	10·2	39·4	10·6	7·6	45·0	17·5	17·8	41·1	18·6	61·0	37·2	21·7	115·8
	1956	1957	1957	1956	1956	1955	1956	1957	1956	1956	1956	1956	1956	1957	1956	1955	1957	1957	1957	1956	1956
Sainwara (Surajgarh)	..	..	25·4	..	..	0	..	..	0	..	..	0	..	..	0	..	..	43·2	..	..	0.8
	..	..	1957	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1957	..	..	1957
Bikrani . .	..	..	0	..	..	0	..	..	0	..	..	43·2	..	..	0	..	..	66·0	..	..	145·8
	..	..	..	..	..	..	..	..	..	..	..	1957	..	..	..	..	..	1955	..	..	1956
Tarpal . . .	..	..	27·9	..	..	0	..	..	1·8	..	..	1·3	..	..	10·2	..	..	77·5	..	..	81·3
	..	..	1957	..	..	..	..	..	1957	..	..	1957	..	..	1956	..	..	1957	..	..	1957
Kotra Cantonment	..	..	12·7	..	..	0	..	..	8·9	..	..	56·1	..	..	12·2	..	..	63·5	..	..	150·4
	..	..	1957	..	..	..	..	..	1957	..	..	1957	..	..	1956	..	..	1956	..	..	1956
Dharoi . . .	31.7	4.1	0	37.2	5.7	0	41.1	9.6	0	43.9	14.4	0	45.0	22.8	0	41.4	23.4	104.7	37.5	22.8	125.2
	1956	1957	..	1956	1957	..	1956	1957	..	1956	1956	..	1956	1956	..	1957	1957	1956	1957	1956	1956
Ganga Catchment																					
Mukhim . .	18.8	—2.7	13.5	21.7	—0.6	10.2	19.4	2.1	21.6	28.9	5.0	39.4	31.7	8.8	39.6	27.9	10.5	26.4	28.1	16.2	105.2
	1957	1957	1957	1956	1957	1956	1957	1957	1957	1956	1957	1957	1956	1957	1957	1957	1957	1956	1957	1957	1957
Tehri . . .	23.9	0.4	50.3	30.0	3.2	23.4	33.3	7.3	29.7	37.8	9.8	24.6	40.6	15.4	39.9	39·6	12.1	17.8	35.0	13.2	73.7
	1956	1957	1957	1956	1957	1956	1956	1957	1956	1956	1957	1957	1956	1957	1956	1957	1957	1957	1956	1957	1956
Gandak Catchment																					
Gorkh . .	22.1	6.0	46.2	22.8	6.1	0	27.6	8.4	5.1	34.2	11.4	1.0	35.6	17.3	28.7	32.0	17.8	82.5	30.7	19.8	95.5
	1957	1957	1957	1957	1957	4.3	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Pokhara . .	23.1	4.1	54.9	24.5	4.3	1957	28.9	7.6	17.8	34.1	10.6	14·7	36.6	16.0	52.3	32.8	16.2	173.2	31.2	20.6	123.4
	1957	1957	1957	1957	1957	0	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957
Nawakot . .	21.5	6.4	33.0	25.1	7.6	..	30.1	11.3	4.8	35.1	13.2	7.4	38.3	..	36.1	37.9	14.3	48.3	32.3	20.6	64.5
	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957	1957
Jamosom* . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Timure†	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..
	..	..	..	..	..		..	..	..	..	..	..	..		..	..	..	..	..	..	..
Gogra Catchment (Trans-Himalayan Region)																					
Dailekh . .	18.2	..	30.4	19.9	..	0.3	24.4	..	52.6	30.3	..	11.5	34.3	..	6.6	32.3	..	42.7	28.5	..	47.5
	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957
Gogra Catchment																					
Dandeldhura .	18.5	—1.5	45.7	17.9	—0.2	10.4	20.6	—0.2	35.6	25.6	6.7	18.0	30.7	10.4	8.1	29.6	11.8‡	59.9	26.1	16.1	65.5
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957

*Observatory started in July 1957. †Observatory started in June 1957.

X=Highest Maximum Temperature. N=Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Hydrometeorological Observatories —(contd.)
																	Narbada Catchment
35.6	20.6	175.3	37.2	14.4	158.5	38.9	10.6	45.0	36.7	6.1	6.6	34.4	3.9	4.3	1951	1951	Punasa.
1956	1952	1955	1951	1953	1954	1951	1952	1955	1951	1956	1956	1953	1955	1956			
34.4	21.7	141.0	35.0	19.6	190.3	36.3	8.9	48.3	34.4	5.6	42.2	32.7	2.2	9.7	1951	1951	Bagra Tawa.
1954	1956	1952	1953	1957	1951	1957	1952	1955	1953	1952	1956	1957	1955	1956			
36.1	20.6	209.8	38.9	18.9	116.8	40.6	11.1	52.6	37.8	6.7	1.5	33.9	5.0	7.9	1949	1949	Thikri.
1953	1950	1957	1951	1952	1954	1949	1955	1955	1951	1956	1956	1957	1952	1956			
																	Sabarmati Catchment
34.2	17.7	84.6	33.1	14.7	88.9	37.3	7.2	55.9	33.6	—0.6	0	28.4	—0.6	4.3	1955	1955	Jhadol.
1957	1957	1957	1957	1957	1955	1957	1957	1956	1957	1956	..	1957	1955	1956			
..	..	..	..	..	..	..	..	0	..	..	0	..	..	0	..	1957	Sainwara (Surajgarh).
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
..	..	114.3	..	..	95.3	..	..	21.3	..	..	14.0	..	..	0	..	1955	Bikrani.
..	..	1957	..	..	1955	..	..	1956	..	..	1957	..	..	..			
..	..	190.5	..	..	30.5	..	..	31.7	..	..	2.5	..	..	7.6	..	1956	Tarpal.
..	..	1957	..	..	1956	..	..	1956	..	..	1957	..	..	1957			
..	..	130.8	..	..	75.4	..	..	64.8	..	..	6.3	..	..	0	..	1955	Kotra Cantonment.
..	..	1955	..	..	1955	..	..	1956	..	..	1957	..	..	..			
36·1	21·1	105·9	36·4	21·1	51·3	39·1	16·1	38·9	37·2	10·6	0	32·1	..	..	1956	1956	Dharoi.
1957	1956	1957	1957	1956	1956	1957	1956	1956	1957	1956	..	1957	..	..			
																	Ganga Catchment
26·7	14·5	48·8	25·6	13·2	73·1	24·8	6·6	113·3	20·6	5·9	30·5	20·2	0·9	77·7	1956	1956	Mukhim.
1957	1957	1957	1956	1957	1956	1957	1957	1956	1956	1957	1957	1957	1957	1957			
36·1	20·0	25·4	35·6	17·4	70·6	33·3	..	172·5	31·1	6·7	14·5	23·9	2·2	11·7	1956	1956	Tehri.
1957	1956	1956	1956	1957	1957	1956	..	1956	1956	1956	1957	1956	1956	1956			
																	Gandak Catchment
30·2	19·5	109·5	28·9	18·5	43·7	27·9	13·9	30·2	23·7	11·8	0·8	21·2	7·8	9·9	1957	1957	Gorkha.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			
33·4	19·6	284·0	30·4	18·7	95·5	29·6	12·1	31·7	26·2	11·0	2·0	24·2	5·3	19·1	1957	1957	Pokhara.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			
33·1	20·1	95·3	30·7	16·8	48·3	30·6	13·2	12·9	26·0	12·2	0	22·3	8·0	6·6	1957	1957	Nawakot.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957			
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Jomosom*
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Timure†
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
																	Gogra Catchment (Trans-Himalayan Region)
..	..	65·3	30·7	..	41·1	25·9	..	10·9	21·9	..	2·3	20·5	..	50·0	1957	1957	Dailekh.
..	..	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957			
																	Gogra Catchment
26·8	13·5	48·5	24·9	11·9	78·5	25·2	6·1	0	19·9	5·6	8·6	21·3	3·4	86·6	1957	1957	Dandeldhura.
1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957	1957	1957	1957			

R=Heaviest Rainfall in 24 hours ending at 0830 hrs. I. S. T. .. = Information not available.

TABLE III (A) EXTREMES OF MAXIMUM AND MINIMUM TEMPERATURES (°C) AND

Sub-division and Station	January			February			March			April			May			June			July		
	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	X	N	R
Hydrometeorological Observatories (*contd.*)																					
Gogra Catchment (*contd.*)																					
Munsiyari	18.7	—1.9	43.7	17.4	—0.3	3.1	20.7	1.7	25.2	25.5	5.8	52.1	30.8	8.1	32.3	30.2	11.6	16.2	..	..	106.7
	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	..	1957
Sallyana	19.7	..	35.8	20.2	..	0	25.5	..	10.2	30.6	..	7.1	..	..	0	..	..	32.0	..	..	61.0
	1957	..	1957	1957	..	..	1957	..	1957	1957	..	1957	..	..	..	..	..	1957	..	..	1957
Butwal	..	..	..	28.9	—0.1	0	33.8	12.9	0	40.8	16.3	0	42.9	10.1	0	39.4	20.0	35.4	34.5	21.7	139.7
	..	..	..	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	..	1957	1957	1957	1957	1957	1957
Bagmati Catchment																					
Katmandu(s)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kosi Catchment																					
Chautara	22.2	2.8	46.5	23.9	3.9	16.5	28.4	5.8	24.1	32.6	8.3	29.2	34.0	13.9	52.1	32.8	14.4	98.8	28.9	16.0	99.1
	1956	1957	1957	1956	1956	1954	1957	1957	1953	1957	1957	1956	1957	1956	1956	1955	1955	1956	1955	1957	1954
Okhaldunga	23.9	—0.6	34.3	22.2	1.6	21.8	25.0	4.2	25.4	28.9	5.8	29.0	29.2	5.6	113.8	27.8	8.9	79.5	27.2	5.6	143.5
	1953	1953	1957	1956	1957	1954	1955	1957	1953	1954	1957	1955	1957	1953	1954	1955	1953	1957	1957	1953	1954
Barahkshetra	27·2	7·2	26·2	31·7	8·5	5·6	36·7	11·7	126·2	42·2	17·2	30·2	41·9	20·6	51·8	38·4	21·7	151·6	33·9	22·8	179·8
	1954	1955	1957	1954	1957	1954	1954	1957	1953	1954	1953	1955	1957	1955	1956	1957	1955	1956	1956	1956	1957
Angbung	22·2	1·7	38·3	24·4	3·9	10·9	30·0	8·6	27·9	32·2	10·0	43·2	33·8	8·9	75·7	30·6	7·2	103·1	31·1	16·1	82·5
	1957	1953	1957	1955	1953	1957	1953	1957	1953	1957	1957	1953	1957	1954	1953	1957	1954	1957	1957	1953	1957
Taplejung	19·2	0	34·8	20·6	1·1	11·2	25·6	3·3	37·6	27·8	6·1	56·6	28·3	10·6	55·9	26·1	12·8	63·0	26·7	15·0	60·5
	1957	1955	1957	1956	1953	1953	1953	1957	1953	1957	1957	1954	1957	1955	1954	1956	1953	1954	1956	1956	1956
Taplethok	28·3	0·6	44·7	28·3	3·3	22·9	28·9	5·0	38·3	32·2	8·3	26·7	32·2	11·7	56·4	31·7	15·2	63·5	32·8	15·6	78·2
	1954	1957	1957	1954	1956	1957	1954	1956	1953	1953	1956	1953	1956	1956	1956	1956	1957	1955	1953	1956	1953
Wallungchung Gola	10·0	—7·8	30·5	12·2	—7·8	9·4	15·0	—6·5	10·4	18·3	—2·8	12·9	18·3	1·1	28·5	20·0	1·1	32·0	20·6	4·4	44·5
	1953	1957	1956	1954	1955	1956	1954	1957	1956	1954	1954	1953	1954	1955	1955	1954	1956	1955	1953	1956	1954
Bhojpur	16·7	1·4	35·0	21·1	3·9	0	25·6	5·9	39·9	29·4	8·7	24·1	29·4	11·7	61·2	26·1	14·8	57·1	25·6	16·1	56·6
	1955	1957	1957	1956	1956	..	1955	1957	1956	1955	1957	1956	1957	1955	1955	1957	1957	1957	1956	1956	1956
Chainpur	22·8	3·1	36·8	26·7	5·0	6·3	30·0	8·8	43·2	32·5	9·3	34·3	34·3	13·3	57·1	31·2	15·6	45·2	30·6	16·7	49·8
	1954	1957	1957	1954	1953	1954	1953	1957	1953	1957	1957	1953	1957	1955	1953	1957	1957	1957	1953	1954	1955
Tista Catchment																					
Gangtok	19·3	—2·2	41·1	20·6	—1·1	12·5	21·9	4·1	61·0	24·4	5·9	178·1	25·6	11·3	54·6	25·0	12·7	62·2	23·9	14·4	81·8
	1957	1956	1957	1956	1956	1957	1957	1957	1957	1956	1957	1956	1956	1957	1956	1956	1957	1956	1956	1956	1957
Geyzing	..	1·1	50·8	21·1	3·9	5·1	26·4	2·1	17·5	28·8	7·3	11·9	29·4	13·8	43·4	27·9	13·6	52·6	28·8	17·9	72·6
	..	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957

(s) Departmental observatory at same station, hence extremes not compiled.

X=Highest Maximum Temperature. N = Lowest Minimum Temperature.

HEAVIEST RAINFALL (MILLIMETRES) IN 24 HOURS BASED ON DATA UPTO 1957 (1878-1879 SAKA)

August			September			October			November			December			Based on data from		Sub-division and station
X	N	R	X	N	R	X	N	R	X	N	R	X	N	R	Temperature	Rainfall	
																	Hydrometeorological Observatories (*contd.*)
																	Gogra Catchment (*contd.*)
..	..	58·2	..	..	45·7	..	..	23·4	..	..	14·5	..	..	82·0	1957	1957	Munsiyari.
..	..	1957	..	..	1957	..	..	1957	..	..	1957	..	..	1957			
29·4	..	45·7	27·3	..	48·8	..	..	2·8	24·4	..	0	20·6	..	0	1957	1957	Sallyana.
1957	..	1957	1957	..	1957	..	..	1957	1957	..	..	1957	..	..			
36·8	23·6	157·5	37·8	22·3	45·7	33·4	17·3	40·6	29·5	14·0	0	26·4	6·8	3·8	1957	1957	Butwal.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	..	1957	1957	1957			
																	Bagmati Catchment
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Katmandu.(s)
																	Kosi Catchment
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..			
28·9	16·1	78·7	28·3	16·1	66·0	27·4	11·6	32·5	24·1	8·9	23·4	21·9	4·4	15·5	1955	1953	Chautara.
1957	1956	1954	1956	1956	1954	1957	1957	1956	1957	1956	1956	1957	1955	1955			
29·4	15·0	107·2	28·3	10·6	65·5	27·2	7·2	35·1	22·8	5·6	19·8	21·7	2·2	6·1	1953	1953	Okhaldunga.
1953	1955	1954	1954	1953	1955	1956	1953	1956	1954	1954	1956	1953	1955	1957			
36·7	22·2	124·7	34·4	21·1	91·2	33·9	14·9	136·1	30·6	10·6	29·5	28·3	8·9	3·3	1953	1953	Barahkshetra.
1957	1956	1954	1953	1956	1956	1956	1957	1953	1953	1953	1956	1955	1954	1957			
32·6	15·0	53·6	30·6	16·7	63·3	30·4	12·8	63·3	25·6	8·3	1·3	24·4	6·1	7·1	1953	1953	Angbung.
1957	1954	1957	1953	1953	1957	1957	1953	1957	1954	1953	1955	1953	1953	1957			
28·6	16·1	73·7	26·7	13·3	99·8	25·0	8·3	68·3	21·1	5·0	20·1	19·4	0·6	12·7	1953	1953	Taplejung.
1957	1955	1953	1957	1956	1954	1956	1955	1956	1956	1953	1956	1957	1954	1955			
32·2	15·6	55·1	31·7	15·6	48·8	32·8	10·2	63·0	29·4	7·8	25·4	28·3	5·0	12·5	1953	1953	Taplethok.
1956	1954	1955	1956	1956	1955	1956	1957	1955	1956	1956	1956	1956	1956	1957			
19·4	4·4	55·1	19·4	4·4	28·7	18·3	—0·6	18·3	15·6	—3·9	15·7	14·4	—6·7	5·3	1953	1953	Wallungchung Gola.
1955	1953	1954	1953	1956	1955	1956	1953	1955	1955	1956	1956	1954	1956	1956			
29·6	15·9	78·0	26·7	15·0	52·6	26·1	10·6	20·6	22·2	8·1	22·9	19·4	4·4	4·6	1955	1955	Bhojpur.
1957	1957	1955	1956	1956	1955	1956	1957	1956	1955	1957	1956	1955	1955	1957			
31·7	17·2	69·9	31·1	15·0	45·7	28·9	11·7	67·2	26·1	8·3	0	25·6	6·1	8·9	1953	1953	Chainpur.
1953	1955	1955	1953	1953	1953	1955	1955	1955	1955	1953	..	1953	1955	1957			
																	Tista Catchment.
27·6	15·8	63·0	26·1	11·7	79·0	25·0	8·1	58·2	20·5	5·6	19·0	18·3	2·8	12·5	1956	1956	Gangtok.
1957	1956	1957	1956	1956	1957	1956	1957	1956	1957	1956	1957	1956	1956	1957			
32·2	17·2	150·0	29·8	16·0	115·3	26·8	10·1	27·9	22·8	9·1	16·0	20·7	6·3	7·6	1957	1957	Geyzing.
1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957	1957			

R=Heaviest Rainfall in 24 hours ending at 0830 I. S. T. .. = Information not available.

