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India. METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1948

INTRODUCTION

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Published by Authority of the Government of India

Under the Direction of

S. Basu, M.Sc.

Director General of Observatories

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METEOROLOGICAL DEPARTMENT

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CORRECTION SLIP

Page vi - Right hand side - para.1 read:

"Table VII gives the mean duration of bright sunshine in local apparent time and not in I.S.T.as printed in the table and Table VIIA..."

Page vi - Right hand side - para.2 read:

"Table VIII gives the mean hourly and extreme pressure at 12 stations. In case of Colaba a uniform correction of -2.1 mb. is to be applied to make the pressure data refer to station level."

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INDIA WEATHER REVIEW, 1948

INTRODUCTION

THE India Weather Review is composed of the twelve Monthly Weather Reports and the Annual Summary.

Monthly Weather Report

Up to 1932, the Monthly Weather Report contained only the means of 8 hrs. L.M.T. observations based upon the figures telegraphed for the Indian Daily Weather Report. The need for an afternoon weather chart for the preparation of forecasts for aviators led to most of the observatories in northern and central India being raised to class II by the end of 1930. It was then considered desirable to include the afternoon observations of these observatories in the Monthly Weather Report and base the means on the scrutinised data from the Monthly Meteorological Registers. When the arrangements for scrutinising were completed, the Monthly Weather Report was expanded in January 1933 to contain the afternoon observations as well as the observations at Climatological stations which send their observations by post. The remaining observatories in the Peninsula were raised to class II in April 1937 and from 1938 the afternoon observations from these observatories are also published in the Monthly Weather Report. As a result of the constitutional changes in August 1947, the data of Pakistan stations have not been included in the Monthly Weather Reports from August 1947.

From 1933 each Monthly Weather Report gives a short account of the weather of the month and had till 1947 Tables I to V. On the omission of the data of stations in South Baluchistan, Iran and Arabia contained in Table III from the Monthly Weather Report for August 1947, it now contains only Tables I to IV as mentioned below :—

Table I.—Divisional and sub-divisional means.

Table II.—Monthly means of observations at 8 hours .S.T. and 17 hours I.S.T. at Indian Stations.

Table III.—Monthly means of observations at 8 hours I.S.T. and 17 hours I.S.T. at class IV stations.

Table IV.—Data of class V stations.

With the discontinuance of the Upper Air Data, Part A, from 1946, the Monthly Weather Report was expanded in 1947 to include two additional tables A and B giving monthly mean directions and velocities of upper winds at heights up to 9·0 km. and above. From January 1948, two plates giving monthly mean constant pressure charts for 1000 and 850 mbs. and for 700 and 500 mbs. levels have also been added to the Monthly Weather Report.

Annual Summary

Between 1933 and 1937 the Annual Summary was published in five parts. From the issue for 1938 it is published in four parts as detailed below. The fifth part comprising the "Seismic Records" which was being published in the form of a quarterly bulletin called the "Seismological Bulletin" has been discontinued from the issue for January-March 1946 and is now being issued separately as a monthly. Data of stations in Pakistan, Iran and Arabia were omitted from 1947:—

I. Introduction.—Title page; table of contents; introduction including an alphabetical list of observatories, a list of stations equipped with autographic instruments and errata to Monthly Weather Reports and Annual Summary.

II. Part A.—Summary of weather and rainfall and tables of meteorological data. This gives a general description of the weather of the year, and contains annual tables corresponding to the monthly tables in the Monthly Weather Reports, monthly and annual tables for a few stations, tables of observations at the third hour of observation and daily means at the first class stations and special tables of nocturnal radiation temperature, sunshine data, hourly wind velocity and rainfall. From the year 1948, hourly data of pressure, temperature, humidity and rainfall and frequency tables of these elements for stations equipped with autographic instruments have also been included. Three plates A1, A2, A3 showing the monthly and seasonal distribution of rainfall and monthly departures of pressure are given at the end.

III. Part B.—Snowfall. This gives a summary of the snowfall reports received from the mountain regions in the north of India.

IV. Part C.—Storms and depressions. This describes all storms and depressions and contains articles on western disturbances and local storms and charts of storm tracks.

The following notes concerning the observatories, the instruments in use and their conditions of exposure, the methods of observation and reduction and grouping of results will be of some help to users of this volume.

Observing stations.—An alphabetical list of stations, the data of which are included in the Monthly Weather Reports or in Tables I to XIV of the Annual Summary, Part A, is given in the table below. The class to which the station belongs, the geographical co-ordinates (φ, λ), the heights of the barometer cistern (H_b) above M.S.L. and of the anemometer above the ground (h_a) are also given against each station.

The scheme of classification of observatories adopted in this department is the following :—

Class I.—Observatories taking three or more sets of observations per day at fixed times, and having autographic instruments for recording at least pressure, temperature, wind speed and direction.

Class II.—Observatories taking two sets of observations per day.

Class III.—Observatories taking one set of observations per day.

Class IV.—Observatories not equipped with barometers but taking either two or one set of all the remaining observations per day.

Class V.—Observatories taking instrumental observations of daily rainfall only.

The three hours of observation adopted at Indian stations are 8 hours I.S.T.,12-30 hours I.S.T., and 17 hours I.S.T. At stations where only a single observation is recorded, *viz.*, Class III, IV and V observatories, the observations are recorded at the morning hour only. At class II stations, observations are recorded at 8 hours I.S.T. and 17 hours I.S.T. whereas at class I stations observations are recorded at 12-30 hours I.S.T. also.

The Indian Standard Time (I.S.T.) corresponds to the longitude of 82° 30′E and is therefore 5 hours 30 mins. in advance of the Greenwich Mean Time.

At all observatories of this department, 4 ft. above ground level has been adopted as the standard height for the bottom of the Stevenson Screen, so that the bulbs of the dry and wet bulb thermometers are at a height of 4¼ to 4½ ft. above ground. A standard height of 1 ft. above ground has been adopted for the rim of the funnel of the raingauge.

As the wind vane is generally fixed at about the same height as the anemometer, its height is not separately given.

Alphabetical List of Stations

Station	Class	φ		λ		H_b	h_a
		° N	′	° E	′	ft.	ft.
Abu	II	24	36	72	43	3,945	63
Agra	II	27	10	78	02	553	39
Ahmedabad	II	23	02	72	35	163	51
Ahmednagar	II	19	05	74	55	2,154	39
Aijal	II	23	44	92	43	3,599	26
Ajmer	II	26	27	74	37	1,593	45
Akola	II	20	42	77	02	925	43
Alibag	III	18	38	72	52	23	74
Aligarh	II	27	58	78	04	615	46
Allahabad (Bamrauli)	I	25	27	81	44	322	19
Alleppey	II	09	33	76	25	12	37
Ambala	II	30	23	76	46	892	43
Amini Divi	III	11	07	72	44	13	27
Amraoti	II	20	56	77	47	1,213	26
Anantapur	II	14	41	77	37	1,148	49
Angul	II	20	50	85	06	455	25
Arogyavaram	II	13	32	78	30	2,299	33
Arrah	V	25	34	84	40	—	—
Asansol	II	23	41	86	59	414	33
Aurangabad	II	19	53	75	20	1,905	35
Bahraich	II	27	34	81	36	407	37
Balasore	II	21	30	86	56	65	26
Balehonnur	IV	13	22	75	27	—	—
Bangalore	I	12	58	77	35	3,021	55
Bankura	V	23	14	87	04	—	—
Bareilly	II	28	22	79	24	568	41
Barmer	II	25	45	71	23	638	22
Baroda	I	22	18	73	15	115	42
Belgaum	II	15	51	74	31	2,562	42
Bellary	II	15	09	76	51	1,473	30
Benares	II	25	18	83	01	250	81
Berhampore	II	24	08	88	16	62	25
Betul	II	20	52	77	56	2,144	32
Bhavnagar	II	21	45	72	12	55	27
Bhopal	II	23	16	77	25	1,643	32
Bhuj	II	23	15	69	48	343	30
Bidar	II	17	55	77	32	2,178	36
Bijapur	II	16	49	75	43	1,950	30
Bikaner	II	28	00	73	18	734	37
Bogra	II	24	51	89	23	63	30
Bombay	I	18	54	72	49	35	58
Buldhana	II	20	32	76	14	2,133	30
Burdwan	II	23	14	87	51	106	53
Calcutta (Alipore)	I	22	32	88	20	21	56

Station	Class	φ		λ		H_b
		° N	′	° E	′	ft.
Calicut	II	11	15	75	47	27
Calingapatam	II	18	20	84	08	19
Cawnpore	II	26	26	80	22	414
Chaibasa	II	22	33	85	49	742
Champa	II	22	02	82	40	805
Chanda	II	19	58	79	18	634
Chandbali	II	20	47	86	44	20
Chapra	V	25	47	84	44	—
Cherrapunji	II	25	15	91	44	4,309
Chitaldrug	II	14	14	76	27	2,405
Cocanada	II	16	57	82	14	26
Cochin	II	09	58	76	14	10
Coimbatore	II	11	00	76	58	1,341
Colombo	I	06	54	79	52	24
Contai	II	21	47	87	45	35
Cooch Behar	V	26	20	89	27	—
Coonoor	III	11	21	76	48	5,730
Cuddalore	II	11	46	79	46	39
Cuddapah	II	14	29	78	50	428
Cuttack	II	20	29	85	52	87
Dahanu	II	19	58	72	43	15
Dalhousie	V	33	22	75	58	—
Daltonganj	II	24	03	84	04	725
Darbhanga	II	26	10	85	54	161
Darjiling	II	27	03	88	16	7,432
Deesa	II	24	14	72	12	466
Dehra Dun	II	30	19	78	02	2,239
Dehri	II	24	55	84	11	352
Devgad	II	16	23	73	21	117
Dhanbad	III	23	47	86	26	839
Dharampore	V	30	54	77	01	—
Dhubri	II	26	01	89	59	115
Dibrugarh	II	27	28	94	55	348
Dohad	II	22	50	74	16	1,093
Dras	II	34	26	75	46	10,059
Dum Dum	II	22	39	88	27	33
Dwarka	II	22	22	69	05	37
Fatehpur	II	25	56	80	50	375
Gadag	II	15	25	75	38	2,131
Gauhati	II	26	11	91	45	182
Gaya	II	24	45	84	57	365
Gilgit	II	35	55	74	23	4,890
Gonda	II	27	08	81	58	360
Gondia	II	21	28	80	12	1,026

Station	Class	φ		λ		H_b	h_a
		° N	′	° E	′	ft.	ft.
Gopalpur	II	19	16	84	53	56	27
Gorakhpur	II	26	45	83	22	254	31
Gulbarga	II	17	21	76	51	1,503	36
Gulmarg	III	34	03	74	24	8,709	60
Guna	II	24	39	77	19	1,571	23
Gurez	V	34	40	74	50	—	—
Gwalior	II	26	14	78	15	681	6
Hambantota	II	06	07	81	08	61	14
Hanamkonda	II	18	01	79	34	881	38
Harnai	II	17	48	73	06	66	5
Hassan	II	13	00	76	09	3,149	31
Hazaribagh	II	23	59	85	22	2,006	63
Hissar	II	29	10	75	44	725	42
Honavar	II	14	17	74	27	85	31
Hoshangabad	II	22	46	77	44	992	35
Hyderabad (Begumpet)	I	17	26	78	27	1,778	49
Indore	II	22	43	75	54	1,823	29
Jagdalpur	II	19	05	82	02	1,815	35
Jaipur	I	26	55	75	50	1,431	61
Jaisalmer	II	26	55	70	57	793	39
Jalgaon	II	21	03	75	34	660	10
Jalpaiguri	II	26	32	88	43	271	32
Jammu	IV	32	44	74	55	1,200	—
Jamnagar	III	22	29	70	04	60	35
Jamshedpur	II	22	49	86	11	423	50
Jhalawar	II	24	32	76	10	1,053	29
Jhansi	II	25	27	78	35	824	37
Jodhpur	I	26	18	73	01	736	21
Jubbulpore	II	23	10	79	57	1,289	36
Kalimpong	II	27	04	88	28	3,965	22
Kanker	II	20	16	81	29	1,318	39
Kargil	IV	34	34	76	08	8,790	—
Katmandu	II	27	42	85	12	4,388	24
Khammameth	II	17	15	80	09	367	29
Khandala	V	18	46	73	22	—	—
Khandwa	II	21	50	76	22	1,044	21
Kodaikanal	I	10	14	77	28	7,688	42
Kolhapur	II	16	42	74	14	1,885	35
Kotah	II	25	11	75	51	843	31
Krishnagar	II	23	24	88	31	48	45
Kurnool	II	15	50	78	04	923	49
Kyelang	V	32	35	77	04	—	—
Lachung	V	27	42	88	45	—	—
Leh	II	34	09	77	34	11,529	25
Lhasa	III	29	38	91	08	12,090	37

Station	Class	φ		λ		H_b	h_a
		° N	′	° E	′	ft.	ft.
Lucknow	II	26	52	80	56	371	31
Ludhiana	II	30	56	75	52	810	23
Lumding	IV	25	45	93	11	440	—
Madhosagar	II	26	13	78	00	757	23
Madras	I	13	04	80	15	51	77
Madura	II	09	55	78	07	437	38
Mahabaleshwar	II	17	56	73	40	4,534	28
Mainpuri	II	27	14	79	03	516	28
Malda	II	25	02	88	08	103	51
Malegaon	II	20	33	74	32	1,432	25
Mangalore	II	12	52	74	51	72	54
Mannar	—	08	59	79	55	12	16
Marmagao	II	15	25	73	47	202	25
Masulipatam	II	16	11	81	08	10	24
Mawsynram	V	25	18	91	35	—	—
Meerut	III	29	01	77	43	762	47
Mercara	II	12	25	75	44	3,781	18
Midnapore	II	22	25	87	19	149	28
Minicoy	II	08	18	73	00	6	48
Miraj	II	16	49	74	41	1,817	30
Misgar	II	36	47	74	46	10,190	21
Motihari	II	26	40	84	55	218	30
Muktesar	II	29	28	79	39	7,592	14
Mussooree	II	30	27	78	05	6,699	30
Muzaffarpur	V	26	07	85	24	—	—
Mysore	II	12	18	76	42	2,518	73
Nagercoil	II	08	10	77	27	195	32
Nagpur	II	21	09	79	07	1,010	10
Naya Dumka	II	24	16	87	15	489	26
Neemuch	II	24	28	74	54	1,626	42
Negapatam	II	10	46	79	51	31	39
Nellore	II	14	27	79	59	66	46
New Delhi	I	28	35	77	12	714	53
Nizamabad	II	18	40	78	06	1,250	46
Nowgong	II	25	04	79	27	750	28
Ongole	II	15	34	80	03	38	30
Ootacamund	II	11	24	76	44	7,364	27
Pachmarhi	II	22	28	78	26	3,528	37
Palamcottah	V	08	44	77	45	—	—
Palghat	II	10	46	76	39	319	10
Pamban	II	09	16	79	18	37	26
Parbhani	II	19	08	76	50	1,350	—
Patna	II	25	37	85	10	173	51
Pendra	II	22	46	81	54	2,040	20
Phalodi	II	27	08	72	22	783	40

Station	Class	φ		λ		H_b	h_a
		° N	′	° E	′	ft.	ft.
Poona	I	18	32	73	51	1,834	24
Port Blair	II	11	40	92	43	259	27
Puri	II	19	48	85	49	20	29
Purnea	II	25	46	87	28	124	25
Raichur	II	16	12	77	21	1,311	41
Raipur	II	21	14	81	39	970	28
Rajkot	II	22	18	70	50	432	30
Rajsamand	III	25	03	73	53	1,856	22
Ramagundam	II	18	46	79	26	527	17
Ranchi	II	23	23	85	20	2,150	44
Ratlam	II	23	19	75	03	—	46
Rentachintala	II	16	33	79	33	348	27
Roorkee	II	29	51	77	53	899	40
Sabour	II	25	14	87	04	122	24
Saharsa	II	25	52	86	37	156	19
Salem	II	11	39	78	10	913	52
Sambalpur	II	21	28	83	58	486	29
Sandheads	II	20	51	88	15	28	—
Saugor	II	23	51	78	45	1,808	5
Saugor Island	II	21	39	88	03	10	52
Seoni	II	22	05	79	33	2,027	31
Seychelles	II	04	37	55	27	15	37
Shillong	II	25	34	91	53	4,921	28
Sholapur	II	17	40	75	54	1,570	29
Sibsagar	II	26	59	94	38	317	21
Sikar	II	27	37	75	08	1,406	27
Silchar	II	24	49	92	48	96	24
Simla	II	31	06	77	10	7,224	86
Skardu	II	35	18	75	37	7,505	17
Sonamarg	V	34	19	75	19	—	—
Sri Ganganagar	II	29	55	73	53	580	26
Srinagar	I	34	05	74	50	5,205	60
Surat	II	21	12	72	50	39	64
Sutna	II	24	34	80	50	1,041	33
Tezpur	II	26	37	92	47	258	30
Titilagarh	II	20	03	83	03	691	29
Trichinopoly	II	10	49	78	42	255	38
Trincomalee	II	08	35	81	15	24	15
Trivandrum	I	08	29	76	57	211	41
Udaipur	II	24	35	73	42	1,910	16
Umaria	II	23	32	80	53	1,506	34
Vellore	II	12	55	79	09	703	21
Vengurla	II	15	55	73	40	29	—
Veraval	II	20	55	70	22	26	34
Vizagapatam	II	17	42	83	18	126	43
Yatung (Chumbi)	IV	27	29	88	55	9,800	—

Territorial Divisions.—The system of territorial divisions according to which the observatories are grouped is given below. The number of observatories in each of the sub-divisions, is given in brackets against the sub-division.

Chief Political Divisions	Sub-divisions
	Bay Islands (1).
Assam	Assam (11).
West Bengal	West Bengal (16).
Orissa	Orissa (7).
Bihar	Chota-Nagpur (6). Bihar (12).
United Provinces	United Provinces, East (8). United Provinces, West (10).
East Punjab	East Punjab (8).
	Kashmir (11).
Rajputana	Rajputana, West (6). Rajputana, East (8).
Bombay	Gujarat (11). Konkan (8). Bombay, Deccan (12).
Central India	Central India, West (7). Central India, East (3).
Central Provinces and Berar	Berar (3). Central Provinces, West (8). Central Provinces, East (8).
Hyderabad	Hyderabad, North (5). Hyderabad, South (5).
Mysore	Mysore (6).
Madras	Malabar (7). Madras, South-east (14). Madras, Deccan (5). Madras Coast, North (6).

Barometric pressure.—Till 1932 mercurical baro meters of the Fortin type with tubes of 0·4″ uniform bor were in use at most of the observing stations in India; bu since that year Kew pattern Barometers, made accordin to departmental specifications, have gradually been intro duced at all the plain stations. The Kew pattern Barometer were also introduced at two hill stations—Kodaikanal an Mahabaleshwar—during 1946 and 1947 respectively. Forti Barometers continue to be used at other hill stations.

Aneroid barometer was in use at Lhasa.

The standard for the measurement of atmospheric pressu in India is the "Calcutta Standard". On the results of a comparisons made till 1935, the correction at present accep ed of the "Calcutta Standard" with respect to Kew is—0·009

Standard Barometers are now maintained at Poon Bombay, Delhi, Nagpur, Calcutta and Madras for th purpose of standardizing barometers before they are issue to land stations. Marine barometers for issue to ships a standardized at Bombay, Calcutta and Madras. The working standards are all corrected with respect to the "Ca cutta Standard". The correction of all the barometers issu by this department is therefore ultimately based on the "Ca cutta Standard".

The main work of the determination of the correctio of the barometers issued to outstations is done at Poona.

Registered No. B-3097

INDIA WEATHER REVIEW, 1948

Monthly Weather Report

January

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Published by authority of the Government of India

Chief features :—(*i*) Active secondaries induced by many of the western disturbances, giving excess rainfall over most parts of northern India, and (*ii*) strengthening of the northeast monsoon over the south Bay of Bengal and the formation of a depression there.

Eight fresh western disturbances affected northwest India during the month. The last western disturbance of the previous month moved across thePunjab and the North-West Frontier Province and caused local or scattered showers over the region from the North-West Frontier Province to the southeast Punjab between the 1st and 6th. It induced a secondary low pressure area over the central parts of the country which caused local thundershowers in and near Central India between the 2nd and 4th and in the United Provinces on the 3rd. In the course of its movement eastnortheastwards it caused widespread thundershowers in Orissa, Chota Nagpur, Bihar and Bengal on the 6th. The first western disturbance of the month moved away through the extreme north on the 7th and 8th. A secondary low pressure area, apparently induced by the second western disturbance which moved across the North-West Frontier Province and Kashmir on the 9th and 10th, appeared over west Central India on the 11th and moved east-northeastwards through the east United Provinces. It was responsible for local or fairly widespread thundershowers in Central India between the 11th and 14th ; local precipitation also occurred in Rajputana on the 12th and in the United Provinces on the 12th and 13th. The third western disturbance, while moving northeastwards across the North-West Frontier Province and Kashmir induced a trough of low pressure off the Kathiawar-Konkan coast on the 15th. The trough of low became more marked on the next day, persisting there without any appreciable movement until the 20th. In association with this trough there was widespread or local rain in the Konkan, Gujarat and the Bombay Deccan between the 18th and 21st. The fourth disturbance moved through the North-West Frontier Province and the north Punjab on the 19th. In association with this, widespread rain occurred in east Rajputana and the East Punjab between the 19th and 21st. It also induced a trough of low pressure off the Mekran coast on the 23rd which lay off Sind coast on the next day. A shallow " low " appeared over southeast Bengal on the 20th, and there was widespread rain extending from the Konkan to Bihar on the 22nd and local precipitation from the Bombay Deccan to Central India and the north Central Provinces on the 23rd. The next three disturbances moved in quick succession during the 24th to 30th and there was widespread rainfall in the southwest Punjab on the 25th with well-distributed precipitation in the west United Provinces and east Rajputana on the 29th and in and near Central India and the Central Provinces on the 29th and 30th. Rainfall also occurred locally in Orissa on the 30th and at a few places in Assam on the last two days of the month. The last western disturbance was affecting Baluchistan on the last day of the month.

The northeast monsoon strengthened over the south Bay of Bengal on the 13th, and a depression formed there on the 14th with its central region near Lat. 11°N, Long.86°E. The depression moved to Lat.11½°N, Long.84½°E by 0800 hrs. of the following day. Thereafter it weakened as it travelled northwestwards into a trough of low pressure which lay to the east of Ceylon on the 15th morning ; thereafter the trough moved westwards across the Gulf of Mannar and remained over the southeast Arabian Sea in the neighbourhood of the Laccadives from the 18th to 20th. It was responsible for widespread and locally heavy rainfall in southeast Madras on the 17th and 18th. Well-distributed showers also fell in Mysore and Malabar on the 18th and 19th.

Night temperatures were generally above normal in many parts of the country outside northwest India and were markedly so in Central India and the Central Provinces on most days of the month, except during the first week when they were generally below normal in Sind, southwest Rajputana, Gujarat and the north Bombay Deccan. According to newspaper reports, the Kashmir valley was in the grip of a severe cold wave for five days since the 14th.

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The total rainfall during the month was generally in large excess in Orissa, Chota Nagpur, the east United Provinces, the East Punjab, Rajputana, the Central parts of the country, the Bombay Presidency, Mysore, Malabar and southeast Madras and normal in West Bengal, the west United Provinces and north Hyderabad. Elsewhere it was in moderate to large defect except in south Hyderabad where no rain fell. Averaged over the plains of India, the rainfall during the month was 129 per cent. in excess.

Maximum temperatures were below normal in Kashmir, east Rajputana, Gujarat, west Central India, Berar, the west Central Provinces and north Hyderabad and normal elsewhere. Minimum temperatures were below normal in Kashmir, normal in Assam, west Rajputana, Gujarat, the Konkan and Malabar and above normal elsewhere. Humidity was normal in the Bay Islands, Assam, West Bengal, Bihar, Kashmir and the Madras Presidency and in excess elsewhere. Cloud amount was normal in Assam, Orissa, the west United Provinces, the East Punjab, Kashmir, and west Rajputana and in excess elsewhere.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amount for the 13 chief political divisions and the 27 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

***N.B.*—The Indian Standard Time used in this publication is 5 hrs. 30 mins. in advance of G.M.T.**

POONA 5 :
The 1st April 1948.

S. BASU,
for *Director-General of Observatories.*

	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
ISION.	"	"	"		°	°	mb.	%	
m . .	0·27	0·68	—0·41	—60	+1·9	+0·6	+0·4	—4	—0·1
t Bengal .	0·49	0·46	+0·03	+7	+1·3	+3·0	+1·2	+3	+0·7
a . .	0·68	0·35	+0·33	+94	—0·4	+2·5	+2·1	+10	+0·4
r . .	0·69	0·63	+0·06	+10	+1·1	+3·4	+2·0	+7	+1·4
ed Provin-s.	1.18	0·85	+0·33	+39	—0·3	+3·1	+1·7	+11	+1·2
Punjab .	1·62	1·08	+0·54	+50	+1·1	+3·1	+2·1	+13	—0·5
utana .	1·50	0·27	+1·23	+456	—2·2	+2·0	+3·0	+19	+0·7
IVISION.									
Islands .	1·02	1·79	—0·77	—43	+0·9	+3·0	—0·1	—1	+1·7
m . .	0·27	0·68	—0·41	—60	+1·9	+0·6	+0·4	—4	—0·1
Bengal .	0·49	0·46	+0·03	+7	+1·3	+3·0	+1·2	+3	+0·7
a . .	0·68	0·35	+0·33	+94	—0·4	+2.5	+2·1	+10	+0·4
ta Nagpur	1·30	0·75	+0·55	+73	+0·1	+4·0	+2·6	+10	+1·4
r . .	0·41	0·57	—0·16	—28	+1·9	+3·0	+1·5	+4	+1·4
ed Pro-nces, East.	1·32	0·67	+0·65	+97	—0·5	+3·9	+1·5	+9	+1·9
ed Pro-nces, West.	1·04	1·04	0	0	—0·1	+2·3	+2·0	+13	+0·4
ab, .	1·62	1·08	+0·54	+50	+1·1	+3·1	+2·1	+13	—0·5
mir .	1·62	3·78	—2·16	—57	—4.1	—2·9	+0·1	+4	—0·7
putana, st.	1·04	0·24	+0·80	+333	—0·8	+1·7	+2·9	+16	+0·2
putana, st.	1·96	0·31	+1·65	+532	—3·3	+2·3	+3·1	+21	+1·2
t . .	0·53	0·07	+0·46	+657	—2·4	+2.0	+2·2	+15	+1·1
al India, st.	1·72	0·23	+1·49	+648	—2·6	+2·9	+3·4	+23	+2·8

	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION—*contd.*	"	"	"		°	°	mb.	%	
8. Bombay . .	0·47	0·10	+0·37	+370	—1·2	+2·7	+2·8	+13	+1·3
9. Central India .	1·90	0·48	+1·42	+296	—1·9	+3·9	+3·4	+21	+2·6
10. Central Provinces and Berar.	2·22	0·45	+1·77	+393	—2·0	+3·9	+3·6	+16	+2·8
11. Hyderabad .	0·14	0·27	—0·13	—48	—1·7	+3·1	+2·8	+12	+1·1
12. Mysore .	0·28	0·17	+0·11	+65	—0·8	+2·7	+1·9	+7	+1·1
13. Madras. .	1·29	0·85	+0·44	+52	—0·3	+2·5	+1·8	+3	+0·9
Mean of India .	1·12	0·49	+0·63	+129	—0·8	+2·9	+2·5	+11	+1·2
SUB-DIVISION—*contd.*									
15. Central India, East.	2·15	0·81	+1·34	+165	—0·9	+5·2	+3·5	+17	+2·4
16. Berar . .	3·27	0.36	+2.91	+808	—3·6	+3·9	+5·1	+22	+3·6
17. Central Provinces, West.	3·00	0·50	+2·50	+500	—2·1	+3·8	+4·0	+20	+3·3
18. Central Provinces, East.	0·85	0·42	+0·43	+102	—1·2	+4·1	+2·6	+10	+2·0
19. Konkan .	0·39	0·06	+0·33	+550	—0·5	+1·8	+2.8	+7	+1·5
20. Bombay Deccan.	0·44	0·15	+0·29	+193	—0.1	+3.9	+3.5	+13	+1·4
21. Hyderabad, North.	0·29	0·27	+0·02	+7	—2·3	+3·2	+2·8	+13	+1·4
22. Hyderabad, South.	0	0·26	—0·26	—100	—1·3	+3·0	+2·8	+11	+0·9
23. Mysore . .	0·28	0·17	+0·11	+65	—0·8	+2·7	+1·9	+7	+1·1
24. Malabar .	1·53	0·53	+1·00	+189	+0·4	+1.9	+2·7	+5	+1·4
25. Madras, South-east.	2·29	1·49	+0·80	+54	+0·1	+2·5	+1·1	+1	+0·9
26. Madras, Deccan	0·03	0·18	—0·15	—83	—0·3	+3·3	+2·6	+4	+0·8
27. Madras Coast, North.	0·33	0·49	—0·16	—33	—1·3	+2·1	+1·6	+3	+0·7

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature, °F. Mean	Departure from normal.	Highest.	Date.	Minimum temperature, °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature °F. Mean 8 hrs. I.S.T.	Mean 17 hrs. I. S. T.	Wet bulb temperature °F. Mean 8hrs. I. S. T.	Mean 17 hrs. I.S.T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
BAY ISLANDS—																				
Port Blair	259	1005·3	+0·6	1002·7	85·1	+0·9	87	18,29,31	74·6	+3·0	66	24,26	80·6	78·5	74·0	73·0	25·7	—0·1	25·2	7
ASSAM—																				
Dibrugarh	348	1006·1	—0·1	1001·9	73·6	+2·2	77	6	50·7	+0·6	43	6	55·3	66·3	54·5	61·6	14·1	—0·2	16·7	9
Sibsagar	317	1007·6	+0·6	1003·6	73·1	+2·6	77	4 days	51·1	+1·4	45	1,2,3	57·4	66·2	56·7	64·7	15·5	+1·0	20·2	9
Tezpur	258	1009·8	+0·4	1004·9	75·4	+1·6	79	15	53·0	+0·5	48	2,3	57·5	68·9	55·8	61·9	14·5	0	15·7	8
Gauhati	182	1011·8	+0·3	1007·4	75·9	+1·3	79	4 days	52·0	+1·0	47	2	58·3	70·0	56·5	62·7	14·7	0	16·1	9
Dhubri	115	1013·7	+0·1	1010·6	74·8	+1·4	79	31	..	..	..	..	58·2	72·5	56·7	62·2	15.0	+0·5	14·4	8
Silchar	96	1014·7	+0·3	1010·6	78·7	+0·7	84	5	54·8	+2·5	52	1,28,29	58·6	72·7	57·0	64·2	15·2	0	16·6	9
WEST BENGAL—																				
Dum Dum	33	1016·0	..	1012·9	79·8	..	85	23,31	56·9	..	52	6	63·2	75·9	58·8	63·6	14·9	..	14·4	7
Calcutta	21	1016·8	+0·2	1013·2	80·5	+0·9	87	31	58·6	+4·0	54	13	61·7	74·2	59·5	64·3	16·5	+1·9	15·9	8
Saugor Island	10	1016·7	0	1013·6	76·9	—0·1	79	4 days	63·3	+4·7	59	13	67·6	74·2	64·2	65·8	18·9	+1·4	18·1	8
Sandheads	28	1015·7	—0·4	1013·7	..	..	..	..	..	..	..	..	73·4	76·0	70·8	72·6	24·6	+5·2	25·8	8
Midnapore	149	1012·0	—0·1	1008·7	80·5	—0·3	87	31	58·4	+2·8	53	12	61·8	77·6	58·4	64·7	15·1	+2·0	15·0	8
Burdwan	106	1014·3	+0·6	1010·2	80·2	+1·3	86	31	57·4	+2·7	53	2,18	63·9	77·1	58·6	63·8	14·3	+1·2	14·1	7
Krishnagar	48	1015·5	—0·1	1012·3	81·0	+2·9	87	31	54·7	+3·1	50	13	58·1	77·7	55·8	64·7	14·1	+0·5	15·0	8
Asansol	414	1003·0	+0·4	999·5	78·5	+0·7	85	31	56·3	+3·6	53	4 days	61·9	74·4	58·1	64·1	14·7	+2·6	15·7	7
Berhampore	62	1015·5	+0·1	1011·7	79·7	+3·0	84	27,31	55 3	+2·1	50	18	61·9	74·6	57·6	63·2	14·2	+0·4	14·6	7
Malda	103	1014·3	+0·5	1010·6	76·6	+2·1	81	31	52·8	+2·8	46	18	61·8	72·2	57·2	61·6	13·9	+0·6	14·0	7
Jalpaiguri	271	1007·9	+0·1	1004·0	76·0	+1·6	79	30	52·4	+1·4	48	1,2	54·7	72·4	53·5	61·8	13·5	—0·2	14·1	9
ORISSA—																				
Balasore	65	1015·3	+0·2	1011·8	79·7	—1·2	86	31	60·4	+4·1	56	12,15	66·4	73·1	62·7	66·6	17·9	+3·2	19·4	7
Chandbali	20	1016·6	—0·1	1013.5	80·6	—0·7	88	31	61·0	+3·0	56	12	64·9	75·3	63·1	66·9	18·8	+2·7	18·7	9
Puri	20	1016·6	+0·4	1013·4	80·2	+0·2	83	17,28	65·3	+1·6	61	12	68·5	76·2	65·5	69·1	20·1	+1·4	21·1	8
Gopalpur	56	1015·1	+0·2	1011·9	79·9	—0·7	83	29	64·2	+1·9	59	13	68·5	75·9	65·3	69·0	19·9	+2·0	21·0	8
Cuttack	87	1013·9	—0·4	1010·5	82·3	—0·8	87	23,25,31	62·6	+2·8	58	12	65·1	78·8	63·3	67·8	19·0	+2·4	18·2	9
Angul	455	1001·2	+0·1	997·7	80·6	—1·2	85	23,27	[illegible]9·0	+2·9	54	12	61·7	78·0	59·8	65·5	16·6	+2·0	15·8	8
Sambalpur	486	1000·1	—0·1	996·6	82·7	+0·9	87	22,23,30	57·8	+2·8	52	8	62·1	79·2	59·8	65·2	16·4	+2·3	14·9	8
CHOTA NAGPUR—																				
Jamshedpur	423	1002·6	0·1	998·9	79·8	—0·6	85	31	57·2	+5·9	53	1,2,12	61·2	76·3	58·1	63·8	15·2	+2·7	14·6	8
Chaibasa	742	991·3	+0·3	987·2	80·4	+1·2	87	31	57·1	+4·7	53	12	60·4	77·0	57·9	65·0	15·3	+2·2	15·7	8
Ranchi	2,150	942·7	+0·4	940·4	74·3	+0·8	80	27	52·7	+1·6	47	11	56·9	69·5	53·9	60·1	12·8	+2·7	13·6	8
Hazaribagh	2,006	947·9	+0·5	945·3	72·2	—0·6	77	1,4,31	51·6	+1·3	46	11	57·3	66·8	53·4	57·5	12·1	+2·2	12·1	7
Daltonganj	725	992·4	+0·1	989·1	75·6	—0·3	82	31	53·9	+6·4	49	1,28	58·5	72·0	56·3	61·8	14·6	+3·2	14.3	8
Dhanbad	839	988·2	..	..	..	..	..	..	55·3	..	50	2	62·4	..	56·9	..	13·3	..	..	7
BIHAR—																				
Purnea	124	1013·2	—0·1	1009·7	77·1	+2·4	81	30,31	49·6	+1·9	42	18	55·5	71·6	53·9	61·9	13·5	+1·1	14·6	9
Darbhanga	161	1012·2	+0·3	1008·8	74·9	+0·6	81	31	50·6	+0·8	45	17,18	54·1	71·6	53·2	61·7	13·4	+0·5	14·3	9
Motihari	218	1010·4	+0·9	1006·5	..	..	..	..	49·4	+2·5	42	17	58·3	68·9	55·7	61·0	14·0	+1·6	14·7	84
Patna	173	1011·7	0	1008·6	75·1	+2·1	81	31	54·0	+2·9	49	12,18	59·5	70·8	55·2	60·2	12·8	+0·7	13·1	75
Dehri	35[illegible]	1005·2	..	1002·8	75·2	..	81	30,31	56·2	..	51	18	59·4	72·3	56·9	61·2	14·7	..	13·5	85
Gaya	365	1004·7	0	1001·7	75·8	—1·5	82	31	54·4	+5·2	49	18	59·2	72·0	55·8	60·8	13·7	+3·3	13·2	80
Naya Dumka	489	1000·2	—0·1	996·8	79·8	—3·8	86	1,31	54·3	+3·4	49	12	61·2	74·7	56·1	62·5	13·1	+1·1	13·9	69
Sabour	12[illegible]	1013·4	—0·1	1010·0	75·1	+1·1	80	31	49·3	+4·3	41	18	58·3	69·9	56·0	61·9	14·2	+2·5	15·3	86