MONTHLY MEANS OF UPPER WINDS

DECEMBER, 1957 (Asadha 10—Sravana 9, 1879 Saka)

During the month, observations of velocity and direction of upper winds were made at 55 stations in India. Out of these, at 43 stations all the observations were taken by means of pilot balloons and at 12 stations some observations were made by means of pilot balloons while the other observations by the radiowind method. Particulars of the stations, their co-ordinates and the approximate times of the regular pilot balloon and rawin ascents at each station are given in the Table overleaf. All radiowind ascents have been indicated by means of an asterisk (*) against the scheduled hours.

Data from ascents made at the scheduled time or within two hours on either side of the scheduled times of regular observations have been used for averaging.

Data upto 9.0 km. a. m. s. l. are given under Table IV and data above 9.0 km. a. m. s. l. under Table V.

In Tables IV and V :

n—represents the number of observations ;

V—represents the mean wind speed in knots irrespective of direction ;

v—represents the resultant mean velocity in knots ;

D—represents the direction of the resultant mean wind in degrees East of North.

Mean and resultant winds are given in this publication for the following heights :

Surface, 0.15 km. a. g., 0.3, 0.6, 0.9, 1.5, 2.1, 3.0, 3.6, 4.5, 5.4, 6.0, 7.2, 9.0, 10.5, 12.0, 14.1, 16.2, 18.0, 21.0, 24.0, 27.0, 30.0, 33.0 and 36.0 km. a. m. s. l. Of these the levels 1.5, 3.0, 5.4, 7.2, 9.0, 12.0, 14.1 and 16.2 km. a. m. s. l. are considered as the best approximations to the standard pressure levels 850, 700, 500, 400, 300, 200, 150 and 100 mb. respectively.

PARTICULARS OF PILOT BALLOON AND RAWIN STATIONS IN INDIA

Station	Lat. N	Long. E	Height of Anemometer head a.m.s.l. in metres	Date of opening	Approximate times of flight (IST)			
Agartala	23°53′	91°15′	17	28th November, 1951	0530	1730	2330	
Ahmedabad	23°04′	72°38′	60	19th May, 1928	0530	1730	2330	
Amausi	26°45′	80°53′	132	20th November, 1950	0530	1730	2330	
Ambala	30°23′	76°46′	283	1st April, 1941	0530	1730	2330	
Amritsar	31°38′	74°52′	230	21st June, 1957	0530*	1730*		
Anantapur	14°41′	77°37′	364	12th February, 1946	0530	1730	2330	
Asansol	23°41′	86°59′	136	29th May, 1942	0530	1730	2330	
Baghdogra	26°38′	88°19′	140	7th June, 1953	0530	1730	2330	
Bairagarh	23°17′	77°21′	532	26th February, 1943	0530	1730	2330	
Bamrauli	25°27′	81°44′	103	20th February, 1930	0530*	1130	1730*	2330
Bangalore	12°58′	77°35′	936	19th May, 1915	0530	1730	2330	
Bareilly	28°22′	79°24′	180	12th January, 1943	0530	1730		
Begumpet	17°27′	78°28′	553	1st September, 1929	0530	1730	2330	
Bhagalpur	25°14′	86°57′	61	19th May, 1950	0530	1730		
Bhubaneshwar	20°15′	85°50′	55	5th December, 1942	0530	1730	2330	
Bhuj	23°15′	69°48′	111	14th September, 1937	0530	1730	2330	
Bikaner	28°00′	73°18′	229	18th October, 1946	0530	1730	2330	
Chikalthana	19°51′	75°24′	583	7th October, 1951	0530	1730	2330	
Cochin†	09°56′	76°14′	3	16th March, 1942	0530	1730	2330	
Darjeeling	27°03′	88°16′	2115	21st May, 1956	0830	1730		
Dum Dum	22°39′	88°27′	19	14th May, 1921	0530*	1130	1730*	2330
Gadag	15°25′	75°38′	650	3rd May, 1943	0530	1730	2330	
Gannavaram	16°32′	80°48′	24	8th April, 1942	0530	1730	2330	
Gauhati	26°05′	91°43′	51	12th March, 1955	0530*	1130	1730*	2330
Gaya	24°45′	84°57′	119	19th March, 1937	0530	1730	2330	
Gopalpur	19°16′	84°53′	24	15th February, 1946	0530	1730	2330	
Gorakhpur	26°45′	83°22′	83	5th January, 1943	0530	1730		
Gwalior	26°14′	78°15′	219	7th May, 1938	0530	1730	2330	
Imphal	24°51′	93°58′	805	8th March, 1952	0530	1730	2330	
Jabalpur	23°10′	79°57′	402	30th July, 1928	0530	1730	2330	
Jagdalpur	19°05′	82°02′	562	25th March, 1948	0530	1730	2330	
Jaipur	26°49′	75°48′	404	6th June, 1953	0530	1730		
Jamshedpur	22°49′	86°11′	147	23rd July, 1942	0530	1730		
Jharsuguda	21°55′	84°05′	234	1st May, 1944	0530	1730	2330	
Jodhpur	26°18′	73°01′	229	15th October, 1934	0530*	1130	1730*	2330
Madras	13°00′	80°11′	29	8th April, 1926	0530*	1130	1730*	2330
Mangalore	12°52′	74°51′	40	4th June, 1928	0530	1730	2330	
Minicoy	08°18′	73°00′	16	14th April, 1941	0530	1730	2330	
Mohanbari	26°29′	95°01′	110	1st June, 1948	0530	1730	2330	
Mussoorie	30°27′	78°05′	2050	3rd November, 1955	0830	1730		
Nagpur	21°06′	79°03′	316	23rd April, 1943	0530*	1130	1730*	2330
Nanpara	27°50′	81°30′	141	23rd April, 1957	0530	1730		
New Delhi	28°35′	77°12′	227	20th October, 1936	0530*	1130	1730*	2330
Poona	18°32′	73°51′	593	5th January, 1925	0530	1730	2330	
Port Blair	11°40′	92°43′	93	29th October, 1945	0530*	1130	1730	2330
Raipur	21°14′	81°39′	308	15th July, 1944	0530	1730	2330	
Raxual	26°59′	84°51′	83	28th October 1957	0530	1730		
Santa Cruz	19°07′	72°51′	12	14th May, 1933	0530*	1130	1730*	2330
Tezpur	26°37′	92°47′	79	12th August, 1932	0530	1730	2330	
Tiruchirapalli	10°46′	78°43′	96	22nd June, 1936	0530	1730	2330	
Trivandrum	08°29′	76°57′	73	8th December, 1928	0530*	1130	1730*	2330
Udaipur	24°35′	73°42′	587	24th June, 1947	0530	1730	2330	
Vengurla	15°52′	73°38′	8	22nd November, 1941	0530	1730	2330	
Veraval	20°54′	70°22′	17	13th October, 1941	0530*	1130	1730*	2330
Visakhapatnam	17°43′	83°14′	10	24th September, 1928	0530	1730	2330	

*Radiowind ascents.

†Naval Meteorological office.

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	AGARTALA												AHMEDABAD											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	0·5	0·4	128	31	1·9	1·6	343	31	0·8	0·5	019	31	4·7	4·0	032	31	5·1	3·0	351	31	4·1	2·7	354
0·15 a. g. . .	31	5·1	2·8	033	31	6·7	5·3	329	31	5·2	3·6	357	31	15·4	11·8	039	30	7·1	4·2	346	31	13·7	9·5	004
0·3 a.m.s.l. .	31	5·1	3·4	006	31	5·6	4·4	325	31	5·0	4·0	339	31	14·5	10·9	055	31	7·1	3·9	351	31	12·7	8·7	008
0·6 ,, .	31	5·2	3·6	358	31	4·2	2·9	313	31	5·5	4·9	324	31	11·4	6·0	066	31	7·0	3·3	356	31	8·6	4·9	007
0·9 ,, .	31	6·0	3·8	342	31	4·4	2·1	306	31	6·0	4·6	311	31	7·4	0·7	003	31	6·7	2·9	340	31	7·4	2·0	023
1·5 ,, .	31	8·3	6·8	307	30	7·2	4·6	304	31	6·5	4·3	302	31	10·2	7·8	238	31	8·3	4·8	273	31	9·1	4·7	225
2·1 ,, .	31	15·7	13·9	294	30	15·8	14·4	296	30	13·5	11·9	292	30	13·4	11·0	231	31	11·8	8·8	254	31	11·6	7·2	242
3·0 ,, .	29	26·0	23·1	284	30	26·1	25·3	282	30	24·6	23·3	278	29	15·5	12·6	260	31	15·3	12·8	267	31	14·8	11·5	257
3·6 ,, .	21	29·1	24·8	280	23	28·3	22·8	277	16	26·3	26·3	273	29	19·2	17·1	268	29	17·6	15·5	265	27	17·8	14·5	263
4·5 ,, .	14	30·0	29·0	276	7	26·8	26·2	277	5	30·0	28·0	276	21	25·5	21·9	270	28	22·2	20·1	268	19	25·1	20·8	267
5·4 ,, .	12	34·5	33·5	274	1	45·0	45·0	260	1	17·0	17·0	260	12	29·5	24·9	271	28	27·2	24·2	268	10	30·8	28·5	275
6·0 ,, .	8	36·6	34·7	276	..	..	..	..	1	19·0	19·0	260	5	24·4	20·5	248	27	31·5	29·6	274	6	28·8	27·7	270
7·2 ,, .	2	48·0	47·6	276	..	..	..	..	..	..	..	..	..	..	..	..	25	41·2	36·9	275	1	22·0	22·0	245
9·0 ,, .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	52·6	49·4	264	..	..	..	..

Station	AMAUSI												AMBALA											
Time in I. S. T.	0530				1730				2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·2	1·6	310	31	3·3	1·7	316	31	2·6	1·9	278	31	3·5	1·6	330	31	2·7	1·4	299	31	4·2	2·7	318
0·15 a. g. . .	31	10·7	6·4	336	31	8·6	5·9	291	31	10·1	5·9	301	19	12·6	8·4	328	31	9·9	4·9	303	31	14·7	8·9	334
0·3 a.m.s.l. .	31	10·5	6·1	335	31	8·8	5·6	296	31	10·2	5·9	302	29	6·0	3·3	331	31	4·6	2·4	303	31	6·4	3·4	332
0·6 ,, .	31	9·0	4·3	323	31	8·4	6·1	292	31	10·3	5·4	300	29	12·4	7·7	326	31	11·3	5·2	320	31	14·0	7·0	335
0·9 ,, .	31	9·2	6·4	308	31	9·1	7·1	293	31	8·9	5·3	302	29	11·2	5·5	323	31	11·7	4·4	335	31	11·5	4·1	335
1·5 ,, .	31	11·5	10·2	295	31	12·1	10·8	296	31	10·2	8·7	288	29	8·8	4·0	317	30	8·8	2·3	335	31	8·2	3·4	309
2·1 ,, .	31	14·4	13·3	285	30	14·7	12·3	291	31	13·3	11·5	280	28	7·6	1·7	287	30	6·7	0·3	035	31	7·5	2·6	259
3·0 ,, .	24	19·5	18·6	280	26	21·0	19·9	288	17	18·9	16·7	270	26	8·4	2·1	248	30	9·3	2·4	246	30	10·4	5·2	205
3·6 ,, .	8	17·1	16·7	274	23	22·7	22·0	285	1	46·0	46·0	250	15	9·3	3·1	255	28	10·9	4·6	258	13	13·7	8·4	244
4·5 ,, .	2	31·0	30·7	265	12	24·8	24·0	278	..				6	18·2	11·1	272	24	19·8	14·7	269	4	23·0	21·1	275
5·4 ,, .	..	..	..	..	3	39·7	38·7	289	..								19	32·8	29·8	277	4	28·5	28·0	281
6·0 ,, .	..	..	..	..	1	56·0	56·0	280	..								17	39·4	34·9	278	3	31·7	31·4	267
7·2 ,, .	..	..	..	..	..	..	..	..	..								11	50·5	45·2	283				
9·0 ,, .	..	..	..	..	..	..	..	..									2	68·5	68·5	278				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	AMRITSAR								ANANTAPUR												ASANSOL			
Time in I. S. T.	0530*				1730*				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·7	0·6	008	31	3·0	1·3	317	31	2·6	2·4	089	31	9·5	9·2	080	31	9·2	8·8	102	31	2·4	2·0	306
0·15 a.g. . .	22	4·0	1·2	345	25	3·5	1·9	318	31	8·9	8·5	100	31	11·2	10·9	083	31	15·2	14·9	107	31	7·6	4·5	358
0·3 a.m.s.l. .	22	3·9	1·2	350	25	3·2	1·7	313													31	7·4	4·3	010
0·6 ,, .	22	8·5	5·1	228	25	7·0	4·2	323	31	10·9	10·5	102	31	11·5	11·3	084	31	15·5	15·2	107	31	6·5	3·4	354
0·9 ,, .	22	7·0	3·9	308	25	5·2	2·6	215	31	14·4	14·2	094	31	11·3	11·1	083	31	15·3	15·1	104	31	7·7	4·9	312
1·5 ,, .	22	6·0	2·8	300	25	5·0	1·4	302	31	11·5	10·8	075	31	11·5	11·3	086	31	9·6	8·7	078	31	13·5	12·5	297
2·1 ,, .	23	8·4	3·8	281	25	5·2	1·1	214	31	9·0	7·2	086	31	9·9	9·1	085	31	9·5	6·9	075	30	18·7	17·4	297
3·0 ,, .	23	9·8	5·6	226	25	8·8	4·9	195	31	8·8	5·9	100	31	10·8	6·5	087	31	9·9	6·3	096	11	15·8	14·8	302
3·6 ,, .	23	13·3	10·2	246	25	11·0	6·5	223	30	9·0	5·8	106	30	10·6	5·7	086	30	10·6	6·7	100	3	12·0	11·8	249
4·5 ,, .	23	21·9	20·0	250	25	19·4	15·6	256	24	11·9	5·9	075	30	10·7	4·9	097	22	11·0	4·8	102				
5·4 ,, .	23	29·0	26·8	255	25	30·3	27·2	260	13	12·0	6·1	360	29	13·9	5·1	074	16	11·9	1·8	101				
6·0 ,, .	23	34·3	32·9	257	25	36·6	32·5	259	10	12·9	4·5	355	28	14·3	3·4	071	8	13·1	3·5	182				
7·2 ,, .	23	47·4	45·6	259	25	48·1	45·9	261	4	23·0	12·5	318	23	15·2	3·1	303	4	14·8	5·6	273				
9·0 ,, .	22	64·2	61·0	256	21	67·7	66·1	262					17	18·8	13·4	276								

Station	ASANSOL								BAGHDOGRA												BAIRAGARH			
Time in I. S. T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·1	1·7	319	31	1·6	1·3	331	31	1·7	1·5	010	31	1·9	1·5	271	31	1·9	1·8	360	31	4·3	2·5	077
0·15 a.g. . .	31	7·6	5·6	334	31	9·0	5·2	017	31	4·6	3·3	080	31	5·8	3·8	249	31	4·4	1·0	034	31	14·5	8·7	115
0·3 a.m.s.l. .	31	7·6	5·6	335	31	9·1	5·2	016	31	4·6	3·3	087	31	5·8	4·1	251	31	4·4	0·6	026				
0·6 ,, .	31	6·9	5·6	328	31	8·2	4·6	353	31	4·3	2·1	096	31	5·4	4·0	248	31	4·4	1·5	275	31	14·0	8·8	101
0·9 ,, .	31	7·1	5·6	317	31	7·7	5·8	305	31	4·2	0·8	090	31	5·2	3·5	245	31	4·4	1·7	266	31	10·5	5·3	163
1·5 ,, .	30	11·6	10·5	308	31	12·7	11·9	291	30	4·7	2·0	085	31	5·7	1·8	237	31	5·9	1·1	158	31	10·0	9·0	254
2·1 ,, .	30	18·5	17·9	305	31	19·5	18·7	296	29	7·4	0·5	158	29	6·4	1·8	269	31	7·6	1·2	266	31	13·7	12·1	256
3·0 ,, .	11	18·8	18·1	292	15	18·3	17·5	296	28	20·1	17·6	285	24	20·8	19·3	289	29	22·6	14·5	290	30	14·7	13·1	278
3·6 ,, .	2	19·5	18·1	283	5	18·8	18·4	290	19	35·4	34·8	281	13	29·2	28·2	279	18	33·4	33·0	283	20	14·1	12·8	278
4·5 ,, .									8	43·2	42·9	284	3	19·6	19·5	275	1	40·0	40·0	280	10	13·4	10·2	266
5·4 ,, .									3	53·3	52·3	266									2	20·5	18·9	237
6·0 ,, .																					1	29·0	29·0	280
7·2 ,, .																								
9·0 ,, .																								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	BAIRAGARH								BAMRAULI															
Time in I. S.T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·8	0·8	355	31	3·9	2·2	051	30	1·1	0·7	285	31	3·5	1·8	280	31	2·4	1·3	313	31	1·8	0·7	349
0·15 a. g. . .	31	6·2	1·7	330	31	12·6	7·0	069	26	6·6	3·4	283	31	5·8	2·6	283	29	6·3	4·0	320	31	11·4	5·1	338
0·3 a.m.s.l. .									26	7·6	3·3	278	31	6·0	2·5	276	29	6·9	4·5	318	31	11·2	4·9	335
0·6 ,, .	31	6·0	1·9	327	31	13·0	7·7	066	26	9·7	5·4	276	31	6·4	4·0	282	29	8·5	6·1	300	31	9·9	4·7	298
0·9 ,, .	31	6·3	1·7	309	31	9·3	3·6	097	26	10·2	7·7	280	31	9·0	7·4	293	29	9·8	7·4	294	31	10·3	7·2	282
1·5 ,, .	31	6·2	4·0	258	31	8·1	6·2	217	26	14·5	13·6	274	31	15·8	14·1	285	29	14·9	13·5	284	31	13·6	12·3	279
2·1 ,, .	31	9·8	7·8	259	31	12·5	10·2	236	26	18·2	15·4	275	31	18·5	16·6	285	29	17·8	15·4	281	30	15·9	14·7	279
3·0 ,, .	30	13·8	12·1	268	29	13·2	11·5	260	24	20·3	19·2	282	29	22·0	20·7	282	28	21·2	20·4	278	19	18·3	17·4	284
3·6 ,, .	29	18·4	16·6	272	19	15·7	12·9	265	24	24·2	20·7	279	27	24·5	23·4	277	28	24·0	23·5	277	4	19·5	18·7	280
4·5 ,, .	24	22·8	20·9	266	8	21·4	18·9	275	23	30·7	29·0	275	24	31·0	28·7	275	28	28·5	28·3	277	1	22·0	22·0	305
5·4 ,, .	19	25·2	23·0	267					23	37·0	35·2	273	21	34·5	33·6	278	28	33·8	33·0	273				
6·0 ,, .	16	25·2	23·9	268					23	41·0	38·9	271	20	38·5	38·0	274	28	38·3	36·3	270				
7·2 ,, .	10	29·8	27·7	263					20	50·8	49·0	266	8	42·9	42·3	267	26	50·5	47·7	266				
9·0 ,, .									17	59·7	56·5	268	2	53·0	53·0	253	18	61·0	58·1	262				

Station	BANGALORE									BAREILLY							BEGUMPET			
Time in I. S. T.	0530				1730				2330	0530				1730			0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	8·0	7·6	076	31	8·0	7·2	088	31	8·0	7·7	085	31	3·0	1·6	304	31	3·2	1·0	279	31	0·2	0·2	113
0·15 a. g. . .	23	15·0	14·6	074	31	10·6	10·1	087	31	16·3	15·7	092	31	9·5	6·4	321	31	7·8	3·6	303	31	10·3	10·1	125
0·3 a.m.s.l. .													31	9·3	6·2	322	31	7·5	3·4	303				
0·6 ,, .													31	9·6	6·1	302	31	8·9	4·1	301	31	6·8	6·6	114
0·9 ,, .													30	8·7	6·0	301	31	9·1	4·8	295	31	11·8	10·9	110
1·5 ,, .	20	16·4	15·6	079	31	11·2	10·9	081	31	15·2	13·7	080	29	9·5	6·9	298	31	9·3	5·8	298	30	9·8	7·1	050
2·1 ,, .	18	11·1	9·7	082	30	9·8	9·2	076	29	10·4	8·2	088	29	12·1	10·1	284	29	11·5	8·0	295	30	8·6	4·1	026
3·0 ,, .	17	11·5	10·8	092	29	10·8	8·1	084	29	12·3	10·7	095	28	15·9	13·8	283	29	14·5	13·9	283	30	7·9	0·4	245
3·6 ,, .	17	11·6	10·9	092	26	10·9	9·4	085	26	13·0	11·9	083	18	19·1	17·7	270	27	19·7	19·0	278	30	8·3	1·4	140
4·5 ,, .	15	11·4	9·2	083	24	13·7	10·5	074	25	13·5	10·1	086	9	29·9	27·7	270	23	30·6	29·4	272	29	11·9	3·3	251
5·4 ,, .	11	11·5	8·0	062	23	14·4	9·8	069	20	12·9	7·4	057	4	22·7	19·3	258	19	43·4	42·9	271	27	12·8	6·0	259
6·0 ,, .	8	12·7	7·7	058	21	14·9	8·2	068	15	12·1	6·1	060	3	22·7	19·7	264	12	46·4	45·9	271	27	13·9	7·1	244
7·2 ,, .	1	32·0	32·0	355	15	18·2	10·5	004	8	15·6	9·1	204	1	47·0	47·0	290	2	47·5	46·8	278	8	16·3	9·1	290
9·0 ,, .	1	9·0	9·0	320	13	16·4	11·5	289	1	26·0	26·0	330									4	29·5	25·8	276

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	BEGUMPET								BHAGALPUR								BHUBANESHWAR							
Time in I. S. T.	1730				2330				0530				1730				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·0	2·7	095	31	1·1	1·0	086	31	2·0	1·1	241	31	2·8	2·0	276	31	1·4	0·8	358	31	2·7	1·0	083
0·15 a.g.	31	7·3	7·0	095	31	13·7	12·4	095	31	6·5	3·7	317	31	6·9	5·6	304	31	4·9	1·1	359	31	6·7	3·8	079
0·3 a.m.s.l.									31	6·2	3·6	314	31	6·6	5·1	297	31	5·3	0·1	332	31	5·7	3·0	065
0·6 ,,	31	7·6	7·0	091	31	8·5	7·7	087	31	5·9	3·8	317	31	7·2	5·5	293	31	5·4	1·6	007	31	4·5	2·8	014
0·9 ,,	31	7·3	6·9	090	31	13·1	12·5	106	31	6·3	4·1	298	31	8·3	6·5	282	31	6·3	3·6	004	31	5·0	4·2	338
1·5 ,,	31	6·2	5·0	081	31	8·9	7·0	101	31	13·3	11·6	290	31	12·4	10·6	288	31	8·0	5·5	002	31	8·7	7·9	330
2·1 ,,	31	6·1	2·9	046	31	7·2	4·3	049	28	17·0	16·6	293	29	18·4	17·3	291	30	8·7	5·3	322	30	10·6	8·8	308
3·0 ,,	30	8·1	0·9	301	31	9·3	0·8	326	17	22·7	22·3	291	15	21·1	20·7	290	30	11·8	8·4	291	28	12·6	10·4	288
3·6 ,,	30	9·5	2·1	270	14	9·6	4·3	277	5	21·8	21·6	282	5	20·8	20·5	273	30	14·8	10·9	288	10	17·5	14·5	284
4·5 ,,	28	11·3	4·1	281	2	16·0	14·7	265	1	39·0	39·0	275					30	18·3	14·5	281	1	10·0	10·0	305
5·4 ,,	27	14·5	6·0	286	1	10·0	10·0	340									29	20·7	17·2	275				
6·0 ,,	25	16·0	6·7	261	1	7·0	7·0	105									28	23·2	19·9	257				
7·2 ,,	22	18·6	12·9	265	1	5·0	5·0	045									21	29·4	24·4	270				
9·0 ,,	11	34·0	29·9	281													15	28·3	21·0	266				

Station	BHUBANESHWAR				BHUJ												BIKANER							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1·4	0·2	348	31	0·6	0·3	317	31	4·8	3·3	018	31	1·4	1·0	345	31	1·7	0·6	360	31	2·4	1·7	350
0·15 a.g.	31	7·9	5·5	159	31	11·9	8·4	016	31	9·5	6·5	011	31	12·5	9·4	356	30	10·5	5·5	064	31	6·4	4·7	010
0·3 a.m.s.l.	31	7·3	4·8	165	31	12·5	9·0	023	31	9·6	6·6	010	31	13·3	10·0	356	31	9·1	4·9	071	31	6·1	4·4	010
0·6 ,,	31	5·1	1·4	224	31	12·3	8·7	026	31	10·0	6·7	004	31	13·5	10·5	015	30	9·0	2·9	040	31	6·9	5·0	010
0·9 ,,	31	5·3	3·6	329	31	10·8	6·1	013	31	10·8	6·7	358	31	11·7	8·4	025	30	8·4	2·5	304	30	6·6	4·4	022
1·5 ,,	31	8·4	6·3	350	31	11·3	4·2	307	31	11·6	5·5	311	31	10·7	2·5	004	30	9·5	4·7	304	30	6·5	2·6	322
2·1 ,,	31	8·1	4·9	316	30	10·2	6·0	280	31	13·0	8·2	284	31	12·8	7·0	273	28	8·9	5·8	304	30	9·4	5·4	285
3·0 ,,	30	12·7	8·9	284	30	14·4	11·8	274	30	16·1	12·3	273	30	15·8	13·3	266	26	14·8	12·8	277	27	16·1	13·7	267
3·6 ,,	11	16·2	13·1	271	14	17·4	14·9	280	29	19·6	17·0	273	14	15·0	12·7	276	23	18·9	17·5	261	26	24·8	22·4	272
4·5 ,,	3	16·7	16·0	275	9	16·8	12·6	286	29	24·0	20·9	271	11	24·6	22·5	264	12	30·3	28·6	265	21	31·0	28·5	272
5·4 ,,	2	16·0	15·7	265	2	18·0	17·7	274	28	31·1	27·3	272	8	29·6	28·4	246	2	43·0	39·4	279	17	38·5	35·2	271
6·0 ,,					2	23·0	22·0	276	27	34·0	29·1	273	6	32·8	32·0	245	1	65·0	65·0	260	15	46·3	43·0	268
7·2 ,,									22	40·2	36·5	280									8	53·7	48·4	272
9·0 ,,									14	48·0	45·8	266												

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	BIKANER				CHIKALTHANA												COCHIN							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface .	31	2·3	1·9	022	31	0·9	0·8	100	31	1·5	1·2	109	31	0·8	0·6	093	31	1·8	1·7	050	31	5·4	3·2	260
0·15 a.g. .	31	11·8	9·7	041	31	10·2	3·2	101	31	4·6	2·8	134	31	10·9	9·0	096	30	6·7	6·0	061	27	6·7	4·4	274
0·3 a.m.s.l. .	31	10·0	8·1	032													30	5·7	4·8	060	27	6·0	3·9	296
0·6 ,, .	31	10·2	7·6	050													30	5·8	4·7	043	27	5·2	3·8	014
0·9 ,, .	31	8·2	4·1	058	31	11·9	9·4	055	31	4·5	2·7	138	31	11·6	9·8	110	30	7·1	4·8	057	27	6·7	5·4	040
1·5 ,, .	31	8·2	1·5	246	31	9·0	6·0	155	31	4·7	1·3	112	31	8·2	6·1	126	3	7·4	5·1	068	27	10·4	9·2	085
2·1 ,, .	31	10·5	6·8	285	31	7·2	4·2	215	31	5·6	1·3	008	31	7·0	2·6	163	30	10·6	9·1	079	27	9·5	8·0	082
3·0 , .	29	16·4	14·6	271	30	10·2	5·7	270	31	7·0	4·2	275	31	9·2	4·2	240	30	12·0	9·9	082	25	9·2	8·5	072
3·6 ,, .	27	21·1	19·2	262	23	12·8	10·0	274	31	10·3	8·0	265	15	10·7	6·5	268	25	11·4	9·6	083	19	10·6	9·6	074
4·5 ,, .	15	25·2	22·6	272	9	11·9	8·6	256	29	15·0	11·1	269	1	13·0	13·0	255	16	12·7	10·7	076	12	10·3	9·2	092
5·4 ,, .	3	29·0	28·6	267					26	17·8	13·9	265					8	12·7	11·7	081	3	12·0	11·1	084
6·0 ,, .	1	34·0	34·0	240					25	21·6	17·0	262					5	15·2	14·9	083	1	13·0	13·0	115
7·2 ,, .									13	26·2	21·2	256					1	17·0	17·0	070				
9·0 ,, .									2	47·5	44·7	261					1	11·0	11·0	040				

Station	COCHIN				DARJEELING								DUM DUM											
Time in I.S.T.	2330				0830				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	1·1	0·7	048	31	0·6	0·3	228	31	1·1	0·7	270	31	0·8	0·8	337	31	3·0	2·6	347	31	0·8	0·8	341
0·15 a.g. . .	25	5·3	3·2	081	13	2·5	0·5	140	7	5·3	4·7	229	31	6·5	3·9	359	31	5·2	4·3	349	31	6·6	4·3	336
0·3 a.m.s.l. .	25	5·2	2·3	078									31	6·5	3·9	185	31	6·0	5·0	343	31	6·5	4·8	344
0·6 ,, .	25	6·6	2·9	094									31	7·7	5·0	340	31	6·7	6·0	332	31	7·0	5·7	343
0·9 ,, .	25	6·6	4·6	077									31	8·6	7·0	323	31	8·2	7·3	329	31	7·8	6·7	342
1·5 ,, .	24	7·3	6·1	050									31	12·4	11·0	318	31	13·8	13·1	314	31	11·6	11·0	326
2·1 ,, .	22	8·1	6·8	070									31	16·2	15·5	310	31	17·2	16·6	308	31	15·7	15·2	314
3·0 ,, .	19	11·2	9·8	084	13	10·6	7·9	272	7	5·7	3·7	323	31	18·9	18·2	292	31	19·3	18·5	292	31	19·5	18·6	297
3·6 ,, .	6	11·8	11·4	076	13	24·6	24·3	276	4	14·3	12·5	285					31	22·5	21·8	283				
4·5 ,, .	3	14·3	13·9	083	5	38·4	38·3	278	1	12·0	12·0	290	31	26·0	25·1	282	31	27·1	26·1	281	31	27·0	26·3	284
5·4 ,, .	1	18·0	18·0	110	3	37·7	37·0	280	1	16·0	16·0	290	31	31·4	30·5	278	30	31·7	30·6	279	31	32·8	31·8	284
6·0 ,, .					1	41·0	41·0	280					31	35·5	34·2	275	27	32·8	31·5	275	31	36·0	35·9	281
7·2 ,, .													31	42·4	41·2	274	17	34·4	33·3	271	31	43·1	41·4	275
9·0 ,, .													31	53·2	50·9	267	2	42·5	42·0	249	31	52·4	50·8	274