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I.S.T.									17 hrs. I. S. T.										
8 hours I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														BAY ISLANDS—
5·9	+1·7	6·3	1·02	—0·77	1·00	19	1	—1·3	9·9	+1·4	1	14	13	1	0	0	0	0	2	0	17	14	0	0	0	0	0	0		Port Blair.
																														ASSAM—
4·4	—0·7	3·9	1·28	—0·21	0·74	23	3	—0·7	1·0	+0·4	1	3	9	1	2	1	0	2	12	0	3	2	0	1	0	0	1	24		Dibrugarh.
8·1	+0·1	3·6	2·38	+1·17	1·27	23	3	—0·5	1·2	+0·8	2	7	2	1	4	5	1	0	9	6	3	1	0	0	0	0	4	17		Sibsagar.
2·2	—1·2	2·2	0·28	—0·30	0·28	31	1	—0·5	1·5	—0·2	3	7	12	1	0	0	0	4	4	1	4	3	3	0	0	0	2	18		Tezpur.
3·5	+1·0	2·3	0·03	—0·35	0·03	22	0	—1·1	1·8	+0·6	3	8	1	5	3	0	1	0	10	1	5	1	2	0	0	1	0	21		Gauhati.
0·6	—1·5	0·6	0	—0·31	0	..	0	—0·8	3·1	0	1	16	2	3	0	3	0	0	6	2	6	4	0	3	5	0	0	11		Dhubri.
4·3	+2·1	1·8	0	—0·77	0	..	0	—1·5	0·8	—0·3	1	2	4	11	1	1	1	0	10	0	2	1	0	1	3	1	0	23		Silchar.
																														WEST BENGAL—
2·7	..	2·9	0·43	..	0·40	6	1	..	..	..	9	2	1	2	0	0	1	3	13	4	1	0	0	3	1	4	11	7		Dum Dum.
2·4	+0·1	2·8	0·81	+0·44	0·76	6	1	+0·2	1·2	—0·8	2	2	0	0	1	0	1	0	25	1	0	0	0	2	0	2	2	24		Calcutta.
2·2	—0·5	2·3	1·63	+1·22	1·63	6	1	+0·1	6·0	+0·5	11	9	1	2	0	1	3	3	1	8	3	0	1	4	5	3	6	1		Saugor Island.
1·4	—0·9	1·0	0·43	+0·24	0·43	6	1	+0·5	..	..	4	12	2	0	1	4	0	3	5	5	13	1	1	1	3	0	0	7		Sandheads.
2·8	+0·6	2·8	0·38	—0·09	0·38	6	1	+0·1	2·0	+0·4	6	17	0	1	0	0	0	0	7	5	12	0	0	3	3	0	1	7		Midnapore.
2·6	+0·3	3·0	0·20	—0·25	0·	6	1	+0·1	1·5	+0·3	8	4	1	1	0	1	1	2	13	7	2	1	0	0	0	2	9	10		Burdwan.
2·7	+1·1	2·7	0·34	—0·11	0·29	6	1	+0·1	(h) 0.9	—0·2	0	0	0	2	0	0	0	3	26	2	0	0	0	0	0	2	8	19		Krishnagar.
3·1	+0·7	3·6	1·00	+0·33	0·98	6	1	—0·4	2·9	—0·4	2	0	1	0	0	0	4	13	11	2	0	0	0	0	0	3	16	10		Asansol.
3·1	+0·9	3·3	0·19	—0·19	0·19	6	1	0	0·3	—0·8	0	0	0	0	1	0	0	1	29	1	0	0	0	0	1	0	1	28		Berhampore.
2·7	+1·4	2·8	0·15	—0·39	0·14	6	1	+0·1	2·7	0	6	1	1	0	4	4	3	8	4	4	0	1	0	1	2	4	11	8		Malda.
3·5	+1·8	2·3	0	—0·31	0	..	0	—0·7	2·0	+1·1	13	4	1	0	1	1	0	2	9	0	1	1	2	4	7	2	0	14		Jalpaiguri.
																														ORISSA—
2·9	+0·7	4·1	2·73	+2·20	2·05	6	3	+2·0	1·4	—0·4	16	4	0	0	0	1	0	4	6	0	0	0	3	2	0	0	0	26		Balasore.
1·7	—0·6	2·1	1·70	+1·50	1·38	6	3	+2·3	3·0	—0·6	16	0	0	0	0	1	0	10	4	1	11	10	6	1	1	0	1	0		Chandbali.
2·8	+0·5	3·0	0·19	—0·22	0·15	6	1	+0·4	6·3	+0·1	19	6	0	0	0	2	0	3	1	0	2	3	16	7	3	0	0	0		Puri.
2·5	+0·8	2·0	0·40	+0·12	0·40	1	1	+0·5	6·2	+0·1	18	0	0	0	0	1	0	11	1	2	0	16	7	5	0	0	1	0		Gopalpur.
2·2	—0·3	3·2	0·95	+0·63	0·95	6	1	+0·3	1·8	+0·7	3	1	0	0	0	0	0	2	25	0	3	2	0	1	1	0	1	23		Cuttack.
3·7	+0·8	4·3	0·63	+0·19	0·55	6	1	+0·1	2·9	—0·1	2	0	0	0	1	0	8	13	7	6	9	5	4	2	0	0	2	3		Angul.
3·3	+1·1	4·7	0·19	—0·24	0·16	6	1	+0·1	2·5	+0·4	3	14	0	1	0	1	0	1	11	4	5	2	4	2	2	5	2	5		Sambalpur.
																														CHOTA NAGPUR—
3·4	+1·0	4·0	0·99	+0·63	0·93	6	1	+0·1	2·2	+0·7	0	1	1	0	0	2	10	3	14	1	1	2	3	0	3	6	6	9		Jamshedpur.
4·3	+1·8	5·1	1·06	+0·42	0·94	6	2	+0·6	1·0	—0·3	0	2	0	2	0	5	1	0	21	0	4	1	0	1	3	2	1	19		Chaibasa.
2·4	—0·2	2·9	1·44	+0·52	1·18	6	3	+1·2	1·9	—1·6	6	0	1	0	0	0	0	1	23	5	0	1	1	0	0	1	0	23		Ranchi.
4·3	+1·9	5·0	0·97	+0·28	0·92	6	1	—0·9	4·2	—1·0	3	1	0	1	3	1	1	7	14	8	2	1	1	0	0	2	16	1		Hazaribagh.
4·7	+2·7	5·0	2·03	+1·11	1·58	6	2	+0·1	1·2	—0·6	0	2	1	7	0	0	2	0	19	5	3	0	1	1	0	8	3	10		Daltonganj.
..	..	..	0·70	..	0·70	6	1	..	4·0	..	5	3	1	0	0	2	8	4	8	..	..	..	..	..	..	..	..	..		Dhanbad.
																														BIHAR—
2·8	+1·0	2·7	0·14	—0·27	0·14	6	1	+0·2	2·0	+0·6	0	0	3	0	3	16	6	0	3	0	0	0	0	0	8	12	1	10		Purnea.
3·7	+1·7	3·4	0·22	—0·22	0·14	6	1	0	0·9	—0·5	0	3	1	0	0	2	12	3	10	0	0	0	0	0	0	13	2	16		Darbhanga.
3·7	+1·2	3·6	0·12	—0·35	0·07	6	0	—1·1	1·7	+0·2	1	0	3	0	0	2	14	2	9	0	0	1	0	0	0	19	0	11		Motihari.
3·7	+1·6	3·8	0·34	—0·25	0·31	5	1	—0·3	3·5	+1·3	0	1	4	0	1	6	13	2	4	1	2	1	0	0	1	14	8	4		Patna.
3·8	..	4·1	1·76	+1·08	1·37	6	2	+0·5	2·1	..	0	0	0	2	2	5	2	3	17	6	4	0	1	0	1	2	12	5		Dehri.
4·3	+2·2	4·1	1·03	+0·31	0·93	6	1	—0·3	3·5	+0·3	0	0	0	6	7	1	1	0	16	3	2	1	0	0	0	5	18	2		Gaya.
2·5	+0·8	2·6	0·12	—0·55	0·12	6	1	—0·3	1·8	+0·5	0	2	0	2	0	7	0	14	6	0	3	0	0	0	17	0	9	2		Naya Dumka
3·4	+1·2	3·4	0·40	—0·14	0·28	6	1	—0·1	1·8	—1·3	0	2	1	0	0	8	8	0	12	1	0	0	0	0	0	13	8	9		Sabour.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Re hu
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I. S. T.	Mean 8 hours I.S.T.	Mean 17 hrs. I.S.T.	Mean 8hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
U. P., EAST—																				
Gonda	360	1004·7	..	1002·2	72·5	—1·3	79	30	49·4	+3·6	42	16	52·9	67·5	51·5	59·8	12·3	+1·9	13·7	89
Gorakhpur	254	1009·3	+1·1	1005·7	74·2	+1·2	80	30,31	51·8	+3·3	45	17	55·1	71·2	52·4	60·3	12·2	+0·6	12·7	82
Banaras	250	1008·8	+0·1	1005·9	74·6	+0·4	81	31	51·2	+3·1	44	18	55·5	71·6	53·2	60·7	12·9	+1·2	13·2	94
Allahabad (Bamrauli)	322	1006·4	+0·1	1004·1	73·9	—0·9	81	31	51·6	+4·5	46	17,18	54·8	70·8	53·5	61·0	13·4	+2·7	13·9	92
Fatehpur	375	1004·8	..	1001·9	72·8	—2·4	80	30	52·8	+6·4	45	17	57·0	69·5	54·7	61·9	13·6	+3·1	15·5	86
Kanpur	414	1003·3	+0·6	1001·0	72·2	+0·3	79	31	50·6	+4·9	41	17	53·0	68·7	57·9	59·9	12·8	+2·5	13·6	94
Lucknow	371	1005·0	+0·8	1002·5	72·8	—1·1	85	4	50·7	+3·6	43	17,18	53·6	68·5	51·9	60·7	12·4	+1·9	14·6	90
Bahraich	407	1003·1	+0·6	1000·7	72·6	0	79	30,31	48·9	+1·8	42	16,17	52·0	68·9	50·4	59·8	11·7	+0·8	13·4	90
U. P., WEST—																				
Jhansi	824	988·5	—0·3	986·0	72·8	—3·3	82	31	50·9	+3·5	46	3,16,17	54·2	69·9	52·7	60·8	12·8	+3·2	14·3	90
Agra	553	998·6	+0.6	996·4	70·5	—2·1	78	30	49.1	+4·8	40	16	51·5	68·7	50·5	58·2	12·1	+4·0	11·9	93
Mainpuri	516	999·6	+0·4	997·1	71·7	—1·5	80	30	48·6	+3·0	41	4 days	51·5	67·9	49·8	58·6	11·4	+2·0	12·6	87
Aligarh	615	995·9	—	994·8	70·5	—0·4	77	30	47·6	+2·4	41	15	50·3	67·9	48·9	57·7	11·2	+3·3	11·8	89
Bareilly	568	997·3	+0·4	994·5	72·1	+1·3	79	30	49·2	+2·9	41	15	53·4	67·7	50·5	57·8	11·2	+0·9	12·0	81
Roorkee	899	985·3	+0·1	983·1	70·6	+2·2	75	4 days	43·7	0	38	5 days	46·2	67·8	44·8	56·3	9·4	+0·1	10·3	90
Dehra Dun	2,239	939·1	+0·9	937·6	69·1	+2·9	75	29	43·3	—0·7	39	12,16	46·1	64·5	43·9	54·3	8·8	+0·4	10·5	84
EAST PUNJAB—																				
New Delhi	714	992·1	—0·1	990·1	69·6	—0·9	78	30	47·9	+4·6	40	17	49·8	66·7	48·1	56·8	10·6	+3·0	11·3	87
Hissar	725	992·5	+0·4	990·0	70·2	—0·6	75	30,31	45·2	+3·8	35	15	47·8	67·4	46·2	57·8	10·1	+2·5	11·9	88
Ambala	892	985·4	0	983·3	72·0	+2·9	78	29	46·0	+2·6	37	15	48·3	67·1	47·1	57·0	10·5	+1·6	11·4	86
Ludhiana	812	988·8	+0·3	987·4	70·1	+3·2	76	29	45·0	+1·3	38	14	47·0	66·5	46·1	57·2	10·2	+1·5	11·8	93
KASHMIR—																				
Srinagar	5,205	848·7	+3·3	847·2	33·4	—7·6	41	23	24·9	—2·4	15	15	27·2	32·0	26·1	30·5	4·3	—0·6	5·2	88
Gulmarg	8,709	(Closed during winter months.)																		
Dras	10,059	706·7	+3·5	705·6	8·0	—9·4	22	10,21	—	—	—	—	—	—	—	—	—	—	—	—
Leh	11,529	669·4	+5·0	665·9	29·0	—0·4	37	1	3·7	—4·3	0	28	8·0	26·5	6·5	21·0	1·4	—0·2	2·2	71
Skardu (R)	7,505																			
Gilgit (R)	4,890																			
Misgar (R)	10,190																			
RAJPUTANA, WEST—																				
Sri Ganganagar	580	997·7	—	996·1	70·3	+2·5	97	30	43·7	+5·6	34	16	47·1	67·7	46·3	57·7	10·2	+3·2	11·9	94
Bikaner	734	991·6	+0·1	987·1	71·2	—	77	4 days	43·2	—	33	16,17	47·1	70·8	44·3	56·2	8·7	—	9·1	79
Phalodi	800	988·7	—	987·9	72·3	—	78	29,31	46·5	—	38	16	48·2	71·1	45·9	64·1	9·6	—	19·5	80
Jodhpur	736	991·3	+1·5	988·9	73·3	—3·0	81	29	50·5	—1·9	41	2	53·3	71·9	49·0	56·8	9·9	+3·4	9·0	72
Barmer	638	994·7	+0·4	992·1	74·6	—1·8	82	28,29	51·3	+1·3	46	24	53·9	73·7	48·6	58·7	9·4	+2·1	10·3	65
RAJPUTANA, EAST—																				
Sikar	1,406	967·8	—	965·9	70·5	—	79	1	46·4	—	37	14,16,17	49·1	67·1	47·2	55·2	10·2	—	9·6	87
Jaipur	1,431	967·4	—0.1	965·3	69·9	—3·3	75	4 days	49·0	+2·2	39	15,16	51·9	67·6	48·9	55·9	10·5	+2·7	10·0	81
Ajmer	1,593	962·4	+0·6	959·2	69·1	—3·6	78	29	47·5	+1·8	37	15	55·5	67·4	51·5	56·2	11·3	+3·3	11·1	76
Kotah	843	987·6	—0·3	984·7	74·1	—3·0	84	29	52·5	+1·4	47	15,16	54·4	72·2	52·0	60·1	11·9	+3·0	12·8	84
Jhalawar	1,053	979·5	—0·6	976·6	74·5	—3·4	86	29	51·8	+3·9	44	3	54·1	72·6	51·7	59·8	12·0	+3·5	12·1	84
Udaipur	1,910	956·7	—	947·9	72·8	—	81	29	47·5	—	40	3,4	51·2	70·2	48·3	57·7	10·2	—	11·1	81

(R) Register not received.

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity miles per hour.		Wind direction—Number of winds from :—																		STATION
											8 hrs. I.S.T.									17 hrs. I. S. T.									
	Departure from normal.	Mean 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST.
4·4	+1·5	4·1	1·70	+1·19	1·00	5	3	+1·8	2·5	—0·2	1	0	4	0	1	0	10	5	10	0	0	2	0	1	1	11	5	11	Gonda.
4·5	+1·7	3·2	0·18	—0·41	0·10	22	1	—0·3	1·8	+0·7	0	2	1	0	0	1	14	0	13	1	1	0	0	0	3	15	0	11	Gorakhpur.
4·6	+1·6	4·3	0·56	—0·18	1·25	5	3	+1·5	3·2	+1·0	0	3	3	1	0	9	5	1	9	0	3	1	0	0	1	8	18	0	Banaras.
4·7	+1·8	5·4	0·68	—0·17	0·35	5	3	+1·9	2·5	—0·1	1	2	3	2	0	0	6	0	17	8	1	3	1	1	0	3	10	4	Allahabad. (Bamrauli)
4·3	+1·9	4·6	2·76	+2·22	1·64	5	6	+4·6	2·0	0	0	1	5	0	0	1	5	3	16	1	0	2	0	0	0	1	6	21	Fatehpur.
4·6	+3·0	4·3	2·94	+2·38	1·52	5	5	+3·6	4·9	+2·6	2	4	1	0	0	6	4	3	11	8	3	1	1	0	1	9	6	2	Kanpur.
5·0	+1·7	5·0	1·13	+0·37	0·67	5	4	+2·5	1·3	0	0	0	3	0	0	0	6	2	20	2	0	2	0	1	0	11	0	15	Lucknow.
4·3	+2·4	4·4	0·61	—0·21	0·29	5	2	+0·4	3·1	+1·5	1	0	3	1	0	6	3	3	14	0	0	1	0	0	5	4	4	17	Bahraich.
																													U.P., WEST—
3·8	+1·7	4·4	1·72	+1·18	0·60	5	5	+3·8	2·8	+0·6	0	1	1	0	0	1	1	1	26	0	3	4	0	0	1	7	9	7	Jhansi.
3·5	+0·7	3·9	2·04	+1·53	1·00	5	4	+2·8	1·3	—1·4	1	1	1	0	0	1	1	1	25	4	2	2	1	1	0	2	2	16	Agra.
3·4	+0·7	4·0	1·03	+0·46	0·52	3	4	+2·7	2·2	+0·8	0	0	3	3	1	6	5	5	8	1	0	4	3	1	1	10	5	6	Mainpuri.
3·4	+1·5	4·0	1·30	+0·84	0·40	3	5	+3·8	—	—	0	2	1	0	1	0	9	1	17	2	3	3	0	0	0	6	10	7	Aligarh.
3·5	+0·6	3·9	1·02	+0·03	0·94	3	1	—0·9	1·9	+0·4	2	1	3	3	0	3	8	2	9	1	2	0	0	0	1	17	3	7	Bareilly.
2·7	—0·6	3·2	0·09	—1·58	0·06	19	0	—2·8	1·9	+0·1	0	0	0	2	0	1	1	17	10	0	0	0	2	1	6	0	21	1	Roorkee.
2·3	—2·0	3·0	0·04	—2·28	0·04	19	0	—3·9	1·5	0	4	4	0	0	0	0	1	1	21	1	0	0	2	1	4	12	4	7	Dehra Dun.
																													EAST PUNJAB—
4·4	+1·2	4·1	2·25	+1·26	1·14	3	4	+2·0	—	—	1	3	2	1	2	2	10	4	6	3	1	2	4	1	1	2	12	5	New Delhi.
2·4	—0·3	2·0	3·37	+2·87	2·30	2	2	+0·6	3·6	+0·3	3	3	2	1	1	6	5	6	4	4	4	2	0	1	1	3	8	8	Hissar.
0·7	—2·8	0·9	0·49	—0·83	0·25	5	2	—0·5	—	—	0	3	0	5	0	1	0	22	0	0	0	0	1	0	1	0	29	0	Ambala.
3·1	—0·3	2·3	0·38	—1·13	0·21	20	3	+0·3	1·5	+0·2	1	5	1	0	0	0	3	2	19	0	3	0	0	0	1	1	3	23	Ludhiana.
																													KASHMIR—
0·0	+1·8	8·0	0·90	—2·00	0·45	20	4	—2·1	1·9	—0·3	0	0	0	13	3	0	1	0	14	1	2	0	9	7	0	1	2	9	Srinagar.
																													Gulmarg.
5·7	—0·6	5·5	2·33	—1·50	0·81	20	7	—2·6	0	—0·6	0	0	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	31	Dras.
5·2	—1·5	5·8	0·51	+0·13	0·17	20	2	+1·0	0·6	—0·5	0	7	1	0	0	0	0	0	23	0	0	0	0	15	2	0	0	14	Leh.
																													Skardu (R).
																													Gilgit (R).
																													Misgar (R).
																													RAJPUTANA, WEST—
4·7	+0·7	2·1	2·31	+1·86	1·38	2	3	+1·7	1·8	—1·7	1	1	1	1	0	0	0	0	27	2	0	1	0	3	0	0	12	13	Sri Ganganagar.
2·8	0	2·0	0·40	+0·13	0·25	12	2	+1·2	2·6	—0·4	1	5	0	0	0	1	0	0	24	2	19	0	2	0	1	0	4	3	Bikaner.
2·7	—	3·4	0·02	—0·12	0·02	18	0	—0·5	5·3	—	3	3	0	6	1	3	2	6	7	4	15	1	1	0	2	0	8	0	Phalodi.
3·1	+0·1	3·6	2·23	+2·08	1·58	19	2	+1·7	4·2	—2·7	5	20	2	1	0	0	1	0	2	5	14	4	3	0	0	3	2	0	Jodhpur.
2·6	0	2·4	0·22	+0·04	0·21	19	1	+0·6	4·7	0	2	0	0	0	0	0	2	25	2	6	16	2	0	0	1	1	3	2	Barmer.
																													RAJPUTANA, EAST—
3·5	—	4·2	2·08	—	0·64	2	6	—	2·1	—	2	2	5	8	0	0	0	0	14	9	4	4	2	1	0	3	5	3	Sikar.
3·3	+0·6	4·3	3·01	+2·57	1·18	20	3	+2·0	3·5	0	0	2	12	2	1	0	0	1	13	9	2	4	1	4	1	0	4	6	Jaipur.
2·9	+0·5	3·3	3·42	+3·05	1·83	20	6	+5·0	1·4	—0·2	0	1	0	1	0	0	0	0	29	1	8	1	3	2	3	5	3	3	Ajmer.
4·1	+1·9	3·8	1·02	+0·78	0·61	21	3	+2·4	1·4	+0·1	0	1	0	0	0	0	1	1	28	2	6	1	1	0	3	1	3	14	Kotah.
3·8	+1·7	4·1	0·89	+0·61	0·30	29	4	+3·2	2·0	0	3	5	0	0	0	0	1	2	20	8	8	3	1	2	1	1	5	2	Jhalawar.
3·5	—	4·0	1·45	+1·25	0·96	19	3	+2·6	1·7	—	1	0	0	0	0	0	0	5	25	1	6	4	5	1	0	2	1	11	Udaipur.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M.

STATION.	Height of barometer cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative humidity %	
		Mean 8 hours I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
GUJARAT—																					
Deesa*	466																				
Bhuj	343	1005·0	+0·5	1002·5	76·3	—3·1	84	31	51·3	—1·0	45	4 days	53·3	75·5	48·9	58·4	10·0	+0·3	9·8	71	+22
Dwarka	37	1014·8	-0·4	1012·3	77·2	-0·7	85	31	60·2	+0·7	57	1	61·6	74·3	57·1	63·4	13·9	+0·2	15·0	74	+4
Jamnagar	60	1014·9	+0·3		76·5	—2·6	83	31	55·2	+2·8	50	4 days	58·3	—	53·0	—	11·3	+0·5	—	69	+5
Rajkot	132	1000·6	0·3	997·6	80·7	-2·6	91	28	53·3	+2·3	42	2	55·2	79·4	50·5	62·2	10·5	+2·3	11·4	69	+16
Veraval	26	1013·6	-1·3	1010·9	82·6		93	31	56·8		49	3,4	60·5	77·9	54·8	67·9	12·1	—	18·8	67	+14
Surat	39	1013·0	—1·1	1010·5	85·4	—1·4	94	31	60·8	+3·0	54	3,4	62·3	82·1	58·4	70·8	15·0	+2·8	20·6	78	+16
Bhavnagar	55	1013·4	-0·8	1010·3	81·5	-2·5	91	28	54·2	+0·2	45	3	56·8	80·3	52·5	64·5	11·6	+3·0	13·6	73	+24
Ahmedabad	163	1010·3	0·5	1007·3	80·4	—4·4	90	28	54·3	+1·7	52	4	61·1	78·9	55·3	63·2	12·4	+3·9	12·7	67	+20
Dohad	1,093	977·5		974·5	81·4	—2·7	88	28,29,30	55·1	+3·1	46	7	58·6	78·5	53·7	61·9	12·2	+2·9	11·4	73	+9
Baroda	115	1011·3	-	1008·1	85·0	—1·3	94	28	55·2	+5·6	44	3,4,5	57·4	81·9	54·8	65·3	13·5	+4·1	13·8	84	+23
CENTRAL INDIA, WEST—																					
Neemuch	1,626	960·4	0	957·9	74·3	—2·8	85	19	50·1	+1·5	44	2	52·8	72·4	49·7	58·7	10·9	+2·6	11·3	81	+23
Indore	1,823	952·5	-0·7	949·7	77·9	—1·6	85	30	52·7	+2·9	42	6,7	55·7	76·2	52·9	61·0	12·5	+2·9	12·3	84	+22
Bhopal	1,643	959·5	-0·4	956·8	76·1	—3·2	83	28	52·7	+2·9	44	7,8	56·5	72·7	54·2	61·8	13·5	+4·6	14·4	86	+29
Guna	1,571	961·6	-0·8	960·2	74·3	-2·8	84	29	49·9	+4·2	41	3	53·5	71·8	50·9	59·6	11·7	+3·4	12·5	85	+20
Gwalior	681	993·8		991·6	70·8		80	2	48·9		39	16,17	54·0	67·6	52·0	59·5	12·3	..	13·8	87	
Madhosagar	757	990·7	-	988·3	71·7		79	2,30	51·6		45	16	55·1	68·8	53·2	58·5	13·0	..	12·2	87	
CENTRAL INDIA, EAST—																					
Nowgong	750	991·4	+0·4	988·3	73·7	—1·2	82	29	50·8	+4·2	45	16	53·8	70·2	52·6	59·7	13·0	+2·9	12·8	92	+13
Sutna	1,041	980·5	-0·1	977·7	74·5	-0·5	82	30	52·5	+4·4	47	8,9	55·5	71·3	54·5	62·7	14·1	+3·8	15·6	91	+20
Umaria	1,506	964·3		961·8	76·0	—1·0	84	30	53·5	+7·0	45	7,8	56·1	72·2	54·5	62·2	13·9	+3·8	15·0	89	+18
BERAR—																					
Akola	925	983·1	-0·7	979·7	83·0	-3·1	89	29,30,31	60·6	+5·7	49	6	63·3	80·8	58·4	65·6	15·7	+5·6	14·7	78	+21
Amraoti	1,213	973·6	-0·3	970·6	80·7	-4·1	86	18,31	61·3	+2·2	52	7	63·6	78·9	59·0	64·3	15·0	+4·6	14·0	75	+23
C. P., WEST—																					
Khandwa	1,014	979·2	0·6	975·6	83·0	1·8	89	28,29	56·4	+3·8	44	8	60·7	80·7	56·4	64·6	13·6	+4·1	13·6	76	+17
Hoshangabad	992	981·6	0·8	978·2	78·3	-2·1	85	29	57·7	+3·5	48	7,8	60·2	76·8	56·9	64·2	14·3	+4·2	14.9	81	+22
Saugor	1,808	953·9	0	951·5	72·6	4·1	82	29	54·1	+1·6	49	7,14	56·6	69·2	53·8	59·6	13·6	+4·6	13·5	83	+28
Jubbulpore	1,289	971·9	+0·3	968·8	77·9	+0·5	87	29	54·3	+6·4	46	7,8	57·9	74·5	55·9	63·6	14·4	+3·5	15·1	88	+14
Seoni	2,027	946·7	+0·3	944·1	75·9	-2·9	83	28,29	55·4	+3·5	48	8	58·9	73·0	56·0	62·3	14.1	+3·5	14·9	83	+19
Nagpur	1,010	980·7	0·6	977·8	81·4	-2·3	88	31	58·9	+2·9	50	7	62·3	78·4	59·0	65·0	16·0	+5·1	15·0	81	+24
C. P., EAST—																					
Gondia	1,026	980·7		978·0	78·8		84	4 days	59·9		53	6	62·0	76·6	59·7	65·2	16·4		16·1	87	
Pendra	2,046	946·8	+0·2	944·0	73·0	-1·6	79	27	54·4	+3·8	48	6,7,8	58·7	69·1	56·2	61·6	14·4	-3·5	15·7	85	+16
Champa	805	988·6		985·6	80·2		87	30	59·7		54	6,7	61·6	77·7	59·4	64·9	16·4		15·2	87	—
Raipur	970	983·0	+0·3	979·7	80·9	0·7	86	30,31	54·4	-3·6	53	6,7	64·7	77·6	60·7	65·9	16·3	-4·0	16·5	79	+14
Titlagarh	691	992·6		988·8	83·3		89	31	59·9		53	9,12	64·3	80·3	60·4	65·8	16·2		15·1	79	
Kanker	1,318	970·9	0	967·5	81·1	-1·5	86	31	55·5	-3·2	50	5 days	60·8	78·9	58·2	68·8	15·4	+2·5	19·5	84	+10
Chanda	634	994·0	0·2	990·6	83·4	-1·8	89	29	59·9	+4·5	49	7,8	64·0	80·3	60·2	65·0	16·1	-2·1	14·9	79	—[illegible]
Jagdalpur	1,815	953·7	-0·2	950·0	81·5	—0·3	87	27	55·7	+5·3	46	10	60·3	77·8	57·8	63·0	15·3	+0·9	13·7	85	+[illegible]

*Data not reliable.