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds upto 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	DUM DUM				GADAG												GANNAVARAM							
Time in I.S.T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	1·5	0·4	342	31	5·5	5·0	111	31	6·4	6·0	089	31	6·5	6·3	089	31	4·0	3·7	046	31	5·3	5·0	097
0·15 a.g. .	31	7·2	3·3	008	31	16·6	16·4	115	31	10·6	10·2	086	31	17·2	16·7	084	30	9·5	9·0	080	31	7·5	7·1	100
0·3 a.m.s. 1. .	31	6·6	3·8	358													30	10·0	9·6	089	31	7·9	7·3	098
0·6 ,, .	31	6·1	4·5	340													30	11·3	10·9	092	31	8·1	7·9	087
0·9 ,, .	31	7·6	6·4	327	31	17·1	16·8	108	31	11·1	10·7	084	31	16·9	16·5	088	31	11·0	10·4	076	31	8·1	7·4	072
1·5 ,, .	31	12·0	11·7	319	31	11·6	10·4	076	31	10·6	10·3	086	31	14·0	13·3	095	31	9·5	7·7	063	31	8·2	6·8	050
2·1 ,, .	31	15·4	14·3	313	31	9·8	6·1	088	31	9·9	9·0	087	31	9·8	7·6	087	31	6·8	3·5	082	31	8·1	5·1	040
3·0 ,, .	24	16·9	15·4	241	31	8·0	3·6	134	31	9·1	5·3	099	31	8·3	3·2	106	30	8·1	1·9	084	31	8·0	1·9	040
3·6 ,, .	3	16·3	16·0	278	31	9·1	4·1	132	29	9·6	4·6	103	31	9·1	4·1	123	25	9·3	2·2	128	31	8·2	1·5	085
4·5 ,, .					27	11·2	2·3	118	28	11·5	4·2	086	26	11·3	2·9	157	15	11·2	3·0	141	31	9·8	0·8	218
5·4 ,, .					22	12·9	3·3	322	25	13·1	2·2	066	15	12·9	2·8	145	8	12·6	4·5	291	30	13·0	2·4	250
6·0 ,, .					16	13·9	5·4	304	25	14·4	1·2	136	11	12·2	4·1	245	6	12·0	9·0	283	30	13·7	5·2	263
7·2 ,, .					3	20·3	14·7	301	19	16·4	6·1	271	2	22·0	21·7	286	5	22·6	20·6	297	25	17·9	9·7	262
9·0 ,, .									15	18·6	16·5	263					3	36·3	34·4	287	18	24·8	17·9	267

Station	GANNAVARAM				GAUHATI												GAYA			
Time in I.S.T.	2330				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	4·6	4·3	092	31	0·9	0·8	078	31	3·0	2·7	040	30	1·1	1·0	054	31	1·0	0·4	077	31	1·5	0·8	203
0·15 a.g. . .	31	11·8	11·3	106	31	4·6	2·9	090	31	4·7	4·0	050	30	6·5	5·6	058	31	5·0	2·8	099	31	7·7	2·2	253
0·3 a.m.s. 1. .	31	12·8	12·5	106	31	4·6	3·2	092	31	4·7	4·2	052	30	6·3	5·1	059	31	5·2	4·3	093	31	7·8	1·7	282
0·6 ,, .	31	11·9	11·7	096	31	5·1	3·9	090	31	5·8	5·0	075	30	5·9	4·7	071	31	5·7	5·0	089	31	7·3	3·2	313
0·9 ,, .	31	9·5	9·3	074	31	5·6	3·3	085	31	6·7	4·1	088	30	5·0	2·8	100	31	4·9	1·8	086	31	8·2	6·7	298
1·5 ,, .	31	9·3	7·3	059	31	6·8	2·1	101	31	8·2	3·8	127	30	6·4	2·6	220	30	6·2	0·8	063	31	15·0	14·0	292
2·1 ,, .	31	7·6	5·1	069	31	9·3	0·7	128	31	9·2	2·0	154	30	8·4	5·1	235	28	8·1	0·1	360	31	25·1	17·4	290
3·0 ,, .	31	7·7	1·9	096	31	19·5	16·8	285	27	20·0	14·7	278	30	17·5	14·2	280	11	17·8	14·6	270	15	20·0	18·6	293
3·6 ,, .	28	8·7	1·9	083	31	32·8	31·5	284	25	30·0	23·8	278	30	34·4	33·7	279	5	13·0	31·6	264	4	20·0	19·2	305
4·5 ,, .	22	12·0	1·7	127	31	42·2	41·6	275	18	41·3	29·2	280	30	44·5	43·8	275					1	18·0	18·0	275
5·4 ,, .	7	13·1	8·4	259	31	46·5	45·5	275	13	46·5	36·6	275	30	50·0	49·1	279								
6·0 ,, .	6	17·2	9·5	255	31	50·7	49·7	279	11	49·2	48·6	273	30	55·5	55·0	270								
7·2 ,, .	1	20·0	20·0	270	29	61·2	59·6	277	4	48·0	47·9	277	28	63·5	58·8	277								
9·0 ,, .					18	83·0	80·0	275	1	65·0	65·0	270	14	75·6	74·1	276								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	GAYA								GOPALPUR								GORAKHPUR			
Time in I. S T.	1730				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	3·0	2·4	330	31	0·8	0·3	215	31	4·3	4·2	328	31	5·0	4·4	122	31	1·7	1·1	293	31	2·5	1·2	275
0·15 a.g. . .	31	7·9	5·8	332	31	8·2	3·8	352	31	7·8	6·2	334	31	8·3	7·7	117	31	4·7	2·4	163	31	9·8	6·0	310
0·3 a.m.s. l. .	31	7·9	6·1	325	31	8·3	4·0	351	31	4·2	1·1	031	31	7·5	6·9	095	31	4·9	3·7	147	31	9·3	5·4	309
0·6 ,, . .	31	7·6	5·9	307	31	8·2	4·9	316	31	4·4	1·8	078	31	6·0	4·6	046	31	5·0	4·1	110	31	8·5	3·9	307
0·9 ,, . .	31	8·9	7·1	285	31	9·9	8·3	277	31	5·9	4·4	046	31	7·0	6·1	360	31	5·3	4·6	056	30	8·1	3·1	283
1·5 ,, . .	28	14·8	13·9	287	31	14·5	14·2	286	31	8·5	7·3	026	31	8·9	7·7	344	31	8·9	7·5	001	30	12·7	10·4	289
2·1 ,, . .	29	19·5	16·9	294	30	19·2	18·2	292	31	7·3	3·5	345	31	8·7	6·5	332	31	8·0	4·7	339	29	17·1	16·1	282
3·0 ,, . .	19	20·4	19·5	283	17	18·4	18·0	285	30	9·7	7·0	276	31	11·8	8·5	294	29	8·9	6·4	272	20	23·3	22·3	289
3·6 ,, . .	6	20·0	19·6	285	1	15·0	15·0	265	29	12·5	9·5	287	31	13·9	10·6	285	19	13·4	9·8	274	10	23·2	22·4	291
4·5 ,, . .					1	21·0	21·0	250	23	14·9	12·6	274	31	16·0	13·0	278	6	16·5	12·7	255	3	30·0	28·1	293
5·4 ,, . .									14	19·0	16·5	270	28	17·9	14·7	270								
6·0 ,, . .									13	20·2	18·4	278	26	18·0	14·9	271								
7·2 ,, . .									7	21·4	18·4	283	6	18·5	14·9	236								
9·0 ,, . .									2	39·5	39·2	282	1	35·0	35·0	275								

Station	GORAKHPUR				GWALIOR												IMPHAL							
Time in I.S.T.	1730				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	1·5	1·0	263	31	1·2	0·4	332	31	3·7	2·7	004	31	1·4	0·3	321	31	0·1	0·1	270	31	2·7	2·0	256
0·15 a. g. .	31	7·9	6·2	260	31	10·5	3·1	009	31	8·5	5·8	003	31	9·1	3·2	031	17	2·0	0·9	154	31	6·3	5·8	247
0·3 a. m. s. l. .	31	8·0	6·2	260	31	8·3	2·7	009	31	7·7	5·5	005	31	7·5	2·7	035								
0·6 ,, . .	31	7·9	6·1	270	31	11·0	3·4	355	31	8·8	4·6	350	31	9·5	1·8	350								
0·9 ,, . .	31	8·5	5·3	277	31	10·0	4·9	304	31	8·1	3·8	328	31	9·2	4·6	292	17	1·8	1·2	161	31	6·1	5·1	255
1·5 ,, . .	31	12·9	10·1	297	31	12·1	10·1	273	30	11·4	9·5	278	31	11·6	10·1	261	17	3·7	1·0	295	31	6·6	5·4	234
2·1 ,, . .	30	17·4	16·3	295	30	16·4	14·7	269	30	17·9	16·0	272	31	14·8	13·2	267	17	8·2	5·2	255	31	9·2	8·1	245
3·0 ,, . .	13	19·5	18·9	293	28	21·9	20·1	271	30	22·8	21·8	273	31	20·9	19·7	266	12	18·1	17·4	275	31	19·8	18·3	276
3·6 ,, . .	6	24·7	23·5	287	12	20·3	19·3	276	29	27·3	26·5	271	14	17·6	15·7	263	12	25·8	24·6	281	24	29·7	28·5	276
4·5 ,, . .	3	25·0	22·9	273					23	31·6	30·7	271	3	27·3	23·0	245	9	34·7	33·2	271	5	36·4	36·4	[illegible]
5·4 ,, . .	1	29·0	29·0	291					15	37·3	36·1	278					3	38·0	37·4	272				
6·0 ,, . .	1	39·0	39·0	275					8	33·1	31·0	269												
7·2 ,, . .									1	45·4	45·0	280												
9·0 ,, . .																								

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	IMPHAL				JABALPUR												JAGDALPUR							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	0·6	0·4	251	31	1·8	1·3	127	31	2·2	1·3	013	31	2·6	1·4	111	31	0·2	0·1	360	31	1·4	1·2	042
0·15 a.g.	31	2·7	0·4	220	31	9·3	3·9	116	31	6·3	3·0	003	31	12·2	5·7	083	31	6·5	2·7	052	31	6·0	4·6	046
0·3 a.m.s.l.																								
0·6 „					31	10·0	3·9	114	31	6·3	3·0	001	31	12·3	5·9	081	31	3·3	1·6	037	31	4·3	3·1	048
0·9 „	31	2·3	0·6	221	31	9·1	1·7	166	31	5·8	2·7	342	31	8·8	3·6	092	31	7·5	3·8	070	31	5·8	5·1	044
1·5 „	31	4·6	2·5	231	31	10·5	7·8	269	31	7·2	4·9	306	31	9·5	5·4	266	31	5·9	3·6	030	31	4·8	4·1	027
2·1 „	31	8·5	6·4	236	31	12·5	10·8	280	31	10·6	8·2	282	31	11·8	8·7	261	31	7·5	3·7	345	31	5·5	2·1	337
3·0 „	27	21·4	20·4	275	31	15·5	13·8	284	29	13·9	12·6	274	31	14·6	13·1	276	31	8·3	3·7	291	30	9·2	5·3	294
3·6 „	23	32·6	31·5	272	31	18·5	16·8	283	27	18·6	17·6	280	28	17·3	15·8	282	31	10·9	7·3	291	28	11·5	8·3	289
4·5 „	2	32·0	31·5	259	27	20·2	18·2	275	23	24·7	23·4	276	17	20·7	18·4	287	26	14·6	9·4	276	25	15·6	11·0	277
5·4 „					20	21·0	18·3	272	23	30·0	28·2	273	9	23·7	21·9	267	18	13·3	8·6	260	22	16·8	12·6	265
6·0 „					14	24·0	20·6	254	22	30·8	29·4	265	5	28·0	26·7	277	12	12·2	5·3	275	21	17·8	14·0	270
7·2 „					1	2·0	2·0	325	15	35·5	34·2	265	1	31·0	31·0	255	1	18·0	18·0	275	16	24·0	19·8	254
9·0 „									5	51·4	49·7	271									7	28·1	24·9	247

Station	JAGDALPUR				JAIPUR								JAMSHEDPUR								JHARSUGUDA			
Time in I. S. T.	2330				0530				1730				0530				1730				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1·0	0·9	048	31	3·1	2·4	062	31	3·3	0·5	015	31	1·4	1·3	298	31	1·4	0·5	348	31	3·1	2·7	028
0·15 a.g.	31	10·0	8·0	073	31	8·9	4·5	055	31	7·6	1·2	019	30	4·9	3·9	302	30	3·5	1·7	355	31	6·2	5·1	049
0·3 a.m.s.l.													30	5·0	3·4	310	31	3·5	1·7	359	31	6·7	5·9	035
0·6 „	31	6·5	4·7	074	31	9·4	4·8	055	31	7·6	1·2	019	31	5·1	1·9	318	31	4·9	2·8	330	31	5·8	1·2	359
0·9 „	31	10·3	8·7	064	31	8·5	2·7	056	31	7·3	2·2	360	31	5·8	3·3	306	31	6·8	4·8	318	31	6·1	3·0	299
1·5 „	31	5·5	4·1	042	30	8·3	2·6	288	31	7·0	4·3	305	31	11·9	11·1	304	31	13·1	12·0	306	31	7·7	6·0	320
2·1 „	31	5·8	0·9	345	30	13·1	7·4	262	30	11·6	9·3	271	29	15·5	14·5	312	29	15·7	15.0	310	31	10·2	9·3	318
3·0 „	30	10·1	6·2	303	28	19·7	10·1	240	29	22·0	20·2	265	23	18·7	17·9	291	26	18·5	17·4	293	31	13·7	12·7	293
3·6 „	27	11·0	6·7	280	15	20·9	15·7	253	29	27·2	25·4	264	17	20·4	19·7	282	19	19·4	18·7	282	25	15·4	13·5	286
4·5 „	21	12·1	8·0	245	9	26·8	14·2	207	24	33·6	32.2	268	14	25·4	24·0	275	9	21·1	2)·0	279	1	15·0	15·0	315
5·4 „	16	13·4	8·0	246	1	21·0	21·0	135	19	35·8	34·4	269	9	23·7	23·7	291					1	19·0	19·0	315
6·0 „	13	15·9	8·1	256					11	63.2	62·2	269	5	23·0	22·3	288								
7·2 „	9	14·6	11·3	251					6	52·0	50·9	272	1	30·0	30·0	280								
9·0 „	1	33·0	33·0	300																				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	JHARSUGUDA								JODHPUR															
Time in I. S. T.	1730				2330				0530*				1130				1730*				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·6	1·2	216	31	1·9	0·8	042	29	7·0	6·3	034	31	5·7	4·5	044	30	6·4	4·3	023	31	7·1	6·3	025
0·15 a. g. .	31	5·8	2·4	220	31	6·2	1·7	220	29	7·8	6·2	036	31	7·4	3·9	063	30	6·7	4·3	020	31	15·9	14·9	043
0·3 a.m.s. l. .	31	6·6	2·6	214	31	5·2	0·2	095	29	7·7	6·4	038	31	7·1	4·1	059	30	6·7	4·5	020	31	13·5	11·0	035
0·6 „ . .	31	4·9	2·0	254	31	5·6	2·1	250	29	7·9	4·9	030	31	8·4	2·4	065	30	6·9	3·9	018	31	14·0	10·9	051
0·9 „ . .	31	4·6	2·6	299	31	5·0	2·6	288	29	7·7	2·7	013	31	8·1	2·1	065	30	6·7	3·2	016	31	11·1	7·3	060
1·5 „ . .	31	7·6	6·3	331	31	6·7	4·7	333	29	9·0	4·2	288	31	8·9	1·8	277	30	7·4	2·6	310	31	9·1	2·9	204
2·1 „ . .	31	10·9	9·4	333	31	8·5	6·4	315	29	11·9	8·8	271	30	10·9	7·0	252	30	11·5	8·8	264	28	10·1	7·7	250
3·0 „ . .	31	13·3	11·9	296	30	13·1	11·4	294	29	17·7	16·0	261	29	17·0	15 3	261	28	21·0	19·3	259	26	16·3	14·7	262
3·6 „ . .	30	18·5	17·3	287	24	16·2	14·2	285	29	22·5	20·7	264	28	21·9	20·4	265	27	25·0	23·2	257	7	17·3	16·8	260
4·5 „ . .	27	23·0	21·7	281					28	30·8	28·6	268	26	29·7	28·8	269	27	33·0	30·2	262	1	9·0	9·0	055
5·4 „ . .	16	27·4	26·3	277					26	40·5	38·7	266	26	35·2	34·0	269	25	42·0	39·7	262				
6·0 „ . .	6	28·5	27·9	288					25	44·0	41·5	267	26	39·5	37·8	270	25	47·0	44·2	260				
7·2 „ . .									24	54·0	51·3	266	18	42·3	40·6	273	22	56·5	52·0	261				
9·0 „ . .									21	65·1	60·5	260	10	61·1	58·1	263	19	68·6	65·1	263				

Station	MADRAS												MANGALORE							
Time in I. S. T.	0530*				1130				1730*				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	6·8	6·3	012	31	10·1	9·2	030	31	10·1	9·9	025	31	5·2	4·7	021	31	7·1	6·4	089	31	6·2	4·9	290
0·15 a. g. . .	31	13·1	12·7	030	30	14·3	13·6	026	31	15·4	14·8	030	31	13·3	13·1	043	31	13·1	10·6	089	31	7·7	6·0	299
0·3 a.m.s. l. .	31	14·0	13·7	035	30	14·8	14·4	037	31	15·3	14·8	035	31	14·5	14·3	047	31	13·0	9·9	088	31	7·5	5·0	318
0·6 „ . .	31	14·4	14·2	043	30	15·9	15·5	038	31	15·0	14·6	040	31	15·2	14·9	051	31	11·6	7·3	094	31	5·7	3·0	035
0·9 „ . .	31	14·7	14·3	051	28	15·6	15·3	043	31	14·3	13·9	044	31	15·1	15·0	055	31	10·5	8·4	097	31	7·5	6·7	076
1·5 „ . .	31	14·3	13·5	060	13	13·2	12·1	054	31	12·5	11·5	057	29	21·1	11·1	063	31	9·2	7·8	099	31	13·5	13·1	082
2·1 „ . .	31	13·0	12·2	075	2	13·5	12·9	068	31	11·7	9·2	074	27	10·7	9·7	084	31	9·4	6·7	099	30	11·5	9·9	086
3·0 „ . .	31	12·6	11·1	088	1	7·0	7·0	115	31	12·3	10·5	088	27	11·0	8·9	095	29	10·1	7·4	096	29	9·2	7·1	098
3·6 „ . .	31	14·2	12·3	090					31	13·0	10·7	085	23	11·6	9·1	090	24	9·5	7·7	092	29	10·1	7·3	086
4·5 „ . .	30	15·0	11·6	092					31	14·5	10·2	080	15	13·5	9·9	094	11	9·7	6.7	097	28	11·8	8·0	065
5·4 „ . .	30	16·3	9·8	092					31	15·3	8·8	089	8	14·5	8·9	097	3	8·7	6·5	027	28	12·4	7·1	061
6·0 „ . .	30	16·7	8·3	094					30	15·1	6·8	093	3	14·3	6·9	007	2	9·0	8·6	006	27	12·9	5·0	052
7·2 „ . .	30	16·0	3·8	060					28	16·4	2·4	074									24	16·4	5·9	311
9·0 „ . .	25	15·3	5·6	233					26	16·2	5·5	218									22	18·5	11·5	283

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

July, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	MANGALORE				MINICOY												MOHANBARI							
Time in I. S. T.	2330				0530				1730				2330				0530				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·3	2·5	055	31	4·0	2·1	018	31	3·7	2·1	031	31	3·6	2·2	035	31	0·5	0·5	045	31	0·3	0·3	045
0·15 a.g.	31	7·2	4·3	340	31	8·2	4·6	015	30	9·1	6·1	028	30	8·3	5·6	044	28	6·2	5·6	061	30	4·4	3·8	053
0·3 a.m.s.l.	31	7·1	4·0	343	31	8·7	5·2	016	30	10·1	6·6	030	30	8·5	5·6	047	28	6·2	5·6	053	30	4·0	3·6	054
0·6 ,,	31	7·0	4·3	019	31	9·1	5·5	039	30	10·5	6·9	037	30	8·9	6·1	048	28	5·1	4·5	043	30	4·1	3·2	060
0·9 ,,	31	7·7	5·8	061	31	10·3	7·3	068	30	9·9	7·0	053	30	9·8	6·8	062	28	4·6	4·3	050	30	4·4	3·6	054
1·5 ,,	31	12·3	11·8	087	30	11·7	9·5	080	26	10·4	7·7	069	28	10·4	9·0	074	26	4·0	2·8	066	30	3·3	1·7	080
2·1	30	13·0	11·4	091	28	10·1	7·9	071	26	9·8	6·9	084	28	11·0	9·4	074	25	4·3	1·5	125	29	5·2	3·9	176
3·0 ,,	29	9·8	7·0	108	24	10·7	7·7	071	23	9·5	6·4	079	25	9·9	7·4	074	21	6·3	2·5	195	27	6·4	4·3	194
3·6 ,,	25	10·1	7·6	095	17	10·6	9·5	069	20	8·9	6·7	073	19	10·0	6·9	074	17	10·9	3·3	266	18	10·9	5·7	257
4.5 ,,	20	12·8	8·5	080	6	10·7	9·3	061	19	9·9	8·2	058	16	10·9	9·2	056	15	25·2	21·0	273	8	25·8	25·5	265
5·4 ,,	13	14·5	9·3	050	4	10·3	8·3	044	18	11·3	8·1	048	7	12·4	9·4	062	9	35·8	34·4	272	1	26·0	26·0	285
6·0 ,,	10	16·6	8·8	047	3	5·3	5·1	018	17	10·4	8·0	050	2	16·0	14·9	055	5	30·8	30·6	270				
7·2 ,,	3	11·0	8·4	229					11	16·7	10·7	036					3	44·3	44·1	274				
9·0 ,,	1	26·0	26·0	255					8	14·0	6·0	354					1	45·0	45·0	270				

Station	MOHANBARI				MUSSOORIE								NAGPUR											
Time in I.S.T.	2330				0830				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	0·1	0·1	045	31	2·9	1·2	202	31	2·9	1·8	234	31	2·8	2·1	003	31	2·1	1·1	120	31	3·4	2·5	098
0·15 a.g.	30	5·2	4·0	043	27	4·2	2·9	167	22	4·5	1·5	252	31	4·3	2·0	044	31	3·9	1·7	117	31	3·9	2·5	092
0·3 a.m.s.l	30	4·9	3·5	047																				
0·6 ,,	30	4·3	3·3	054									31	5·3	2·0	090	31	4·2	2·5	131	31	4·2	2·6	083
0.9 ,,	30	4.5	3·7	060									31	6·6	3·4	147	31	5·3	1.9	125	31	4·9	2·1	082
1·5 ,,	30	4·0	2·7	067									31	6·9	1·0	024	31	6·6	1·8	017	30	5·0	1·2	010
2·1 ,,	28	4·3	1·9	144	27	5·0	2·5	171	22	5·9	2·5	252	31	7·1	3·9	311	31	6·7	3·7	321	30	6·6	4·2	322
3·0 ,,	25	5·2	2·8	187	27	8·7	2·2	173	22	8·4	3·8	209	31	9·7	7·7	285	31	9·9	8·6	303	30	10·0	7·6	280
3·6 ,,	6	14·0	9·3	267	27	8·2	2·8	225	22	7·9	3·2	206	30	13·1	11·2	277	31	13·0	7·4	271	30	12·9	10·0	270
4·5 ,,	1	91·0	91·0	255	26	15·6	12·7	266	18	13·7	8·9	248	28	18·0	15·5	275	31	17·4	14·8	265	29	14·8	15·5	270
5·4 ,,					24	29·8	28·3	270	17	26·7	25·5	263	25	21·6	18·9	272	31	23·2	20·4	261	29	24·4	21·8	265
6·0 ,,					23	38·9	36·9	270	17	36·9	36·0	266	25	24·8	21·5	273	30	26·5	22·9	261	30	28·3	25·9	263
7·2 ,,					14	53·4	52·1	272	13	52·8	52·9	266	25	31·8	28·6	270	30	33·4	28·3	263	30	34·2	31·8	260
9·0 ,,					1	45·0	45·0	310	4	61·7	61·6	270	23	42·2	40.1	267	18	44·5	40·7	269	28	46·0	43·3	260

TABLE IV—MONTHLY MEAN DIRECTION AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	NAGPUR				NANPARA								NEW DELHI											
Time in I.S.T.	2330				0530				1730				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·9	1·0	097	31	2·6	1·8	274	31	1·0	0·3	281	31	4·4	3·0	328	31	5·5	2·9	300	31	4·2	2·9	323
0·15 a. g. . .	31	11·2	7·4	115	28	7·9	5·3	323	31	7·8	4·9	271	31	12·8	5·7	330	31	9·4	3·4	310	30	10·6	6·7	322
0·3 a.m.s. l .					28	8·0	5·0	330	31	7·7	4·7	273	31	11·8	5·4	325	31	8·5	3·6	307	30	10·4	7·0	322
0·6 ,, .	31	11·5	9·5	131	28	8·5	4·2	213	31	8·1	4·6	284	31	11·0	5·0	315	31	10·5	3·1	314	30	9·7	5·9	325
0·9 ,, .	31	8·7	6·3	128	28	9·3	3·8	297	31	8·0	3·8	300	31	10·2	5·7	305	31	11·5	4·1	313	30	9·7	6·7	323
1·5 ,, .	31	6·3	1·7	004	27	10·5	6·1	310	31	9·7	5·1	307	31	9·4	7·0	295	30	9·7	4·9	291	30	8·2	6·0	308
2·1 ,, .	31	7·7	5·1	333	25	11·1	7·0	293	30	10·7	8·3	304	31	9·8	8·1	290	30	10·1	6·7	264	30	9·1	6·8	288
3·0 ,, .	30	9·8	7·9	277	19	14·6	13·1	287	21	15·0	13·2	292	31	14·0	12·0	275	28	14·9	12·4	260	30	14·6	13·1	274
3·6 ,, .	16	12·2	9·3	279	8	14·9	13·2	298	8	22·9	22·1	284	31	19·4	16·9	272	27	18·8	17·0	257	30	20·5	18·9	271
4·5 ,, .	4	14·3	12·1	288	2	24·0	24·0	276					30	28·5	26·5	272	27	25·8	24·6	261	29	29·7	28·5	273
5·4 ,, .	2	17·0	16·9	279									29	37·1	35·8	273	25	36·0	34·8	267	29	39·1	38·0	274
6·0 ,, .	1	15·0	15·0	270									29	43·5	42·1	272	25	42·6	41·6	267	29	44·2	42·0	273
7·2 ,, .													28	53·1	51·8	269	23	56·8	55·2	266	29	52·8	51·0	274
9·0 ,, .													28	73·5	69·3	271	19	72·4	69·9	268	25	70·3	66·6	268

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	2330				0530				1730				2330				0530*				1130			
Ht. in Km. .	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . .	31	2·8	2·2	307	31	0·6	0·5	219	31	1·6	0·8	093	31	0·8	0·5	199	31	6·6	6·4	050	31	7·9	7·7	052
0·15 a.g. . .	31	12·7	7·5	323	31	5·0	3·7	099	31	4·8	2·4	0 3	31	6·3	0·5	117	31	12·0	11·6	050	31	12·3	12·0	055
0·3 a.m.s. l .	31	11·0	6·2	319													31	12·8	12·5	054	31	12·7	12·4	056
0·6 ,, .	31	11·5	6·9	324	31	2·6	1·4	206	31	3·6	2·0	076	31	3·6	2·4	213	31	12·2	11·7	067	31	12·5	12·0	065
0·9 ,, .	31	10·7	6·9	322	31	8·3	6·5	102	31	5·2	2·5	030	31	8·0	2·5	073	31	12·3	11·6	084	31	12·2	11·6	073
1·5 ,, .	31	9·5	6·9	297	31	9·2	8·4	120	30	4·4	3·0	015	31	8·1	7·4	101	31	14·0	13·5	090	29	13·3	12·8	092
2·1 ,, .	31	10·6	7·9	278	31	7·6	5·7	138	30	4·7	1·7	087	31	8·1	7·0	112	31	13·8	13·2	090	23	12·0	11·4	093
3·0 ,, .	28	15·0	12·6	276	31	8·0	3·8	263	29	6·0	1·3	125	29	6·9	2·9	196	31	10·7	10·0	092	17	10·5	9·7	093
3·6 ,, .	21	21·3	19·5	271	29	9·9	4·4	276	28	8·6	2·2	212	29	9·7	5·4	240	31	10·3	9·1	079	15	10·5	9·8	089
4·5 ,, .	9	25·6	22·2	279	10	13·3	5·6	244	26	12·1	5·9	260	11	14·3	5·5	237	30	12·9	10·7	099	14	10·9	9·6	099
5·4 ,, .									25	15·8	10·4	265	4	12·0	11·7	325	30	13·0	10·1	100	14	13·6	12·0	099
6·0 ,, .									24	18·5	14·5	262	4	12·8	12·2	330	30	13·7	9·0	098	14	14·6	13·3	102
7·2 ,, .									17	25·9	23·0	259					30	13·1	7·6	128	12	16·9	14·0	097
9·0 ,, .									10	38·3	36·8	252					23	14·5	7·2	162	10	16·7	12·3	110

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	PORT BLAIR								RAIPUR												RAXAUL			
Time in I.S.T.	1730*				2330				0530				1730				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	8·0	7·8	049	31	6·7	6·3	046	31	1·3	0·2	066	31	1·1	0·7	039	31	2·3	1·4	125	31	0·4	0·2	128
0·15 a.g.	31	13·9	13·4	047	31	11·0	10·5	052	31	6·6	1·2	095	31	3·8	2·3	037	31	7·2	4·2	112	29	5·7	3·1	301
0·3 a.m.s.l	31	13·9	13·4	049	31	11·0	10·4	055													29	5·3	3·1	300
0·6 „	31	13·1	12·5	058	31	10·8	10·3	059	31	7·1	2·2	120	31	4·0	2·3	032	31	6·5	3·8	115	29	5·2	2·7	297
0·9 „	31	12·9	12·2	072	31	9·6	9·2	073	31	5·6	0·8	114	31	4·5	2·4	022	31	4·9	2·1	098	29	6·2	1·3	264
1·5 „	31	12·5	11·8	091	24	10·2	9·4	091	31	6·3	2·9	351	31	5·3	3·1	012	30	6·7	3·5	007	29	8·7	2·6	285
2·1 „	31	11·4	10·5	089	18	9·7	9·4	093	31	8·0	4·8	338	31	6·6	4·6	345	31	6·6	3·1	347	29	14·6	10·7	287
3·0 „	31	10·7	9·5	084	9	7·1	6·8	092	31	10·1	8·3	310	29	9·9	8·1	295	30	9·9	8·3	285	28	20·5	19·3	287
3·6 „	31	11·3	9·6	087	7	7·7	7·1	091	22	11·0	9·2	294	30	14·9	13·0	283	12	14·5	13·1	289	19	23·0	20·6	285
4·5 „	30	13·4	11·6	095	4	9·7	8·6	104	11	15·7	13·6	269	30	18·5	16·9	273	1	22·0	22·0	310	3	33·3	12·0	285
5·4 „	30	14·5	11·5	096	1	13·0	13·0	130	05	19·4	14·3	268	24	25·3	22·8	267								
6·0 „	30	14·5	10·0	099	1	10·0	10·0	080	04	25·2	21·4	247	18	30·3	27·9	269								
7·2 „	28	13·1	7·0	105					2	24·5	21·5	288	1	33·0	33·0	275								
9·0 „	21	14·9	10·4	206					1	52·0	52·0	270												