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity miles per hour.		Wind direction--Number of winds from																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
4	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	
																														GUJARAT— Deesa*
9	+0·3	2·0	0·63	+0·55	0·45	19	2	+1·8	3·5	—0·6	1	0	0	0	0	0	0	0	30	9	17	0	0	1	0	0	0	4		Bhuj.
7	+0·7	2·5	0·02	—0·08	0·02	19	0	+0·2	9·9	+1·7	9	20	2	0	0	0	0	0	0	4	10	1	1	0	0	0	15	0		Dwarka.
0	+0·7	..	0	—0·05	0	..	0	—0·1	7·3	+1·3	3	7	4	1	0	0	0	0	16	..	..	..	..	..	..	..	..	..		Jamnagar.
4	+0·5	2·3	0·12	+0·08	0.12	19	1	+0·9	6·4	+2·3	5	11	8	2	0	1	0	0	4	8	11	6	1	0	2	1	1	1		Rajkot.
4	+1·0	2·5	0	—0·04	0	..	0	—0·1	9·1	..	8	20	3	0	0	0	0	0	0	2	5	0	4	5	6	6	3	0		Veraval.
5	+2·0	3·0	0·09	—0·02	0·08	20	0	—0·2	3·5	+0·7	8	8	3	0	0	0	0	1	11	4	4	0	0	0	1	6	12	4		Surat.
5	+0·8	3·0	1·73	+1·64	1·68	19	1	+0·9	3·9	+0·3	2	2	1	1	0	7	6	4	8	5	11	6	1	3	0	1	2	2		Bhavnagar.
5	+0·9	3·0	2·26	+2·24	1·21	19	2	+1·9	4·7	+1·0	7	12	7	1	1	0	0	2	1	8	7	2	0	1	3	4	5	0		Ahmedabad.
1	+2·2	2·8	0·21	+0·12	0·11	21	2	+1·8	5·9	+3·4	3	9	4	5	5	1	1	1	2	4	6	2	3	2	6	4	3	1		Dohad.
5	+2·3	3·5	0·20	+0·14	0·20	19	1	+0·9	2·2	—0·5	3	12	1	0	0	0	0	0	15	6	8	1	0	0	0	4	3	9		Baroda.
																														CENTRAL INDIA, WEST—
8	+2·9	5·2	1·43	+1·23	0·75	28	4	+3·6	4·3	+0·3	0	25	2	1	0	0	0	1	2	2	18	2	2	0	2	1	1	3		Neemuch.
1	+3·0	4·5	0·25	+0·01	0·10	2	1	+0·5	3·2	+1·2	1	8	2	3	2	0	0	0	15	5	6	2	2	8	2	2	2	2		Indore.
6	+3·3	4·8	3·59	+3·35	1·35	28	6	+5·2	3·2	+1·1	1	8	0	2	2	2	0	1	15	4	8	2	3	0	1	2	4	7		Bhopal.
9	+2·1	5·5	1·62	+1·36	0·50	14,29	5	+3·8	3·8	+0·9	1	2	5	4	0	0	2	1	16	7	4	3	4	2	0	5	1	5		Guna.
6	..	5·0	3·16	..	1·40	5,12	3	..	1·6	..	0	1	0	0	0	0	1	3	26	4	12	2	1	0	0	0	6	6		Gwalior.
9	..	5·1	6·23	..	5·02	5	4	..	3·6	..	1	4	0	0	1	9	0	2	14	3	13	2	3	0	0	1	7	2		Madhosagar.
																														CENTRAL INDIA, EAST—
8	+2·1	5·0	1·90	+1·31	0·93	5	4	+2·5	2·2	+1·1	2	2	4	0	1	4	2	0	16	4	15	4	0	0	1	4	0	3		Nowgong.
2	+2·7	5·4	2·09	+1·26	0·62	6	5	+3·2	2·3	+0·2	1	4	3	1	0	1	1	1	19	2	4	4	2	1	2	3	4	9		Sutna.
5	+2·4	5·3	2·45	+1·44	1·15	5	5	+2·9	2·0	—0·1	3	1	3	0	1	1	0	3	15	7	6	1	2	0	2	2	8	3		Umaria.
																														BERAR—
4	+3·3	5·1	2·53	+2·18	1·41	25	4	+3·3	3·9	+1·2	0	9	10	3	2	0	1	0	6	2	6	7	5	2	1	0	2	6		Akola.
9	+3·9	4·5	4·01	+3·64	1·41	4	5	+4·2	6·0	+2·4	2	16	8	5	0	0	0	0	0	0	8	1	12	0	5	0	5	0		Amraoti.
																														C. P., WEST—
3	+3·0	4·3	0·57	+0·26	0·26	22	2	+1·4	4·0	+1·3	4	7	9	1	0	0	1	1	8	4	1	4	6	8	3	3	1	1		Khandwa.
9	+2·8	5·1	1·27	+0·87	0·47	28	5	+4·1	3·0	+0·9	1	3	16	1	0	0	0	0	10	2	5	10	3	2	1	1	1	6		Hoshangabad.
6	+4·4	7·3	7·11	+6·54	2·87	29	8	+6·7	8·8	+0·5	1	12	7	8	1	1	0	1	0	4	12	4	3	1	2	2	2	1		Saugor.
5	+3·6	5·1	1·29	+0·47	0·64	29	3	+1·3	2·5	+1·1	4	6	2	6	0	0	0	2	11	7	9	1	2	2	1	1	2	6		Jubbulpore.
3	+3·3	5·0	4·05	+3·50	1·45	5	6	+4·8	2·7	+0·4	5	5	2	1	2	0	0	0	16	2	3	5	8	7	3	0	1	2		Seoni.
3	+2·5	4·5	3·72	+3·35	1·98	4	3	+2·2	3·4		7	7	2	0	0	0	0	1	14	5	7	10	2	2	1	0	0	4		Nagpur.
																														C. P., EAST—
2		2·9	4·32		1·67	4	6		1·9		6	2	3	6	0	1	4	3	6	11	5	1	3	3	0	1	5	2		Gondia.
3	+1·8	5·6	2·93	+2·08	1·30	5	4	+2·3	2·6	—0·2	5	2	0	0	4	2	2	3	13	12	4	1	1	8	0	0	3	2		Pendra.
5		4·8	1·37		1·00	6	4		3·3		12	4	4	0	0	0	0	7	4	14	3	4	1	0	0	3	3	3		Champa.
4	+2·5	4·3	0·67	+0·30	0·20	25	2	+1·2	2·6	+0·8	0	14	3	0	0	0	0	1	13	0	14	0	1	0	1	0	3	12		Raipur.
5		2·3	0		0		0		1·2		0	1	0	2	2	0	0	1	25	9	10	2	1	0	0	0	1	8		Titlagarh.
3	+2·6	5·0	0·65	+0·45	0·58	25	1	+0·5	1·6	—0·2	1	1	0	0	1	0	0	0	28	6	6	1	0	0	1	3	7	7		Kanker.
5	+2·5	4·3	0	—0·31	0		0	—0·5	2·5	+0·9	0	7	2	3	0	1	0	5	13	0	12	0	0	0	3	0	6	10		Chanda.
9	+0·5	3·7	0	—0·39	0		0	—0·7	2·0	+0·7	0	4	0	0	0	2	0	3	22	0	9	0	0	0	9	0	4	9		Jagdalpur.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature, °F		Wet bulb temperature °F		Vapour pressure millibars.			
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	2
KONKAN—																				
Dahanu	15	1013·4	—	1011·1	79·8	—	88	8	63·0	—	54	5	65·1	76·9	62·6	73·4	18·3	—	26·5	8
Bombay	35	1012·4	—1·1	1009·9	83·2	0	90	8	68·3	+1·6	61	5	70·8	78·9	66·0	70·8	19·6	+1·4	22·1	7
Alibag	23	1013·5	—0·3	—	81·9	—0·7	90	10	65·8	+2·3	57	5	68·2	—	65·0	—	19·7	+3·8	—	8
Harnai	66	1011·3	—	1009·2	81·5	—	87	8	72·9	—	65	5	74·1	78·9	68·1	72·5	20·8	—	24·3	7
Devgad	117	1009·0	—	1006·3	86·6	—	91	9	73·3	—	65	6	74·9	83·1	70·3	75·0	23·3	—	26·0	7
Marmagao	202	1001·5	—0·4	1003·0	85·2	—0·7	91	18,29	71·7	+1·4	68	13,14,15	76·3	82·7	70·2	73·0	22·5	+3·2	23·3	7
Honavar	85	1010·8	—	1007·1	89·8	—	96	18	70·3	—	65	13	74·8	84·6	68·9	75·4	21·4	—	26·1	
BOMBAY, DECCAN—																				
Jalgaon	660	990·6	—	987·8	84·3	—	91	28,29,31	57·8	—	47	5,6	61·8	83·4	57·9	67·8	14·7	—	15·6	
Malegaon	1,432	965·7	—0·5	967·2	83·7	—2·5	90	28,31	56·6	+4·2	45	5,6	60·7	82·0	56·9	64·0	14·1	+5·0	12·3	
Ahmednagar	2,154	940·7	—1·1	937·7	82·2	—2·3	87	29,30,31	57·5	+4·3	46	8	61·5	79·8	56·2	62·8	13·3	+3·5	12·7	
Poona	1,834	951·6	—0·7	948·1	86·0	—0·5	91	29,30,31	58·7	+5·7	49	6	60·8	83·1	58·5	65·6	15·8	+5·1	14·4	
Sholapur	1,570	961·1	—0·2	957·6	86·8	—0·6	91	31	63·6	+4·3	56	14	66·5	84·4	59·2	65·1	14·2	+3·3	13·3	
Miraj	1,817	951·9	—1·2	948·0	87·9	+1·7	93	31	62·1	+4·5	54	15	65·9	85·9	59·5	67·3	14·7	+2·2	15·3	
Kolhapur	1,885	949·9	—	946·2	86·5	—	92	28,31	61·0	—	55	1,14	63·6	84·4	59·1	65·1	15·3	—	13·3	
Bijapur	1,950	948·4	0	944·4	87·7	+1·5	103	15,16	63·0	+2·8	52	6	67·7	84·5	61·6	67·1	16·2	+2·9	15·6	
Belgaum	2,562	927·5	—0·4	924·4	83·8	—0·1	87	27,31	59·9	+2·2	53	15,16,17	64·5	81·8	60·7	64·7	16·6	+4·0	14·0	
Gadag	2,131	941·9	—0·4	938·3	87·2	+1·9	91	23	64·6	+3·1	60	14	70·2	84·2	62·5	66·2	16·2	+2·3	14·7	
HYDERABAD, NORTH—																				
Aurangabad	1,905	950·0	—0·5	946·9	82·0	—2·7	88	30	60·7	+4·0	52	7,8	64·3	80·4	58·7	67·0	14·6	+4·9	17·1	
Parbhani	1,350	967·1	—	963·8	85·2	—	92	31	60·3	—	50	7	64·8	82·7	59·9	68·6	15·5	—	17·6	
Bidar	2,178	940·2	—	937·0	80·5	—3·2	85	29	62·5	+1·6	59	5 days	65·3	80·2	60·1	63·6	16·1	+1·8	13·3	
Nizamabad	1,250	971·3	—1·0	968·2	85·1	—1·1	89	4 days	61·5	+3·9	52	8	65·8	83·0	60·5	65·8	15·6	+1·6	14·0	
Ramagundam	527	998·2	—	994·3	86·1	—	90	19,29	64·1	—	54	9	68·5	83·5	63·5	67·1	17·7	—	15·3	
HYDERABAD, SOUTH—																				
Gulbarga	1,503	962·9	—0·8	959·3	84·5	—2·8	88	26	63·0	+3·0	58	3	66·5	84·7	60·9	66·4	16·0	+3·5	14·7	
Raichur	1,311	969·5	—0·6	965·9	85·6	—1·2	89	24,31	66·9	+2·2	63	12,13	69·0	84·4	64·6	67·0	18·9	+3·0	14·7	
Hyderabad (Begumpet).	1,778	954·3	—0·2	951·3	84·0	—0·7	88	24,28,29	62·4	+3·7	54	13	64·2	80·3	62·3	67·0	18·4	+2·8	17·1	
Hanamkonda	881	985·1	—0·6	981·6	84·7	—0·3	89	24,29	65·0	+3·1	55	8	67·7	82·5	64·7	67·0	19·5	+2·0	15·6	
Khammameth	367	1003·3	—	999·3	86·0	—	90	24	64·1	—	57	8,9	70·0	84·3	66·4	70·3	20·6	—	19·0	
MYSORE—																				
Chitaldrug	2,405	932·3	—0·6	928·6	84·0	—0·8	87	23	64·2	+1·6	59	14	68·7	82·6	62·6	64·1	16·9	+1·7	12·9	
Hassan	3,149	908·4	—	905·2	81·7	—1·1	85	23,26,31	60·6	+3·6	55	13	64·6	79·3	61·4	63·9	17·3	+1·6	14·0	
Bangalore	3,021	912·6	—0·4	909·5	80·0	—0·3	85	31	61·0	+3·7	56	12	63·7	77·5	60·9	62·6	17·1	+1·1	13·3	
Mysore	2,518	928·6	—0·7	925·3	82·5	—1·7	87	23	63·5	+2·7	58	13	67·2	81·5	63·4	64·4	18·4	+1·9	13·7	
MALABAR—																				
Mangalore	72	1010·5	—0·7	1007·0	88·2	—0·9	92	30	72·6	+2·0	68	13	75·4	84·3	71·4	75·4	24·5	—4·1	26·0	
Calicut	27	1011·4	—1·0	1008·0	89·3	+1·4	93	24	73·3	+2·4	71	1,14,15	75·0	87·1	71·5	77·4	24·8	+2·0	27·7	
Palghat	319	1002·1	—	997·9	91·3	—	94	7,8,15	73·9	—	71	25	76·6	88·8	71·1	74·7	23·5	—	23·0	
Cochin	10	1012·2	—0·6	1008·5	87·7	+0·8	90	16,20,24	74·7	+1·2	73	10,28,29	78·3	85·3	72·3	75·7	24·4	+2·5	26·0	
Alleppey	12	1011·8	—	1008·4	89·6	—	92	4 days	74·1	—	70	2	78·6	85·2	74·5	76·8	27·3	—	27·7	
Trivandrum	211	1004·5	—0·9	1001·9	88·8	—	92	21	73·3	—	70	1	75·7	84·8	72·3	75·0	25·5	+2·0	25·2	
Nagercoil	195	1005·5	—	1002·3	92·8	—	95	8,17,23	75·9	—	71	25	79·0	86·5	70·6	74·2	21·7	—	23·3	

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10″ or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	
																														KONKAN—
4·5	—	3·0	0·47	—	0·35	19	1	—	8·0	—	5	6	14	5	1	0	0	0	0	16	0	0	0	0	1	3	11	0		Dahanu.
3·7	+2·1	2·5	0·34	+0·20	0·20	19	1	+0·8	6·9	+0·3	8	12	6	3	0	0	0	0	2	6	0	0	1	0	1	2	20	1		Bombay.
3·5	+1·6	—	0·64	+0·59	0·38	19	2	+1·8	2·7	—1·9	3	9	5	4	0	0	0	0	10	—	—	—	—	—	—	—	—	—		Alibag.
0·1	—	0	0·52	—	0·22	22	3	—	7·7	—	1	12	11	2	0	0	2	3	0	0	0	1	0	0	2	14	14	0		Harnai.
3·3	—	3·3	0·05	—	0·05	18	0	—	7·8	—	0	7	22	0	0	0	0	2	0	1	1	0	0	0	3	2	24	0		Devgad.
2·8	+0·9	3·3	0·15	+0·15	0·08	18	0	0	6·6	+1·0	1	7	16	6	0	0	0	1	0	1	0	0	1	0	4	14	11	0		Marmagao.
4·0	—	3·8	0·45	+0·40	0·16	25	2	+1·9	2·5	—	0	5	21	0	0	0	0	0	5	0	0	3	0	0	0	15	12	1		Honavar.
																														BOMBAY, DECCAN—
5·4	—	4·0	0·76	+0·32	0·39	28	3	+2·4	3·8	—	1	0	10	11	2	2	0	0	5	2	7	7	2	2	1	4	6	0		Jalgaon.
4·0	+2·2	4·4	1·29	+1·12	0·37	19	4	+3·7	3·2	—0·4	1	0	0	0	0	2	0	0	28	1	3	2	7	3	7	0	2	6		Malegaon.
3·2	+1·6	3·3	0·79	+0·58	0·36	23	4	+3·6	4·1	+0·4	0	2	0	5	0	7	0	17	0	0	5	0	9	4	11	0	1	1		Ahmednagar.
3·7	+2·0	4·2	1·38	+1·32	0·88	23	3	+2·8	1·6	—2·1	0	0	1	0	0	1	1	0	28	0	2	6	0	1	5	5	3	9		Poona.
4·1	+2·5	5·3	0·02	—0·13	0·02	19	0	—0·3	6·9	+1·2	0	5	4	15	1	1	0	1	4	2	2	3	14	2	1	1	2	4		Sholapur.
3·5	+1·4	6·2	0·03	+0·02	0·03	23	0	—0·1	5·0	+0·6	0	4	11	1	1	0	0	3	11	1	2	12	5	3	0	3	1	4		Miraj
2·4	—	3·2	0·18	—	0·18	23	1	—	5·2	—	0	5	6	1	0	3	3	1	12	2	5	1	5	4	2	4	2	6		Kolhapur.
2·4	+0·5	3·8	0·06	—0·12	0·06	19	0	—0·2	4·4	+1·6	2	0	0	11	8	2	1	0	7	2	5	9	9	2	0	1	1	2		Bijapur.
1·8	—0·1	2·8	0·06	—0·06	0·06	19	0	—0·2	3·3	+0·5	0	19	11	0	1	0	0	0	0	1	19	9	0	1	0	0	1	0		Belgaum.
3·0	+1·3	4·7	0·03	—0·14	0·03	19	0	—0·2	5·2	+0·6	0	9	11	3	0	0	1	1	6	1	12	13	2	0	0	1	1	1		Gadag.
																														HYDERABAD, NORTH—
3·3	+1·3	3·3	0·94	+0·65	0·47	25	3	+2·5	4·6	0	1	10	14	0	1	1	1	0	3	1	1	9	4	7	4	4	0	1		Aurangabad.
4·0	—	4·6	0·21	—0·15	0·12	25	1	+0·3	0	—	1	8	18	2	0	0	0	1	1	2	10	13	2	0	1	0	2	1		Parbhani
3·5	+1·9	5·5	0	—0·22	0	—	0	—0·5	7·5	+1·1	0	2	7	10	6	4	1	1	0	2	8	12	3	2	1	1	1	1		Bidar.
2·8	+1·0	3·7	0	—0·20	0	—	0	—0·4	3·0	+0·9	1	2	3	8	0	1	0	0	16	6	6	3	6	2	0	1	2	5		Nizamabad.
4·1	—	3·2	0	—	0	—	0	—	3·8	—	2	3	3	12	4	0	1	0	6	3	4	8	10	4	0	0	1	1		Ramagundam.
																														HYDERABAD, SOUTH—
2·0	+0·4	3·5	0	—0·21	0	—	0	—0·3	6·7	+2·0	0	16	8	4	1	0	1	1	0	5	3	6	9	1	5	0	2	0		Gulbarga.
3·0	+1·1	4·5	0	—0·13	0	—	0	—0·2			0	1	8	20	2	0	0	0	0	1	1	7	19	2	0	0	1	0		Raichur.
4·0	+1·2	4·1	0	—0·31	0	—	0	—0·5			0	3	5	11	0	0	0	0	12	0	2	14	12	0	1	0	0	2		Hyderabad (Begumpet).
4·1	+0·8	3·3	0	—0·40	0	--	0	—0·7	4·7	+1·1	2	1	0	9	15	2	0	0	2	4	3	1	14	5	2	0	1	1		Hanamkonda.
3·3	—	3·5	0·04	—	0·04	6	0	—	3·6	—	8	0	10	6	0	0	0	0	7	7	1	7	14	1	0	0	1	0		Khammameth.
																														MYSORE—
2·5	—0·2	5·3	0·12	—0·13	0·09	19	0	—0·3	5·7	+1·1	0	0	12	16	0	0	1	0	2	0	4	17	5	1	1	0	0	3		Chitaldrug.
3·7	+0·6	4·6	0·16	—0·01	0·11	24	1	+0·7	4·3	+1·2	0	6	14	7	0	0	0	0	4	1	2	18	6	0	2	0	0	2		Hassan.
5·9	+2·2	5·6	0·42	+0·18	0·27	19	2	+1·5	7·5	+2·4	0	4	17	9	1	0	0	0	0	1	7	12	9	1	0	1	0	0		Bangalore.
5·1	+1·7	6·0	0·42	+0·28	0·26	24	1	+0·7	7·6	+1·7	0	16	10	1	0	1	0	0	3	3	15	11	1	0	0	0	0	1		Mysore.
																														MALABAR—
3·1	+0·6	3·1	1·25	+1·14	1·25	19	1	+0·8	5·1	+0·3	0	2	26	2	0	0	0	0	1	2	0	0	0	0	4	7	17	1		Mangalore.
4·6	+1·9	4·7	3·20	+2·85	2·05	24	3	+2·4	6·5	+1·3	0	11	17	3	0	0	0	0	0	0	0	0	0	0	6	16	9	0		Calicut.
2·2	—	4·3	2·44	—	1·24	24	3	—	7·5	—	0	0	19	11	0	1	0	0	0	0	3	22	3	0	0	1	0	2		Palghat.
5·1	+2·7	5·2	0·54	—0·35	0·50	18	1	—0·1	5·3	+1·2	0	11	18	1	0	0	0	0	1	0	0	0	0	1	2	24	4	0		Cochin.
5·1	—	4·7	1·05	—	0·55	12	3	—	4·8	—	0	2	13	8	1	0	0	0	7	0	0	0	0	0	2	13	15	1		Alleppey.
5·7	+0·4	4·9	1·15	+0·36	0·53	31	3	+1·3	3·2	+0·4	3	16	4	2	0	0	0	1	5	0	1	0	0	4	20	6	0	0		Trivandru
5·2	—	7·1	1·86		1·75	25	2	—	8·5	—	1	22	6	0	0	0	1	1	0	1	14	2	0	0	7	5	1	1		Nagercoil.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M.

STATION.	Height of bar cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity. %	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I. S. T.	Mean 8hrs. I. S. T.	Mean 17 hrs. I.S.T.	Mean 8 hrs I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
MADRAS, SOUTH-EAST—																					
Pamban	37	1012·5	—0·1	1009·3	81·8	—0·8	84	25	75·2	+0·7	73	2,12	79·0	78·7	75·3	75·3	28·3	+1·4	28·4	84	—2
Madura	437	998·6	—0·8	994·7	86·9	+1·1	90	15,16,17	70·8	+2·4	67	2	74·7	84·6	70·5	72·5	23·6	+1·3	21·8	80	—2
Negapatam	31	1012·9	—0·4	1010·1	81·8	—0·5	83	5 days	74·4	+2·6	69	12	76·6	79·8	72·8	74·5	25·9	+1·4	26·8	82	—0
Trichinopoly	255	1005·8	—0·3	1001·9	87·8	+0·5	91	10,16	71·4	+3·2	69	4 days	74·8	85·2	70·7	72·9	23·8	+1·5	22·1	81	+2
Coimbatore	1,341	967·9	—0·8	964·3	86·2	+0·2	89	14,31	68·7	+3·8	66	2,11	70·5	84·3	67·0	69·1	21·0	+0·5	17·4	83	0
Salem	913	982·7	—0·8	978·4	89·5	+1·4	94	16	68·1	+3·1	65	19	69·8	86·3	66·1	70·2	20·3	+0·2	18·0	81	+2
Cuddalore	39	1013·2	—0·4	1010·2	82·4	—0·3	84	6,17	70·5	+1·6	65	12	72·3	79·7	70·4	73·5	24·5	+0·5	25·3	91	+4
Vellore	703	990·7	—0·2	986·7	84·9	+1·0	88	6 days	67·1	+2·9	61	12	69·7	83·3	68·0	71·1	22·7	+2·0	20·5	91	+2
Madras	51	1013·2	—0·3	1010·1	83·5	—1·8	85	7 days	69·7	+2·6	65	11	73·2	79·9	70·9	72·5	24·8	+1·1	23·9	89	+2
Arogyavaram	2,299	936·9	—	933·5	81·3	—	86	31	60·9	—	55	12	65·9	78·9	62·5	64·3	17·9	—	14·6	83	—
MADRAS, DECCAN—																					
Cuddapah	428	1000·2	—0·5	996·5	(a) 91·3	+3·2	95	31	69·9	+4·2	67	19	80·3	(a) 81·9	70·6	71·6	21·2	+1·1	(a) 21·8	60	—17
Bellary	1,473	964·0	—0·4	960·1	86·0	—1·8	90	23	65·3	+3·0	62	12,13	68·4	84·7	64·4	68·3	18·9	+3·7	16·2	79	+12
Kurnool	923	983·3	—0·2	979·4	87·7	—0·7	91	7,26,31	64·7	+3·1	60	12,14	68·1	85·6	63·9	67·1	18·5	+2·3	14·3	79	+7
Rentichintala	348	1003·7	—	999·7	85·3	—1·9	90	24	64·7	+3·0	59	13	68·8	85·1	66·0	68·6	20·5	+3·3	16·4	86	+14
Anantapur	1,148	974·9	—	970·9	86·5	—	90	6	66·7	—	59	13	72·8	84·5	66·1	68·0	18·9	—	15·9	69	—
MADRAS COAST, NORTH—																					
Nellore	66	1012·8	—0·8	1009·8	85·1	—0·1	89	24	68·8	+1·3	64	12	71·4	80·8	69·7	72·1	24·0	+0·9	22·9	91	+4
Ongole	38	1014·2	—	1011·0	83·5	—	88	7	68·3	—	65	13,22	70·7	79·9	69·3	74·7	23·8	—	27·0	93	—
Masulipatam	10	1015·5	—0·4	1012·4	81·3	—1·7	84	79	69·1	+3·1	66	22	72·3	78·9	69·9	73·8	23·8	+1·7	26·2	88	+2
Cocanada	26	1015·7	+0·3	1012·3	79·5	—1·6	82	7	68·5	+2·1	64	13	74·8	77·7	70·2	72·5	23·2	+3·0	24·9	79	+1
Vizagapatam	126	1011·9	—0·1	1009·6	80·1	—0·5	82	20,28	69·2	+1·8	64	21	72·5	77·2	68·2	70·8	21·6	+1·9	22·8	79	+5
Calingapatam	19	1015·4	—0·6	1012·8	79·4	—2·4	82	6 days	65·5	+2·0	60	13	67·8	77·2	64·8	70·1	19·6	+0·4	22·0	84	+1
HILL STATIONS *EXCLUDING* KASHMIR—																					
Shillong	4,921	853·0	+0·5	850·5	61·5	+1·4	69	3	39·1	+0·3	34	16,24	51·0	53·5	46·1	50·0	8·7	+0·1	10·9	67	—6
Cherrapunji	4,309	872·3	+0·9	869·7	61·2	+0·9	67	2	46·5	+0·4	43	16	55·2	54·8	49·7	51·4	10·0	+0·3	11·6	65	—1
Atjal	3,599	893·9	—	892·0	68·3	—	72	2,3,31	52·1	—	49	8,13,18	58·2	61·4	53·5	55·8	12·2	—	13·1	75	—
Darjiling	7,432	777·3	+0·5	774·9	52·3	+5·3	63	2	37·5	+2·1	34	25	43·6	43·0	40·0	40·3	7·1	+0·1	7·6	76	—[illegible]
Kalimpong	3,965	882·6	—0·3	880·7	62·0	+2·6	65	4 days	48·4	+2·2	45	1,4	50·8	54·5	47·9	50·8	10·2	+0·2	11·3	81	+[illegible]
Katmandu	4,388	870·7	—	867·4	65·5	+0·9	70	30	35·6	—0·6	31	6 days	40·6	57·5	38·9	49·5	7·5	+0·7	8·9	85	—[illegible]
Muktesar	7,592	772·5	—0·4	771·3	52·1	+2·3	60	9	36·5	+1·0	31	4,15	40·0	46·0	32·6	38·6	3·6	—0·6	5·3	47	—[illegible]
Mussoorie	6,699	798·0	—	794·2	54·1	+4·6	64	8	38·1	+1·2	34	25	43·9	46·8	36·5	41·4	4·8	—0·1	6·9	50	—[illegible]
Simla	7,224	781·6	0	781·5	50·0	+2·5	57	8	37·1	+1·7	33	13,25	40·9	45·0	33·5	39·4	4·0	0	6·2	47	+
Abu	3,945	883·4	+0·4	883·9	66·3	+0·4	72	19,26,27	47·3	—3·4	39	2,5	51·4	56·3	46·2	47·9	8·6	+2·8	8·0	63	+1
Pachmarhi	3,528	897·6	0	895·4	70·1	—1·9	76	28,29	50·5	+2·8	41	8	54·8	67·0	52·7	59·0	12·7	+2·9	13·8	87	+2
Mahabaleshwar	4,534	864·7	—0·6	863·2	72·4	—2·0	78	31	56·3	—0·8	51	6,7,13	58·3	67·7	54·1	58·7	12·7	+3·4	13·2	74	+1
Mercara	3,781	887·1	—0·6	884·7	73·7	—3·4	77	24,27,31	58·7	+1·5	54	14	61·4	73·8	58·8	62·8	15·9	+0·8	15·1	86	+
Ootacamund	7,364	781·4	+0·4	779·8	66·7	+0·8	72	27,30	42·1	—0·9	36	13,14	45·7	59·9	43·9	54·6	9·2	+1·7	12·7	89	+2
Coonoor*	5,730	828·6	—	—	65·3	—0·9	70	26	50·6	+3·0	44	29	56·0	—	53·1	—	12·8	+2·5	—	83	+1
Kodaikanal	7,688	772·3	+0·4	770·9	61·8	—0·4	66	17,23,27	46·9	+0·3	42	28	51·1	55·6	47·6	53·2	9·9	+2·2	13·0	81	+2
CEYLON—																					
Colombo	24	1011·3	—0·5	1008·0	87·0	+0·1	91	28,29	72·5	+0·6	70	12,25	74·3	83·2	72·0	75·9	25·7	+0·7	27·2	89	+
Trincomalee	24	1012·2	—0·3	1009·4	80·9	—1·2	84	19,22,23	75·9	+1·3	72	5	77·9	79·4	76·9	75·7	28·2	+1·8	28·7	86	
Hambantota	61	1008·9	—1·1	1006·0	85·7	+1·0	69	12,29	74·1	+1·8	72	4 days	76·3	83·2	73·3	76·7	26·7	+1·9	28·4	86	—
Mannar	12	1012·7	—	1009·6	83·7	—	87	19	75·4	—	73	1,21	77·3	81·2	74·3	75·2	27·6	—	27·1	86	—

* Observations of 30 days

(a) Mean of 30 days.

Cloud amoun (tenths of sky).			Rainfall, inches.				Number of rainy days, (0·10″ or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													MADRAS, SOUTH EAST—
5·2	+1·1	4·3	3·84	+1·27	1·51	31	7	+3·0	10·3	+0·5	15	12	0	0	1	0	0	3	0	16	10	0	0	1	0	0	4	0	Pamban.
5·8	+1·3	6·0	1·89	+1·11	1·40	18	4	+2·5	4·2	—0·3	9	9	2	0	0	0	0	0	11	2	14	12	0	0	0	0	0	3	Madura
6·8	+1·4	5·9	5·34	+2·61	1·78	18	5	+2·0	11·8	+3·9	0	15	2	0	0	0	1	13	0	0	30	1	0	0	0	0	0	0	Negapatam.
3·8	+0·2	5·7	1·14	+0·15	0·68	18	3	+1·3	4·8	+1·4	7	17	0	0	0	0	0	1	6	0	16	12	1	0	0	0	0	2	Trichinopoly.
5·7	+1·4	5·4	0·85	+0·22	0·68	18	1	—0·1	4·5	+1·9	9	15	5	1	0	0	1	0	0	9	15	6	1	0	0	0	0	0	Coimbatore.
4·1	+1·0	5·0	0·46	+0·17	0·33	18	2	+1·3	7·2	+3·3	0	3	23	0	0	0	1	0	4	0	1	22	3	0	0	0	0	5	Salem.
4·9	+0·5	4·8	3·50	+1·15	2·06	18	4	+1·6	6·9	+2·4	3	3	1	0	0	0	0	21	3	0	24	7	0	0	0	0	0	0	Cuddalore.
4·8	+1·3	5·3	1·62	+0·17	0·86	18	3	+0·9	4·6	+2·2	0	2	2	1	0	0	0	0	26	0	3	22	4	1	0	0	0	1	Vellore.
4·0	+0·1	5·5	2·16	+0·75	0·70	17	4	+2·3	12·3	+1·3	2	11	4	0	0	0	0	14	0	0	23	8	0	0	0	0	0	0	Madras.
4·7	—	4·9	0·21	—	0·14	18	1	—	3·3	—	0	0	2	4	7	0	0	0	18	1	10	9	8	0	0	0	0	3	Arogyavaram.
																													MADRAS, DECCAN—
2·9	+0·1	3·3	0	—0·39	0	—	0	—0·6	7·6	+1·0	0	0	8	1	0	0	0	0	22	0	3	25	1	0	0	0	0	2	Cuddapah.
5·5	+2·9	5·4	0	—0·10	0	—	0	—0·3	4·0	+1·3	0	0	6	10	0	0	0	0	15	0	0	14	10	1	0	0	0	6	Bellary.
3·2	+1·1	5·2	0	—0·15	0	—	0	—0·3	4·0	+1·1	0	1	8	6	2	0	0	0	14	0	2	12	9	1	0	0	0	7	Kurnool.
3·7	—0·8	4·1	0·15	+0·14	0·15	1	1	+1·0	3·6	+0·3	0	1	1	1	0	0	0	0	28	1	3	8	16	0	2	0	0	1	Rentichintala.
2·3	—	3·8	0	—0·24	0	—	0	—0·3	7·4	—	0	1	20	3	0	0	0	0	7	0	10	15	1	0	0	0	0	5	Anantapur.
																													MADRAS COAST, NORTH—
4·0	—0·2	4·2	1·19	—0·12	0·90	1	2	+0·6	2·8	0	2	1	1	0	0	0	0	4	23	1	3	23	3	0	0	0	0	1	Nellore.
3·9	—	3·3	0·24	—	0·16	2	1	—	4·0	0	11	11	0	2	0	0	1	5	1	0	3	20	7	0	0	0	0	1	Ongole.
3·4	+1·0	3·4	0·02	—0·18	0·02	1	0	—0·3	6·6	+2·7	3	16	6	0	0	0	0	2	4	0	0	11	18	0	0	0	0	2	Masulipatam.
2·6	—0·8	1·3	0	—0·28	0	—	0	—0·5	8·9	+3·4	1	26	0	0	0	1	0	2	1	0	8	3	20	0	0	0	0	0	Cocanada.
3·5	+0·3	2·8	0·42	—0·01	0·42	7	1	+0·5	4·5	+1·6	11	4	0	0	0	0	3	0	13	0	8	13	7	2	0	0	0	1	Vizagapatam.
5·8	+3·4	5·7	0	—0·22	0	—	0	—0·6	8·5	+3·7	10	1	1	0	0	0	4	15	0	0	5	15	10	1	0	0	0	0	Calingapatam.
																													HILL STATIONS *EXCLUDING* KASHMIR—
3·1	+1·2	6·6	0	—0·52	0	—	0	—1·1	2·5	+1·0	1	2	2	3	0	3	1	0	19	2	2	0	0	0	1	1	6	19	Shillong.
2·9	+0·4	4·5	0	—0·75	0	—	0	—1·5	3·8	+0·3	1	10	7	2	2	8	0	0	1	1	5	0	1	4	15	1	2	2	Cherrapunji.
1·5	—	2·3	0	—	0	—	0	—	3·8	—	0	0	26	0	0	1	3	0	1	0	0	2	0	0	7	18	2	2	Aijal.
(a) 5·0	+0·7	6·1	0·01	—0·52	0·01	22	0	—1·2	(a) 4·2	+1·6	0	1	15	3	0	0	4	0	7	0	0	2	0	0	2	21	1	5	Darjiling.
4·7	+1·5	5·8	0	—0·41	0	—	0	—0·9	5·9	—0·8	1	0	0	2	0	0	2	17	9	0	0	1	24	6	0	0	0	0	Kalimpong.
5·5	—0·7	3·3	0	—0·38	0	—	0	—0·8	1·1	—0·1	0	2	2	1	0	0	0	0	26	8	1	1	0	0	0	0	6	15	Katmandu.
2·6	—1·3	2·9	0·13	—2·03	0·07	19	0	—3·6	6·9	+1·3	1	9	9	1	0	1	6	3	1	0	2	3	1	1	8	12	2	2	Muktesar.
2·8	—1·7	4·8	0·04	—2·67	0·04	19	0	—5·0	2·9	—1·5	7	5	2	4	3	0	0	0	10	1	1	1	8	12	3	1	0	4	Mussoorie.
3·6	—1·1	4·7	0·56	—2·05	0·35	19	3	—1·8	1·7	—2·0	3	2	1	10	7	0	1	0	7	2	2	0	3	8	5	0	1	10	Simla.
1·2	—0·9	1·0	0·77	+0·51	0·55	19	2	+1·4	3·1	—0·4	0	7	0	0	2	1	0	0	21	0	0	0	7	0	0	0	0	24	Abu.
5·6	+3·2	5·1	2·36	+1·72	1·14	30	6	+4·7	1·8	+0·6	0	3	1	4	6	6	0	1	10	3	5	1	4	1	3	1	3	10	Pachmarhi.
3·8	+2·6	3·8	0·82	+0·68	0·70	23	1	+0·8	0·5	—5·4	0	1	5	5	0	0	0	0	20	0	0	1	1	0	1	0	0	28	Mahabaleshwar.
3·6	—0·7	4·1	0·27	+0·11	0·15	24	2	+1·7	5·9	+1·9	0	13	14	0	0	0	1	2	1	0	12	14	0	0	0	3	2	0	Mercara.
2·6	—0·1	6·0	2·74	+1·45	1·12	18	5	+3·2	2·4	—0·7	0	0	3	0	0	0	0	0	28	9	5	6	2	3	0	1	0	5	Ootacamund.
6·9	+2·8	—	5·81	+3·35	3·28	18	5	+2·3	3·8	+0·5	3	1	2	2	0	2	0	3	17	—	—	—	—	—	—	—	—	—	Coonoor.*
4·3	+0·8	8·2	7·46	+4·27	6·48	18	4	0	8·9	+0·3	2	5	3	11	3	0	1	2	4	1	4	1	11	3	0	0	5	6	Kodaikanal.
																													CEYLON—
4·9	—0·2	6·6	4·51	+0·72	1·32	6	7	+1·7	—	—	4	16	4	0	0	1	0	0	6	9	3	0	0	0	2	5	11	1	Colombo.
6·5	+1·1	6·6	5·15	—1·67	0·97	4	11	—2·9	—	—	8	11	5	2	1	0	0	2	2	16	9	4	1	1	0	0	0	0	Trincomalee.
7·2	+2·9	8·6	1·82	—1·13	0·90	31	3	—3·0	—	—	30	0	0	0	0	0	1	0	0	14	9	2	0	5	0	1	0	0	Hambantota.
5·8	—	6·1	5·53	—	2·22	20	8	—	—	—	6	19	4	1	1	0	0	0	0	9	18	3	0	0	0	0	1	0	Mannar.

TABLE III.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M.T.) AT 4TH CLASS STATIONS—JANUARY 19

STATION.	Maximum temperature °F.				Minimum temperature °F.				Mean dry bulb temperature 8 hrs. I. S. T. °F.	Mean wet bulb temperature 8 hrs. I. S. T. °F.	Vapour pressure, millibars.		Relative Humidity %		Mean cloud amount 8 hrs. I. S. T.	Rainfall, inches.				Number of rainy days (0·10″ or more).		Wi
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I. S. T.	Departure from normal.	Mean 8 hrs. I. S. T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ASSAM—																						
Lumding . .	78·0	+ 4·5	80	7 days	45·5	—1·7	43	6·14	66·4	60·5	15·2	+ 1·9	68	—25	..	0	—0·56	0	..	0	—1·4	..
KASHMIR—																						
Jammu . .	68·5	+ 3·4	79	8	49·6	+ 1·8	45	14	51·4	47·8	9·7	+ 1·1	75	+ 4	3·6	1·65	—0·64	0·75	20	3	—0·4	N15W
Kargil . .	20·8	—6·3	31	11	3·3	—6·7	—13	23	..	..	..	..	..	..	3·0	1·13	—0·19	0·52	20	4	+ 0·2	N20I
MYSORE—																						
Balehonnur . .	80·6	—0·3	84	27,29	60·3	+ 1·9	55	14	65·2	62·8	18·5	+ 3·4	87	+ 11	—	0·26	+ 0·21	0·21	24	1	+ 0·8	..
TIBET—																						
Yatung (Chumbi) .	48·6	+ 3·4	55	3	17·9	—1·7	13	20,29	23·5	22·7	3·9	0	90	+ 6	3·7	0·06	—0·50	0·05	30	0	—1·7	..

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M.T.) AT 5TH CLASS STATIONS—JANUARY

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days (0·10″ or more).		DIVISION.	STATION.	Rainfall, inches.				Numbe rainy (0·10″ or
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total of the month.
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7
Assam . .	Mawsynram .	0	..	0	..	0	..	Kashmir . .	Sonamarg . .	3·08	—7·22	1·32	20	5
West Bengal .	Bankura . .	0·25	—0·33	0·25	6	1	—0·2							
	Cooch Behar .	0	—0·26		..	0	—0·5		Gurez . .	1·77	—3·66	0·45	22	8
Bihar . .	Muzaffarpur .	0·10	—0·42	0·10	22	1	—0·1							
	Chapra . .	0·18	—0·39	0·18	6	1	—0·3							
	Arrah . .	0·10	—0·57	0·10	6	1	—0·3	Bombay, Deccan .	Khandala . .	0	—0·10	0	..	0
United Provinces, West.	Meerut (R) .							Madras, South-east	Palamcottah .	2·15	+ 0·44	1·35	31	3
East Punjab .	Dharampore (R) .													
	Kyelang . .	1·37	—1·14	0·45	18	5	—0·7	Sikkim . .	Lachung. . .	1·01	+ 0·21	0·21	19	6
	Dalhousie . .	2·45	—4·67	1·20	20	4	—3·4							

R=Register not received.

Monthly Weather Report, January 1948.

Monthly Means of Upper Winds.

During the month observations of velocity and direction of upper winds were made at 46 stations in India and neighbourhood, by means of pilot balloons. Particulars of the stations, their coordinates, and the approximate times of the regular pilot balloon ascents at each station are given in the table below. 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. Night and morning ascents were restricted to 9 kms. while the afternoon ascents were unrestricted. Data up to 9 kms. are given under table A and data above 9 kms. under table B.

For ascents during the afternoon only, heights were determined by the tail method as described in pages 146-151 of Vol. XXIV, Part 5 of the Memoirs of the India Meteorological Department. For other ascents heights were calculated from the formula—

$$A = K \frac{L^{\frac{1}{2}}}{(L+W)^{\frac{1}{3}}} \quad \text{where}$$

A=Rate of ascent of balloon in metres per minute,

L=Effective free lift of the balloon, in grams,

W=Weight of balloon and attachments in grams,

K=a constant which has been taken to be 84, for ascents during night.

For ascents in the morning the value of K used was different for different regions in India and different seasons.

In tables A and B,

n represents the number of observations,

V represents the mean speed in m/sec. irrespective of direction,

v represents the resultant mean velocity of wind in m/sec.

and D represents the direction of resultant mean wind in degrees east of north.

Monthly means of previous years have appeared in the following publications :—

(1) Up to the end of 1919, in Vol. XXIII (Part III) of the MEMOIRS of this Department.

(2) 1920, in the MONTHLY WEATHER REVIEWS of that year.

(3) 1921-27, in the INDIA WEATHER REVIEWS of those years.

(4) 1928-35, in the UPPER AIR DATA (Part 13) of the respective years.

(5) 1936-43, in the UPPER AIR DATA (Part A) of those years.

(6) 1944-46, under publication in UPPER AIR DATA (Part A) of those years.

(7) 1947, onwards in the respective Monthly Weather Report of every month

Note :—**Data for Minicoy from Aug. '47 to December '47 have also been included in this issue.**

Particulars of Pilot Balloon Stations in India.

Station.	Lat.	N.	Long.	E.	Ht. of Anemometer head a. s. l. in meters.	Date of opening.	Aproximate times of flights.			Remarks.
Ahmedabad	23°	04′	72°	38′	61	19th May 1928	0100	0700	1600	
Allahabad (Bamrauli)	25°	27′	81°	44′	103	28th February 1930	0100	0700	1600	
Ambala	30°	23′	76°	46′	283	1st April 1941	0100	0700	1600	
Anantapur	14°	41′	77°	37′	364	12th February 1946		0700	1600	
Asansol	23°	41′	86°	59′	135	29th May 1942	0100	0700	1600	
Balasore	21°	30′	87°	01′	18	2nd May 1945		0700		
Bangalore	12°	58′	77°	35′	936	19th May 1925	0100	0700	1600	
Bareilly	28°	22′	79°	24′	181	12th January 1943		0700	1600	
Bhopal	23°	17′	77°	21′	526	26th February 1943	0100	0700	1600	
Bhuj	23°	15′	69°	48′	111	14th September 1937	0100	0700	1600	
Bikaner	28°	00′	73°	18′	229	18th October 1946		0700	1600	Shifted from Suratgarl
Bombay	19°	07′	72°	50′	5	14th May 1933	0100	0700	1600	Also worked betv 7th June 1919 and March 1920 and between 25th A 1923 and 2nd J. ary 1925.
Calcutta	22°	39′	88°	27′	19	14th May 1921	0100	0700	1600	Also worked betv 30th March 1919 31st August 1920.
Cochin	9°	58′	76°	14′	3	16th March 1942	0100	0700	1600	
Cooch Behar	26°	20′	89°	27′	53	6th July 1942		0700	1600	
Cuttack	20°	48′	85°	56′	32	5th December 1942	0100	0700	1600	
Deolali	19°	53′	73°	49′	576	January 1946		0700		Means are published March 1947.
Gadag	15°	25′	75°	38′	650	3rd May 1943		0700	1600	
Gaya	24°	49′	85°	01′	117	19th March 1937	0100	0700	1600	
Gopalpur	19°	16′	84°	53′	24	15th February 1946		0700	1600	
Gorakhpur	26°	45′	83°	25′	83	5th January 1943		0700	1600	
Hyderabad (Dn.)	17°	26′	78°	27′	555	1st September 1929	0100	0700	1600	
Jamshedpur	22°	49′	86°	11′	141	23rd July 1942		0700	1600	
Jharsuguda	21°	55′	84°	05′	232	1st May 1944	0100	0700	1600	
Jodhpur	26°	18′	73°	01′	223	15th October 1934	0100	0700	1600	
Jubbulpore	23°	10′	79°	57′	402	30th July 1928		0700	1600	

Particulars of Pilot Balloon Stations in India—*contd.*

STATION.	Lat.	N.	Long.	E.	Ht. of Anemometer head a. s. l. in meters.	Date of opening.	Approximate times of flights (I.S.T.).			Remarks.
dhosagar	26°	13′	78°	00′	232	7th May 1938		0700	1600	
dras	13°	04′	80°	15′	29	8th April 1926	0100	0700	1600	
legaon	20°	33′	74°	32′	443	8th May 1943	0100	0700	1600	
ngalore	12°	52′	74°	51′	40	4th June 1928	0100	0700	1600	
sulipatam	16°	11′	81°	08′	10	8th April 1942	0100	0700	1600	
nicoy	8°	20′	73°	00′	16	14th April 1941		0700	1600	
gercoil	8°	10′	77°	26′	68	18th October 1945	0100	0700	1600	
gpur	21°	09′	79°	07′	309	23rd April 1943	0100	0700	1600	Also worked between 20th August 1915 and 15th November 1915.
w Delhi	28°	35′	77°	12′	227	20th October 1946	0100	0700	1600	Also worked between 16th November 1929 and January 1932
ona	18°	32′	73°	51′	560	5th January 1925	0100	0700	1600	
t Blair	11°	40′	92°	43′	93	29th October 1945	0100	0700	1600	
ipur	21°	14′	81°	39′	307	15th July 1944	0100	0700	1600	
narsa	25°	52′	86°	37′	40	1st April 1943		0700	1600	
pur	26°	37′	92°	47′	79	12th August 1932	0100	0700	1600	
chinopoly	10°	49′	78°	42′	88	22nd June 1936	0100	0700	1600	
vandrum	8°	29′	76°	57′	73	8th December 1928		0700		
aipur	24°	35′	72°	42′	587	1st July 1947	0100	0700	1600	
ngurla	15°	52′	73°	38′	91	22nd November 1941	0100	0700	1600	
raval	20°	54′	70°	22′	17	13th October 1941	0100	0700	1600	
agapatam	17°	42′	83°	18′	54	24th September 1928	0100	0700	1600	

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	AHMEDABAD.												ALLAHABAD.											
	0100				0700				1600				0100				0700				1600			
	n	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	1·6	23	31	2·2	1·7	50	31	2·8	1·3	21	31	0·5	0·2	42	31	0·8	0·1	182	31	2·0	1·1	31
0·15 a. g.	31	8·4	6·2	29	31	8·9	7·8	56	30	3·8	1·9	30	31	5·3	3·2	322	31	5·1	0·6	343	31	3·9	2·0	31
0·6 a. s. l.	31	6·9	4·4	46	31	8·3	6·0	70	30	4·1	2·0	27	31	5·5	1·9	349	30	4·9	1·0	341	31	3·9	2·1	30
1·0 ,,	31	4·9	1·4	78	31	6·2	2·7	58	30	4·0	1·1	20	31	5·5	2·1	289	30	4·9	2·1	307	29	4·8	3·6	29
1·5 ,,	29	5·3	2·3	194	31	5·8	0·7	251	30	4·6	0·7	253	30	6·4	4·0	274	29	6·7	4·2	286	29	7·0	5·7	28
2·0 ,,	29	7·1	4·3	219	31	6·6	3·6	227	30	6·6	4·4	229	30	8·0	6·5	276	29	8·0	6·5	286	29	7·9	6·9	27
2·5 ,,	27	8·4	5·5	231	30	8·3	6·1	224	30	8·0	6·1	235	14	7·9	6·3	279	29	9·3	7·8	286	27	9·1	7·7	27
3·0 ,,	25	9·9	7·1	243	30	10·1	7·8	228	30	9·7	7·6	239	10	10·5	9·4	263	28	10·7	9·0	281	24	10·5	9·4	27
4·0 ,,	5	11·4	9·0	263	24	10·6	8·8	258	25	12·7	11·4	257					22	11·0	9·2	275	21	13·7	12·9	27
5·0 ,,	1	6·0	6·0	250	18	14·4	12·6	264	22	18·2	17·3	268					18	15·0	12·7	271	19	17·8	17·3	27
6·0 ,,					12	21·8	20·0	262	20	23·9	22·7	264					7	20·6	18·7	262	18	23·8	23·1	26
7·5 ,,					9	33·1	32·3	269	15	34·8	33·6	264									12	31·5	30·1	28
9·0 ,,					2	26·3	26·2	268	3	39·7	38·8	259									3	43·7	43·7	27

Height in km.	AMBALA.												ANANTAPUR.								ASANSOL.			
	0100				0700				1600				0700				1600				0100			
	n	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	1·5	320	31	1·7	1·1	320	31	2·8	1·6	306	31	1·9	1·8	84	31	2·6	2·5	75	31	1·4	1·2	33
0·15 a. g.	25	7·3	6·2	326	26	6·8	5·6	328	26	5·6	4·9	305	31	5·0	4·7	103	31	4·7	4·6	84	30	4·8	3·3	38
0·6 a. s. l.	25	6·9	5·9	326	26	7·2	5·9	329	26	5·6	4·8	306	31	6·1	6·0	112	31	4·7	4·6	87	30	5·8	4·1	34
1·0 ,,	25	4·5	3·4	318	26	6·2	4·8	320	26	5·6	4·8	312	31	8·4	8·1	113	31	4·6	4·4	94	30	5·1	4·4	29
1·5 ,,	25	4·0	2·1	317	26	5·2	3·4	317	26	4·5	3·4	317	31	6·4	5·8	101	31	5·2	4·8	95	30	7·2	6·4	29
2·0 ,,	25	4·6	1·5	307	26	5·0	1·8	305	26	4·4	1·4	303	30	4·6	2·6	81	30	4·0	3·4	94	26	8·1	7·1	29
2·5 ,,	14	4·1	1·1	235	26	4·7	1·4	276	26	3·8	1·1	259	30	4·2	1·4	71	29	3·3	1·3	90	12	6·2	5·1	29
3·0 ,,	15	5·0	3·1	258	24	4·8	1·9	256	25	3·9	1·3	253	30	3·8	0·9	104	29	3·2	0·8	220	9	8·0	6·0	27
4·0 ,,	4	6·1	5·4	236	23	5·9	3·5	250	28	6·3	4·5	273	28	3·8	1·9	273	25	3·9	1·9	271	1	5·0	5·0	1
5·0 ,,					17	11·0	9·9	253	22	10·7	9·0	269	28	5·6	3·7	268	21	5·5	3·1	256				
6·0 ,,					14	13·9	12·7	262	21	14·3	13·2	267	28	8·0	5·7	271	18	7·2	5·5	251				
7·5 ,,					8	20·1	19·3	258	14	21·6	20·4	266	24	10·9	6·7	260	11	11·9	8·5	248				
9·0 ,,					3	25·3	24·3	244	13	29·9	28·3	260	12	9·9	6·8	236	5	15·0	13·8	241				

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	ASANSOL.								BALASORE.				BANGALORE.								BAREILLY.			
	0700				1600				0700				0700				1600				0700			
	n	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	1·3	1·0	314	31	1·7	1·5	311	31	2·0	1·7	318	31	3·6	3·5	94	31	2·9	2·2	93	31	0·3	0·1	69
0·15 a. g. . . .	31	4·4	3·0	336	31	3·2	2·8	325	31	4·5	3·0	9	31	7·9	7·6	102	28	5·0	4·2	94	31	7·5	4·4	329
0·6 a. s. l. . . .	31	4·9	3·3	346	31	3·4	3·0	319	31	3·5	2·4	27	—	—	—	—	—	—	—	—	31	7·9	4·2	307
1·0 „ . . .	31	5·4	3·7	318	31	3·9	3·3	311	30	4·0	3·1	3	31	5·7	5·6	100	28	4·9	4·1	96	31	7·2	3·6	302
1·5 „ . . .	29	6·9	6·3	303	31	5·8	5·1	302	30	5·0	4·2	338	29	6·8	6·0	92	27	4·7	4·3	89	31	6·7	3·2	305
2·0 „ . . .	25	9·4	8·2	302	31	8·0	6·9	298	30	5·8	4·4	313	28	4·9	3·8	68	28	4·0	3·4	87	31	6·7	3·1	288
2·5 „ . . .	20	9·9	8·6	298	27	9·9	8·5	294	30	6·9	5·7	288	28	4·4	2·7	77	28	3·5	2·5	79	29	6·6	3·6	281
3·0 „ . . .	15	11·5	8·6	284	24	11·2	10·0	295	30	8·0	7·0	280	27	5·3	2·0	81	25	3·1	0·9	108	29	8·1	5·1	273
4·0 „ . . .	5	9·8	8·3	255	18	14·5	12·5	281	28	11·3	10·2	275	24	4·8	1·5	123	22	3·5	0·9	7	22	10·3	8·3	271
5·0 „ . . .	1	7·0	7·0	245	7	21·6	19·1	259	27	16·6	15·4	269	20	4·7	0·6	27	20	4·5	0·8	344	16	14·7	12·8	270
6·0 „ . . .	1	18·0	18·0	245	2	19·7	19·5	230	22	21·0	19·6	265	19	5·9	1·8	349	18	5·6	1·5	315	5	13·9	12·1	276
7·5 „ . . .					1	38·0	38·0	235	6	27·7	25·5	258	9	7·7	1·6	35	10	9·7	3·3	311	1	20·0	20·0	300
9·0 „ . . .													2	9·3	9·1	47	5	12·4	5·9	207				

Height in km.	BAREILLY.				BHOPAL.												BHUJ.							
	1600				0100				0700				1600				0100				0700			
	n	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	0·3	270	31	3·6	2·5	53	31	2·9	1·7	84	31	3·6	0·3	344	31	0·9	0·7	21	31	0·3	0·2	39
0·15 a. g. . . .	31	5·5	3·4	283	29	8·2	5·7	80	29	7·4	4·9	104	31	3·7	0·2	337	31	6·7	5·8	12	28	5·2	4·5	27
0·6 a. s. l. . . .	31	5·6	3·0	290	29	7·4	5·5	75	29	6·3	4·2	98	31	3·7	0·1	55	31	9·2	8·2	31	28	9·1	7·7	37
1·0 „ . . .	31	6·3	3·0	299	29	7·7	4·9	110	29	7·0	3·1	142	30	4·0	0·6	218	30	7·7	6·3	40	28	8·0	6·2	35
1·5 „ . . .	31	7·1	2·6	302	28	6·5	2·9	174	28	6·8	3·4	201	29	4·9	2·7	227	29	6·6	3·5	41	28	6·7	4·3	21
2·0 „ . . .	30	6·5	2·6	296	23	6·6	4·0	232	27	7·5	5·6	240	29	6·8	5·0	245	27	5·9	0·8	282	28	6·6	2·9	350
2·5 „ . . .	29	7·1	4·5	290	14	9·0	6·4	253	23	7·9	6·6	254	28	9·3	7·3	252	23	7·0	2·7	251	27	6·8	2·5	287
3·0 „ . . .	27	8·3	6·4	286	9	10·1	8·4	254	21	9·3	7·7	267	21	10·5	8·4	263	20	7·3	4·0	269	27	7·3	4·5	274
4·0 „ . . .	25	12·2	9·6	281	1	5·0	5·0	355	14	10·9	8·4	268	16	11·1	8·6	273	3	11·8	11·0	272	26	11·3	9·0	266
5·0 „ . . .	23	15·4	13·3	278					8	14·3	13·8	266	14	16·1	13·8	275					18	15·7	15·0	266
6·0 „ . . .	20	20·1	17·6	274					5	19·6	19·1	262	11	20·4	18·8	267					15	20·9	20·3	264
7·5 „ . . .	13	26·8	24·0	273									6	32·3	30·5	267					7	35·4	33·6	256
9·0 „ . . .	5	33·3	30·7	261									1	42·0	42·0	275								

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

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Height in km.	BHUJ.				BIKANER.								BOMBAY.											
	1600				0700				1600				0100				0700				1600			
	n	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	3·7	32	31	1·5	0·8	77	31	1·7	0·8	13	31	1·1	0·9	45	31	1·5	1·3	61	31	4·9	4·4	301
0·15 a. g.	31	5·4	4·6	23	28	6·0	3·8	79	31	3·7	2·4	33	30	4·1	3·1	32	31	4·8	3·4	42	31	4·2	2·7	304
0·6 a. s. l.	30	5·9	4·7	28	27	5·5	2·9	54	31	3·9	2·0	30	30	3·3	1·9	15	31	4·3	1·8	55	31	4·0	0·7	295
1·0 „	29	5·4	3·5	26	27	5·2	2·1	31	30	4·1	2·0	21	30	3·3	0·9	204	31	3·6	0·6	83	31	3·8	2·1	172
1·5 „	29	5·5	1·9	15	27	5·5	1·7	8	30	4·2	0·9	349	26	5·6	3·7	183	30	5·7	4·2	190	31	5·5	4·2	186
2·0 „	29	5·7	2·3	290	26	5·7	2·1	352	29	5·7	1·9	274	25	7·1	5·8	172	29	7·3	6·4	190	31	7·7	6·2	190
2·5 „	28	7·3	4·9	273	26	5·8	2·4	303	29	6·9	3·0	262	18	6·5	5·6	187	28	8·1	6·5	197	30	7·4	5·6	211
3·0 „	27	9·2	7·2	266	25	7·4	4·4	285	28	8·6	5·7	264	10	6·9	4·9	222	25	7·0	5·5	240	30	7·7	5·6	248
4·0 „	24	12·7	10·8	280	21	10·2	8·8	267	24	12·4	11·0	276	4	10·4	10·3	280	19	10·3	9·4	272	28	9·9	8·5	260
5·0 „	20	17·3	16·6	268	16	13·7	12·7	260	22	16·3	14·8	259					13	12·9	12·1	280	27	13·8	12·6	265
6·0 „	17	22·6	21·8	262	12	17·4	16·7	258	18	19·2	15·7	263					9	14·7	12·8	275	24	17·3	16·0	266
7·5 „	8	32·8	32·2	264	3	22·8	22·4	253	8	27·3	26·8	261					2	12·3	10·7	284	16	18·4	17·0	269
9·0 „					2	26·0	23·6	252									1	17·0	17·0	315	5	21·1	19·5	287

Height in km.	CALCUTTA.												COCHIN.											
	0100				0700				1600				0100				0700				1600			
	n	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	1·1	0·7	354	31	1·3	0·9	20	31	2·5	1·9	313	31	1·4	1·1	45	31	1·4	1·3	48	31	4·9	4·4	255
0·15 a.g.	29	6·4	2·9	21	31	4·6	2·8	24	31	3·0	2·0	324	31	1·8	1·0	50	31	3·7	3·4	72	31	3·7	3·4	266
0·6 a. s. l. . .	29	4·7	2·6	333	31	3·8	2·2	17	31	3·1	2·5	325	31	3·8	0·9	79	31	3·7	3·0	83	31	2·8	0·9	346
1·0 „	29	5·3	3·7	322	31	4·1	2·5	336	31	3·7	3·2	322	31	3·3	2·2	86	31	3·9	3·0	93	31	3·8	3·3	58
1·5 „	29	7·8	7·0	314	29	5·8	4·9	321	30	5·1	4·7	314	31	4·1	3·2	72	31	4·2	3·6	76	31	4·5	3·9	74
2·0 „	28	8·9	7·6	303	29	6·8	5·5	309	30	6·9	6·7	304	30	4·0	3·2	74	31	4·1	2·6	84	31	4·8	3·8	88
2·5 „	23	10·1	7·9	293	28	8·7	7·0	297	30	9·1	8·0	297	26	3·5	2·1	80	29	3·8	2·0	100	31	4·5	3·1	84
3·0 „	19	10·2	8·5	281	28	10·2	8·6	279	30	11·3	10·0	289	23	3·7	0·9	81	28	3·4	1·9	106	30	4·0	2·0	94
4·0 „	1	7·5	7·5	260	21	13·3	11·5	271	27	15·1	14·0	278	4	4·3	1·0	130	24	4·4	2·1	83	29	4·8	2·6	89
5·0 „					11	15·6	13·9	269	21	18·3	17·4	269	1	3·5	3·5	130	24	5·2	3·3	90	27	5·9	3·5	66
6·0 „					3	15·3	12·0	249	16	22·9	21·6	267					22	6·0	3·0	63	27	6·4	4·2	71
7·5									6	22·3	20·5	260					20	8·8	2·6	119	23	9·3	4·4	92
9·0																	17	9·1	5·9	153	17	9·8	2·4	110

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	COOCH BEHAR.								CUTTACK.												DEOLALI.			
	0700				1600				0100				0700				1600				0700			
	n	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	1·0	83	31	1·1	0·5	225	31	0·2	0·2	24	31	0·3	0·2	14	31	0·3	0·2	56	20	1·1	0·8	26
0·15 a. g.	30	4·8	4·3	85	31	2·7	1·5	228	30	3·8	1·3	124	31	3·3	1·3	5	31	2·5	1·2	30	20	3·3	2·9	101
0·6 a. s. l.	30	4·7	2·8	90	31	3·0	1·8	231	29	4·0	0·8	120	30	3·7	1·3	75	31	2·3	0·7	36	20	1·8	1·4	72
1·0 ,,	30	4·3	2·0	100	31	3·5	1·6	227	30	3·5	1·4	353	30	3·7	2·2	39	31	2·6	0·7	350	20	5·3	4·3	131
1·5 ,,	30	4·3	1·6	104	31	3·8	1·0	248	30	4·1	2·4	333	30	4·3	3·1	360	31	3·7	2·4	310	20	5·4	4·5	172
2·0 ,,	30	5·0	0·9	76	29	4·8	1·0	295	22	4·5	2·9	311	30	4·6	2·5	318	31	5·4	4·1	300	19	6·5	5·5	190
2·5 ,,	30	6·3	1·0	298	28	6·5	3·2	292	18	5·2	3·7	287	30	5·6	3·9	297	29	7·1	5·6	294	19	7·2	5·0	192
3·0 ,,	27	8·8	5·6	278	27	9·2	8·0	285	15	6·5	5·1	265	30	6·1	4·6	283	29	7·6	6·3	287	18	7·2	4·7	228
4·0 ,,	18	14·5	12·4	271	23	16·4	14·6	276	1	4·5	4·5	160	29	9·2	8·2	268	28	10·5	9·2	277	14	11·1	8·5	256
5·0 ,,	10	16·3	14·1	279	14	19·8	17·7	278					25	14·3	13·0	262	23	14·8	13·3	268	9	14·2	13·4	269
6·0 ,,	3	12·3	11·0	259	5	23·1	22·5	257					17	17·9	16·8	259	18	18·4	15·8	262	7	19·4	19·0	272
7·5 ,,	2	20·5	18·2	263	3	28·3	27·5	247					6	23·9	22·5	277	6	24·3	22·3	262	1	18·5	18·5	245
9·0 ,,																	4	30·5	29·1	250				

Height in km.	GADAG.								GAYA.												GOPALPUR.			
	0700				1600				0100				0700				1600				0700			
	n	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	4·3	124	31	2·8	2·0	123	31	1·1	0·2	143	31	1·3	0·7	174	31	2·4	2·0	308	31	3·7	3·3	337
0·15 a. g.	31	7·8	6·9	125	31	3·8	2·9	119	29	3·6	1·8	325	31	3·4	1·6	241	30	4·5	3·6	307	31	5·2	3·5	352
0·6 a. s. l.	—	—	—	—	—	—	—	—	29	4·1	2·8	313	31	4·0	2·1	301	30	4·5	3·8	301	31	3·8	2·2	70
1·0 ,,	31	9·1	8·2	128	31	3·9	3·1	114	29	5·5	4·7	288	31	5·0	3·7	288	30	4·9	4·3	289	31	3·5	2·3	64
1·5 ,,	30	6·5	5·0	120	31	4·1	3·3	114	29	7·5	6·8	283	31	7·3	5·9	290	29	7·3	6·8	292	31	4·6	2·5	14
2·0 ,,	30	4·1	2·4	119	28	3·9	3·1	117	22	7·7	6·5	285	28	9·0	7·4	297	27	9·2	8·5	289	31	4·5	2·0	348
2·5 ,,	30	4·0	0·3	127	27	3·5	2·2	125	6	5·4	3·9	262	26	9·7	8·4	298	27	10·9	10·3	282	31	5·3	2·3	290
3·0 ,,	29	4·6	1·0	285	23	3·3	1·2	201	3	8·2	7·6	241	24	11·4	9·6	289	26	12·0	11·4	281	30	4·7	3·1	283
4·0 ,,	28	5·3	3·5	279	16	4·5	2·4	299					10	10·9	9·5	271	23	15·4	14·8	277	29	7·9	6·5	266
5·0 ,,	27	7·1	5·2	273	12	7·6	5·4	281					4	16·4	13·3	276	18	18·8	17·3	274	26	12·1	11·0	262
6·0 ,,	25	9·7	7·1	272	7	6·7	4·5	264									9	23·2	21·7	274	22	15·1	14·2	258
7·5 ,,	20	13·9	9·5	264	4	10·4	6·1	280													6	19·7	18·0	269
9·0 ,,	11	14·5	11·1	250	2	9·3	6·5	288													2	17·5	16·3	260

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	GOPALPUR.				GORAKHPUR.								HYDERABAD (Dn.).										
	1600				0700				1600				0100				0700				1600		
	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	4·0	3·4	112	31	1·9	0·9	272	31	2·1	1·3	257	31	2·9	2·4	105	31	2·0	1·7	104	31	3·2	2·8
0·15 a.g.	31	5·2	4·0	106	31	5·3	2·3	311	31	4·4	2·1	261	31	7·4	6·7	121	31	6·0	5·5	125	31	4·8	4·5
0·6 a.s.l.	31	3·2	2·0	31	30	5·3	1·8	277	31	4·9	2·3	277	31	5·0	4·4	113	31	3·6	3·1	112	31	4·3	3·9
1·0 ,,	30	3·7	1·9	350	30	4·9	2·5	274	31	5·7	3·1	288	31	8·2	7·7	125	31	8·2	7·6	126	31	4·7	4·2
1·5 ,,	31	4·1	2·4	315	29	5·5	4·2	284	30	6·5	5·3	291	31	5·6	4·5	115	29	5·9	4·4	114	31	4·3	3·1
2·0 ,,	30	4·6	3·1	300	29	7·1	5·2	290	30	8·0	6·5	291	31	4·9	0·9	31	29	4·6	1·4	25	31	4·2	1·3
2·5 ,,	30	4·9	3·5	277	28	8·1	6·3	287	28	8·7	7·0	287	28	4·5	1·3	317	29	3·9	1·0	335	30	3·9	0·9
3·0 ,,	30	6·1	5·1	271	24	8·0	4·7	283	25	9·6	7·4	279	27	4·8	2·5	281	29	4·7	1·9	278	30	4·5	2·1
4·0 ,,	28	10·0	9·3	267	13	7·8	5·9	259	14	9·5	6·5	275	7	4·7	4·5	280	28	6·6	4·8	266	23	7·4	6·1
5·0 ,,	27	15·1	13·8	262	4	13·0	12·0	232	7	11·9	6·5	248					24	8·7	7·7	263	16	9·7	9·0
6·0 ,,	25	18·2	16·8	266	1	13·5	13·5	255	2	14·5	14·5	270					22	12·7	10·9	259	12	14·0	12·9
7·5 ,,	18	23·6	21·8	270					1	25·0	25·0	265					14	17·4	14·9	259	11	17·8	16·2
9·0 ,,	7	24·9	24·4	260													7	19·3	15·0	219	5	20·3	18·3

Height in km.	JAMSHEDPUR.								JHARSUGUDA.												JODHPUR.		
	0700				1600				0100				0700				1600				0100		
	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	0·8	0·3	286	31	1·7	0·9	304	31	1·1	0·9	35	31	1·4	1·2	24	31	1·0	0·6	325	31	3·4	3·1
0·15 a.g.	31	2·7	0·3	17	31	2·3	1·2	308	30	4·3	2·5	57	31	5·2	4·0	50	30	3·3	1·2	332	29	5·8	4·3
0·6 a.s.l.	31	3·1	1·3	55	31	2·4	1·3	308	30	3·9	1·6	75	31	4·4	2·1	93	30	2·8	1·2	324	29	5·5	3·8
1·0 ,,	30	3·4	0·9	334	31	2·6	1·7	309	30	3·5	0·7	29	31	3·7	0·1	53	29	2·7	1·2	327	29	4·5	2·3
1·5 ,,	29	4·9	3·8	306	30	4·3	3·7	310	30	3·5	1·2	328	31	3·9	1·3	317	29	3·2	1·9	330	28	4·7	0·5
2·0 ,,	29	6·9	5·3	301	30	6·5	5·6	299	28	5·1	2·7	303	31	6·4	3·9	305	29	5·1	3·9	317	24	5·1	1·3
2·5 ,,	27	8·0	6·6	297	29	8·2	7·4	293	23	6·8	5·1	285	31	6·9	4·8	300	29	6·4	5·4	296	17	6·3	4·0
3·0 ,,	24	8·4	7·2	283	29	9·7	8·8	286	19	7·6	6·2	285	29	7·3	5·9	295	27	7·9	7·2	283	12	7·2	4·9
4·0 ,,	17	11·2	9·8	277	28	13·5	12·3	279	4	10·9	10·4	280	26	11·2	10·1	275	26	12·7	11·8	270			
5·0 ,,	6	12·7	10·7	247	26	18·2	17·0	269	1	8·5	8·5	250	25	15·6	13·7	262	20	16·9	15·7	264			
6·0 ,,					22	22·8	21·7	267					20	19·9	19·0	258	17	20·5	19·8	260			
7·5 ,,					5	23·5	20·3	272					7	26·9	26·1	261	7	29·6	29·3	265			
9·0 ,,													1	42·5	42.5	255	2	44·0	44·0	267			

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	JODHPUR.								JUBBULPORE.								MADHOSAGAR.							
	0700				1600				0700				1600				0700				1600			
	n	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	2·4	44	31	3·3	2·3	44	31	0·9	0·3	75	31	1·9	0·3	344	31	0·8	0·2	229	31	2·3	0·9	18
0·15 a.g.	31	6·6	5·0	67	29	4·0	2·2	22	31	3·9	1·8	93	30	3·6	0·9	326	31	4·2	1·4	57	31	4·3	1·7	354
0·6 a.s.l.	31	6·6	4·0	76	29	4·2	2·3	26	31	4·7	1·9	97	30	3·5	0·7	332	30	5·3	1·8	57	31	3·9	1·4	29
1·0 „	31	5·9	2·1	77	29	4·1	2·3	31	30	5·2	1·6	138	29	3·2	0·9	317	29	5·6	1·1	49	31	4·2	0·5	2
1·5 „	31	6·1	0·4	43	27	4·4	1·8	40	25	4·4	2·5	242	29	3·6	1·7	277	27	4·9	1·6	273	27	5·1	2·0	245
2·0 „	30	5·5	1·0	320	26	5·3	1·1	324	25	5·9	3·7	277	28	5·1	3·3	275	24	5·4	3·9	266	26	6·3	4·2	265
2·5 „	30	5·8	2·2	271	25	7·1	4·5	268	24	7·6	5·6	277	28	6·8	5·7	275	22	7·0	5·9	267	24	8·3	7·0	265
3·0 „	28	7·6	4·5	267	24	8·7	6·4	262	22	8·5	6·7	272	26	8·9	7·6	278	19	8·1	6·9	271	21	9·2	8·2	267
4·0 „	23	1·9	9·7	259	21	13·1	10·8	261	16	11·0	9·3	258	25	11·5	10·5	273	16	12·2	10·6	266	17	12·4	11·4	269
5·0 „	12	15·2	14·6	266	19	16·7	14·9	259	12	16·3	13·5	256	22	16·9	15·7	264	11	17·6	15·9	268	9	14·4	13·4	264
6·0 „	10	22·1	21·3	263	12	21·8	21·2	259	2	23·7	23·7	272	15	22·6	21·7	261	9	20·9	20·0	265	5	17·9	16·8	257
7·5 „	1	21·5	21·5	295	4	30·9	28·8	259					7	28·9	28·5	276	2	30·0	27·1	262				
9·0 „	1	40·0	40·0	290	1	46·5	46·5	285					2	44·3	42·7	271	2	42·3	37·8	254				