Station	RAXAUL				SANTA CRUZ												TEZPUR			
Time in I.S.T.	1730				0530*				1130				1730*				2330				0530			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	23	0·9	0·8	229	31	4·5	3·7	025	31	2·3	1·9	066	31	7·1	6·0	328	31	1·3	0·9	027	31	0·7	0·6	049
0·15 a.g.	23	8·4	7·5	262	31	9·7	8·2	058	31	4·1	3·2	038	31	10·3	8·7	330	31	7·1	5·8	020	29	7·2	6·8	082
0·3 a.m.s.l.	23	8·0	7·6	262	31	9·5	7·3	033	31	5·3	4·0	077	31	10·4	8·6	330	31	8·1	7·0	010	29	7·3	7·0	081
0·6 „	23	8·1	7·0	268	31	8·5	5·3	054	31	6·5	4·8	099	31	8·6	5·2	332	31	8·3	6·2	001	29	6·5	5·8	090
0·9 „	23	7·2	5·2	288	31	7·6	4·0	080	31	6·2	4·3	102	31	6·8	2·0	350	31	7·3	3·6	008	29	6·5	5·3	084
1·5 „	23	8·6	3·8	315	31	8·5	5·1	115	31	6·3	3·8	158	31	7·4	2·0	102	31	7·5	4·4	109	26	6·3	4·7	088
2·1 „	23	15·1	12·2	299	31	8·8	5·6	154	31	7·5	3·4	224	31	8·2	3·1	112	31	10·3	8·3	135	12	7·3	2·9	085
3·0 „	23	24·8	21·8	290	31	9·2	3·2	223	31	10·0	4·4	283	31	8·5	1·7	210	31	9·1	4·5	210	16	13·5	4·2	311
3·6 „	16	27·4	24·6	285	31	10·9	4·7	253	30	11·9	4·7	262	31	11·1	4·4	255	24	11·2	5·5	229	9	21·3	10·2	281
4·5 „	8	30·7	30·2	277	31	14·7	7·8	267	30	13·1	6·2	261	31	15·2	9·6	275	10	11·4	6·4	213	6	33·8	31·2	286
5·4 „	1	45·0	45·0	275	31	18·7	7·6	263	30	16·4	9·9	268	31	19·1	13·3	270	5	18·6	8·6	232	6	37·8	37·2	285
6·0 „					31	21·9	12·3	270	29	19·3	12·6	264	31	22·1	16·4	265	3	18·0	14·6	240	5	36·0	35·6	285
7·2 „					31	29·7	20·0	276	27	25·9	19·9	254	31	28·8	21·2	258					2	62·5	62·4	291
9·0 „					26	40·5	34·0	262	24	37·1	31·7	263	28	36·7	31·4	264					1	97·0	97·0	290

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level

December 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	TEZPUR								TIRUCHIRAPALLI												TRIVANDRUM			
Time in I.S.T.	1730				2330				0530				1730				2330				0530*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	0·7	0·7	066	31	0·9	7·6	027	31	7·7	7·4	007	31	6·5	5·7	066	31	6·6	6·0	038	31	2·9	1·7	006
0·15 a.g.	31	9·6	9·4	067	30	10·1	9·7	076	28	16·5	16·2	024	26	12·2	11·5	059	27	15·8	15·6	047	31	4·2	2·9	012
0·3 a.m.s.l.	31	9.8	9.6	066	30	10·2	9·8	083	28	18·7	18·4	026	26	13·1	12·4	057	27	18·0	17·6	045	31	4·5	3·3	017
0·6 ,,	31	8·2	7·9	066	30	8·2	8·0	086	28	21·0	20·5	035	26	15·7	14·9	049	27	21·6	21·2	045	31	5·8	4·3	034
0·9 ,,	31	6·2	5·0	071	30	5·3	4·3	098	27	18·0	17·6	042	26	16·2	15·3	047	27	19·3	19·1	040	31	6·8	5·4	048
1·5 ,,	28	4·9	1.8	128	30	4·6	1·4	087	26	13·5	12·7	057	25	15·8	14·6	048	25	14·3	13·5	048	31	7·7	4·9	054
2·1 ,,	28	7·6	3·1	128	24	7·7	1·2	086	23	13·0	11·7	078	24	14·1	13·5	064	23	12·9	11·1	074	31	9·2	5·9	078
3·0 ,,	22	10·2	4·1	294	17	12·9	8·6	274	23	12·6	11·8	083	20	12·5	11·7	073	17	12·3	11·7	089	31	10·5	8·1	081
3·6 ,,	11	22·5	20·9	269	7	30·7	30·4	268	17	13·1	11·2	094	17	13·4	12·3	081	17	12·4	11·1	087	31	11·5	9·4	078
4·5 ,,	4	24·0	23·7	266	1	35·0	35·0	265	17	13·7	13·0	092	16	15·6	13·5	081	12	12·7	11·2	093	31	13·1	11·0	077
5·4 ,,	1	37·0	37·0	270					14	12·9	8·7	083	14	14·6	12·1	079	6	11·2	8·5	095	31	14·0	11·6	071
6·0 ,,									9	12·1	6·3	068	12	14.6	11·5	076	3	13·7	7·2	086	31	14·5	11·8	067
7·2 ,,									6	18.2	5·8	016	7	17·1	9·2	064	1	33·0	33·0	350	31	14·3	9·1	066
9·0 ,,									3	13·3	8·4	252	4	11·5	5·2	009					27	14·2	8·2	108

Station	TRIVANDRUM												UDAIPUR											
Time in I.S.T.	1130				1730				2330				0530				1730				1730			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	2·2	0·8	358	31	3·2	2·0	260	31	2·5	0·8	007	31	0·1	0·1	315	31	0·9	0·7	276	31	C	A	L	M
0·15 a.g.	30	3·6	0·7	040	31	4·4	2·2	280	30	4·9	1·3	262	31	5·7	3·5	018	31	6·8	1·8	102	31	6·0	2·6	027
0·3 a.m.s.l.	30	3·8	0·8	069	31	4·9	1·9	280	30	4·9	1·3	267												
0·6 ,,	30	4·2	1·3	072	31	6·2	3·0	360	30	6·1	2·0	030												
0·9 ,,	28	6·0	4·1	058	31	7·7	5·5	035	30	8·3	6·1	063	31	6·8	2·6	043	31	6·4	1·2	073	31	7·3	3·8	055
1·5 ,,	24	7·5	5·5	059	31	9·9	8·6	057	30	10·0	8·1	064	31	10·6	7·9	222	31	5·9	2·7	270	31	8·0	3·8	166
2·1 ,,	19	7·5	5·6	076	31	10·6	7·6	070	25	10·4	6·6	084	31	15·1	13·5	250	31	11·2	9·9	258	31	12·3	10·4	227
3·0 ,,	14	12·0	10·7	075	31	12·0	9·9	072	20	9·9	7·5	091	31	18·9	16·5	258	30	17·5	15·1	250	30	19·3	17·1	254
3·6 ,,	13	14·7	13·5	087	31	12·3	9·2	070	16	8·7	7·1	080	24	23·0	21·4	268	30	22·2	19·9	259	25	20·9	18·8	262
4·5 ,,	7	13·6	12·4	092	31	12·9	10·0	078	11	10·9	8·7	034	7	15·6	11.3	275	28	28·6	27·5	266	15	22·3	218	215
5·4 ,,	5	10·8	10·2	066	31	13·5	11·3	063	7	11·0	8·2	101					27	34·9	33.3	267	1	22·0	22·0	210
6·0 ,,	5	15·0	11·6	061	28	13·6	10·5	065	4	12·5	9·7	104					27	36·4	34·4	266	1	21·0	21·0	235
7·2 ,,	3	17·3	15·4	355	27	13·6	8·7	056									23	43·3	41.4	270				
9·0 ,,	3	11·3	4·1	299	26	14·0	7·8	132									5	62·6	57·8	272				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 Km. above mean sea level.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Station	VENGURLA												VERAVAL											
Time in I.S.T.	0530				1730				2330				0530*				1130				1730*			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1·2	1·1	360	31	3·7	3·6	275	31	2·1	2·0	357	31	7·3	6·6	022	31	6·1	4·2	016	31	8·9	5·9	309
0·15 a.g.	31	9·8	8·1	060	31	7·2	6·2	282	31	11·4	10·8	008	30	13·0	10·9	027	31	7·1	5·2	020	31	12·7	8·1	327
0·3 a.m.s. l.	31	10·5	8·4	073	31	7·2	5·8	285	31	12·2	10·7	005	30	12·4	10·1	018	31	7·7	6·1	019	31	12·2	7·2	327
0·6 „	31	11·2	9·8	091	31	5·2	1·1	006	31	10·5	7·9	023	30	10·0	5·1	002	31	7·9	5·0	012	31	10·8	6·2	348
0·9 „	31	11·3	10·4	095	31	7·0	5·7	069	31	9·9	7·4	057	30	7·5	1·4	357	31	7·3	3·3	358	31	9·3	5·3	005
1·5 „	31	9·5	7·8	101	31	11·9	11·5	074	31	12·7	11·5	093	30	8·5	3·0	204	31	8·7	2·3	226	31	8·9	2·7	002
2·1 „	31	8·2	4·1	099	31	12·7	11·0	080	31	13·9	13·6	095	30	10·4	4·8	250	31	8·6	2·6	255	31	8·7	3·0	250
3·0 „	30	8·6	3·8	147	31	9·7	4·1	106	29	10.2	5·5	123	30	13·8	9·6	270	29	10·6	6·6	274	31	11·0	8·0	280
3·6 „	22	10·5	5·5	141	31	10·5	3·9	117	18	10·7	4·7	148	29	16·6	12·6	274	29	13·4	9·2	274	31	14·4	11·0	276
4·5 „	9	11·9	0·7	034	30	11·4	1·5	116	1	4·0	4·0	200	29	21·7	17·0	278	28	18·0	13·3	278	31	20·3	14·9	273
5·4 „	2	20·0	8·1	133	30	14·6	1·7	214					29	26·3	21·1	270	28	22·8	17·7	272	31	25·3	20·0	272
6·0 „	1	13·0	13·0	065	30	17·3	4·2	258					29	30·0	23·8	269	28	26·3	20·4	272	31	29·3	23·7	270
7·2 „					20	22·1	12·2	281					29	40·0	33·6	266	26	33·0	26·8	274	31	39·5	33·7	266
9·0 „					5	23·0	18·4	200					25	61·0	55·5	258	20	49·7	41·9	271	30	55·3	49·5	262

Station	VERAVAL				VISAKHAPATNAM											
Time in I.S.T.	2330				0530				1730				2330			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	5·3	4·5	003	31	0·3	0·3	009	31	7·6	7·4	093	31	0·8	0·7	034
0·15 a.g.	30	16·4	13·2	013	31	4·8	4·3	033	31	10·0	9·8	096	31	5·0	4·2	067
0·3 a.m.s. l.	30	16·0	12·1	019	31	5.3	4.9	057	31	10·7	10·5	088	31	6·5	5·8	085
0·6 „	30	13.3	9.5	030	31	6·5	6·2	067	31	9·2	8·8	053	31	7·4	7·0	083
0·9 „	30	11·2	6·5	049	31	7·6	7·2	055	31	8·6	8·3	039	31	7·5	7·2	062
1·5 „	29	8·0	1·7	043	30	5·9	4·1	051	31	9·8	8·6	010	31	7·9	6·2	032
2·1 „	29	9·6	1·9	030	30	5·7	1·2	358	31	8·6	5·5	001	31	7·1	1·4	023
3·0 „	29	10·0	4·6	262	30	6·2	1·8	320	31	7·3	3·6	310	29	7·2	2·6	299
3·6 „	20	12·7	8·3	269	28	8·0	2·0	293	31	7·6	3.4	292	26	8·7	2·6	288
4·5 „	10	18·5	12·0	277	22	10·6	5·1	259	31	11·0	4·7	271	17	10·6	3·2	257
5·4 „	2	13·5	4·2	223	11	12·8	8·1	254	30	13·8	6·7	258	7	12·6	8·4	220
6·0 „	1	18·0	18·0	215	6	17·2	15·3	266	26	14·3	7·4	255	2	16·5	13·9	220
7·2 „									12	16·4	11·5	257				
9·0 „									2	22·5	22·4	239				

TABLE IV—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 Km. above mean sea level.

December 1957 (Asadha 10—Sravana 9, 1879 Saka)

AHMEDABAD

1730 hrs.

Ht. in Km	n	V	v	D
10.5	6	52·5	46·2	273
12.0	3	51·7	50·3	267
14·1	1	76·0	76·0	275

AMRITSAR

0530 hrs.*

Ht. in Km	n	V	v	D
10.5	20	84·6	82·3	257
12·0	15	89·0	86·3	259
14·1	3	63·7	63·2	256
16.2	2	59·5	58·7	261
18·0	1	45·0	45·0	260

1730 hrs.*

Ht. in Km	n	V	v	D
10.5	17	88·6	86·7	261
12·0	13	94·8	93·1	263
14·1	7	82·0	80·6	263
16.2	5	68·4	67·8	270

ANANTAPUR

0530 hrs.

Ht. in Km	n	V	v	D
10·5	10	21·4	17·4	237
12·0	2	16·5	13·7	240

BAMRAULI

0530 hrs.*

Ht. in Km	n	V	v	D
10·5	13	75·5	73·5	264
12·0	9	84·1	81·3	258
14.1	3	78·3	77·2	265
16.2	1	89·0	89·0	250

1130 hrs.*

Ht. in Km	n	V	v	D
10·5	1	58·0	58·0	260
12.0	1	59·0	59·0	245

1730 hrs.*

Ht. in Km	n	V	v	D
10·5	16	71·0	65·7	260
12.0	11	74·8	68·6	257
14.1	2	87·0	87·0	270

BANGALORE

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	9	20·9	16·5	236
12·0	8	27·0	17·6	236
14·1	6	24·0	18·4	229
16·2	4	13·7	13·5	185
18·0	4	14·0	5·2	177
21·0	2	30·5	26·2	267
24·0	1	97·0	97·0	290
27·0	1	24·0	24·0	235
30·3	1	14·0	14·0	220

BEGUMPET

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	2	33·5	33·5	260
12·0	2	41·5	40·0	237

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	8	38·3	34·3	267
12·0	5	42·2	38·6	235
14·1	2	38·0	38·0	253
16·2	1	39·0	39·0	260
18·0	1	22·0	22·0	265

BHUBANESHWAR

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	9	39·7	31·4	257
12·0	6	47·8	47·5	257
14·1	4	48.5	48·1	257
16·2	1	25·0	25·0	250

BHUJ

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	11	61·0	57·3	268
12·0	5	84·0	81·6	253

CHIKALTHANA

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	1	48·0	48·0	245
12·0	1	62·0	62·0	250

DUM DUM

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	27	67·7	65·6	267
12·0	21	77·9	75·0	267
14·1	9	77·1	75·5	255
16·2	1	76·0	76·0	260

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	31	62·2	60·3	265
12·0	28	78·7	73·2	265
14·1	23	76·6	75·6	262
16·2	11	61·8	60·4	265
18·0	2	22·5	21·9	250
21·0	1	27·0	27·0	270

GADAG

1730

Ht. in Km.	n	V	v	D
10·5	8	25·0	21·7	236
12·0	4	27·3	22·8	233
14·1	1	65·0	65·0	330

GANNAVARAM

0530 hrs.

Ht. in Km.	n	V	v	D
10·5	1	31·0	31·0	205
12·0	1	20·0	20·0	225

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	10	24·1	22·8	246
12·0	7	33·3	32·1	244

GAUHATI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	12	104·3	95·2	270
12·0	4	108·3	107·5	260
14·1	1	138·0	138·0	260

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	5	81·6	83·6	275
12·0	2	97·5	97·5	270

JAGDALPUR

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	3	33·4	33·0	241
12·0	2	40·0	39·7	239
14·1	2	41·5	41·3	240

JODHPUR

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	16	70·3	66·1	263
12.0	11	81·6	74·5	271
14·1	3	64·3	63·8	259
16·2	1	52·0	52·0	270
18·0	1	49·0	49·0	280

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	3	63·1	62·1	266
12·0	1	27·0	27·0	250
14·1	1	20·0	20·0	080
16·2	1	8·0	8·0	270

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	16	90·2	86·8	259
12·0	9	95·3	93·6	259
14·1	3	91·3	90·3	257

MADRAS

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	22	21·1	13·1	211
12·0	17	29·8	23·2	194
14·1	10	24·6	16·1	220
16·2	3	20·0	19·0	250

1730 hrs. *

Ht. in Km.	n	V	v	D
10·5	19	19·7	13·3	202
12·0	15	25·3	21·0	197
14·1	7	25·4	18·9	231
16·2	4	17·7	12·1	215
18·0	1	10·0	10·0	060

MANGALORE

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	17	23·3	18·0	221
12·0	17	28·6	22·5	206
14·1	12	29·0	20·5	230
16·2	5	20·6	16·2	275
18·0	2	11·5	7·1	072

MINICOY

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	6	12·2	6·2	165
12·0	3	25·3	14·6	207
14·1	1	7·0	7·0	005

NAGPUR

0530 hrs*

Ht. in Km.	n	V	v	D
10·5	21	53·6	51·0	259
12·0	11	61·2	59·1	247
14·1	5	49·2	48·8	240
16·2	3	57·0	56·9	238

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	9	58·1	55·5	250
12·0	2	80·6	79·9	253
14.1	1	63·0	63·0	250

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	25	57·6	56·2	249
12·0	17	64·6	62·9	245
14·1	7	63·1	62·3	244
16·2	2	86·5	86·3	245
18·0	1	71·0	71·0	250
21.0	1	58·0	58·0	250
24·0	1	67·0	67·0	255

NEW DELHI

0530 hrs.*

Ht. in Km.	n	V	v	D
10·5	22	83·5	80·0	269
12·0	14	79·1	76·4	271
14·1	10	78·7	77·0	267
16·2	5	65·4	65·2	267
18·0	3	46·0	46·0	265

1130 hrs.