Height in km.	MADRAS.												MALEGAON CAMP.											
	0100				0700				1600				0100				0700				1600			
	n	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	1·1	21	31	1·8	1·2	346	31	4·9	4·8	62	31	1·7	1·0	295	31	0·6	0·4	277	31	3·0	2·1	169
0·15 a. g.	31	5·2	5·1	57	31	5·2	4·6	37	31	6·3	5·9	56	31	4·6	1·8	35	30	3·4	1·6	98	31	4·4	3·0	178
0·6 a.s.l.	31	6·5	6·3	66	30	6·7	6·4	61	31	6·3	5·9	55	31	4·6	1·8	35	30	3·4	1·6	98	31	4·4	3·0	179
1·0 „	30	6·2	5·4	64	29	6·7	6·2	64	31	6·5	5·7	52	31	5·5	2·6	87	30	6·3	4·0	127	31	4·3	3·2	185
1·5 „	23	5·8	4·3	69	28	5·7	3·9	71	29	6·0	4·0	49	30	5·2	2·4	155	30	6·3	4·7	178	31	4·9	3·0	204
2·0 „	23	4·6	3·3	60	27	5·2	3·1	68	21	4·5	1·7	44	29	6·5	5·1	191	29	7·0	5·5	204	31	5·8	3·9	229
2·5 „	16	4·4	1·6	67	23	4·6	2·1	75	16	4·0	1·0	52	27	8·2	7·2	200	28	8·3	7·0	209	29	6·8	5·4	237
3·0 „	11	3·3	0·6	42	23	3·2	0·8	99	14	3·4	0·6	52	26	8·1	7·0	208	28	8·9	7·9	234	26	8·3	7·0	246
4·0 „	4	3·5	1·8	46	17	3·3	0·7	267	11	4·1	1·8	326	13	12·5	10·2	253	21	10·6	9·2	270	20	11·7	10·8	263
5·0 „	1	4·0	4·0	115	16	4·3	1·0	202	7	3·7	0·6	90					18	13·5	11·8	274	12	13·4	12·2	274
6·0 „					16	4·7	1·4	217	4	6·1	3·6	120					14	17·2	15·1	280	9	16·3	15·0	287
7·5 „					12	7·5	3·3	208	3	9·0	5·6	44					6	19·9	18·0	270	8	21·2	19·6	283
9·0 „					7	10·1	8·6	198	2	7·0	6·9	59					1	23·0	23·0	250	4	24·2	22·9	274

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	MANGALORE.												MASULIPATAM.											
	0100				0700				1600				0100				0700				1600			
	n	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	2·4	44	31	2·6	2·3	85	31	4·0	2·9	275	31	0·8	0·7	65	31	1·1	0·9	32	31	3·2	2·9	105
0·15 a. g.	30	5·1	4·2	11	31	4·8	4·1	73	31	5·5	4·7	277	31	5·7	5·4	91	31	5·6	5·2	61	31	5·3	5·1	104
0·6 a. s. l.	30	5·0	4·0	356	31	5·0	2·7	53	31	2·8	1·1	336	31	7·1	6·8	93	31	7·0	6·5	95	31	5·6	5·0	85
1·0 ,,	30	3·8	1·9	30	31	4·6	2·7	73	30	3·4	2·9	84	31	6·6	5·9	79	31	6·4	5·8	92	31	5·6	4·6	71
1·5 ,,	29	3·9	3·5	97	31	4·5	3·5	105	30	5·2	5·0	83	30	5·3	4·1	74	31	5·3	3·9	83	31	5·0	3·6	60
2·0 ,,	28	6·3	6·1	97	31	4·4	3·6	113	31	5·3	4·5	77	27	4·6	2·6	83	30	4·1	2·7	74	31	4·0	2·6	60
2·5 ,,	25	5·0	3·8	101	31	3·9	2·1	132	31	4·5	2·8	84	22	3·0	0·5	32	30	3·6	1·4	38	30	3·6	1·5	41
3·0 ,,	18	3·6	0·5	177	31	4·4	0·7	158	31	3·7	1·5	92	20	3·9	1·5	265	29	3·4	0·8	291	30	4·1	1·1	295
4·0 ,,	4	4·1	1·3	237	28	3·7	1·0	24	30	3·9	0·4	258	10	5·0	4·3	227	28	5·2	3·3	250	27	5·4	3·6	259
5·0 ,,					27	4·2	0·8	277	29	4·8	0·8	283					25	6·8	5·0	260	24	6·7	5·4	268
6·0 ,,					25	6·6	2·6	298	28	6·9	2·8	281					23	8·8	6·2	262	24	9·1	7·3	268
7·5 ,,					17	8·3	3·6	229	10	11·2	9·2	216					19	14·3	11·0	255	18	14·3	12·1	263
9·0 ,,					12	9·1	2·8	245	4	16·0	15·1	201					16	17·9	14·4	248	11	14·5	12·3	258

Height in km.	MINICOY.								NAGERCOIL.												NAGPUR.			
	0700				1400				0100				0700				1600				0100			
	n	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	50	31	2·2	1·5	38	31	4·3	3·8	53	31	4·1	3·7	49	31	5·1	2·8	43	31	1·4	0·8	54
0·15 a. g.	31	4·2	3·3	40	30	4·6	3·8	38	31	7·6	7·2	50	31	7·1	6·6	47	30	7·9	3·9	44	29	5·7	4·3	87
0·6 a. s. l.	31	4·3	3·4	54	30	4·7	3·9	50	31	8·9	8·8	46	31	8·4	8·1	43	30	6·5	4·7	49	29	6·0	4·3	109
1·0 ,,	30	5·3	4·7	74	30	4·6	4·0	66	31	9·9	9·5	44	31	9·5	8·7	49	30	7·3	6·6	46	28	5·2	2·9	135
1·5 ,,	30	5·5	4·8	84	26	4·4	3·4	80	31	8·5	8·1	46	31	8·4	8·0	56	29	8·3	7·9	40	27	3·8	1·6	164
2·0 ,,	29	4·2	3·2	83	25	3·7	2·5	74	31	6·6	5·3	57	31	5·3	3·7	65	29	7·5	6·6	39	25	4·1	1·2	242
2·5 ,,	27	3·6	2·0	77	22	4·5	2·3	70	30	5·3	3·5	74	30	4·8	2·8	70	28	5·7	3·7	51	22	4·7	3·1	271
3·0 ,,	26	3·2	1·2	58	19	4·3	1·3	66	28	4·7	2·2	87	29	4·8	2·5	76	27	5·0	2·9	73	18	6·5	5·3	265
4·0 ,,	23	5·0	2·2	90	13	4·8	1·2	39	14	4·6	2·6	115	27	4·8	3·8	86	26	6·1	4·4	63	3	12·3	11·2	262
5·0 ,,	15	5·6	3·3	74	12	5·7	2·7	60	7	6·2	2·5	63	26	6·3	5·0	98	22	5·9	4·1	67				
6·0 ,,	13	5·6	1·9	80	8	4·6	1·4	38	1	7·5	7·5	215	23	7·5	5·3	80	22	7·9	6·0	72				
7·5 ,,	7	4·8	3·8	162	5	4·9	2·7	184					20	8·5	5·6	86	17	7·9	4·0	6				
9·0 ,,	5	8·0	5·8	163	4	7·4	6·8	174					15	6·9	2·0	150	15	7·6	4·7	1·4				

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	NAGPUR								NEW DELHI												POONA			
	0700				1600				0100				0700				1600				0100			
	n	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	0·9	43	31	1·5	0·7	73	31	2·0	1·4	327	31	1·9	0·9	297	31	3·6	1·9	304	31	0·4	0·3	245
0·15 a. g.	30	5·0	4·0	65	30	2·4	1·2	101	29	7·1	4·5	346	27	4·8	3·3	341	30	4·1	1·8	318	31	3·0	0·7	261
0·6 a. s. l.	30	6·2	5·0	111	30	2·6	1·3	101	29	7·0	3·7	345	27	6·3	3·1	332	30	4·1	1·7	324	31	1·9	0·7	239
1·0 „	29	5·7	4·3	128	31	3·0	0·8	113	30	6·1	2·6	342	28	5·8	2·6	316	30	5·3	2·2	317	31	4·6	0·7	311
1·5 „	26	4·6	1·9	162	30	3·6	0·7	210	28	6·0	2·7	296	28	5·7	3·3	298	28	5·5	2·9	304	31	5·4	2·2	153
2·0 „	26	4·2	1·8	252	29	4·9	2·3	282	22	6·3	3·1	276	27	6·5	3·3	290	28	5·7	4·1	313	30	6·5	5·1	152
2·5 „	26	5·8	3·6	287	28	5·7	3·5	289	12	4·5	3·8	280	25	6·2	0·7	280	24	6·0	3·7	286	27	7·1	6·0	172
3·0 „	26	7·3	5·6	288	27	6·0	4·9	277	3	5·8	5·0	273	21	6·1	4·8	276	23	6·9	5·5	288	23	7·4	6·5	198
4·0 „	23	9·2	7·5	273	25	9·8	8·9	257					17	9·2	8·4	267	19	10·7	9·7	281	10	7·6	6·3	277
5·0 „	21	14·4	13·0	266	22	15·4	14·3	256					7	13·7	9·5	265	17	15·1	14·5	272				
6·0 „	16	18·5	17·4	262	18	19·5	18·9	262					4	14·5	11·9	263	15	19·7	18·6	264				
7·5 „	6	21·4	20·7	269	9	26·3	25·6	260									9	25·0	24·5	261				
9·0 „	1	26·0	26·0	270	5	28·3	27·7	254									2	27·5	26·8	254				

Height in km.	POONA								PORT BLAIR												RAIPUR			
	0700				1600				0100				0700				1600				0100			
	n	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	0·1	125	31	1·3	0·4	205	31	4·4	4·0	70	31	4·0	3·5	70	31	3·9	3·6	66	31	1·6	1·1	70
0·15 a. g.	29	2·5	1·1	127	31	3·0	0·6	222	29	7·6	7·2	66	31	7·7	7·2	65	31	6·9	6·6	61	29	5·2	4·0	76
0·6 a. s. l.	29	1·2	0·5	133	31	2·0	0·4	232	29	7·8	7·4	71	30	8·6	8·0	71	31	6·8	6·4	68	29	5·2	4·0	81
1·0 „	29	4·8	3·2	114	31	2·8	0·9	203	23	7·5	7·2	88	21	8·2	7·6	88	23	6·2	5·7	80	28	3·7	1·9	87
1·5 „	29	6·2	3·6	152	31	3·4	1·8	192	14	7·5	6·7	86	20	8·8	7·8	99	17	5·6	4·3	70	24	2·8	0·6	165
2·0 „	29	6·9	6·1	177	31	4·6	3·0	197	11	5·1	3·6	100	16	7·4	5·7	104	14	5·4	4·3	71	22	4·3	1·3	270
2·5 „	29	7·0	6·3	194	31	5·0	3·1	215	6	3·4	2·8	114	14	5·3	3·2	100	13	4·1	3·1	67	20	5·6	3·0	273
3·0 „	25	7·0	5·8	214	26	5·7	4·4	241	3	2·2	1·4	102	13	4·2	2·2	104	11	3·9	3·1	84	15	6·8	6·3	275
4·0 „	23	9·6	7·9	266	25	9·2	8·0	259	2	5·0	4·6	104	8	3·4	2·8	96	10	5·5	4·7	85	6	7·1	5·7	268
5·0 „	21	11·9	10·9	276	21	12·7	11·1	268					7	7·4	6·1	115	10	6·9	6·4	109	1	10·0	10·0	280
6·0 „	18	13·4	11·5	275	19	14·5	13·2	274					5	8·1	6·4	96	5	6·3	5·3	107				
7·5 „	9	16·4	14·0	280	11	17·4	16·2	275					2	10·7	8·0	179	2	7·0	4·7	156				
9·0 „	3	13·8	11·6	281	6	20·9	18·6	278					2	5·3	4·1	165	2	5·5	4·3	165				

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	RAIPUR								SAHARSA								TEZPUR							
	0700				1600				0700				1600				0100				0700			
	n	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	0·9	58	31	1·7	1·2	14	31	0·9	0·5	222	31	1·6	1·3	266	31	1·8	1·6	54	31	3·1	1·0	64
0·15 a. g.	30	3·9	3·0	73	31	2·8	1·6	4	31	5·3	2·4	292	30	5·2	4·4	278	29	5·0	4·5	65	31	4·3	3·8	73
0·6 a. s. l.	30	4·7	3·5	94	31	2·7	1·5	16	30	5·5	2·7	291	30	5·0	4·3	276	29	3·5	2·0	88	31	4·2	3·1	90
1·0 „	29	3·9	2·4	105	30	2·6	1·4	25	30	6·2	2·6	284	30	5·5	4·4	280	27	2·7	1·0	88	30	3·7	2·5	80
1·5 „	28	3·3	0·4	44	30	2·9	1·0	11	30	8·2	4·1	276	28	6·6	4·5	291	26	2·9	0·1	60	29	3·9	1·5	76
2·0 „	28	4·9	2·5	317	27	4·2	1·3	328	25	9·2	6·4	287	28	8·9	6·5	295	24	3·9	0·8	260	29	4·5	0·4	84
2·5 „	28	6·2	3·5	290	23	5·5	2·7	287	16	9·9	9·2	291	27	11·8	9·8	291	22	4·1	0·6	193	29	4·7	0·6	98
3·0 „	27	7·2	4·7	278	23	6·2	5·0	275	10	12·9	12·1	290	27	13·4	11·5	288	22	4·3	1·6	263	28	5·6	0·7	261
4·0 „	23	10·8	9·2	274	20	10·0	8·9	269	2	13·5	13·5	276	22	14·5	12·9	281	3	5·5	2·6	243	23	10·5	8·6	271
5·0 „	20	15·2	13·6	267	18	13·9	13·2	266					17	17·6	15·6	275					18	16·1	15·6	268
6·0 „	16	20·0	19·1	266	17	18·5	17·9	265					14	25·0	22·4	277					11	19·1	17·8	262
7·5 „	11	25·2	23·7	272	13	25·1	24·5	263					4	28·3	25·9	259					9	27·8	25·4	269
9·0 „	7	33·1	29·5	277	9	32·5	31·6	257					1	37·0	37·0	225					4	37·7	36·7	254

Height in km.	TEZPUR				TRICHINOPOLY												TRIVANDRUM				UDAIPUR			
	1600				0100				0700				1600				0700				0100			
	n	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	0·9	0·5	87	31	2·2	2·1	46	31	2·0	1·9	28	31	3·0	2·8	69	31	0·5	0·4	31	31	0·5	0·3	33
0·15 a. g.	31	2·7	1·6	73	30	8·0	7·8	49	30	6·4	6·3	28	31	5·7	5·5	68	31	2·1	0·5	55	28	4·1	3·5	3
0·6 a. s. l.	31	3·1	1·5	71	30	9·9	9·5	60	30	8·1	7·8	50	31	7·0	6·8	64	31	2·3	1·2	79	—	—	—	—
1·0 „	31	3·4	0·5	123	30	9·1	8·7	59	30	7·8	7·2	56	31	7·1	6·8	57	31	3·1	2·5	72	27	4·9	3·2	5
1·5 „	30	3·7	1·1	179	30	6·9	6·2	61	29	6·3	5·1	58	30	6·6	5·1	55	31	3·0	1·7	45	28	5·0	2·1	18
2·0 „	30	4·9	2·3	222	29	5·9	3·2	55	29	5·0	3·5	66	28	5·3	3·9	62	29	2·9	1·1	67	28	6·6	4·3	2
2·5 „	30	5·3	3·0	244	23	4·9	2·4	78	28	4·9	3·6	87	27	4·1	2·9	73	29	3·1	1·4	75	27	8·3	6·5	2
3·0 „	28	6·8	4·5	264	21	4·4	3·0	80	28	3·4	2·1	83	24	3·6	1·6	49	29	3·4	2·1	81	20	8·3	6·6	2
4·0 „	28	13·9	12·9	266	7	4·0	1·1	138	23	3·9	1·0	115	21	3·3	1·7	80	25	4·0	2·7	94				
5·0 „	25	19·4	18·7	268	2	8·3	6·3	69	22	5·7	3·6	95	19	4·6	2·4	82	23	5·7	4·5	82				
6·0 „	21	23·8	23·1	271	1	4·5	4·5	150	20	5·6	3·5	61	17	5·5	2·1	49	21	6·2	5·3	78				
7·5 „	10	28·2	26·6	265					18	6·6	1·6	133	14	6·2	1·3	183	16	6·1	4·1	88				
9·0 „	4	41·7	39·1	276					15	8·6	3·8	178	9	7·1	3·4	165	6	6·1	1·5	150				

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

JANUARY 1948.

Height in km.	UDAIPUR								VENGURLA												VERAVAL			
	0700				1600				0100				0700				1600				0100			
	n	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	0·4	0·3	325	31	1·6	0·6	83	31	1·2	1·2	7	31	0·9	0·8	7	31	3·8	3·0	255	31	3·9	3·4	18
0·15 a. g.	31	3·8	2·8	355	31	3·2	1·4	56	30	5·7	5·4	8	31	3·7	2·9	46	31	5·1	3·7	275	31	8·3	7·2	20
0·6 a. s. l.	—	—	—	—	—	—	—	—	30	5·1	3·9	354	31	5·2	2·9	67	31	3·3	0·9	256	31	7·1	5·0	33
1·0 ,,	31	5·6	3·6	78	31	3·0	0·7	51	30	4·2	0·3	206	31	5·1	2·2	118	31	3·1	1·8	105	31	5·5	2·2	78
1·5 ,,	30	6·6	1·5	120	30	4·3	0·6	244	30	5·3	4·3	131	30	4·6	3·6	142	31	4·3	3·2	112	30	6·0	2·6	169
2·0 ,,	30	6·4	3·7	234	29	5·8	3·4	235	20	6·9	6·1	143	30	5·1	4·2	150	31	4·9	3·3	115	27	5·9	3·3	202
2·5 ,,	28	8·1	6·5	238	28	7·9	5·4	247	15	6·1	3·2	158	29	5·2	3·9	180	31	4·9	1·7	133	13	6·4	5·1	236
3·0 ,,	24	8·1	6·1	246	26	10·1	8·0	250	12	4·5	3·0	235	29	5·3	3·4	241	30	4·3	0·8	227	7	7·1	3·7	253
4·0 ,,	19	10·7	9·8	264	24	12·6	10·5	255	6	8·3	7·6	259	26	6·6	4·3	269	30	5·4	3·3	266				
5·0 ,,	15	14·2	13·3	268	24	17·7	16·0	256	2	6·3	6·1	260	25	7·6	5·7	273	27	7·7	5·3	269				
6·0 ,,	9	17·6	17·3	270	20	21·6	21·1	270					22	9·1	6·6	262	26	9·7	7·3	269				
7·5 ,,					9	28·2	27·0	266					14	12·1	9·7	248	22	14·0	10·7	269				
9·0 ,,					1	40·0	40·0	280					11	13·3	12·1	248	18	16·3	11·1	256				

Height in km.	VERAVAL								VIZAGAPATAM											
	0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	3·7	3·3	35	31	4·8	1·5	250	31	0·9	0·7	26	31	0·8	0·7	8	31	2·3	2·0	84
0·15 a. g.	31	8·9	8·0	35	31	4·9	1·2	260	30	4·2	3·5	55	31	4·7	4·1	24	31	5·6	4·9	91
0·6 a. s. l.	31	6·7	4·6	37	31	4·2	1·9	5	30	4·9	4·3	78	31	5·0	4·5	72	31	4·8	4·0	63
1·0 ,,	30	5·4	2·1	22	31	4·5	2·4	10	31	4·5	4·1	71	31	4·3	3·9	72	31	4·1	3·5	55
1·5 ,,	30	6·0	2·0	215	30	5·8	0·7	299	29	4·5	3·7	63	31	4·6	3·0	67	31	4·0	2·6	32
2·0 ,,	29	7·4	3·7	212	29	7·4	2·2	227	27	4·4	2·6	69	31	4·7	2·4	70	30	3·7	1·9	16
2·5 ,,	27	7·2	3·9	227	29	8·1	4·7	245	23	4·0	0·7	21	29	4·2	1·2	17	29	4·0	1·4	348
3·0 ,,	27	7·7	4·7	241	28	9·3	6·5	247	19	3·9	1·6	266	29	4·3	1·9	298	29	4·0	2·4	303
4·0 ,,	26	10·5	7·9	252	25	13·4	12·5	261	6	4·1	3·2	244	28	6·3	4·9	262	28	6·7	5·8	262
5·0 ,,	20	16·6	15·6	264	23	17·1	15·9	265					29	9·5	7·8	259	28	9·8	8·9	254
6·0 ,,	11	18·6	17·4	264	19	20·2	19·3	275					26	10·9	9·6	258	28	12·1	11·1	265
7·5 ,,	4	29·4	23·9	273	10	25·7	24·6	274					19	17·0	14·8	260	23	16·8	15·7	259
9·0 ,,					3	33·3	31·5	294					13	19·1	18·5	247	17	20·8	20·2	251

Table B—Monthly Mean Directions and Velocities of Upper Winds.

Winds above 9 km. above sea level.

JANUARY 1948.

Height in km.	n	V	v	D
AHMEDABAD				
10·0	2	39·5	38·9	250
ALLAHABAD				
10·0	2	66·0	66·0	270
11·0	1	46·0	46·0	275
AMBALA				
10·0	9	32·0	30·4	255
11·0	4	35·3	31·8	250
12·0	1	32·5	32·5	270
ANANTAPUR				
10·0	1	19·0	19·0	215
BANGALORE				
10·0	3	10·3	7·6	144
11·0	2	13·5	13·1	137
12·0	2	13·7	13·3	167
BHOPAL				
10·0	1	38·0	38·0	270
COCHIN				
10·0	16	9·3	2·2	194
11·0	8	11·7	0·2	224
12·0	7	9·1	7·2	204
13·0	3	10·3	9·3	238
14·0	1	17·0	17·0	275
15·0	1	12·0	12·0	265
16·0	1	8·0	8·0	230
GADAG				
10·0	1	8·0	8·0	330
GOPALPUR				
10·0	4	30·3	30·2	256
HYDERABAD (Dn.)				
10·0	4	24·1	21·0	270
11·0	3	22·2	19·4	292
12·0	1	20·0	20·0	235
13·0	1	18·5	18·5	220

Height in km.	n	V	v	D
BOMBAY (Juhu)				
10·0	2	26·5	25·5	296
11·0	1	25·0	25·0	275
MADRAS				
10·0	1	10·0	10·0	60
11·0	1	9·5	9·5	105
12·0	1	11·0	11·0	90
13·0	1	7·5	7·5	95
MALEGAON CAMP				
10·0	1	23·0	23·0	310
11·0	1	19·5	19·5	320
MANGALORE				
10·0	4	17·4	16·7	197
11·0	2	13·5	12·6	209
12·0	2	9·0	8·3	245
13·0	1	10·5	10·5	240
MASULIPATAM				
10·0	7	20·4	17·8	256
11·0	5	21·8	20·6	237
12·0	1	23·5	23·5	240
13·0	1	17·0	17·0	260
NAGERCOIL				
10·0	11	8·6	6·4	162
11·0	6	9·3	7·2	157
12·0	5	11·3	8·7	134
13·0	5	11·3	8·0	118
14·0	3	14·5	9·9	100
15·0	1	15·0	15·0	230
NAGPUR				
10·0	3	34·5	33·5	253
11·0	1	36·0	36·0	270

Height in km.	n	V	v	D
POONA				
10·0	4	16·0	13·8	294
11·0	3	14·5	12·0	316
12·0	2	18·5	11·0	312
13·0	1	23·5	23·5	350
14·0	1	33·0	33·0	355
PORT BLAIR				
10·0	1	5·0	5·0	295
11·0	1	9·0	9·0	195
12·0	1	4·5	4·5	190
13·0	1	4·0	4·0	270
RAIPUR				
10·0	5	33·5	32·4	262
11·0	1	41·0	41·0	200
TEZPUR				
10·0	1	54·0	54·0	270
TRICHINOPOLY				
10·0	5	10·0	1·6	162
11·0	2	11·7	7·5	190
12·0	2	9·5	9·1	170
13·0	1	8·0	8·0	191
TRIVANDRUM				
10·0	5	6·6	3·8	182
11·0	2	9·3	8·2	162
VENGURLA				
10·0	11	13·6	9·0	269
11·0	8	12·0	7·1	260
12·0	7	15·0	10·2	257
13·0	6	17·7	16·1	275
14·0	5	15·3	13·5	287
15·0	3	14·8	13·6	284
16·0	2	16·5	10·4	273
17·0	1	15·5	15·5	215
18·0	1	14·5	14·5	245

Height in km.	n	V	v	D
VERAVAL				
10·0	1	27·5	27·5	280
VIZAGAPATAM				
10·0	7	22·8	22·7	245
11·0	3	16·7	16·5	242
12·0	2	19·0	16·7	255
13·0	3	24·0	23·8	241
14·0	2	22·7	21·7	230
15·0	2	29·3	26·5	220
16·0	1	19·0	19·0	206
17·0	1	24·0	24·0	210
18·0	1	37·5	37·5	220
19·0	1	35·0	35·0	10
MINICOY				
10·0	4	10·0	9·1	165
11·0	2	13·5	13·2	147
12·0	1	1·0	1·0	35
13·0	1	5·0	5·0	315
14·0	1	2·5	2·5	275

Table A—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

AUGUST 1947—DECEMBER 1947.

MINICOY.

Height in km.	AUGUST								SEPTEMBER								OCTOBER							
	Morning				Afternoon				Morning				Afternoon				Morning				Afternoon			
	n	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	4·0	290	31	4·2	4·0	292	30	3·4	3·2	282	30	3·5	3·4	284	31	2·0	1·8	299	31	2·8	2·6	298
0·15 a.g.	30	9·1	8·7	286	30	9·1	8·8	288	28	7·1	6·7	288	28	7·8	7·6	284	30	5·3	4·5	300	31	6·1	5·6	298
0·6 a. s. l.	30	13·7	13·2	290	29	13·8	13·5	288	28	9·9	9·5	289	28	10·3	10·1	287	30	5·5	4·9	309	31	6·1	5·8	305
1·0 „	29	15·8	15·6	292	28	15·2	14·9	290	27	10·7	10·4	290	28	11·0	10·7	288	29	4·8	4·0	313	30	5·6	5·1	313
1·5 „	26	14·8	14·5	295	25	14·4	14·1	292	25	10·1	9·7	289	26	10·3	9·2	287	28	4·7	3·4	327	25	4·5	3·5	314
2·0 „	23	12·8	12·6	289	20	12·4	12·1	288	23	9·4	9·0	289	23	10·4	9·9	283	27	4·9	3·2	334	23	5·0	3·6	317
2·5 „	22	11·2	10·7	283	14	9·3	8·9	283	20	9·1	8·6	282	22	10·0	9·6	282	25	5·4	4·3	313	23	5·7	4·5	307
3·0 „	19	9·7	9·2	278	12	8·3	8·0	278	17	8·3	7·8	280	19	10·3	10·0	282	25	6·3	4·8	301	19	6·9	5·3	297
4·0 „	6	6·4	5·7	281	7	6·0	4·6	277	8	7·6	6·5	289	12	8·9	8·3	284	20	4·1	1·4	315	10	4·1	2·1	331
5·0 „	4	9·2	6·3	281	2	8·0	6·9	64	5	4·5	2·8	312	4	5·9	5·0	300	15	3·9	0·5	104	8	3·9	0·4	26
6·0 „	1	4·5	4·5	75	1	11·5	11·5	85	3	5·5	5·1	309	4	5·4	2·5	7	13	3·7	2·0	81	7	5·7	3·0	71
7·5 „	1	11·0	11·0	90	1	14·0	14·0	80	3	3·2	0·8	10	3	5·3	4·8	91	8	5·4	4·9	74	5	5·2	4·9	77
9·0 „					1	6·5	6·5	80	2	9·5	8·8	84	2	15·0	11·1	50	5	8·2	8·0	85	4	7·3	7·0	107

Height in km.	NOVEMBER								DECEMBER							
	Morning				Afternoon				Morning				Afternoon			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	30	1·0	0·6	13	30	2·1	1·1	15	31	1·0	0·5	10	31	2·1	1·3	14
0·15 a. g.	29	3·0	2·0	17	30	3·8	2·6	15	31	2·8	1·0	358	31	3·5	2·4	16
0·6 a. s. l.	28	3·5	2·3	40	30	3·8	2·8	23	31	2·8	1·2	32	31	3·4	2·6	20
1·0 „	30	4·1	3·3	53	27	3·6	2·7	52	30	3·2	1·9	52	26	2·9	2·2	38
1·5 „	29	5·6	4·9	68	24	4·0	3·1	75	29	3·8	2·6	64	23	3·0	1·9	42
2·0 „	27	5·1	4·1	63	21	4·6	2·6	75	28	3·0	2·0	63	22	2·9	1·3	11
2·5 „	24	4·6	2·6	72	19	5·1	2·0	73	28	3·1	1·1	30	22	3·1	1·6	336
3·0 „	22	4·1	2·1	96	13	5·7	1·2	68	28	3·6	1·1	334	22	3·7	1·6	316
4·0 „	17	5·6	1·5	138	11	5·4	1·2	117	26	3·4	0·8	60	18	4·0	1·1	352
5·0 „	14	3·6	1·8	92	9	3·7	2·2	76	25	4·4	1·5	70	16	4·1	1·9	44
6·0 „	14	4·2	2·6	79	8	4·9	3·5	90	20	4·2	2·9	63	10	4·7	2·4	70
7·5 „	9	6·1	3·5	100	7	6·7	4·3	95	14	5·4	3·4	104	7	4·4	2·2	101
9·0 „	6	8·5	5·2	252	5	6·4	5·0	240	10	5·3	1·8	175	4	3·4	2·9	213

Table B—Monthly Mean Directions and Velocities of Upper Winds.

Winds above 9 km. above sea level.

AUGUST 1947—DECEMBER 1947.

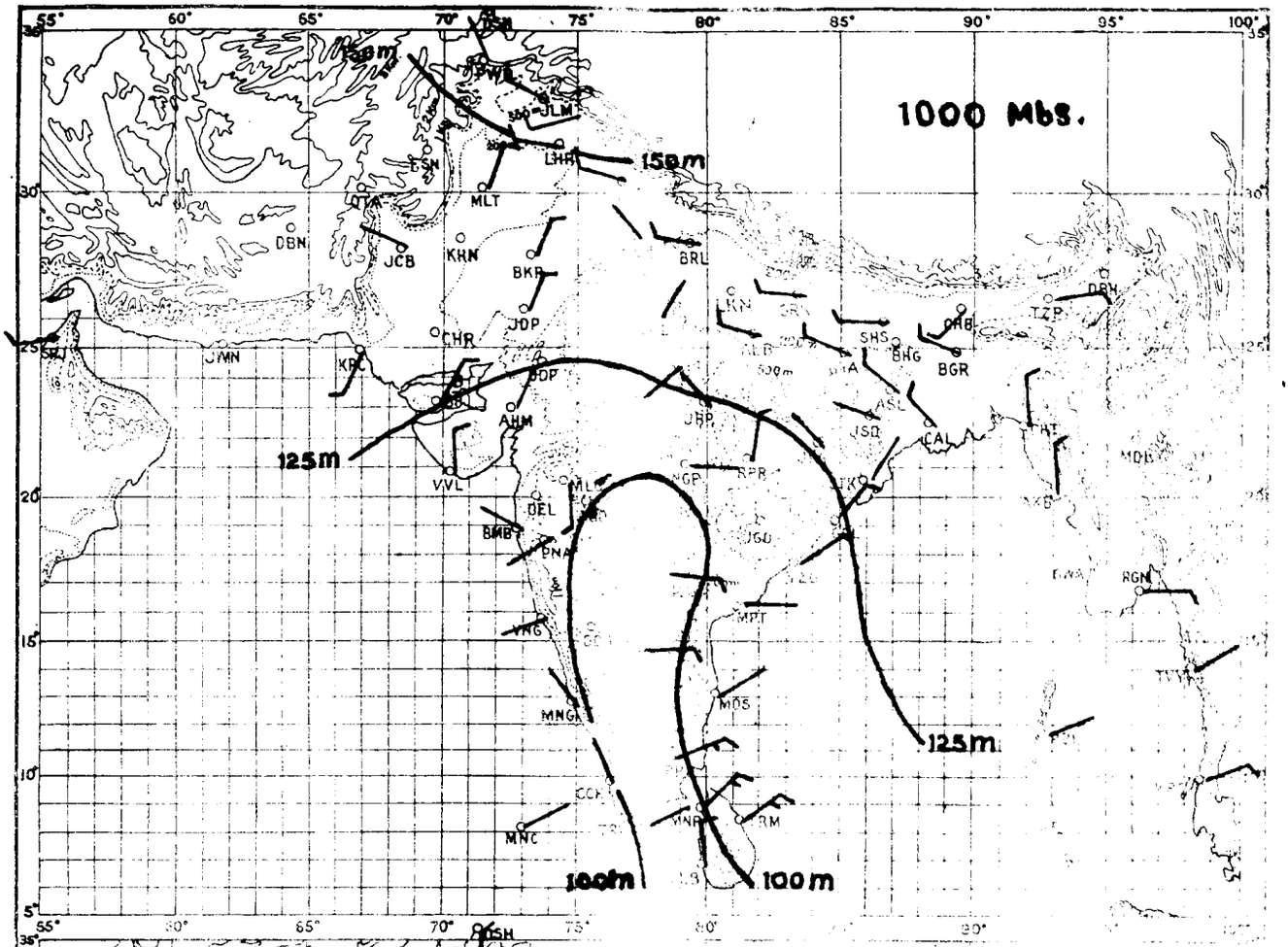
MINICOY.

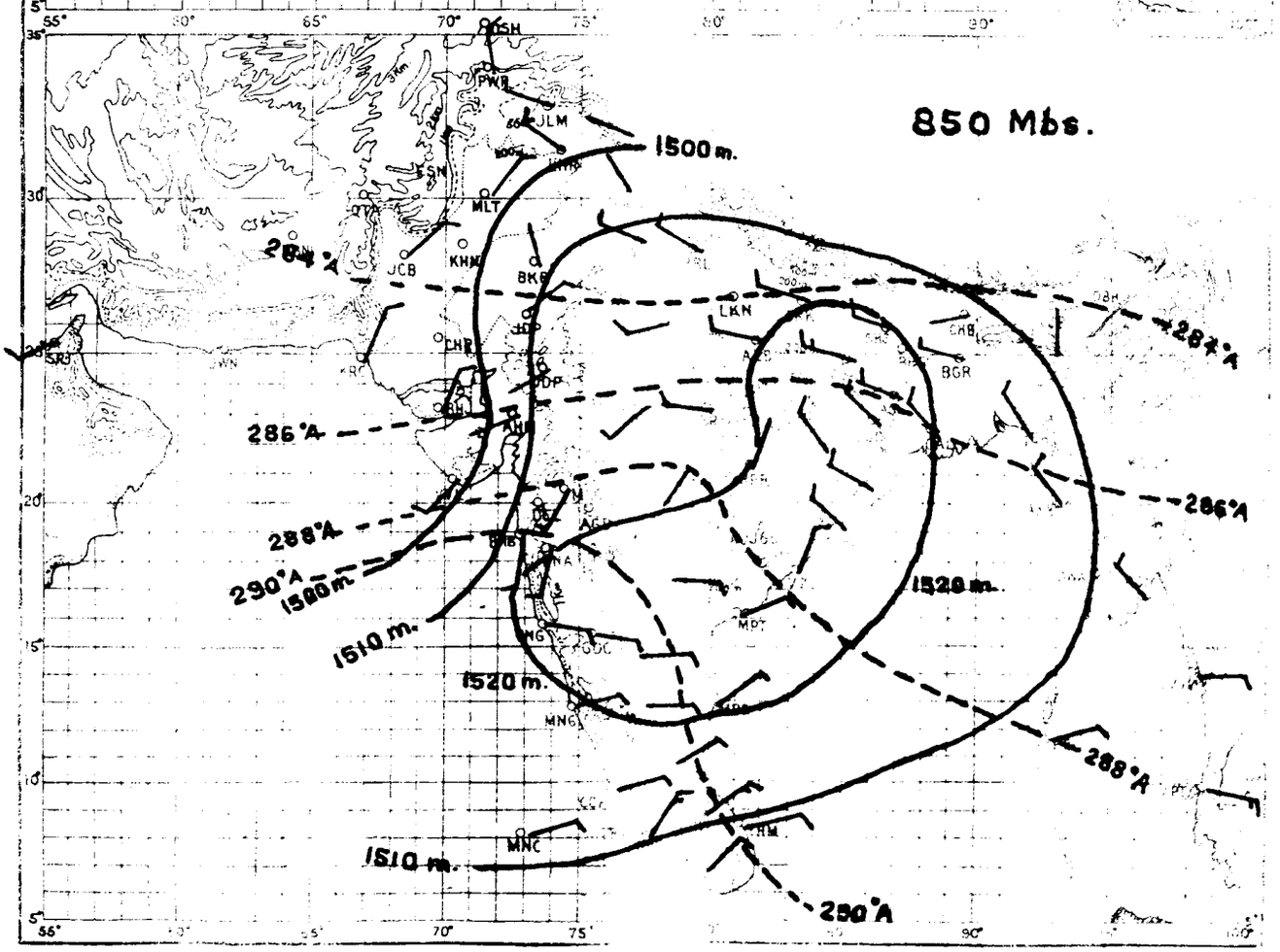
Height in km.	n	V	v	D	Height in km.	n	V	v	D	Height in km.	n	V	v	D
		AUGUST					NOVEMBER					DECEMBER		
10·0	1	3·5	3·5	105	10·0	5	8·0	7·3	222	10·0	1	7·0	7·0	135
					11·0	1	8·5	8·5	225					
		SEPTEMBER			12·0	1	5·5	5·5	240	11·0	1	15·0	15·0	130
10·0	2	17·0	16·9	103	13·0	1	8·0	8·0	270					
11·0	1	27·0	27·0	110	14·0	1	7·0	7·0	260	12·0	1	21·5	21·5	125
					15·0	1	6·5	6·5	225					
		OCTOBER			16·0	1	6·5	6·5	210	13·0	1	12·0	12·0	155
10·0	3	10·8	10·2	88	17·0	1	10·0	10·0	210					
11·0	3	14·8	14·8	91	18·0	1	13·0	13·0	205	14·0	1	4·0	4·0	175
12·0	3	20·0	19·9	88	19·0	1	10·5	10·5	215					
13·0	2	24·3	24·1	97										

MGIPC—S7—20 DGO/52—22-11-52—325

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JANUARY 1948



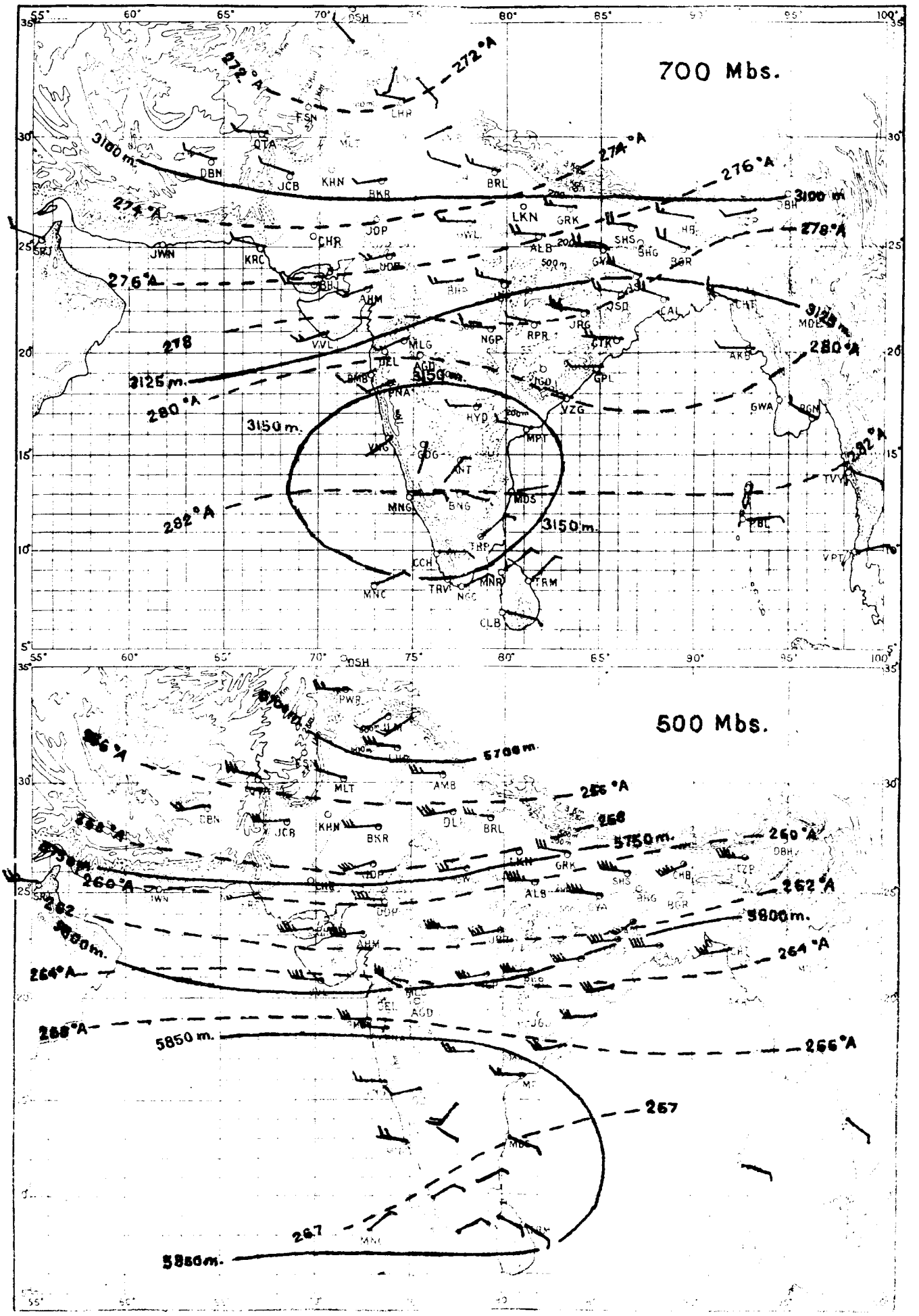


RESULTANT WIND — = 5 Knots — = 10 Knots — = 50 Knots

— — — Temperatures in degrees absolute ——— Contours in metres

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JANUARY 1948



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INDIA WEATHER REVIEW, 1948.

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Monthly Weather Report.

February.

Published by authority of the Government of India.

Chief features :—(i) Western disturbances in the latter half of the month gave excess of rainfall in the Punjab, Sind and Rajputana ; (ii) good rain fell in the central parts of the country, Bengal and Assam.

Eight fresh western disturbances passed across the country during the month. The last western disturbance of the previous month was fairly active and induced a secondary over the Punjab on the 2nd. The two together, while moving eastnortheastwards, caused local rain or snow in the North-West Frontier Province and Baluchistan on the 2nd and local showers in the Punjab on the 3rd and in and near the Punjab Kumaon hills on the 4th. Scattered showers occurred along the Punjab Kumaon hills even after the 4th and under the influence of the first disturbance of the month which moved through Baluchistan and the North-West Frontier Province on the 7th and 8th, scattered showers continued along the Punjab Kumaon hills till the 9th. The second disturbance, which passed through Baluchistan and the North-West Frontier Province on the 10th and 11th induced a secondary low over Sind and Rajputana on the 12th. The third disturbance of the month moved quickly along the Mekran coast and merged into this secondary over Sind and Rajputana on the 13th. The secondary then moved to east Central India by the 14th and became unimportant by the next day. It caused scattered showers in and near Central India and the United Provinces between the 12th and 14th.

The next disturbance began affecting Baluchistan on the 16th and moving northeastwards lay as an active " Low " over Rajputana on the 18th and over east Central India on the 19th ; continuing to move eastwards it became unimportant by the 21st. In association with it local thunderstorm-rain fell in Rajputana and the West Punjab on the 18th with widespread rain in the United Provinces and local rain in Chota Nagpur and Bihar on the 19th. Scattered showers also occurred in Baluchistan and Sind on the 17th and 18th.

The fifth and sixth disturbances were very active. The former, while moving across the northwest frontier, induced a secondary in the north Arabian Sea off the Mekran coast on the 20th. This moved northeastwards and passed across the western Himalayas. The two disturbances together were responsible for widespread rain in the West Punjab and Sind on the 19th and 20th, in the East Punjab and west Rajputana on the 21st and in the west United Provinces on the 22nd.

The last two disturbances of the month, which passed across Baluchistan and the Punjab between the 25th and 28th, caused fairly widespread rain in the Punjab, north Rajputana and the west United Provinces on the 27th and along and near the East Punjab hills on the 28th.

Rainfall during this period was so heavy in the Lahore area, that low lying areas were submerged under water and people were subjected to considerable hardship.

A trough of low pressure appeared off the Konkan coast on the 1st and moving eastnortheastwards across the north Central Provinces and Chota Nagpur to Bengal and Assam, became unimportant there. It gave local showers in the east United Provinces, Bihar and Chota Nagpur on the 3rd and 4th and fairly widespread thunderstorms in Bengal from the 5th to 7th. Another trough appeared over the east Deccan on the 12th and moved to south Bengal. It caused local thundershowers along the north Madras coast on the 11th, in Orissa on the 12th and 13th, in south Bengal on the 13th and in Assam on the 15th and 16th. Scattered showers also occurred along the north Madras coast, the east Central Provinces and Chota Nagpur between the 13th and 16th.

21 DGO/52.

A " Low " developed over the north Central Provinces on the 27th and moved rapidly eastwards. It was responsible for local showers in Orissa and a few showers in Bengal and Assam on the 28th. Weather was unusually dry in the Peninsula during the month.

The total rainfall during the month was in large excess in Orissa, the East Punjab and Rajputana, in slight to moderate excess in west Central India, south Hyderabad and the north Madras coast and normal in Assam, West Bengal and the west United Provinces. It was in slight to moderate defect in Kashmir, Berar, the west Central Provinces, Malabar and southeast Madras and in large defect elsewhere except in the Bombay Presidency and the Madras Deccan where no rain fell. Averaged over the plains of India, the rainfall during the month was 23 per cent. in excess.

Maximum temperatures were above normal in Bihar and below normal in Kashmir and east Rajputana. Minimum temperatures were above normal in West Bengal, southeast Madras and the north Madras coast and normal elsewhere. Humidity was in excess in the west United Provinces, north-west India, Central India and the west Central Provinces and normal elsewhere. Cloud amount was in excess in the United Provinces, east Rajputana, Central India and the Central Provinces and in defect in the Konkan, the Bombay Deccan and north Hyderabad.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amounts for the 13 chief political divisions and the 27 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N. B.—THE INDIAN STANDARD TIME USED IN THIS PUBLICATION IS 5 HOURS 30 MINUTES IN ADVANCE OF G. M. T.

POONA 5,
Dated the 29th April, 1948.

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

	Rainfall.				Departure from normal of				
	Actual.	Normal.	Departure from normal.	Percentage departure from normal	Maximum temperature.	Minimum temperature.	8 hrs. I. S. T. Vapour pressure.	8 hrs. I. S. T. Relative humidity	8 hrs. I. S. T. Cloud.
1	2	3	4	5	6	7	8	9	10
Division.	"	"	"		°	°	mb.	%	
1. Assam . .	1·44	1·44	0	0	0	+0·4	—0·2	—4	—0·2
2. West Bengal .	1·16	1·09	+0·07	+6	+0·5	+2·1	+1·0	+2	+0·5
3. Orissa . .	2·40	1·00	+1·40	+140	—0·3	+1·8	+1·7	+5	+0·3
4. Bihar . .	0·42	1·01	—0·59	—58	+1·5	+0·9	+0·2	—1	+0·2
5. United Provinces	0·72	0·88	—0·16	—18	—0·7	+0·2	+0·2	+4	+0·9
6. East Punjab .	2·02	1·15	+0·87	+76	—1·1	—0·2	+1·2	+7	+0·2
7. Rajputana .	0·90	0·31	+0·59	+190	—1·8	0	+1·9	+12	+0·3
8. Bombay .	0	0·09	—0·09	—100	+0·5	+1·2	+1·2	+6	—0·1
Sub-Division.									
1. Bay Islands .	0·41	1·11	—0·70	—63	+0·5	+0·7	+0·1	0	+0·3
2. Assam . .	1·44	1·44	0	0	0	+0·4	—0·2	—4	—0·2
3. West Bengal .	1·16	1·09	+0·07	+6	+0·5	+2·1	+1·0	+2	+0·5
4. Orissa . .	2·40	1·00	+1·40	+140	—0·3	+1·8	+1·7	+5	+0·3
5. Chota Nagpur	0·68	1·55	—0·87	—56	+0·5	+0·7	+0·7	0	+0·1
6. Bihar . .	0·29	0·74	—0·45	—61	+2·3	+1·1	—0·2	—2	+0·3
7. United Provinces, East.	0·36	0·73	—0·37	—51	0	+0·3	+0·2	+2	+1·1
8. United Provinces, West.	1·08	1·03	+0·05	+5	—1·6	0	+0·2	+7	+0·6
9. East Punjab	2·02	1·15	+0·87	+76	—1·1	—0·2	+1·2	+7	+0·2
10. Kashmir .	3·03	3·40	—0·37	—112	—2·2	—0·9	+0·1	+6	+1·0
11. Rajputana, West.	1·03	0·42	+0·61	+145	—1·1	+0·3	+1·3	+6	—0·1
12. Rajputana, East.	0·77	0·20	+0·57	+285	—2·4	—0·2	+2·3	+17	+0·7
13. Gujarat . .	0	0·11	—0·11	—100	0	+1·1	+1·1	+8	+0·3
14. Central India, West	0·21	0·16	+0·05	+31	—0·9	—0·2	+1·6	+16	+1·1

	Rainfall.				Departure from normal of				
	Actual.	Normal.	Departure from normal.	Percentage departure from normal	Maximum temperature.	Minimum temperature.	8 hrs. I. S. T. Vapour pressure.	8 hrs. I. S. T. Relative humidity	8 hrs. I. S. T. Cloud.
1	2	3	4	5	6	7	8	9	10
Division—*contd.*	"	"	"		°	°	mb.	%	
9. Central India .	0·23	0·43	—0·20	—47	—0·6	—0·5	+1·3	+15	+0·9
10. Central Provinces and Berar.	0·41	0·70	—0·29	—41	0	+1·3	+1·1	+6	+0·7
11. Hyderabad .	0·28	0·39	—0·11	—28	+0·7	+1·7	+0·1	0	—0·5
12. Mysore . .	0·01	0·18	—0·17	—94	+0·4	+1·4	+0·8	+4	+0·3
13. Madras .	0·33	0·50	—0·17	—34	+0·5	+1·9	+0·9	0	+0·2
Mean of India .	0·65	0·53	+0·12	+23	—0·1	+0·9	+0·9	+5	+0·3
Sub-Division—*contd.*									
15. Central India, East.	0·26	0·78	—0·52	—67	—0·4	—1·0	+0·9	+14	+0·6
16. Berar . .	0·29	0·37	—0·08	—22	—0·9	+0·7	+0·9	+5	+0·1
17. Central Provinces, West.	0·46	0·54	—0·08	—15	—0·3	+1·1	+1·2	+8	+1·1
18. Central Provinces, East.	0·40	1·02	—0·62	—61	+0·6	+1·8	+1·1	+5	+0·6
19. Konkan .	0	0·04	—0·04	—100	+1·1	+1·3	+1·2	+3	—0·4
20. Bombay Deccan.	0	0·09	—0·09	—100	+6·0	+1·1	+1·3	+4	—0·3
21. Hyderabad, North.	0·12	0·37	—0·25	—68	0	+1·8	—0·1	—1	—0·6
22. Hyderabad, South.	0·50	0·41	+0·09	+22	+1·3	+1·6	+0·4	+1	—0·4
23. Mysore . .	0·01	0·18	—0·17	—94	+0·4	+1·4	+0·8	+4	+0·3
24. Malabar .	0·32	0·45	—0·13	—29	+0·2	+0·6	+1·2	+2	+0·4
25. Madras, South-east.	0·32	0·61	—0·29	—48	+0·7	+2·2	+0·7	0	+0·3
26. Madras, Deccan	0	0·28	—0·28	—100	+0·9	+1·5	+0·3	—2	—0·3
27. Madras Coast, North.	0·71	0·53	+0·18	+34	0	+2·3	+1·6	+1	+0·3

STATION	Height of bar. cistern above mean sea level in feet.	Pressure at station level in Millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure, millibars.			
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
BAY ISLANDS—																				
Port Blair	259	1005·3	+0·9	1002·4	86·0	+0·5	89	27	71·2	+0·7	67	23	80·2	79·5	74·0	74·0	25·9	+0·1	26·2	74
ASSAM—																				
Dibrugarh	348	1004·3	+0·3	1000·8	71·9	—1·1	80	22,23,28	54·6	—0·1	48	8,18	59·6	67·3	57·3	61·8	14·9	—0·7	16·3	87
Sibsagar	317	1005·5	+0·6	1001·7	72·3	—0·8	81	23	54·2	+0·6	47	9,17,18	60·2	68·0	58·6	65·2	16·2	+0·2	19·9	90
Tezpur	258	1007·7	+0·4	1003·1	76·3	—0·1	85	29	56·0	0	50	16	61·0	71·1	58·1	52·6	15·2	—0·2	15·5	82
Gauhati	182	1009·6	+0·6	1005·4	78·8	+0·8	89	29	54·3	+0·5	46	9	61·8	74·4	58·2	62·8	15·0	—0·2	14·3	80
Dhubri	115	1012·0	+0·6	1008·2	78·7	+1·7	89	24,25	—	—	—	—	63·1	76·6	58·9	63·7	15·2	+0·2	14·5	78
Silchar	96	1013·0	+0·5	1009·3	77·9	—2·7	85	24,26,28	57·4	+1·7	51	8,9	62·6	74·5	59·7	64·4	16·2	—0·2	16·1	84
WEST BENGAL—																				
Dum Dum	33	1013·9	—	1010·6	83·4	—	93	24	62·0	—	53	2,9,10	68·1	80·6	64·0	67·1	18·6	..	16·5	79
Calcutta	21	1014·3	0	1010·9	84·5	+0·8	94	24	63·0	+3·6	53	9	66·9	79·2	64·0	66·8	19·0	+2·0	16·6	85
Saugor Island	10	1014·4	—0·1	1011·5	79·7	—0·9	88	26	68·1	+3·5	57	9	73·3	76·7	68·2	68·2	21·3	+0·5	19·7	76
Sandheads	28	1014·2	+0·1	1011·9	—	—	—	—	—	—	—	—	75·8	77·8	72·0	73·3	25·0	+2·5	25·9	82
Midnapore	149	1009·7	—0·1	1006·2	84·5	—0·9	93	23,24	61·6	+0·4	50	9	64·9	80·8	61·9	66·0	17·6	+2·3	15·0	83
Burdwan	106	1011·2	—0·2	1007·6	83·5	+0·2	93	24	61·0	+2·5	51	8,9	68·3	80·4	61·6	64·8	15·8	+1·0	13·9	66
Krishnagar	48	1013·0	—0·5	1009·9	84·3	+1·6	94	24	58·1	+2·4	49	10	62·0	80·8	59·4	66·0	16·2	+1·0	15·0	85
Asansol	414	1000·6	+0·3	997·1	82·7	+0·4	92	24	59·1	+1·7	48	8	65·5	78·7	60·4	65·7	15·7	+2·3	15·7	73
Berhampore	62	1012·9	—0·1	1009·1	83·4	+1·9	83	24	58·2	+1·7	48	8	65·5	79·3	60·1	64·7	15·3	+0·6	14·3	71
Malda	103	1011·9	+0·2	1008·2	80·4	+1·1	88	23,24	55·8	+1·7	45	8	65·4	77·0	58·6	62·4	13·7	—0·4	12·7	65
Jalpaiguri	271	1005·7	+0·2	1001·9	77·4	+0·5	85	24,29	54·8	+1·0	45	8	57·9	75·1	55·5	62·1	13·9	—0·6	13·2	85
ORISSA—																				
Balasore	65	1012·9	+0·1	1009·4	83·0	—1·8	92	24	64·0	+2·4	53	9	71·0	76·2	65·6	68·8	14·3	—2·9	15·5	74
Chandbali	20	1014·3	+0·2	1011·4	84·8	—0·3	97	24	65·3	+1·6	54	9	70·1	78·4	67·4	69·2	21·8	+1·7	20·3	86
Puri	20	1014·2	+0·2	1011·2	82·9	0	91	25	70·3	+1·2	59	9	74·6	78·9	69·7	72·6	22·5	+0·2	24·4	77
Gopalpur	56	1012·7	0	1009·5	83·4	—0·1	88	25	69·4	+2·2	61	9	73·6	79·0	69·8	72·9	23·1	+2·4	24·9	82
Cuttack	87	1011·5	—0·5	1008·1	86·7	—1·5	96	24	67·3	+2·5	56	9	70·6	82·6	67·8	71·3	21·9	+2·4	20·9	85
Angul	455	998·9	+0·2	995·4	85·6	—1·2	95	24	63·1	+1·8	53	8	66·8	82·1	63·6	67·9	18·7	+2·4	17·0	83
Sambalpur	486	998·0	+0·1	994·2	87·4	+1·1	96	24,28	60·7	+1·3	48	9	67·0	84·5	61·4	65·8	16·1	+0·9	13·3	71
CHOTA NAGPUR—																				
Jamshedpur	423	1000·4	+0·3	996·5	83·9	+0·6	93	24	59·2	+1·5	48	9	64·9	80·2	59·4	63·6	14·8	0	12·6	71
Chaibasa	742	989·1	+0·2	985·2	84·9	+1·1	94	23,24	59·1	+1·7	48	8,9	63·4	82·0	59·4	65·3	15·5	+0·8	13·8	77
Ranchi	2,150	940·9	+0·3	938·5	77·5	+0·6	88	23	53·7	—1·3	41	8	60·8	74·1	54·5	60·5	11·7	+1·1	12·1	66
Hazaribagh	2,006	946·0	+0·7	942·9	76·4	—0·7	83	23	53·9	—0·3	40	8	61·9	71·1	53·9	57·3	10·7	+0·3	10·0	58
Daltonganj	725	990·3	+0·4	983·1	81·0	+1·1	87	24,27	53·6	+1·7	39	8	61·0	76·5	56·8	61·8	13·9	+1·3	12·3	74
Dhanbad	839	986·0	—	—	81·4	—	90	23,24	58·2	—	46	9	65·7	—	57·2	—	12·1	—	—	57

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	
																														BAY ISLANDS—
3·9	+0·3	4·1	0·41	—0·70	0·41	11	1	—1·0	(g) 5·1	—2·0	6	15	3	0	0	0	2	1	2	0	21	7	0	0	0	0	0	1		Port Blair.
																														ASSAM—
6·2	+0·7	7·0	2·29	—0·15	0·42	5,15	6	—0·2	1·4	+0·4	1	6	12	0	2	0	1	2	5	3	4	5	0	0	0	0	1	16		Dibrugarh.
7·3	+0·1	6·4	3·49	+1·47	1·45	23	5	—0·2	2·5	+0·7	11	4	5	1	0	0	0	0	8	8	6	2	0	1	1	0	2	9		Sibsagar.
3·8	0	2·6	0·65	—0·43	0·25	16	4	+1·3	2·6	+0·3	0	8	20	1	0	0	0	0	0	0	4	9	0	0	0	1	1	14		Tezpur.
3·3	—0·1	3·5	0·18	—0·99	0·09	15	0	—2·6	2·3	+0·8	5	4	3	8	4	0	0	1	4	3	7	3	1	0	1	1	4	9		Gauhati
0·2	—2·3	0·3	0·27	—0·47	0·26	15	1	—0·5	3·6	+0·1	0	20	1	0	1	1	0	0	6	2	9	0	1	1	7	0	1	8		Dhubri.
3·7	+0·8	2·3	4·65	+2·76	1·69	7	8	+4·4	1·0	—0·5	0	1	11	6	0	0	0	0	11	1	1	3	1	1	5	6	0	11		Silchar.
																														WEST BENGAL—
3·8	—	3·9	3·13	—	1·96	6	5	—	—	—	7	3	0	0	2	1	0	5	11	2	2	1	2	5	4	2	8	3		Dum Dum.
3·1	+0·2	3·5	1·47	+0·30	0·63	6	3	+1·2	1·9	—0·7	4	1	0	0	1	0	2	3	18	2	0	1	0	2	8	3	5	8		Calcutta.
2·6	—0·7	3·0	2·60	+1·45	1·47	7	3	+1·2	7·7	+1·0	6	4	2	0	3	6	3	3	2	4	0	1	1	9	9	1	2	2		Saugor Island.
2·3	0	2·3	1·52	+0·96	1·22	7	2	+0·9	—	—	6	0	1	1	5	4	4	3	5	1	1	0	2	7	6	1	1	10		Sandheads.
3·2	+0·7	4·0	1·84	+0·49	0·98	4	3	+1·0	2·8	+0·9	5	6	0	0	2	3	0	3	10	6	6	0	2	4	3	0	5	3		Midnapore.
2·9	0	3·1	0·66	—0·66	0·48	4	2	0	2·5	+1·0	4	3	2	1	1	4	2	5	7	6	2	0	0	1	2	4	10	4		Burdwan.
3·5	+0·8	3·1	1·05	—0·10	0·53	6	2	+0·2	1·9	+0·2	0	2	3	1	1	0	1	2	19	4	2	0	1	0	3	2	12	5		Krishnagar.
2·7	+0·1	3·0	0·92	—0·33	0·79	4	2	—0·5	3·7	+0·1	2	2	0	0	1	0	8	10	6	3	1	0	1	3	0	4	10	7		Asansol.
3·8	+1·1	3·2	0·96	+0·13	0·63	4	2	+0·3	1·0	—0·5	1	0	0	2	0	3	2	1	20	1	1	1	1	2	5	1	0	17		Berhampore.
3·2	+1·4	2·5	0·55	—0·25	0·55	4	1	—0·7	3·1	+0·2	3	3	2	2	3	5	2	6	4	1	3	1	0	1	2	3	14	4		Malda.
2·7	+0·6	3·1	0·45	—0·22	0·43	6	1	—0·4	2·8	+1·5	10	7	4	0	0	0	2	0	6	1	4	2	2	5	3	4	0	8		Jalpaiguri.
																														ORISSA—
2·9	+0·4	4·2	5·19	+3·82	2·53	5	5	+2·6	2·7	+0·1	10	6	1	0	1	7	1	2	1	1	0	0	11	10	0	0	0	7		Balasore.
2·3	—0·5	2·4	1·33	+0·02	1·04	7	2	+0·2	4·5	—0·2	5	2	0	0	7	1	2	7	5	1	2	5	16	3	2	0	0	0		Chandbali.
2·6	+0·1	3·0	3·76	+2·84	1·96	13	4	+2·8	9·5	+1·0	8	4	0	0	2	9	1	1	1	1	0	1	13	9	5	0	0	1		Puri.
2·0	+0·5	3·1	3·51	+2·61	2·10	15	3	+1·8	8·9	+1·3	14	0	0	0	2	4	2	6	1	0	0	6	5	13	5	0	0	0		Gopalpur.
3·1	+0·2	3·4	4·38	+3·60	1·77	13	4	+2·5	2·2	+0·7	0	3	1	0	0	0	2	3	20	0	4	1	1	4	3	0	1	15		Cuttack.
4·3	+1·3	3·5	1·05	—0·08	0·68	12	3	+0·9	3·8	+0·3	1	2	0	2	2	0	8	8	6	3	5	3	3	5	0	3	3	4		Angul.
2·6	+0·5	3·7	0·35	—0·59	0·27	20	1	—1·0	2·8	+0·4	4	13	4	1	0	0	0	2	5	5	3	2	3	2	2	3	6	3		Sambalpur.
																														CHOTA NAGPUR
2·6	—0·3	3·3	0·66	—1·29	0·39	5	2	—1·7	3·0	+0·7	0	1	2	0	0	3	12	5	6	5	2	5	1	0	2	8	4	2		Jamshedpur.
3·2	+0·6	4·1	0·46	—1·03	0·32	13	1	—1·5	1·1	—0·5	0	1	0	1	0	11	1	1	14	4	4	0	1	1	3	2	5	9		Chaibasa.
2·0	—0·6	2·8	0·55	—1·25	0·40	4	1	—2·4	3·0	—1·0	4	0	0	0	1	0	1	7	16	4	0	0	0	3	0	1	3	18		Ranchi.
2·7	—0·1	3·6	1·07	—0·89	0·58	19	3	+0·5	5·2	—0·3	2	0	1	3	2	2	5	6	8	3	1	0	1	2	1	4	15	2		Hazaribagh.
3·1	+1·1	3·7	0·64	—0·63	0·36	19	2	—0·4	2·1	—0·3	0	1	3	7	2	2	2	1	11	3	5	0	0	0	1	7	10	3		Daltonganj.
—	—	—	0·90	—	0·82	4	1	—	4·5	—	7	3	0	0	0	5	7	3	4	—	—	—	—	—	—	—	—	—		Dhanbad.

(g)—Mean of 24 days.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2·30 HRS. G.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure, millibars.			Relative h %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
BIHAR—																					
Purnea	124	1010·8	+0·1	1007·1	80·9	+2·0	88	24	51·8	+0·2	39	8	59·8	77·1	56·0	62·6	13·5	—0·1	12·8	78	–
Darbhanga	161	1009·6	+0·3	1006·1	80·3	+2·4	88	23	53·0	+0·1	44	8	58·4	77·6	54·7	63·1	13·0	—0·9	13·1	78	+
Motihari	218	1007·9	+0·7	1003·9	78·0	+1·2	87	23	51·3	+1·3	42	8	63·2	74·6	58·1	62·9	14·3	+0·8	14·3	72	–
Patna	173	1008·9	—0·2	1005·6	80·2	+2·4	86	23,24,27	56·8	+2·0	45	8	62·7	76·7	55·7	61·0	12·0	—0·8	11·3	62	–
Dehri	352	1003·0	—	999·7	80·1	—	88	27	58·5	—	48	8	62·0	77·6	56·4	61·7	13·1	—	11·6	70	–
Gaya	365	1002·3	+0·1	998·8	81·4	+2·0	89	27	55·7	+2·8	44	8	62·4	78·1	55·9	60·8	12·3	+0·9	10·3	64	+
Naya Dumka	489	997·5	—0·4	993·9	83·4	+2·9	94	24	56·7	+1·0	46	8	64·1	79·1	57·6	62·7	13·3	+0·1	12·0	63	+
Sabour	122	1010·9	+0·5	1007·3	80·2	+2·0	87	23,26,27	50·8	+0·3	40	8	62·2	76·0	57·3	63·0	13·8	—0·5	13·7	73	–
U. P., EAST—																					
Gonda	360	1002·0	—	999·7	77·8	—0·2	86	27	50·2	—1·2	41	7	52·7	70·2	51·6	59·7	12·4	+0·2	12·7	71	–
Gorakhpur	254	1006·1	+0·4	1002·8	79·4	+1·7	88	23	53·7	+1·6	45	7	58·6	72·8	53·7	60·1	11·7	—0·6	12·6	79	–
Banaras	250	1006·3	—0·1	1003·8	80·4	+1·0	89	27,28	53·1	+1·0	42	9	57·9	77·9	54·4	61·2	12·9	+0·4	11·0	79	+
Allahabad (Bamrauli).	322	1003·9	+0·1	1000·9	78·8	—0·4	89	27,28	53·0	+2·1	42	9	57·8	77·1	53·4	60·0	11·9	+·9	10·1	73	+
Fatehpur	375	1002·5	—	999·2	77·9	—1·9	88	27	51·6	—0·7	41	9	56·6	74·9	53·2	61·5	12·0	—0·3	13·3	79	+
Kanpur	413	1000·9	+0·6	998·6	77·5	+0·5	87	27	51·6	+0·6	41	8	55·3	75·1	51·7	60·0	11·6	+0·7	10·9	77	+
Lucknow	371	1002·2	+0·3	1000·0	78·0	—0·6	87	27,28	51·9	+0·5	42	5,6	56·1	74·6	52·3	60·6	11·7	+0·4	11.7	77	+
Bahraich	407	1000·7	+0·8	998·2	77·2	+0·2	85	29	49·5	+1·4	39	7,8	55·4	73·5	51·8	59·5	11·6	—0·2	11·1	77	
U. P., WEST—																					
Jhansi	824	986·7	+0·1	983·6	78·1	—2·8	91	27	50·4	—2·2	41	7	55·6	76·8	52·5	60·9	12·1	+2·1	11·0	78	+
Agra	553	996·7	+1·0	994·2	75·7	—1·7	86	27	51·1	+2·9	40	5	53·5	74·3	50·7	58·5	11·2	+2·2	9·6	81	+
Mainpuri	516	997·3	+0·6	995·3	76·8	—0·9	86	27	49·5	—0·3	37	5	53·2	73·9	49·8	59·1	10·5	0	10·7	77	-
Aligarh	615	993·5	—	991·4	74·4	—1·3	82	27	49·5	—1·1	39	5,6	52·9	72·4	50·1	58·1	11·2	+0·8	10·1	79	-
Bareilly	568	994·9	+0·3	992·4	75·6	+0·5	84	27	51·0	+1·9	41	7	56·8	71·9	52·4	58·0	11·4	+0·1	10·2	73	-
Roorkee	899	982·6	+0·4	980·7	71·0	—1·5	76	14	47·1	+0·1	38	6,7	49·3	69·7	47·1	56·4	9·9	—0·4	9·7	84	-
Dehra Dun	2,239	935·8	0·1	935·5	68·3	—0·9	74	25	46·6	0	37	7	50·8	65·1	47·0	54·9	9·6	+0·7	10·5	76	
EAST PUNJAB—																					
New Delhi	714	989·5	—0·4	987·7	73·2	—1·5	78	27	49·9	+0·7	41	6,7,9	51·9	70·9	50·4	57·3	11·8	+1·9	10·1	74	+
Hissar	725	989·9	+0·5	987·7	73·8	—2·4	82	26	46·5	—0·7	34	6	49·9	71·1	42·7	58·9	10·3	+1·5	11·5	84	+
Ambala	892	983·1	0	981·3	72·5	—0·6	79	26	47·7	—0·1	38	6	51·5	69·8	48·6	58·7	10·3	+0·4	12·0	81	+
Ludhiana	812	986·0	—0·3	985·0	71·1	—0·1	79	26	46·8	—0·7	36	7,8	48·6	68·8	47·8	58·7	10·7	+1·0	12·5	85	+
KASHMIR—																					
Srinagar	5,205	844·1	+0·2	843·0	37·8	—6·3	51	29	27·5	2·0	17	9	30·1	36·2	28·9	34·2	4·9	—0·7	6·0	88	–
Gulmarg	8,709							(Closed	during	winter		months)									
Dras	10,059	702·6	0	701·1	19·9	—0·8	33	27													
Leh	11,529	665·9	+2·2	662·3	32·9	—0·1	42	20,21	10·2	—0·1	0	7,8,9	13·3	29·6	11·8	23·9	1·9	+0·2	2·7	74	+
Skardu (R)	7,505																				
Gilgit (R)	4,890																				
Misgar (R)	10,190																				

(R)—Register not received.