Ht. in Km.	n	V	v	D
10·5	13	83·5	80·8	269
12·0	6	91·6	83·8	277
14·1	3	108·0	106·6	267

1730 hrs.*

Ht. in Km.	n	V	v	D
10·5	22	87·0	82·4	269
12·0	15	83·3	80·7	264
14·1	6	77·0	75·0	277
16·2	2	60·0	95·5	265

POONA

1730 hrs.

Ht. in Km.	n	V	v	D
10·5	4	47·5	47·5	241
12·0	1	68·0	68·0	220

TABLE V—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds above 9.0 Km. above mean sea level.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Ht. in Km	n	V	v	D
	PORT BLAIR			
	0530 hrs.*			
10·5	20	13·3	1·4	115
12·0	13	18·2	11·0	167
14·1	7	23·6	20·8	153
16·2	2	20·5	19·5	148
	1130 hrs.			
10·5	3	17·7	17·5	095
12·0	1	11·0	11·0	130
	1730 hrs.*			
10·5	14	14·1	5·8	146
12·0	9	19·9	15·5	182
14·1	6	18·4	17·6	175
16·2	5	22·2	19·5	150
	SANTA CRUZ			
	0530 hrs.*			
10·5	26	48·1	42·1	258
12·0	26	56·8	50·8	250
14·1	20	68·5	63·6	252
16·2	12	51·3	46·2	253
18·0	4	46·0	38·6	242
	1130 hrs.			
10·5	13	56·2	50·6	265
12·0	4	66·5	60·9	264
14·1	2	60·5	60·5	233
	1730 hrs.*			
10·5	28	45·8	40·4	258
12·0	27	58·7	52·6	253
14·1	20	57·6	54·0	250
16·2	14	43·3	38·6	255
18·0	6	29·5	26·7	260
21·0	1	20·0	20·0	270
	TIRUCHIRAPALLI			
	0530 hrs.			
10·5	2	14·0	5·5	270
12·0	1	12·0	12·0	345
	1730 hrs.			
10·5	3	13·3	9·7	189
12·0	2	28·0	25·9	164
14·1	2	27·5	23·4	204
16·2	1	9·0	9·0	070
18·0	1	21·0	21·0	100

Ht. in Km.	n	V	v	D
	TRIVANDRUM			
	0530 hrs.*			
10·5	24	18·1	14·0	135
12·0	23	21·6	15·3	149
14·1	14	23·6	10·9	169
16·2	5	18·4	8·8	250
	1130 hrs.			
10·5	3	9·3	6·6	216
12·0	1	18·0	18·0	245
14·1	1	30·0	30·0	270
16·2	1	35·0	35·0	270
	1730 hrs.*			
10·5	25	18·4	13·8	144
12·0	24	24·0	17·3	148
14·1	19	21·9	13·0	155
16·2	11	18·6	10·5	110
18·0	3	23·3	18·1	098
21·0	2	22·5	16·4	091
	VENGURLA			
	1130 hrs.			
10·5	3	34·7	34·3	217
12·0	3	38·0	37·5	221
	VERAVAL			
	0530 hrs.*			
10·5	23	73·2	69·3	253
12·0	19	84·8	84·5	250
14·1	14	76·8	75·0	250
16·2	4	28·3	23·3	265
18·0	2	21·0	21·0	257
21·0	1	9·0	9·0	330
	1130 hrs.			
10·5	8	62·0	53·5	274
12·0	2	87·0	85·2	240
	1730 hrs*			
10·5	26	72·7	66·5	257
12·0	25	72·6	68·4	253
14·1	16	64·3	63·3	255
16·2	14	45·6	41·1	262
18·0	10	27·8	24·7	262
21·0	3	10·1	10·1	267

RADIOSONDE DATA

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

During the month, observations of upper air temperature, pressure and humidity were made at 13 stations in India as given in the ist below. For a detailed description of the instruments used, a reference may be made to the I. M. D. Scientific Notes Nos. 112 and 113 (Volume IX).

LIST OF RADIOSONDE STATIONS IN INDIA

Serial No.	Name of Station	Type of instrument used	Date of starting	Hours of routine observations in GMT during the month	Remarks
1	Allahabad	Clock type	1st October, 1944	00 and 12	
2	Amritsar	Clock type	21st June, 1957	00 and 12	
3	Bombay	Clock type	7th September, 1954	00 and 12	
4	Calcutta	Clock type	13th December, 1946	00 and 12	Fan type used from 13-12-46 to 30-11-47.
5	Gauhati	Clock type	22nd July, 1955	00 and 12	
6	Jodhpur	Clock type	17th April, 1946	00 and 12	
7	Madras	Fan type	29th June, 1946	00 and 12	
8	Nagpur	Fan type	1st October, 1946	00 and 12	
9	New Delhi	Clock type	3rd December, 1943	00 and 12	
10	Port Blair	Fan type	4th December, 1949	00 and 12	
11	Trivandrum	Fan type	1st July, 1947	00 and 12	
12	Veraval	Fan type	3rd October, 1944	00 and 12	
13	Visakhapatnam	Fan type	8th December 1946	00 and 12	

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 hrs. G.M.T.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (1004 mb.)						AMRITSAR (989 mb.)						BOMBAY (1010 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew point
Surface	31	98	284·8	292	280	282·5	31	230	282·1	288	277	281·5	31	13	294·1	297	288	288·6
1000	31	132	..	..	..	..	23	140	..	..	..	..	31	103	..	..	..	..
900	25	1029	288·6	296	283	276·6	23	1021	285·4	288	281	272·7	31	1022	294·4	298	290	279·4
850	25	1512	286·8	293	282	272·2	23	1498	282·9	286	279	267·3	31	1515	291·1	296	287	277·0
800	25	2021	284.6	290	279	268·8	23	1999	280·3	284	277	266·2	31	2030	287·5	294	283	273·3
700	25	3127	278·7	285	272	260·5	23	3085	274·2	279	268	256·6	31	3149	283·0	288	278	260·1
600	23	4374	271·9	277	267	254·3	23	4310	266·3	271	259	..	31	4414	276·0	280	269	250·7
500	23	5808	263·6	267	258	..	23	5708	257·2	263	248	..	31	5868	267·1	273	263	..
400	21	7496	251·7	257	246	..	23		246·5	249	242	..	31	7580	255·8	262	251	..
300	19	9548	236·1	241	230	..	21	7356	232·6	237	228	..	28	9683	241·3	246	236	..
250	17	10779	228·8	244	222	..	21	9381	225·2	231	220	..	28	10948	232·1	236	227	..
200	12	12235	220·2	230	216	..	21	10603	217·5	228	211	..	28	12434	221·7	228	216	..
175	10	13074	215·4	221	211	..	18	12049	215·1	224	206	..	26	13287	215·3	225	211	..
150	6	14079	210·8	215	208	..	15	12897	214·0	218	209	..	25	14244	209·0	221	203	..
125	..	..	..	..	..	..	12	13870	212·4	216	207	..	18	15384	203·8	218	197	..
100	..	..	..	..	..	..	6	15012	209·2	213	201	..	14	16709	198·8	203	195	..
80	..	..	..	..	..	..	..	16402	..	..	..	..	5	17986	197·6	200	195	..
	CALCUTTA (1015 mb.)						GAUHATI (1010 mb.)						JODHPUR (990 mb.)					
Surface	31	6	287·1	294	283	286·4	31	49	286·9	292	285	286·6	28	218	285·7	291	281	276·7
1000	31	133	..	..	..	..	31	136	..	..	..	..	28	135	..	..	..	..
900	31	1026	286·0	292	282	277·7	31	1029	286·3	291	283	282·5	28	1028	288·0	292	283	271·7
850	31	1505	283·7	288	280	273·8	31	1507	283·1	289	280	279·4	28	1509	285·2	289	280	266.5
800	31	2006	282·2	287	278	270·0	31	2010	280·1	287	276	275·9	28	2014	283·1	289	276	263·8
700	31	3114	279·1	287	274	262·0	31	3098	276·1	279	272	267·4	28	3115	278·4	283	274	258·0
600	31	4366	272·8	277	267	255·1	31	4338	272·3	279	265	252·9	28	4361	272·0	276	269	243·3
500	30	5801	264·5	269	258	..	31	5773	264·0	271	258	..	28	5793	262·8	266	256	..
400	30	7498	253·7	258	248	..	31	7461	252·8	260	241	..	26	7473	250·7	255	247	..
300	26	9581	239·2	251	231	..	24	9537	238·5	245	225	..	26	9527	236·0	241	229	..
250	23	10839	231·2	244	224	..	20	10809	231·1	239	221	..	22	10773	228·6	239	221	.
200	16	12362	222·1	234	217	..	16	12304	221·9	227	215	..	22	12237	219·2	225	212	..
175	10	13222	216·2	223	213	..	11	13163	217·5	223	210	..	19	13095	214·3	221	208	..
150	7	14176	209·3	218	206	..	8	14094	211·0	218	207	..	16	14047	209·5	216	203	..
125	..	..	..	..	..	..	..	..	..	..	..	..	12	15155	205·7	213	200	..
100	..	..	..	..	..	..	..	..	..	..	..	..	6	16517	202·7	207	199	..
80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 hrs. G. M. T.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1010 mb.)						NAGPUR (978 mb.)						NEW DELHI (991 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	15	295·8	299	294	293·2	31	311	291·2	296	286	284·0	31	210	282·8	288	278	281·1
1000	31	108	..	..	..	..	31	123	..	..	..	..	30	138	..	..	..	..
900	31	1023	291·5	294	289	287·5	31	1029	292·0	295	290	280·7	30	1024	286·5	290	283	274·9
850	31	1512	289·6	293	287	282·7	31	1517	288·6	291	283	277·5	30	1503	284.1	289	281	270·6
800	31	2028	288·5	292	285	274·3	31	2029	285·7	290	282	273·1	30	2006	281·6	286	278	267·6
700	31	3150	283·5	289	279	266·3	31	3141	282·0	288	273	262·5	30	3100	276·2	282	268	259·1
600	30	4417	276·4	281	273	261·3	30	4401	275·1	285	268	265·7	30	4335	269·3	274	263	251·3
500	30	5875	268·4	273	264	..	30	5847	265·9	282	259	..	30	5751	260·1	264	253	..
400	30	7597	257·8	267	252	..	30	7552	255·0	274	247	..	30	7415	248·4	253	241	..
300	24	9712	243·5	249	237	..	30	9645	241·2	260	232	..	29	9448	233·8	238	226	..
250	22	10984	233·8	240	227	..	26	10896	231·7	239	222	..	29	10677	225·6	230	219	..
200	16	12477	222·0	227	215	..	19	12362	220·8	227	213	..	29	12127	218·1	226	214	..
175	11	13326	215·4	219	209	..	17	13279	215·1	223	206	..	29	12974	214·6	222	207	..
150	9	14268	208·1	211	202	..	13	14192	210·2	219	204	..	28	13935	211·2	217	203	..
125	7	15368	202·7	205	200	..	10	15318	206·5	215	200	..	21	15031	206·9	212	201	..
100	..	..	..	..	...	..	..	..	..	..	..	..	18	16367	205·2	211	200	..
80	..	..	..	..	..	..	..	..	..	..	..	..	10	17724	203·2	215	199	..
	PORT BLAIR (1002 mb.)						TRIVANDRUM (1002 mb.)						VERAVAL (1012 mb.)					
Surface	31	79	298·1	300	294	296·1	31	64	297·6	299	296	294·5	31	8	292·4	296	289	284·0
1000	31	100	..	..	..	..	31	84	..	..	..	..	30	113	..	..	..	..
900	31	1020	292·6	295	291	289·1	31	1004	293·5	297	290	288·1	30	1024	292·7	295	287	279·4
850	31	1512	290·5	293	289	284·0	21	1497	290·8	295	288	284·2	30	1517	289·6	294	283	276·2
800	31	2029	288·4	292	285	280·7	31	2014	288·4	293	285	281·8	30	2031	287·2	292	280	271·6
700	31	3152	283·2	288	280	275·2	31	3135	282·6	286	273	275·8	30	3149	282·4	286	279	266·6
600	30	4420	276·6	282	273	268·1	31	4400	275·5	280	271	267·3	29	4410	275·6	280	271	260·5
500	30	5877	268·0	273	263	..	31	5853	267·9	272	263	..	29	5857	266.2	277	262	..
400	30	7598	257·0	263	251	..	31	7574	257·7	263	255	..	29	7562	254·8	261	249	..
300	24	9710	243·0	252	234	..	28	9684	242·1	250	233	..	23	9663	241·8	247	237	..
250	21	10983	233·0	244	221	..	27	10953	233·0	241	221	..	23	10933	233·1	241	227	..
200	14	12512	223·4	235	217	..	27	12430	220·8	231	213	..	21	12421	223·7	233	218	..
175	12	13370	217·7	231	212	..	24	13314	215·2	227	204	..	20	13288	217.9	227	211	..
150	10	14324	209·3	220	205	..	24	14232	208·2	221	199	..	18	14255	213·1	221	207	..
125	7	15436	203·6	213	192	..	14	15362	204·2	214	194	..	11	15360	206·8	216	200	..
100	7	16639	198·0	207	191	..	7	16751	201·1	206	193	..	6	16747	202.8	214	188	..
80	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(A) From Ascents at 00 hrs. G. M. T.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (1008mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	31	48	296·3	298	294	291·3
1000	26	122	..	..	..	..
900	26	1035	290·9	295	288	283·5
850	26	1523	288·8	293	286	277·1
800	26	2037	287·7	292	284	269·5
700	26	3157	283·3	289	277	263·4
600	25	4422	275·6	283	271	261·8
500	25	5877	266·7	280	260	..
400	24	7592	256·9	268	249	..
300	22	9703	242·7	255	235	..
250	20	10958	232·9	239	222	
200	20	12446	221·7	229	206	..
175	17	13286	216·0	223	202	..
150	14	14254	209·6	217	199	..
125	10	15345	204·9	211	192	..
100	8	16728	202·9	209	193	..
80	5	18046	201.6	206	196	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 hrs. G. M. T.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	ALLAHABAD Surf. Pr. (1003 mb.)						AMRITSAR (989 mb.)						BOMBAY (1009 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	31	98	293·9	297	288	285·4	31	230	290·4	294	285	283·1	31	13	303·0	306	300	292·4
1000	31	124	..	..	..	..	25	135	..	..	..	..	31	96	..	..	..	..
900	29	1029	289·6	294	283	277·7	25	1030	287·3	293	282	274·1	31	1024	295·6	299	293	280·6
850	29	1516	287·1	291	279	272·5	25	1510	284·5	288	279	267·6	31	1518	292·1	296	289	277·2
800	29	2023	285·2	291	279	270·9	25	2014	281·6	286	277	265·3	31	2036	288·5	291	284	273·1
700	29	3134	279·9	285	275	261·9	25	3106	275·5	281	271	257·3	31	3156	283·4	287	278	258·6
600	29	4384	273·0	277	267	249·8	25	4335	268·0	275	262	..	31	4422	276·3	281	272	255·4
500	29	5820	263·8	270	257	..	25	5744	259·4	265	256	..	31	5877	267·4	273	263	..
400	26	7504	252·0	259	241	..	25	7407	247·6	253	242	..	31	7591	256·3	261	251	..
300	20	9568	237·8	245	233	..	22	9441	232·9	239	216	..	31	9693	241·6	250	236	..
250	18	10820	229·9	238	226	..	22	10668	225·4	231	216	..	31	10960	232·5	239	224	..
200	15	12263	220·0	226	215	..	20	12120	218·9	228	212	..	30	12453	221·9	228	213	..
175	13	13156	215·3	221	209	..	20	12971	216·3	223	210	..	29	13311	216·0	221	206	..
150	9	14126	210·6	218	205	..	19	14009	214·7	221	207	..	21	14286	211·0	218	203	..
125							14	15134	212·8	220	208	..	20	15439	205·1	211	200	..
100							11	16513	209·1	213	205	..	14	16747	200·5	207	193	..
80													7	18059	198·9	203	194	..