Cloud amount. (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs I. S. T.									17 hrs I. S. T.										
Departure from normal.	Mean 17 hrs. I. S. T.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
25	26		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													BIHAR—
+0·7	1·8		0·03	—0·59	0·03	19	0	—1·3	2·5	+0·4	1	3	9	0	1	4	7	1	3	1	0	0	0	1	3	13	1	10	Purnea.
+0·5	2·4		0·42	—0·11	0·40	6	1	—0·4	1·5	—0·6	1	5	3	1	1	1	9	1	7	0	1	2	2	0	3	12	2	7	Darbhanga.
+0·6	1·5		0·20	—0·40	0·20	5	1	—0·4	2·2	—0·1	2	0	7	1	0	0	8	0	11	0	2	2	0	0	0	9	0	16	Motihari.
—0·1	2·4		0·23	—0·51	0·15	19	1	—0·6	4·0	+1·2	0	1	2	1	2	9	8	1	5	1	0	1	2	1	0	15	3	6	Patna.
—	2·5		0·63	—0·21	0·47	3	2	+0·2	3·4	—	0	0	1	2	3	7	4	4	8	2	2	0	1	0	1	0	21	2	Dehri.
+0·4	3·0		0·42	—0·43	0·21	19	2	+0·2	4·6	+0·6	0	1	2	3	11	3	2	0	7	2	3	1	0	0	2	4	14	3	Gaya.
+0·8	2·3		0·20	—0·74	0·20	4	1	—1·0	2·0	+0·5	0	0	0	5	0	13	0	2	9	0	3	0	5	0	19	0	1	1	Naya Dumka.
—0·5	2·0		0·18	—0·61	0·11	19	1	—0·7	3·1	—0·4	0	3	4	5	3	5	6	1	2	4	2	1	0	1	0	10	8	3	Sabour.
																													U. P., EAST—
+0·6	3·5		0·26	—0·65	0·10	27	1	—1·3	3·4	+0·3	3	1	0	3	0	0	9	2	11	1	0	0	0	1	1	8	9	9	Gonda.
+0·6	1·5		0·10	—0·53	0·08	28	0	—1·8	2·4	+0·7	1	3	1	1	0	1	8	1	13	1	1	2	0	1	2	14	1	7	Gorakhpur.
+0·5	3·4		0·37	—0·34	0·29	19	1	—0·9	4·7	+1·9	0	1	6	0	0	12	6	1	3	1	5	2	0	0	1	9	11	0	Banaras.
+1·0	4·0		0·45	—0·18	0·37	19	1	—0·7	3·2	0	1	2	1	2	4	4	7	0	8	10	3	2	1	0	1	2	10	0	Allahabad (Bamrauli).
+1·4	3·6		0·29	—0·42	0·19	19	1	—1·4	2·9	+0·3	0	1	2	2	1	3	6	3	11	1	2	3	0	0	0	5	9	9	Fatehpur.
+2·2	3·5		0·74	+0·08	0·42	21	2	+0·4	6·2	+2·1	3	5	0	0	0	3	3	7	8	4	3	3	0	0	1	8	10	0	Kanpur.
+1·2	4·2		0·38	—0·29	0·13	19	2	+0·4	1·7	0	1	0	3	1	2	2	7	0	13	1	1	2	1	1	1	13	3	6	Lucknow.
+1·4	4·1		0·26	—0·65	0·25	22	1	—1·0	3·5	+1·4	0	0	3	1	0	2	6	4	13	0	1	1	1	0	6	7	5	8	Bahraich.
																													U. P., WEST—
+0·6	2·8		0·09	—0·36	0·03	18,19	0	—1·1	4·0	+1·3	3	1	0	0	0	1	1	2	21	2	1	1	0	0	1	7	12	5	Jhansi.
+0·5	3·4		0·58	+0·09	0·35	21	2	+0·9	1·9	—1·3	1	0	2	0	1	3	2	2	18	2	1	2	0	0	0	3	8	13	Agra.
+0·5	3·3		0·24	—0·30	0·15	21	1	—0·2	2·9	+1·2	2	0	1	2	0	4	4	8	8	1	0	3	2	0	2	7	12	2	Mainpuri.
+0·6	4·1		1·25	+0·49	0·50	27	4	+1·4	6·1	+2·6	0	0	5	0	0	0	15	2	7	3	0	3	1	0	1	3	14	4	Aligarh.
+1·0	4·7		0·80	—0·17	0·35	27	3	+1·1	3·1	+1·1	3	0	2	0	1	5	11	3	4	1	1	4	0	0	41	19	1	2	Bareilly.
+0·4	3·5		2·10	+0·58	1·06	22	4	+1·2	2·5	+0·3	1	3	0	6	0	2	0	11	6	1	2	0	1	0	6	0	16	3	Roorkee.
+0·5	4·9		2·02	—0·45	0·55	27	5	+1·2	1·6	—0·1	7	4	1	1	0	0	1	4	11	2	1	0	1	1	8	9	4	3	Dehra Dun.
																													EAST PUNJAB—
+1·0	4·2		1·35	+0·52	1·04	21	2	+0·3	6·0	—	1	0	2	3	1	2	8	4	8	3	0	2	5	0	1	0	17	1	New Delhi.
+0·4	2·2		0·88	+0·34	0·41	3	3	+1·8	4·0	+0·1	2	2	3	3	3	8	2	3	3	7	5	1	1	0	4	1	6	4	Hissar.
—1·0	2·0		2·52	+0·65	0·98	22	5	+1·9	—	—	0	0	0	3	0	0	0	26	0	0	0	0	2	0	0	0	27	0	Ambala.
+1·4	3·6		3·32	+1·97	2·39	27	2	—0·7	1·4	—0·3	2	2	0	1	1	1	4	2	16	0	1	0	1	1	2	1	7	16	Ludhiana.
																													KASHMIR—
+1·6	8·4		3·58	+0·74	1·08	3	10	+3·8	1·7	—0·7	0	0	0	6	3	1	2	1	16	2	0	0	8	2	2	3	2	10	Srinagar.
																													Gulmarg.
+0·6	5·4		3·28	—0·55	0·72	3	10	+2·4	0	—0·7	0	0	0	0	0	0	0	0	29										Dras.
—0·4	6·5		0·98	+0·67	0·43	22	3	+2·1	1·2	—0·2	0	6	1	0	2	0	0	0	20	0	0	2	0	8	6	4	0	9	Leh.
																													Skardu (R).
																													Gilgit (R).
																													Misgar (R).

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS., I. S. T. (2-30 HRS. G.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure. millibars.			Rel hur %
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
RAJPUTANA, WEST—																				
Sri Ganganagar	580	994·8	—	993·2	73·4	—0·2	83	26	45·4	—0·3	30	6	49·3	70·1	47·5	59·0	10·2	+0·1	12·1	86
Bikaner	734	989·0	0	986·7	75·4	—	86	26	48·1	—	31	6	52·4	74·2	48·5	58·6	9·3	—	9·9	68
Phalodi	800	986·6	—	986·0	75·7	—	87	26	51·7	—	36	7	48·9	73·6	47·1	64·6	10·3	—	17·2	73
Jodhpur	736	989·3	+1·5	986·8	78·4	—2·2	87	26	54·0	+1·4	40	5	57·3	76·3	51·5	59·3	10·2	+2·8	9·6	64
Barmer	638	992·5	+0·9	989·9	80·4	—0·9	98	26	55·3	—0·3	43	5,7	54·9	78·6	52·0	61·5	11·9	+1·4	11·2	62
RAJPUTANA, EAST—																				
Sikar	1,406	965·4	—	963·2	75·8	—	83	26	47·9	—	35	7,8	51·6	76·3	47·9	57·3	9·5	—	7·5	75
Jaipur	1,431	965·4	—0·1	963·2	74·7	—2·3	82	26	51·0	+0·4	36	7	55·5	72·1	50·0	56·6	9·9	+2·0	8·8	66
Ajmer	1,595	960·1	+0·2	957·3	73·4	—3·6	81	26	49·1	—0·8	35	7	55·6	72·0	51·4	57·7	11·3	+2·9	10·5	75
Kotah	843	986·0	+0·1	982·6	80·5	—1·5	93	27	54·9	—0·5	44	7	57·9	78·7	52·7	60·2	11·4	+2·6	9·5	67
Jhalawar	1,053	977·9	+0·1	974·6	80·2	—2·1	92	27	52·9	+0·1	39	7	56·4	79·3	51·8	60·2	11·2	+1·9	9·3	71
Rajsamand	1,850	949·3	—	946·4	78·1	—	87	26	50·3	—	37	7	53·9	76·3	50·4	58·9	11·1	—	10·1	77
GUJARAT—																				
Deesa*	466																			
Bhuj	343	1003·4	+0·6	1000·6	83·5	—0·2	92	26	57·6	+1·1	46	6	60·1	82·4	55·8	62·4	13·3	+1·0	10·3	74
Dwarka	37	1013·8	—0·1	1011·8	79·8	+1·3	90	25	64·6	+1·4	55	7	66·7	76·0	63·1	67·2	18·1	+1·4	18·7	80
Jamnagar	60	1014·7	+1·6	—	81·4	—1·2	88	28	57·7	+1·9	45	7	64·2	—	60·4	—	16·2	+2·4	—	78
Rajkot	432	999·8	+0·4	996·2	86·4	—0·1	98	26	56·0	+1·7	45	7	58·4	85·0	54·4	66·4	12·7	+1·9	13·8	75
Veraval	26	1013·2	—0·5	1010·7	83·3	—	93	25	58·0	—	48	7,8	61·5	77·9	55·4	70·1	12·5	—	21·9	66
Surat	39	1012·7	—0·2	1009·4	89·9	+0·5	105	26,27	61·5	+1·5	50	6	63·5	88·1	58·6	74·4	14·6	+1·1	22·8	72
Bhavnagar	55	1012·7	—0·1	1009·3	87·1	—0·2	97	26	57·3	—0·3	43	7,8	59·5	85·8	53·0	63·5	10·9	+1·0	10·0	61
Ahmedabad	163	1009·2	+0·1	1005·8	87·3	—0·6	97	26	61·5	+1·5	51	6,7	63·8	85·5	55·8	63·7	11·6	+1·7	10·3	57
Dohad	1,093	976·1	—	973·3	86·8	+0·1	96	26	57·4	+0·9	44	7	60·3	84·6	52·0	61·5	9·5	—0·9	8·3	53
Baroda	115	1010·7	—	1007·0	89·7	+0·3	100	26	55·4	+0·6	44	7	59·2	88·0	54·0	64·9	11·9	+0·4	10·6	69
CENTRAL INDIA, WEST—																				
Neemuch	1,626	959·0	+0·2	956·4	79·5	—1·3	89	27	52·8	+0·9	40	7,8	55·3	77·7	50·4	59·0	10·5	+2·0	9·5	70
Indore	1,823	951·5	—0·5	948·5	82·9	—0·2	94	27	52·6	+0·3	37	7	56·4	82·0	51·1	60·8	10·7	+1·5	9·6	68
Bhopal	1,643	958·1	+0·3	955·1	82·0	—0·8	93	27	53·4	—1·2	40	7,8	59·7	79·6	53·2	61·2	11·2	+1·8	11·0	63
Guna	1,571	960·3	+0·1	958·1	80·1	—1·1	92	27	49·3	—0·9	33	7	53·1	78·6	49·2	60·5	10·3	+1·0	10·7	76
Gwalior	681	991·7		988·7	77·0		90	27	51·1		38	5	57·0	75·4	52·3	64·0	11·3		15·2	71
Madhosagar	757	988·7		985·9	77·7		90	27	53·8		44	5,7	58·2	75·7	58·4	59·4	11·7		10·0	71
CENTRAL INDIA, EAST—																				
Nowgong	750	989·1	+0·3	986·0	79·2	—0·8	92	27	49·4	—1·3	37	7	54·2	77·4	51·1	59·3	11·4	+0·7	9·1	79
Sutna	1,041	978·1	—0·4	975·7	79·4	+0·1	90	27	51·1	—1·1	40	8	55·0	77·9	51·8	62·6	11·2	+0·6	13·1	80
Umaria	1,506	962·5		959·7	80·7	—0·4	91	22,23	51·2	—0·5	38	8	56·7	78·2	53·5	60·7	12·7	+1·3	10·6	79
BERAR—																				
Akola	925	981·7	—0·5	977·3	90·4	—0·2	101	27	59·0	+1·2	45	7	62·9	88·8	54·3	64·3	10·5	+0·9	9·6	54
Amraoti	1,213	971·9	—0·3	968·2	87·7	—1·6	99	27	62·4	+0·3	50	7	66·2	87·3	56·4	63·4	11·1	+0·9	9·2	50

*Data not reliable.

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from: 8 hrs. I. S. T.									17 hrs. I. S. T.									STATION.
I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													RAJPUTANA, WEST—
2·9	—1·2	2·7	1·67	+0·54	1.11	27	2	0	2·5	—1·7	2	1	2	6	0	0	1	0	17	5	2	3	1	0	0	2	3	12	Sri Ganganagar.
2·5	—2·2	1·8	0·53	+0·26	0·17	20	2	+1·3	3·2	—0·4	0	3	0	2	0	5	0	2	17	5	4	0	1	0	5	1	9	4	Bikaner.
4·8	—	4·2	1·62	+1·43	0·92	18	5	+4·5	5·5	—	3	3	0	12	2	2	2	3	2	4	3	1	3	2	4	2	9	1	Phalodi.
3·1	+0·3	3·9	0·39	+0·15	0·19	21	1	+0·4	1·9	—4·9	2	14	0	0	0	0	3	0	10	3	10	1	0	0	4	1	5	5	Jodhpur.
3·4	+0·8	3·6	0·95	+0·67	0·45	16	4	+3·4	3·7	—1·2	3	1	0	0	1	0	2	11	11	3	5	1	0	0	5	2	5	8	Barmer.
																													RAJPUTANA, EAST
3·7	—	4·2	0·34	—	0·20	19	2	—	2·2	—	0	0	3	9	1	2	1	0	13	3	0	0	4	2	1	7	8	4	Sikar.
3·6	+1·0	4·5	1·22	+0·90	0·73	21	5	+4·2	3·7	—0·2	2	2	8	5	0	1	0	1	10	7	0	3	1	2	1	7	5	3	Jaipur.
3·6	+1·5	3·2	1·06	+0·80	0·59	19	4	+3·3	1·8	—0·3	0	0	0	1	1	1	1	0	25	1	2	0	0	3	4	8	4	7	Ajmer.
2·4	+0·2	2·9	0·37	+0·16	0·20	19	2	+1·5	1·5	—0·2	0	1	0	0	1	0	2	0	25	4	5	0	0	0	0	7	3	10	Kotah.
2·2	+0·3	3·1	0·54	+0·46	0·43	18	1	+0·6	1·8	—0·3	2	0	0	0	1	1	0	3	22	5	7	2	0	2	1	3	7	2	Jhalawar.
3·3	—	4·0	0·66	+0·52	0·55	16	1	+0·5	1·6	—	2	0	1	0	0	0	1	2	23	1	3	4	2	1	2	6	4	6	Rajsamand.
																													GUJARAT—
																													Deesa.*
0·8	—0·7	1·9	0	—0·17	0	—	0	—0·4	4·3	—0·3	0	1	0	1	3	0	1	1	22	9	3	0	0	0	1	6	7	3	Bhuj.
3·1	+0·8	2·1	0	—0·24	0	—	0	—0·5	10·0	+1·3	7	10	2	0	0	1	4	4	1	1	2	0	0	0	0	7	19	0	Dwarka.
2·5	+1·0	—	0	—0·08	0	—	0	—0·2	6·1	—0·8	1	3	1	1	1	2	2	0	18	—	—	—	—	—	—	—	—	—	Jamnagar.
2·0	0	1·9	0	—0·09	0	—	0	—0·3	7·3	+2·5	1	3	5	2	1	3	4	3	7	7	5	2	1	0	0	3	11	0	Rajkot.
1·4	0	0·7	0	—0·07	0	—	0	—0·2	10·7	—	13	12	0	0	0	0	0	3	1	0	1	0	0	0	5	14	9	0	Veraval.
1·2	—0·1	1·1	0	—0·08	0	—	0	—0·2	3·4	+0·2	9	4	2	1	0	0	0	2	11	3	1	0	0	0	5	5	14	2	Surat
1·9	+0·3	2·6	0	—0·06	0	—	0	—	4·2	0	2	0	0	0	1	7	8	7	4	3	8	5	5	2	1	2	2	1	Bhavnagar.
2·6	+1·1	2·9	0	—0·08	0	—	0	—0·2	4·2	+0·6	5	9	4	0	0	0	3	6	2	5	3	2	0	0	5	6	7	1	Ahmedabad.
1·6	—0·3	1·6	0	—0·04	0	—	0	—0·2	7·0	+3·8	4	6	4	3	3	3	3	2	1	3	3	0	0	0	9	12	2	0	Dohad.
1·9	+0·5	1·9	0	—0·21	0	—	0	—0·3	1·9	—0·4	5	6	2	0	1	1	0	2	12	1	3	1	1	0	1	8	7	7	Baroda.
																													CENTRAL INDIA, WEST—
3·7	+1·9	4·6	0·46	+0·31	0·21	16	2	+1·6	4·0	—0·6	0	13	1	3	0	3	0	1	8	0	9	0	2	0	5	4	3	6	Neemuch.
3·2	+1·6	3·2	0·32	+0·18	0·24	14	1	+0·5	2·8	+0·4	1	5	2	3	0	4	1	1	12	4	1	1	0	2	7	9	4	1	Indore.
2·3	+0·4	2·9	0·05	—0·10	0·05	14	0	—0·5	2·9	+0·1	4	4	0	0	0	1	0	4	16	4	5	0	1	0	1	6	8	4	Bhopal.
2·2	+0·7	2·1	0	—0·19	0	—	0	—0·6	2·8	0	2	0	4	1	2	1	2	1	16	1	1	5	0	0	2	11	3	6	Guna.
3·1		4·1	0		0	—	0		1·9		2	2	2	1	0	0	4	3	15	4	8	4	2	0	0	1	7	3	Gwalior.
3·7		4·4	0·04		0·02	2,19	0		4·2		2	3	1	1	4	8	1	2	7	7	7	3	4	0	0	0	6	2	Madhosagar.
																													CENTRAL INDIA, EAST—
4·1	+1·5	4·0	0·04	—0·53	0·04	2	0	—1·3	2·3	+0·7	2	4	1	0	0	10	0	0	12	3	10	1	0	1	1	1	11	1	Nowgong.
2·9	+0·5	3·0	0·07	—0·71	0·07	3	0	—1·8	2·9	+0·3	0	1	3	1	0	3	2	0	19	4	2	5	1	1	2	4	8	2	Sutna.
2·5	—0·1	2·5	0·67	+0·33	0·29	2,14	4	+2·1	2·4	—0·1	3	1	2	2	2	2	0	1	16	2	3	3	2	0	3	4	11	1	Umaria.
																													BERAR—
1·5	—0·2	1·3	0·23	—0·07	0·23	22	1	+0·4	3·7	+0·6	1	4	2	3	1	2	4	2	10	1	3	1	1	0	2	11	6	4	Akola.
2·0	+0·3	2·4	0·36	—0·08	0·24	22	2	+1·2	5·5	+1·5	0	14	4	3	1	6	0	1	0	0	4	0	1	0	9	0	15	0	Amraoti.

* Data not reliable.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T

STATION.	Height of bar. cistern above mean sea level in feet	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure. millibars.			Relative humidity %	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
C. P., WEST—																					
Khandwa	1,044	978·1	−0·1	973·9	89·0	+0·3	100	27	57·0	+1·1	41	7	60·1	85·1	52·2	64·3	9·9	+1·1	11·3	55	+7
Hoshangabad	992	980·1	−0·3	976·4	83·7	−1·2	95	27	58·3	+0·8	47	5	61·3	82·8	54·5	62·5	11·4	+0·8	10·0	61	+7
Saugor	1,808	952·1	−0·1	94 ·6	78·5	−2·1	91	27	55·2	−0·5	42	7	58·9	76·2	51·0	58·0	9·6	+1·2	9·1	56	+9
Jubbulpore	1,289	970·0	+0·3	966·6	83·3	+1·9	93	23,27	53·7	+2·7	41	8	59·3	80·6	54·7	62·7	12·5	+1·4	11·4	73	+10
Seoni	2,027	945·0	−0·4	942·1	82·6	−0·4	93	26	56·3	+1·4	41	7	61·9	79·5	55·2	62·4	12·2	+1·5	12·3	64	+8
Nagpur‖	1,010	979·2	−0·2	975·5	88·0	−0·2	98	27	59·7	−0·2	46	8	65·1	85·5	57·5	64·4	12·8	+1·1	11·1	60	+6
C. P., EAST—																					
Gondia	1,026	979·0		975·9	84·9		95	27	61·4		48	8	64·7	83·4	59·3	65·3	14·8		13·2	71	
Pendra	2,040	944·7	+0·1	941·9	78·8	+0·7	89	28	55·2	+0·7	42	8	60·8	76·2	54·8	61·4	12·2	+0·6	12·6	67	+5
Champa	805	986·5		983·3	85·4		95	24	61·2		49	8,9	64·2	83·9 (c)	58·7	64·9 (c)	14·4		12·4 (c)	69	
Raipur	970	980·9	+0·1	977·4	86·9	+0·9	96	27	62·2	+2·1	49	8	68·2	85·2	60·1	66·2	14·1	+1·1	13·4	61	+2
Titlagarh	691	990·4		986·4	87·9		96	24,28	64·2		53	8,9	68·7	85·5	63·4	67·3	17·5		14·7	73	
Kanker	1,318	970·2	+1·6	965·8	86·0	+0·3	94	27,28,29	58·8	+0·4	46	8	65·1	83·8	61·3	70·7	16·5	+1·4	19·7	80	+9
Chanda	834	992·4	+0·2	988·4	90·2	−0·2	99	25,27	61·5	+2·0	42	7	68·4	89·0	61·2	67·7	15·2	+0·9	13·5	64	+
Jagdalpur	§1,815	952·1	0	948·7	87·7	+1·1	95	26,27	59·8	+3·8	46	8	66·5	82·8	62·2	66·4	17·3	+1·6	15·5	78	+
KONKAN—																					
Dahanu	15	1013·4	—	1010·9	81·1	—	92	24	64·0	—	52	7	66·5	78·3	63·2	75·0	18·2	—	28·2	83	—
Bombay	5	1012·3	−0·3	1009·7	84·9	+1·8	91	26	69·9	+2·5	64	7	72·0	80·6	67·1	71·3	20·4	+1·5	21·9	77	+
Alibag	23	1014·3	+0·8	—	83·3	+0·7	90	28	66·3	+1·4	57	28	69·1	—	64·8	—	19·0	+1·6	—	78	+
Harnai	66	1011·3	—	1009·0	81·8	—	89	25	73·1	—	67	5,6	73·5	79·4	65·1	72·6	17·3	—	24·3	64	—
Devgad	110	1009·5	—	1006·3	84·9	—	90	24,27	73·4	—	68	6	73·7	82·2	68·2	73·2	21·1	—	23·9	73	—
Marmagao	202	1006·8	+0·6	1003·1	84·6	+0·7	89	1	71·3	+0·1	65	6	76·1	82·5	70·1	73·1	22·3	+0·5	23·6	73	—
Honavar	85	1011·5	—	1007·9	87·6	—	93	25	68·9	—	80	21	73·3	84·2	68·3	75·1	21·3	—	25·7	77	—
BOMBAY DECCAN—																					
Jalgaon	660	989·9	—	986·3	91·0	—	101	27	57·1	—	47	8,9	62·5	90·6	54·3	68·2	10·8	—	13·4	55	—
Malegaon	1,432	965·1	+0·1	960·9	89·7	−0·2	98	27	56·2	+1·5	41	7	62·1	87·8	55·0	66·6	11·6	+2·6	12·8	60	+
Ahmednagar	2,154	940·2	−0·4	937·3	—	—	—	—	57·3	+1·4	47	4,7,8	62·4	87·5	55·1	66·2	11·9	+2·4	13·3	60	+
Poona §	1,834	951·5	+0·3	947·7	90·9	+0·4	99	25,26	56·7	+1·6	47	7	59·7	88·0	55·1	64·7	13·3	+2·4	11·4	75	+
Sholapur	1,570	960·5	+0·6	956·3	93·4	+0·9	99	4 days	64·5	+1·8	56	4 days	66·8	91·9	56·2	66·8	11·2	+1·2	12·2	43	
Miraj*	1,817	951·9	+0·2	947·5	92·2	+1·7	99	26	60·1	+1·1	50	5	65·1	90·9	56·3	67·0	12·0	+1·0	12·8	57	-
Kolhapur†	1,885	949·8	--	945·9	91·2	--	97	25,27	60·2	—	52	5	63·5	89·4	56·4	64·0	12·7	—	10·1	64	—
Bijapur	1,950	947·5	+0·3	943·8	94·4	+3·4	104	14	65·5	+1·6	56	8	69·5	90·9	59·2	67·4	13·0	+0·1	13·3	53	-
Belgaum	2,562	927·3	+0·4	924·0	87·7	—0·6	93	25,27	58·3	—1·0	50	6,7	64·8	85·7	56·4	63·2	12·2	—0·1	10·9	59	
Gadag	2,131	941·8	+0·8	937·5	92·4	+1·7	99	21	66·0	+1·1	58	5	72·3	90·2	62·3	68·1	15·1	+1·0	14·6	58	-
HYDERABAD, NORTH—																					
Aurangabad	1,905	949·4	0	945·8	88·1	—0·5	97	27	61·0	+1·4	50	8	66·2	86·8	55·0	63·7	10·2	+1·2	10·8	47	
Parbhani	1,350	966·3	—	962·3	91·7	—	100	27	60·8	—	46	7	67·0	89·9	58·2	68·5	12·6	—	14·1	56	-
Bidar	2,178	939·4	—	935·8	87·7	—0·1	94	26	66·3	+1·6	57	7	69·6	87·4	58·6	64·7	12·4	—2·3	11·7	53	
Nizamabad	1,250	970·5	—0·3	966·7	91·5	+0·7	100	27	64·5	+2·5	49	6	65·9	89·9	59·5	65·9	14·8	+0·7	12·0	53	
Ramakundam	527	996·5	—	992·0	92·0	—	100	29	68·0	—	56	8	72·4	90·5	64·3	68·3	17·0	—	13·6	62	-

(c) Mean of 28 days. § 1 hr. observations for 28 days only. * 1 hr. observations for 28 days only. * 11 hr. observations for 27 days only. † 1 hr. observations for 26 day † 11 hr. observations for 27 day

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity miles per hour.		Wind direction—Number of winds from																		STATION.
											8 hrs. I. S. T.									17 hrs I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													C. P., WEST—
1·7	+0·3	2·1	0·03	—0·12	0·02	21	0	—0·4	4·3	+0·9	3	4	1	1	3	2	4	3	8	4	2	0	0	2	2	3	16	0	Khandwa.
2·4	+0·6	3·4	1·10	+0·72	0·59	15	3	+2·0	3·0	+0·8	1	5	14	2	1	1	1	1	3	1	3	6	3	1	5	5	1	4	Hoshangabad.
5·0	+3·0	5·3	0·02	—0·45	0·02	13	0	—1·2	9·1	+0·2	1	9	6	5	2	3	2	1	0	5	4	1	1	0	2	7	9	0	Saugor.
3·2	+1·2	3·4	0·43	—0·33	0·22	2	2	+0·3	2·7	+1·0	1	4	2	9	4	1	0	0	8	6	7	0	4	0	3	4	2	3	Jubbulpore.
3·4	+1·4	3·1	0·31	—0·50	0·17	15	2	0	3·1	+0·3	4	6	1	2	2	0	0	1	13	7	4	1	2	5	4	1	3	2	Seoni .
2·4	+0·2	2·5	0·89	+0·24	0·70	22	2	+0·6	3·6		11	4	3	0	0	1	0	3	7	1	7	6	3	2	5	1	2	2	Nagpur .
																													C. P., EAST—
1·8		1·5	0·46		0·46	22	1		2·5		8	3	0	3	2	1	2	2	8	6	3	3	0	2	3	6	5	1	Gondia.
2·9	+0·5	3·7	0·34	—1·13	0·19	3	2	—0·9	3·8	+0·4	8	1	0	0	6	0	2	2	10	6	4	0	3	5	4	1	5	1	Pendra.
2·8		3·1	0		0	0	0		4·5		12	5	4	2	0	0	0	2	4	6	2	1	4	0	2	6	5	3	Champa.
3·1	+1·0	(c) 2·1	0·01	—0·86	0·01	10	0	—0·8	3·0	+1·2	0	9	0	2	0	1	0	2	15	0	2	0	0	0	5	0	10	11	Raipur.
1·8		2·5	1·18		1·04	12	1		1·4		4	3	0	1	2	0	1	0	18	5	7	3	3	4	2	0	1	4	Titlagarh.
3·1	+0·9	3·1	1·22	+0·36	0·87	11	2	—0·1	1·7	—1·0	0	1	0	1	0	1	0	2	24	5	2	0	1	0	3	6	6	6	Kanker.
2·3	+0·5	3·1	0	—0·81	0	0	0	—1·3	2·5	+0·4	1	2	1	2	0	5	1	5	12	0	10	1	2	0	2	0	13	1	Chanda.
1·9	—0·1	3·5	0·44	—0·64	0·34	11	1	—0·6	3·3	+1·4	0	1	0	0	0	6	0	5	17	0	3	0	0	0	12	0	10	4	Jagdalpur.
																													KONKAN—
1·5	—	0·7	0	—	0	—	0	—	5·2	—	4	6	11	7	0	0	0	1	0	12	0	0	0	0	0	5	12	0	Dahanu.
1·1	—0·2	0·1	0	—0·08	0	—	0	—0·1	7·7	+0·7	9	10	5	3	0	0	0	0	2	5	0	0	0	0	0	6	18	0	Bombay.
0·9	—0·4	—	0	—0·03	0	—	0	—0·2	3·4	—2·0	3	7	8	2	0	0	0	0	9	—	—	—	—	—	—	—	—	—	Alibag.
0	—	0·2	0·04	—	0·04	21	0	—	9·2	—	4	6	8	2	0	0	4	5	0	0	0	0	0	0	2	14	13	0	Harnai.
1·4	—	0·9	0	—	0	—	0	—	9·3	—	0	8	17	3	0	0	0	1	0	0	0	0	0	0	0	3	26	0	Devgad.
1·2	—0·6	0·5	0	—	0	—	0	—	7·2	+1·0	1	6	15	3	4	0	0	0	0	1	0	0	0	0	3	12	13	0	Marmagao.
1·6	—	1·0	0	—0·06	0	—	0	—0·1	2·9	—	0	1	23	4	0	0	0	0	1	0	0	0	0	0	2	20	7	0	Honavar.
																													BOMBAY DECCAN—
1·9	—	2·3	0	—0·11	0	—	0	—0·4	4·5	—	1	1	5	5	1	3	6	1	6	2	2	3	0	2	2	9	9	0	Jalgaon.
0·8	—0·6	0·7	0	—0·09	0	—	0	—0·2	4·0	—0·2	0	0	0	0	0	1	0	0	28	1	1	0	0	0	6	1	9	11	Malegaon.
0·6	—0·4	2·6	0	—0·13	0	—	0	—0·3	3·8	—1·0	1	3	0	0	0	4	0	17	4	1	6	0	1	0	7	4	9	1	Ahmednagar.
0·9	—0·1	1·0	0	—0·06	0	—	0	—0·2	2·2	—2·0	0	0	0	0	0	7	10	0	11	2	0	2	0	0	0	8	8	9	Poona.§
1·6	+0·5	2·0	0	—0·13	0	—	0	—0·3	5·7	+0·2	9	6	2	3	0	1	0	1	7	2	6	4	4	1	8	1	3	0	Sholapur.
2·5	—0·6	2·2	0	0	0	—	0	—	4·4	—0·2	1	3	5	1	0	0	4	2	12	2	1	5	2	2	4	6	2	3	Miraj.*
0·2	—	0·3	0	—	0	—	0	—	5·5	—	0	2	5	0	0	1	4	0	14	2	2	5	2	0	2	10	2	2	Kolhapur.†
0·9	—0·3	2·0	0	—0·09	0	—	0	—0·2	4·3	+0·9	8	0	0	1	3	2	0	8	7	6	7	3	1	1	6	5	0	0	Bijapur.
0·1	—1·3	0·3	0	—0·05	0	—	0	—0·1	3·6	+0·7	1	3	9	0	1	0	15	0	0	2	1	8	0	1	0	16	1	0	Belgaum.
1·3	+0·2	2·8	0	—0·16	0	—	0	—0·4	4·7	+0·4	0	7	10	2	0	1	1	0	8	0	9	10	2	0	2	3	1	2	Gadag.
																													HYDERABAD, NORTH—
0·7	—0·7	0·9	0·40	+0·23	0·40	22	1	+0·6	5·6	+0·2	1	3	10	2	2	0	3	0	8	2	1	0	1	3	2	15	2	3	Aurangabad.
1·0	—	1·8	0·09	—0·20	0·09	22	0	—0·7	—	—	3	0	6	3	0	1	12	3	1	0	2	5	1	0	2	10	6	3	Parbhani.
1·3	—0·4	3·3	0	—0·36	0	—	0	—0·7	6·6	+0·4	3	1	4	2	3	8	2	6	0	2	5	3	1	2	4	8	4	0	Bidar.
0·7	—0·8	0·4	0	—0·67	0	—	0	—1·2	2·7	+0·2	0	1	0	2	0	3	0	1	22	6	6	0	2	1	7	1	4	2	Nizamabad.
2·7	—	0·9	0·16	—	0·16	18	1	—	4·2	—	5	1	0	8	7	1	0	0	7	4	1	1	6	6	3	2	3	3	Ramakundam.