Standard Pressure Surface mbs.	CALCUTTA (1012 mb.)						GAUHATI (1008 mb.)						JODHPUR (989 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point			Mean	Max.	Min.	Dew Point
Surface	31	6	297·1	299	295	289·6	31	49	293·6	296	291	291·8	30	218	297·1	300	293	278·1
1000	31	113	..	..	..	..	30	118	..	..	..	..	30	118	..	..	..	..
900	31	1027	291·4	295	288	279·7	30	1024	289·3	295	287	285·5	30	1030	291·0	295	286	272·0
850	31	1513	288·6	292	286	274·0	30	1508	286·3	292	283	282·3	30	1516	287·4	292	281	267·2
800	31	2026	287·2	295	283	267·0	30	2015	282·7	289	279	278·0	30	2026	284·9	290	280	261·6
700	31	3144	282·9	290	278	257·6	30	3113	277·6	283	273	267·7	29	3132	279·9	286	273	254·0
600	31	4409	275·7	281	268	250·1	30	4361	274·1	283	267	258·0	28	4383	273·8	281	266	240·5
500	31	5864	267·3	273	262	..	30	5811	266·1	271	260	..	26	5825	264·7	270	258	..
400	31	7579	256·0	263	249	..	30	7512	254·3	262	247	..	24	7526	253·5	261	245	..
300	29	9683	241·5	247	236	..	18	9581	239·9	247	232	..	21	9597	238·2	247	231	..
250	28	10948	232·7	238	227	..	14	10766	230·5	234	223	..	21	10850	230·0	239	224	..
200	27	12440	222·8	228	216	..	13	12307	221·4	227	215	..	19	12325	221·5	230	214	..
175	25	13300	217·2	222	210	..	7	13150	214·4	219	211	..	19	13185	217·1	225	211	..
150	23	14266	211·1	217	203	..	5	14119	209·8	213	205	..	15	14125	212·4	220	204	..
125	14	15378	200·6	211	203	..							12	15224	207·2	213	202	..
100	12	16713	202·7	209	198	..							10	16596	206·2	211	199	..
80																		

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 hrs. G. M. T.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	MADRAS Surf. Pr. (1010 mb.)						NAGPUR (977 mb.)						NEW DELHI (991 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A				No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point			Mean	Max.	Min.	Dew point
Surface	31	15	299·8	301	299	293·5	31	311	300·2	304	298	284·8	31	210	291·2	294	285	284·3
1000	31	104	..	..	..	..	31	106	..	..	..	..	30	132	..	..	..	..
900	31	1022	291·8	294	287	287·3	31	1029	294·8	298	292	281·2	30	1030	287·7	291	284	273·0
850	31	1512	289·7	294	284	281·4	31	1520	290·4	294	286	279·1	30	1510	284·9	289	281	266·8
800	31	2031	288·2	292	284	277·1	31	2034	286·7	291	283	275·2	30	2015	282.4	287	278	263·6
700	31	3154	283·8	288	279	268·9	31	3149	282·2	288	278	263·0	30	3112	276.9	282	271	256·0
600	31	4421	277·2	281	273	259·5	30	4409	275·1	283	262	255·1	30	4350	270.1	274	265	..
500	31	5883	269·3	273	266	..	30	5855	265·7	272	259	..	30	5771	260·8	266	254	..
400	29	7615	258·7	264	253	..	30	7556	254·1	261	244	..	30	7449	248·6	255	240	..
300	23	9735	243·5	251	238	..	28	9632	239·6	250	229	..	29	9472	234·4	239	227	..
250	18	11002	233·7	241	228	..	27	10893	231·0	245	220	..	29	10702	225·7	230	218	..
200	14	12495	221·6	229	214	..	21	12394	221·3	236	212	..	27	12158	217·5	223	212	..
175	10	13307	213·9	220	209	..	17	13262	216·9	231	204	..	24	130.4	213·5	217	205	..
150	8	14280	207·8	213	203	..	12	14278	212·3	227	207	..	23	13955	209·9	217	202	..
125	6	15355	200·8	203	197	..	5	15456	208·2	215	204	..	17	15056	207·6	213	199	..
100													14	16408	203·7	213	193	..
80													9	17726	203·9	213	197	..

	PORT BLAIR (1002 mb.)						TRIVANDRUM (1002 mb.)						VERAVAL (1011 mb.)					
Surface	31	79	299·6	300	299	295·9	31	64	301·7	304	298	296·1	31	8	300·2	304	296	290·5
1000	31	91	..	..	..	..	31	78	..	..	..	..	31	106	..	..	..	..
900	31	1016	292·9	295	290	290·0	31	1007	295·2	297	293	289·6	31	1028	294·0	297	290	279·9
850	31	1509	290·5	294	288	284·7	31	1501	292·1	294	289	286·3	31	1518	290·1	294	285	276·0
800	31	2026	288·5	291	285	280·7	31	2021	289·5	291	287	282·9	31	2033	287·4	292	276	271·5
700	31	3149	283·3	288	279	274·5	31	3147	283·9	287	281	277·1	31	3152	282·9	286	277	264·8
600	31	4417	276·5	281	272	267·7	31	4417	276·7	282	270	270·2	31	4415	275·9	280	268	261·4
500	31	5872	267·9	273	265	..	31	5875	268·6	274	258	..	31	5867	266·9	272	259	..
400	29	7592	257·2	263	253	..	27	7609	258·6	263	255	..	31	7574	254·7	265	246	..
300	23	9708	243·4	251	236	..	27	9732	243·9	251	237	..	29	9677	241·6	253	229	..
250	18	10978	232·5	242	224	..	27	11013	234·0	242	226	..	27	10965	233·5	245	225	..
200	13	12447	220·4	233	211	..	27	12507	222·0	233	211	..	26	12466	223·7	236	218	..
175	12	13304	214·8	228	204	..	24	13353	215·7	229	206	..	25	13345	218·4	231	210	..
150	12	14269	207·3	221	197	..	21	14323	208·5	225	198	..	24	14328	213·5	227	202	..
125	8	15401	202.0	216	195	..	17	15424	202·7	215	194	..	22	15433	208·6	218	197	..
100	7	16729	196.6	211	187	..	14	16749	200·1	213	191	..	19	16797	204·7	212	200	..
80							6	18030	197.5	208	193	..	16	18145	204·7	215	197	..

RADIOSONDE DATA

TABLE VI—MEAN DYNAMIC HEIGHT, TEMPERATURE AND DEW POINT AT STANDARD PRESSURE SURFACES

(B) From Ascents at 12 hrs. G. M. T.

December, 1957 (Asadha 10—Sravana 9, 1879 Saka)

Standard Pressure Surface mbs.	VISAKHAPATNAM Surf. Pr. (1007 mb.)					
	No. of Obs.	Ht. gpm.	Temperature °A			
			Mean	Max.	Min.	Dew point
Surface	31	48	299·5	302	298	292·4
1000	25	110	..	..	..	..
900	25	1029	292·2	296	289	284.8
850	25	1519	289·8	293	285	278·2
800	25	2034	287·6	290	281	272·6
700	25	3154	283·2	287	278	265·1
600	25	4420	276·5	281	272	260·1
500	25	5873	267·0	273	261	..
400	24	7587	256·7	260	252	..
300	20	9701	242·3	251	235	..
250	15	10949	232·7	239	222	..
200	11	12406	220·7	229	213	..
175	10	13239	213·8	225	204	..
150	9	14210	208.7	220	198	..
125						
100						
80						

Note : Number of observations refer to those of dynamic height.

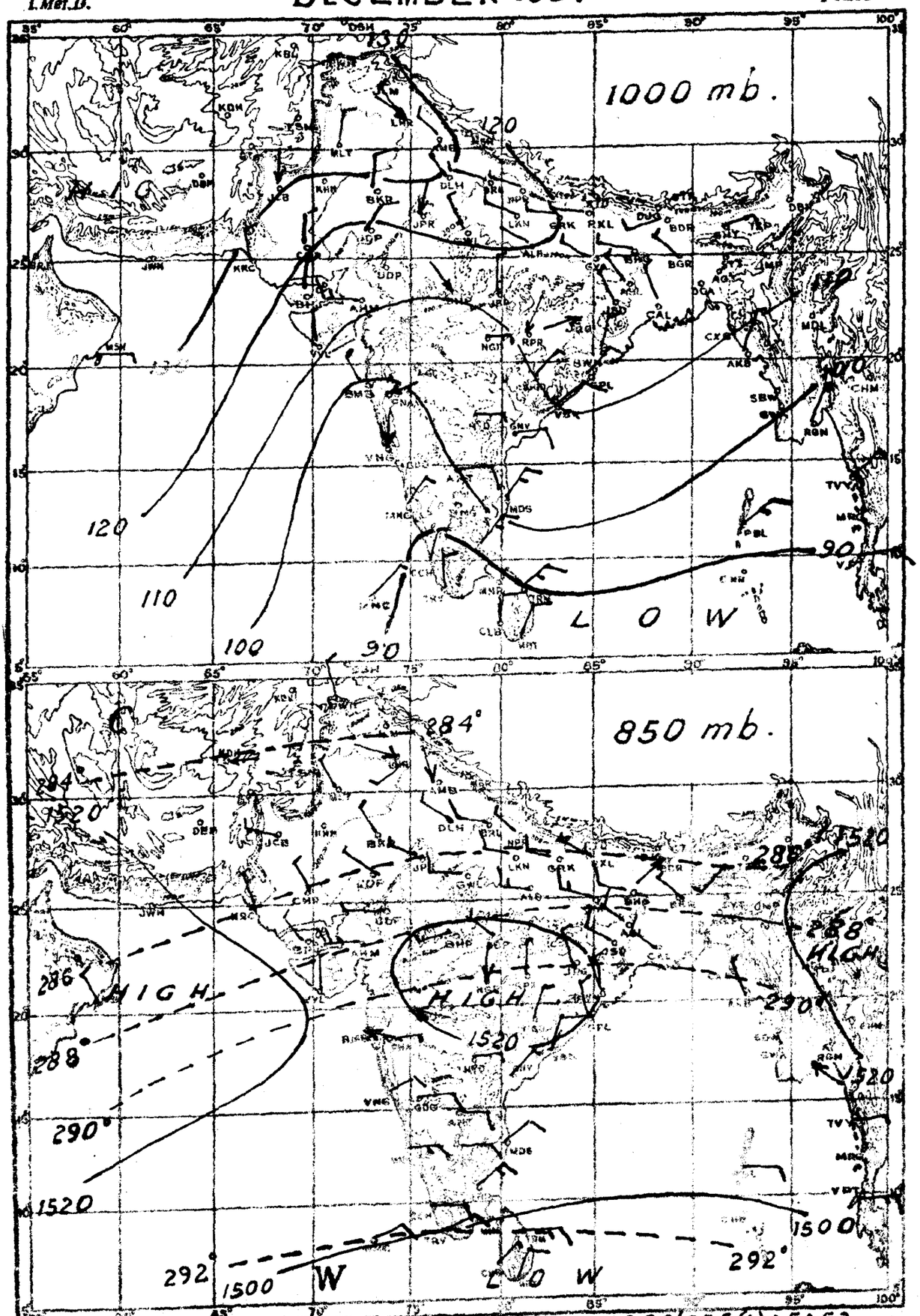
Means are not worked out for temperature and dew point for the 1000 mb. surface and for dew point for standard pressure surfaces with temperature less than 273 °A.

Means are not worked out for less than five observations at standard pressure surfaces.

GIPN—57—336 D. D. G. Obs. Poona/62—7-1-64—260.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

I.Met.D. **DECEMBER 1957** Plate 1



DOGC/905(1):5:62

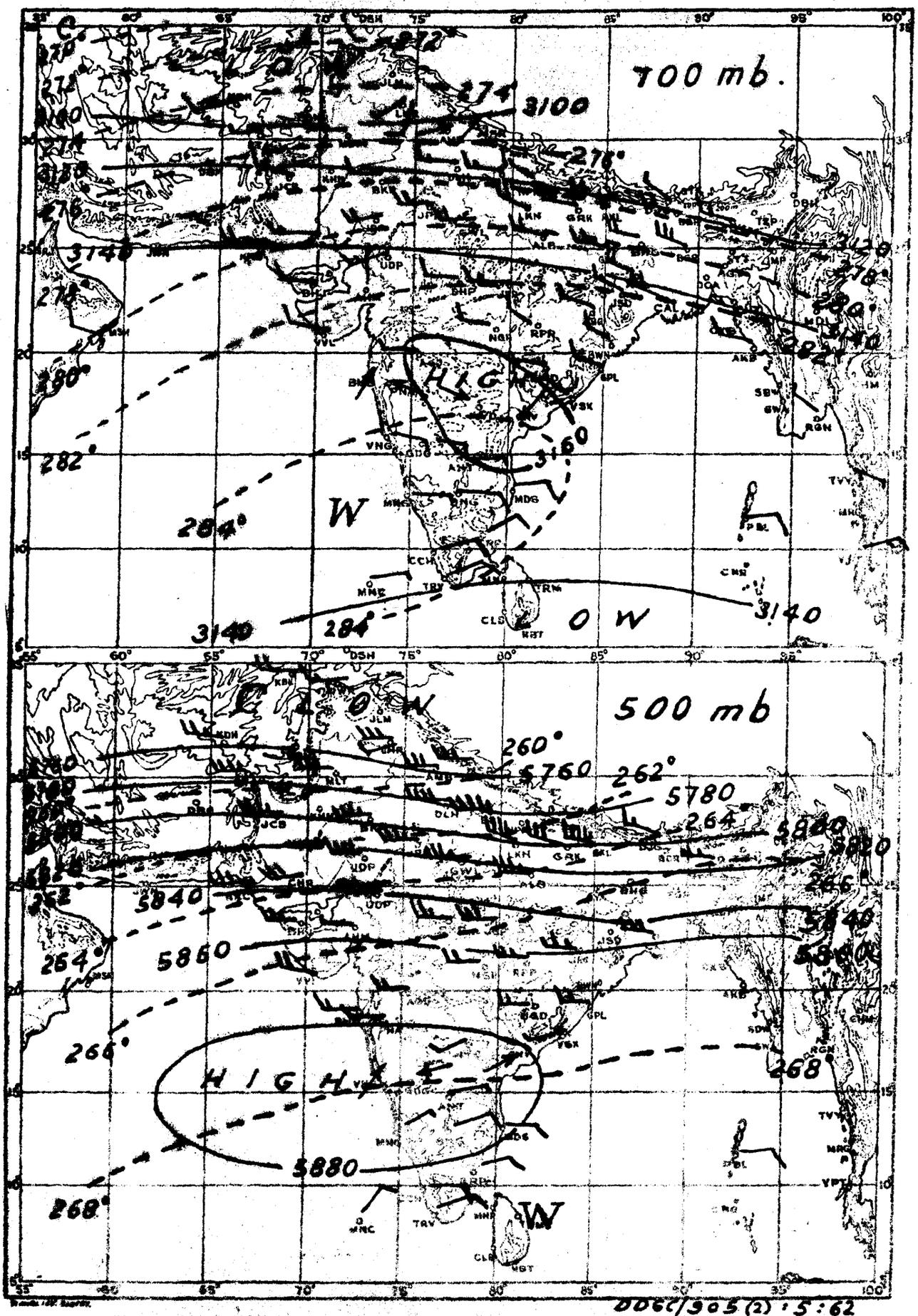
RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

------ Isotherms in degrees absolute. ——— Contours in geopotential metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

DECEMBER 1957

I.Met.D. Plate II



RESULTANT WIND —— 5 Knots, —— 10 Knots, —— 50 Knots.

---------- Isotherms in degrees absolute. ———— Contours in geopotential metres.

15146-5