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure. millibars.			Relative humidity %	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
HYDERABAD, SOUTH—																					
Gulbarga	1,503	962·3	0	958·0	91·2	—1·1	98	28	67·2	+2·9	58	8	90·3	91·9	61·0	72·0	14·6	+2·0	18·6	58	+7
Raichur	1,311	968·4	—0·2	964·7	92·5	+0·4	97	5 days	69·1	+0·7	61	7	71·9	91·5	62·9	70·2	15·5	—0·1	15·6	58	+1
Hyderabad (Begumpet).	1,778	953·0	+0·1	949·7	91·2	+1·9	98	25	64·2	+1·7	55	7,8	69·3	88·3	61·9	68·0	15·9	—0·2	15·1	66	—2
Hanamkonda	881	983·6	—0·3	979·6	91·1	+1·6	98	25,28	68·2	+2·3	55	8	71·5	89·6	66·8	67·9	20·4	+1·4	13·6	77	+[illegible]
Khammameth	367	1001·5	—	997·1	92·7	—	99	25,26,27	69·5	—	60	8	75·1	86·1	70·2	71·6	23·0	—	19·9	77	—
MYSORE—																					
Chitaldrug	2,405	932·2	+0·3	928·1	90·3	+0·7	93	5 days	67·4	+1·2	63	6	73·1	89·3	62·8	66·0	15·4	+0·4	12·3	57	0
Hassan	3,149	908·6	—	905·1	87·1	—0·1	90	25,26,27	60·8	+1·3	57	25	65·1	84·9	60·9	63·5	16·6	+0·3	11·3	79	+8
Bangalor	3,021	912·7	+0·4	909·1	86·7	+1·1	89	7 days	63·4	+3·4	59	23	66·6	84·3	61·4	62·2	16·5	+0·2	10·2	73	0
Mysore	2,518	928·9	+0·4	925·0	88·7	—0·2	91	4 days	65·4	+1·2	62	5 days	69·3	88·4	63·9	64·3	18·1	+09	10.8	74	+5
MALABAR—																					
Mangalore	72	1011·1	+0·5	1007·4	87·1	—1·1	93	25	73·1	+0·6	70	4 days	76·2	84·3	72·1	76·1	25·1	+1·5	27·0	81	+5
Calicut	27	1012·1	+0·2	1008·5	90·0	+1·5	91	9 days	73·7	+0·7	71	17	75·7	87·9	72·0	78·2	25·1	+0·1	28·6	83	+1
Palghat	319	1002·5	—	999·7	95·4	—	100	26	73·1	—	68	25	76·3	93·6	70·7	73·3	23·2	—	18·8	75	—
Cochin	10	1012·9	+0·4	1009·0	87·3	+0·3	91	21,25	76·0	+0·5	75	10 days	79·9	85·6	74·4	77·2	26·6	+2·2	28·1	76	0
Alleppey	12	1012·7	—	1009·0	89·3	—	94	22,28	75·3	—	73	24	79·6	86·1	76·1	77·5	29·2	—	28·3	85	—
Trivandrum	211	1005·6	+0·3	1002·4	88·4	—	91	5 days	73·4	—	71	5 days	75·7	85·5	72·2	75·4	25·4	+0·9	25·5	84	+3
Nagarcoil	195	1006·3	—	1002·8	93·1	—	97	25,26,27	74·9	—	72	25	77·9	87·4	71·3	74·8	23·2	—	23·8	71	—
MADRAS, SOUTH-EAST—																					
Pamban	37	1012·8	+0·8	1009·3	83·9	—0·9	86	25,27	74·9	—0·1	74	10 days	80·9	80·3	75·8	75·6	28·2	+1·3	28·1	78	—4
Madura	437	998·9	+0·2	994·3	91·8	+1·5	97	16	71·8	+2·3	66	25	76·1	90·5	71·8	72·[illegible]	24·7	+1·5	18·9	80	+1
Negapatam	31	1013·0	+0·4	1009·8	83·9	—0·9	89	17	75·5	+2·3	71	4 days	78·2	81·9	73·5	75·0	26·1	+1·0	26·5	79	—1
Trichinopoly	255	1005·6	+0·3	1001·1	93·3	+1·2	99	16	72·2	+2·9	67	25	76·6	91·4	72·1	73·1	24·8	+1·4	19·6	79	0
Coimbatore	1,341	967·7	—0·3	963·7	91·7	+0·8	95	18.26	69·2	+2·7	65	25,27	71·8	90·3	67·1	68·7	20·6	—0·7	14·2	77	—4
Salem	913	982·5	—0·1	977·7	94·7	+1·6	98	17,26,28	69·6	+2·6	62	25	71·6	92·6	66·7	69·7	20·1	—1·4	14·4	76	—1
Cuddalore	39	1012·6	+0·2	1009·6	84·9	—0·2	89	19	71·2	+1·2	67	25,27	73·1	82·2	71·3	74·5	25·4	+0·[illegible]	25·7	92	+5
Vellore	703	990·1	+0·5	985·5	92·1	+3·2	97	15,16	69·5	+3·3	61	27	72·5	89·8	68·7	71·8	22·3	+0·8	18·5	82	—3
Madras	51	1012·4	+0·1	1009·1	88·1	—0·2	94	15	71·3	+2·9	67	2	75·8	82·9	72·7	74·1	26·1	+1·9	24·8	86	+3
Arogyavaram	2,299	936·4	—	932·6	88·3	—	92	28,29	65·7	—	62	3	70·8	86·3	64·4	65·4	18·1	—	12·9	71	—
MADRAS, DECCAN—																					
Cuddapah	428	998·7	—0·3	994·2	97·2	+2·9	102	28	68·8	—0·8	58	24	81·6	90·8	70·8	74·3	20·8	+0·1	21·5	51	—10
Bellary	1,473	963·2	+0·2	958·9	92·8	—1·0	98	28	68·9	+2·8	64	16,23	72·7	91·8	64·7	74·1	17·3	+2·4	20·7	65	+8
Kurnool	923	982·0	+0·2	977·6	94·6	+1·1	100	29	68·3	+2·3	62	23	72·7	92·9	63·4	68·0	15·7	—0·4	12·1	58	—4
Rentichintala	348	1001·8	—	997·0	93·2	+0·8	99	15,28	70·7	+1·6	63	1,8	74·8	92·8	68·1	69·7	20·4	—1·0	14·3	70	—3
Anantapur	1,148	974·0	—	969·4	94·1	—	99	28,29	68·0	—	62	23,24,27	74·7	92·3	63·7	66·9	15·2	—	11·0	51	—

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																			STATION.
											8 hrs. I. S. T									17 hrs. I. S. T.										
	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													HYDERABAD, SOUTH—
1·0	+0·1	2·0	0	—0·27	0	—	0	—0·5	6·2	+0·8	7	5	3	0	2	5	0	7	0	0	2	9	3	3	6	2	4	0	Gulbarga.
0·5	—1·4	2·6	0	—0·13	0	—	0	—0·6	6·2	+0·9	0	0	4	12	4	4	4	1	0	1	3	4	11	2	6	0	2	0	Raichur.
2·0	—0·2	2·1	0	—0·36	0	—	0	—0·9	4·6	+0·8	2	1	1	5	0	3	0	6	11	1	2	4	10	1	4	1	3	3	Hyderabad (Begumpet).
3·5	+0·4	1·8	1·50	+0·92	1·50	18	1	—0·1	5·5	+0·6	1	1	0	12	10	0	0	0	5	3	1	0	8	6	4	2	2	3	Hanamkonda.
3·0	—	2·5	0·05	—	0·05	17	0	—	5·4	—	2	2	5	17	2	0	0	0	1	0	1	4	16	1	5	1	1	0	Khammameth.
																													MYSORE—
0·7	—1·3	2·5	0	—0·11	0	—	0	—0·2	4·7	+0·9	0	0	4	7	2	5	6	0	5	0	5	8	5	2	4	3	1	1	Chitaldrug.
2·5	—0·3	2·2	0	—0·24	0	—	0	—0·4	4·5	+1·6	0	0	7	1	0	2	3	3	13	2	1	13	2	1	4	6	0	0	Hassan.
3·8	+1·5	3·5	0	—0·26	0	—	0	—0·4	5·8	+1·1	0	2	7	7	3	4	3	0	3	2	5	9	6	1	1	3	2	0	Bangalore.
4·0	+1·2	4·0	0	—0·24	0	—	0	—0·5	5·4	+0·7	1	7	0	3	5	1	1	0	11	5	4	11	4	1	0	1	0	3	Mysore.
																													MALABAR—
1·4	—0·9	0·6	0	—0·07	0	—	0	—0·1	5·2	+0·1	1	5	23	0	0	0	0	0	0	2	0	0	0	0	2	7	18	0	Mangalore.
3·4	+0·8	3·7	0	—0·19	0	—	0	—0·3	7·6	+1·5	1	14	14	0	0	0	0	0	0	0	0	0	0	0	2	14	13	0	Calicut.
1·9	—	2·1	0·06	—	0·06	19	0	—	5·0	—	0	2	16	4	0	1	4	0	2	0	2	12	3	0	0	7	2	3	Palghat.
4·0	+1·8	2·6	1·20	+0·40	1·10	3	1	—0·2	6·1	+1·3	1	5	19	1	0	0	0	0	3	0	0	0	0	0	4	17	8	0	Cochin.
5·1	—	1·1	2·15	—	1·00	6	3	—	5·7	—	0	6	11	3	0	0	0	0	9	0	0	0	0	0	1	17	11	0	Alleppey.
2·5	—0·1	3·2	0·08	—0·68	0·08	1	0	—1·3	4·0	+0·6	4	14	5	3	0	0	0	2	1	0	0	0	0	4	15	8	2	0	Trivandrum.
4·2	—	5·7	0·47	—	0·29	14	2	—	6·5	—	1	20	3	0	0	0	1	3	1	1	3	7	4	1	5	5	3	0	Nagercoil.
																													MADRAS, SOUTH-EAST—
4·6	+1·3	3·1	0	—0·86	0	—	0	—1·4	8·2	+1·5	9	15	2	2	1	0	0	0	0	13	13	1	1	1	0	0	0	0	Pamban.
3·5	—0·6	3·7	0·54	+0·01	0·48	18	1	+0·3	3·2	—0·6	5	6	2	0	0	0	0	2	14	0	6	10	7	0	0	0	0	6	Madura.
5·1	+0·5	2·5	0·67	—0·16	0·67	17	1	0	9·4	+2·7	0	10	3	1	1	2	4	3	5	0	13	9	5	2	0	0	0	0	Negapatam.
2·9	0	2·6	0·26	—0·23	0·22	18	1	+0·4	3·2	+0·4	5	6	0	0	1	0	1	0	16	0	15	9	0	1	0	0	0	4	Trichinopoly.
4·1	+0·3	2·5	0·02	—0·34	0·02	18	0	—0·5	4·3	+ 1·7	8	12	4	1	1	2	0	0	1	7	12	5	1	2	2	0	0	0	Coimbatore.
2·5	+0·4	2·1	0 01	—0·32	0·01	18	0	—0·6	6·5	+2·0	1	2	21	0	0	0	0	0	5	1	0	13	2	2	1	0	0	10	Salem.
3·3	—0·4	2·8	0	—0·90	0	—	0	—1·2	5·8	+2·1	1	0	2	1	1	2	7	11	4	0	2	13	14	0	0	0	0	0	Cuddalore.
3·9	+0·9	3·2	0	—0·25	0	—	0	—0·4	4·2	+1·5	0	0	2	0	1	2	0	0	24	0	0	12	11	6	0	0	0	0	Vellore.
2·8	0	2·0	0·03	—0·38	0·03	17	0	—0·7	10·0	+0·5	0	1	2	5	0	5	7	9	0	0	1	10	18	0	0	0	0	0	Madras.
3·0	—	4·3	0	—	0	—	0	—	4·2	—	0	0	0	0	14	0	0	0	15	2	3	13	2	1	0	0	1	7	Arogyavaram.
																													MADRAS, DECCAN—
1·0	—0·7	1·7	0	—0·12	0	—	0	—0·2	6·2	—1·8	0	0	7	0	0	0	1	0	21	3	0	18	2	0	0	1	1	4	Cuddapah.
3·3	+1·6	1·8	0	—0·18	0	—	0	0·3	4·1	+1·2	1	3	0	7	0	0	0	6	12	2	2	8	6	1	1	4	1	4	Bellary.
0·9	—0·5	2·3	0	—0·28	0	—	0	—0·5	4·3	+0·8	1	1	3	3	3	3	2	0	13	2	1	5	4	3	2	1	3	8	Kurnool.
2·1	—1·5	2·7	0	—0·53	0	—	0	—1·3	4·6	—0·3	0	0	7	4	6	5	1	0	6	1	0	8	10	2	2	2	1	3	Rentichintala.
0·8	-	1·3	0	—0·30	0	—	0	—0·4	5·1	—	0	1	4	4	4	7	1	2	6	0	5	10	1	1	1	1	2	8	Anantapur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure. millibars.			Rela humi %	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
MADRAS COAST, NORTH—																					
Nellore	66	1011·7	—0·1	1008·1	91·5	+2·1	98	15	71·3	+1·5	67	24	75·5	85·3	72·2	74·3	25·5	+1·0	23·9	85	
Ongole	38	1012·7	—	1009·1	89·0	—	96	25,26	71·3	—	68	1,2,16	75·5	84·2	73·3	79·5	27·0	—	32·3	89	—
Masulipatam	10	1014·1	—0·1	1010·8	86·3	+0·2	94	25	72·4	+3·8	69	2,8,23	77·2	82·9	73·4	74·4	26·4	+1·5	25·2	83	
Cocanada	26	1014·3	+0·6	1010·6	85·1	—0·5	94	25,26	71·6	+1·9	67	8	78·7	83·0	73·5	74·3	25·8	+2·9	25·0	77	
Vizagapatam	126	1010·2	0	1007·2	83·2	—0·3	92	27	72·7	+2·1	69	23	76·2	80·4	71·1	73·1	23·8	+1·5	24·6	77	
Calingapatam	19	1013·6	—0·4	1010·7	84·8	—1·6	93	25	70·2	+2·5	66	9	72·6	81·6	69·6	73·2	23·4	+1·2	24·1	85	
HILL STATIONS EXCLUDING KASHMIR—																					
Shillong	4,921	851·4	+0·3	849·4	62·1	—0·4	71	29	42·8	+0·4	33	8	53·9	54·9	46·6	49·6	7·9	—1·0	9·9	57	
Cherrapunji	4,309	870·9	+0·6	868·8	61·0	—1·2	68	29	47·8	—0·7	43	8,16	56·0	55·7	49·7	51·0	9·6	—0·4	11·0	63	
Aijal	3,599	894·5	..	891·2	68·4	—	77	24,29	52·3	—	48	4 days	58·5	61·9	54·8	57·8	13·3	—	14·8	76	—
Darjiling	7,432	775·1	—0·6	773·4	50·1	+2·3	57	24,29	37·3	+0·7	31	16	42·0	43·1	39·2	40·9	7·0	—0·3	7·9	79	
Kalimpong	3,965	880·9	—0·2	878·1	64·5	+3·2	69	24	48·4	+0·1	42	8,16	52·0	57·0	48·7	51·7	10·3	—0·3	10·9	78	
Katmandu	4,388	868·7	—	865·5	69·7	+1·5	79	4 days	38·5	—1·4	31	8	43·3	51·5	41·7	51·6	8·4	—0·3	9·1	87	
Muktesa	7,592	770·6	+1·2	769·6	50·8	+0·3	64	26	45·3	—0·5	25	6	37·5	45·0	34·3	38·7	5·5	+0·9	5·7	64	
Mussooree	6,940	795·7		795·5	50·9	+0·4	63	1	37·1	—0·6	29	6	42·3	45·2	36·7	40·9	5·5	—0·4	7·1	61	
Simla	7,224	779·0	—1·4	779·8	46·5	—2·3	58	26	34·4	—1·7	24	4,6	38·5	42·8	33·5	38·1	4·7	+0·5	6·2	66	+
Abu	3,945	884·3	+2·3	884·1	69·3	+1·2	76	4 days	49·8	—3·3	39	8	54·2	61·8	48·8	54·4	9·2	+3·0	11·4	60	—
Pachmarhi	3,528	896·1	—0·1	894·5	75·4	+0·1	85	27	49·7	—1·0	37	8	58·3	72·2	57·8	57·9	10·5	+1·0	10·6	66	—
Mahabaleshwar	4,534	864·9	+0·5	863·1	78·7	+1·4	87	26	58·0	—0·2	47	5	60·3	72·5	49·9	58·3	8·1	—0·2	10·9	47	
Mercara	3,781	887·9	+0·5	885·0	79·0	—1·6	83	25,28	58·8	—0·2	55	6	62·5	78·9	57·8	62·8	14·4	—1·2	13·0	76	
Ootacamund	7,364	782·2	+1·0	780·6	69·5	+2·0	75	26	43·2	—0·7	37	22	47·5	64·7	43·9	54·9	8·5	+0·5	11·2	78	
Coonoor	5,730	829·1	—	—	69·6	—0·2	73	17,25	50·1	+1·0	45	22,25,28	58·4	—	52·2	—	11·1	+0·3	—	69	
Kodaikanal	7,688	773·1	+1·1	771·9	63·7	—0·4	67	4 days	48·3	+0·9	41	21	52·3	58·6	46·9	53·2	9·0	+1·3	11·9	69	
CEYLON—																					
Colombo	24	1012·1	+0·4	1008·7	87·6	—0·4	91	1,22	72·6	+0·4	69	5	74·5	84·3	72·2	75·8	25·9	+0·4	26·8	91	
Trincomalee	24	1013·1	+1·0	1010·1	84·0	—1·0	88	1	75·9	+0·9	71	4,5,7	78·4	81·3	74·1	75·3	26·9	+0·6	27·2	81	
Hambantota	61	1010·1	+0·1	1006·8	86·4	+0·5	90	22	73·0	+0·7	70	7,22	75·7	83·8	72·7	77·3	26·1	+1·5	29·1	86	
Mannar	12	1013·6	—	1009·8	86·8	—	90	26	74·1	—	70	4,5	76·7	85·0	73·4	75·7	26·6	—	26·1	85	

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity miles per hour.		Wind direction—Number of winds from																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total of the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														MADRAS COAST, NORTH—
1·9	—1·1	0·9	0	—0·24	0	—	0	—0·5	3·9	+0·6	0	0	0	0	11	1	0	1	16	0	1	15	13	0	0	0	0	0		Nellore.
2·2	—	0·8	0·21	—	0·21	16	1	—	5·2	—	2	2	1	4	9	1	5	0	5	0	0	10	18	1	0	0	0	0		Ongole.
3·2	+0·6	1·6	0·09	—0·44	0·06	16	0	—0·6	5·2	+1·4	1	0	1	3	6	0	4	1	13	0	0	1	14	13	0	0	0	1		Masulipatam.
2·8	—0·5	3·4	1·49	+1·17	0·78	16	2	+1·4	6·6	+1·9	3	6	0	5	0	10	0	4	1	0	3	0	15	6	5	0	0	0		Cocanada.
2·9	—0·2	3·1	0·78	—0·16	0·50	11	2	+0·9	4·4	+1·2	3	1	0	2	1	2	7	1	12	0	2	4	4	14	5	0	0	0		Vizagapatam.
4·8	+2·5	5·0	1·20	+0·59	1·05	11	2	+0·7	7·3	+2·3	4	1	1	0	0	1	9	13	0	0	0	4	5	11	9	0	0	0		Calingapatam.
																														HILL STATIONS EXCLUDING KASHMIR—
2·1	—0·5	7·2	1·66	+0·60	0·76	11	5	+2·2	3·5	+1·2	0	0	1	1	1	15	2	0	9	2	0	0	0	1	7	2	5	12		Shillong.
2·6	—0·5	4·6	1·43	—0·68	0·35	15	6	+2·5	6·3	+1·3	1	7	2	2	3	6	8	0	0	0	2	0	0	7	16	2	0	2		Cherrapunji.
2·8	—	3·4	2·42	—	0·76	7	6	—	3·7	—	1	0	16	0	1	5	5	0	1	1	0	5	0	0	6	16	0	1		Aijal.
5·5	+0·7	6·5	0·62	—0·57	0·31	28	2	—0·6	6·8	+2·7	0	2	12	1	0	3	6	0	5	0	0	1	0	0	5	20	1	2		Darjiling.
4·1	+0·5	6·5	0·33	—0·80	0·17	16	2	—1·0	6·4	—0·5	0	0	0	4	0	0	0	21	14	0	0	1	24	4	0	0	0	0		Kalimpong.
4·5	—0·9	4·4	0·80	—0·87	0·32	28	3	—2·5	0·9	—0·4	0	0	1	0	0	0	0	0	28	2	0	1	1	3	0	1	2	19		Katmandu.
3·9	0	4·9	2·78	+0·25	0·66	27	8	+3·3	6·4	+0·6	0	7	6	1	0	2	6	2	5	1	4	4	0	1	6	11	1	1		Muktesar.
5·0	+0·3	6·3	2·46	—0·45	1·14	27	6	+0·8	3·3	—1·2	5	6	2	4	2	2	1	2	5	1	1	2	6	11	5	1	0	2		Mussooree.
4·3	—0·2	6·5	2·89	—0·03	1·15	27	6	+0·3	2·3	—1·4	3	2	1	8	6	0	0	0	9	4	0	1	7	7	4	1	1	4		Simla.
1·3	—0·8	1·1	1·90	+1·67	1·13	18	3	+2·4	3·4	—1·0	6	0	0	0	1	4	0	0	18	0	1	0	0	0	9	0	0	19		Abu.
2·2	+0·1	4·1	1·94	+1·27	1·68	22	2	+0·5	2·3	—0·8	1	2	0	1	5	3	3	1	13	4	5	1	0	2	2	7	7	1		Pachmarhi.
0·3	—0·4	0·9	0·03	—0·07	0·03	22	0	—0·1	0·2	—5·6	1	1	4	2	0	0	0	0	21	0	0	0	0	0	3	2	0	24		Mahabaleshwar.
1·7	—1·9	1·6	0	—0·24	0	—	0	—0·5	4·7	+1·4	0	2	2	0	0	0	5	5	15	4	5	2	0	0	0	9	8	1		Mercara.
1·8	—0·4	3·9	0·03	—0·48	0·03	2	0	—1·1	2·4	—0·4	0	3	5	0	0	0	0	0	21	6	4	8	2	1	0	1	0	7		Ootacamund.
3·7	+0·9	—	3·71	+0·85	3·27	2	2	—0·7	4·3	+1·0	6	1	4	3	0	0	0	1	14	—	—	—	—	—	—	—	—	—		Coonoor
3·7	+1·5	6·2	1·17	—0·36	0·90	1	2	—0·4	7·9	+0·1	2	9	8	2	1	0	0	0	7	2	3	2	9	2	0	1	4	6		Kodaikanal.
																														CEYLON—
5·0	+0·5	5·0	0·18	—2·00	0·12	11	1	—2·5	—	—	1	9	9	3	1	1	0	0	5	1	2	0	0	0	1	15	10	0		Colombo.
4·7	+0·5	3·2	0·13	—2·21	0·06	9	0	—2·9	—	—	3	10	3	1	2	3	2	3	2	5	11	9	4	0	0	0	0	0		Trincomalee.
5·8	+2·3	7·5	0·15	—1·44	0·15	1	1	—1·8	—	—	27	0	0	0	0	0	1	1	0	2	2	22	1	1	0	0	0	0		Hambantota.
2·2	—	3·5	1·75	—	1·75	1	1	—	—	—	0	9	11	4	4	1	0	0	0	12	9	1	1	0	2	2	2	0		Mannar.

TABLE III.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. (I. S. T.) / 2-30 HRS. (G. M. T.) AT 4TH CLASS STATIONS—FEBRUARY 1948.

Station	Maximum temperature. °F.				Minimum temperature. °F.				Mean dry bulb temperature 8 hrs. I. S. T. °F.	Mean wet bulb temperature 8 hrs. I. S. T. °F.	Vapour pressure, mb.		Relative Humidity. %		Mean cloud amount 8 hrs. I. S. T.	Rainfall,—inches.				Number of rainy days (0'10" or more).		W
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I. S. T.	Departure from normal.	Mean 8 hrs. I. S. T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction 8 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assam—																						
Lumding . .	78·7	+1·6	89	29	50·4	+0·1	4·2	9	66·4	59·8	14·6	—0·3	66	—24	—	0·61	—0·69	0·24	15	2	—1·0	—
Kashmir—																						
Jammu . .	67·1	—1·5	75	26	50·5	—0·7	42	7	53·2	49·2	10·2	+0·7	74	+5	6·0	5·55	+3·12	2·50	27	9	+5·3	—
Kargil (R)																						
Mysore—																						
Balehonnur . .	82·6	+0·3	89	5 days	60·1	0	55	6	64·6	63·0	19·0	+2·1	91	+8	—	0·04	—0·02	0·04	8	0	—0·2	—
Tibet—																						
Yatung (Chumbi) .	45·1	—0·1	55	27,28,29	19·0	—2·7	11	17	23·0	22·3	3·9	+0·2	92	+7	5·0	1·33	—0·82	0·33	12	6	+2·1	—

R=Register not received.

TABLE IV.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. (I. S. T.) / 2-30 HRS. (G. M. T.) AT 5TH CLASS STATIONS—FEBRUARY 1948.

Division.	Station.	Rainfall,—inches.				Number of rainy days (0-10" or more).	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8
Assam . .	Mawsyanram .	0·55	—	0·18	5	4	—
West Bengal .	Bankura . .	1·13	—0·01	1·13	4	1	—1·1
	Cooch Behar .	0·34	—0·47	0·34	6	1	—0·8
Bihar . . .	Muzaffarpur .	0·05	—0·52	0·05	19	0	—1·7
	Chapra . .	0·14	—0·54	0·11	19	1	—0·6
	Arrah . .	0·62	—0·21	0·62	19	1	—0·6
United Provinces, West.	Meerut . .	1·59	+0·57	1·05	21	3	+0·8

Division.	Station.	Rainfall,—inches.				Numl rainy (0-10" o
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.
1	2	3	4	5	6	7
East Punjab .	Dharampore .	6·68	+3·39	3·04	27	7
	Kyelang . .	4·64	+2·10	1·25	25	10
	Dalhousie . .	11·97	—	3·15	27	10
Kashmir . .	Sonamarg (R) .					
	Gurez . .	4·84	—2·73	1·55	3	9
Bombay, Deccan	Khandala . .	0	—0·12	0	—	0
Madras, South-east	Palamcottah .	1·65	+0·48	0·85	11	3
Sikkim . .	Lachung . .	1·42	—1·27	0·30	28	8

R=Register not received.

MONTHLY WEATHER REPORT, FEBRUARY 1948.

Monthly Means of Upper Winds.

Note.—Data up to 9·0 Km. a. s. l. are given under Table A and those above 9·0 Km. under Table B.

In Tables A & B,

n represents the number of observations.

V the mean wind speed in m/second irrespective of direction.

v the resultant mean velocity in m/second.

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

For the coordinates of the stations for which data have been published in these Tables and other particulars, please refer to the Monthly Weather Report, January 1948.

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	AHMEDABAD.												ALLAHABAD.											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . . .	29	2·1	1·5	335	29	2·1	1·0	344	29	2·5	1·2	329	29	1·0	0·4	323	29	1·3	0·4	197	29	2·8	1·9	31
0·15 a. g. . . .	29	8·9	5·9	348	29	8·3	4·9	18	29	4·2	2·1	310	29	7·6	4·6	349	29	6·2	0·8	40	29	4·6	3·0	31
0·6 a. s. l. . . .	29	7·3	4·5	336	29	8·3	4·3	18	29	4·2	2·3	308	29	6·7	4·3	337	29	6·4	1·9	10	29	5·3	3·1	30
1·0 „ . . .	29	5·1	3·1	304	29	6·1	3·2	332	29	4·5	2·8	303	29	5·9	3·9	302	29	5·7	2·2	311	29	5·1	3·5	28
1·5 „ . . .	29	5·4	3·1	269	29	6·5	4·3	285	29	5·5	4·0	293	28	7·6	6·1	286	29	6·9	6·0	291	29	6·3	5·5	28
2·0 „ . . .	28	6·8	5·0	260	29	7·4	5·9	272	29	7·8	6·4	277	25	8·6	7·8	274	29	8·2	8·2	281	29	8·7	7·8	28
2·5 „ . . .	26	9·1	7·5	267	29	9·6	8·4	273	28	10·8	9·1	274	21	11·0	10·4	272	28	10·8	10·0	281	26	9·9	9·1	28
3·0 „ . . .	18	10·4	9·0	262	27	12·1	10·9	273	28	13·4	11·5	274	15	12·3	11·9	276	27	13·1	12·3	278	26	12·2	11·3	2
4·0 „ . . .	3	12·2	11·8	286	25	15·6	14·5	271	28	19·5	18·0	280	1	12·0	12·0	275	18	14·5	13·7	278	24	17·7	17·1	2
5·0 „ . . .					19	19·0	18·1	273	21	19·9	19·0	274					5	18·2	18·0	277	22	20·3	19·9	2
6·0 „ . . .					11	21·0	20·6	269	20	22·3	21·4	276					3	20·0	19·7	278	19	24·1	23·7	2
7·5 „ . . .					3	31·0	30·8	268	10	29·0	27·6	271									6	26·8	26·3	2
9·0 „ . . .									3	43·2	40·6	278									1	35·0	35·0	2

Height in km.	AMBALA.												ANANTAPUR.								ASANSOL.			
	0100				0700				1600				0700				1600				0100			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . . .	29	2·7	1·0	340	29	2·6	0·6	5	29	3·1	1·7	302	29	1·4	0·5	202	29	3·0	2·2	76	29	1·6	1·1	
0·15 a. g. . .	29	8·2	4·6	348	29	7·6	2·5	26	29	6·0	3·3	304	29	4·7	1·7	182	29	4·5	2·9	82	28	5·6	2·6	
0·6 a. s. l. . . .	29	8·3	4·4	345	29	8·5	2·6	348	29	6·5	2·6	309	29	5·4	1·9	174	29	4·5	2·6	88	28	6·3	3·0	
1·0 „ . . .	29	7·3	3·1	329	28	7·5	2·9	325	29	7·3	2·3	314	29	6·7	2·8	130	29	4·2	2·0	92	27	6·2	3·9	
1·5 „ . . .	29	6·4	2·7	291	27	6·6	2·7	310	28	6·9	1·5	307	29	5·9	3·9	106	29	4·4	2·1	91	25	7·4	5·8	
2·0 „ . . .	27	6·5	3·0	265	26	5·7	2·0	295	28	6·4	0·9	298	29	5·1	2·9	79	29	4·8	1·6	90	18	7·9	7·1	
2·5 „ . . .	24	6·6	2·7	244	25	6·6	1·7	295	27	6·3	1·4	270	29	5·4	2·1	37	29	5·5	1·5	50	13	10·0	9·5	
3·0 „ . . .	19	6·0	3·1	238	25	7·2	2·6	292	26	7·2	2·1	280	29	6·4	2·6	4	29	6·0	1·2	6	12	12·6	11·9	
4·0 „ . .	6	6·4	5·3	267	24	9·8	6·8	292	23	8·1	4·9	282	29	7·1	4·0	338	27	7·1	3·1	325				
5·0 „ . .	4	9·5	7·8	271	17	12·0	10·9	276	23	12·9	10·4	284	29	6·6	4·6	322	26	7·8	5·4	320				
6·0 „ . . .					12	16·5	15·7	277	21	16·7	15·0	280	29	7·8	6·1	315	23	7·7	6·0	304				
7·5 „ . . .					5	18·9	17·8	280	12	24·0	23·5	281	23	9·0	7·3	289	13	8·9	6·7	286				
9·0 „ . . .									9	32·8	32·0	283	12	11·7	10·7	281	3	9·0	8·1	263				

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	ASANSOL.								BALASORE.				BANGALORE.								BAREILLY.			
	0700				1600				0700				0700				1600				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	1·6	1·1	299	29	2·3	1·4	308	29	2·8	1·5	306	29	2·2	1·0	114	29	3·4	1·9	106	29	0·7	0·1	**342**
0·15 a. g.	29	4·6	2·0	315	29	4·0	2·3	309	29	5·9	1·8	301	29	5·8	3·1	126	29	4·3	2·8	87	29	7·2	4·8	**326**
0·6 a. s. l.	29	4·9	3·0	324	29	4·1	3·0	294	29	5·5	2·2	259									29	7·4	5·3	**310**
1·0 „	28	6·3	4·4	314	29	5·2	4·3	286	27	5·0	2·6	293	29	4·7	2·7	129	28	3·9	2·6	88	29	7·0	5·1	**302**
1·5 „	28	7·9	6·5	290	28	6·4	5·5	285	27	6·1	4·9	288	29	7·1	3·2	117	28	5·2	3·6	85	29	7·3	5·5	**297**
2·0 „	24	10·0	8·6	290	23	9·3	8·9	290	27	8·4	7·8	293	28	6·3	3·5	83	28	5·6	3·8	87	29	7·9	5·9	**293**
2·5 „	19	12·0	11·2	281	21	12·8	12·1	293	25	10·9	10·2	297	27	6·0	4·1	62	29	5·5	3·6	75	29	8·7	6·4	**283**
3·0 „	11	14·0	11·6	294	20	15·5	14·7	291	25	12·2	11·5	292	25	5·7	3·1	61	28	5·6	2·8	60	29	9·8	8·3	**280**
4·0 „	3	13·0	12·8	298	10	16·7	16·2	292	21	15·0	14·6	284	21	7·2	2·1	35	22	6·2	2·8	4	23	12·5	10·9	**279**
5·0 „	1	9·0	9·0	275	3	17·7	17·3	290	13	16·5	16·2	283	19	6·2	2·6	339	17	6·7	3·3	353	10	13·7	12·9	**271**
6·0 „	1	10·0	10·0	290	1	20·0	20·0	305	9	20·7	20·2	284	15	7·3	3·3	352	17	6·7	3·8	352	4	15·0	14·6	**270**
7·5 „									2	21·5	21·1	283	11	6·5	3·3	299	10	7·9	5·1	291	1	14·0	14·0	**295**
9·0 „													10	7·5	5·7	271	5	12·1	11·4	278				

Height in km.	BAREILLY.				BHOPAL.												BHUJ.							
	1600				0100				0700				1600				0100				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	1·8	1·4	290	29	3·4	1·8	39	29	1·9	0·8	40	29	3·0	1·6	285	29	2·1	1·6	271	29	0·7	0·3	**80**
0·15 a. g.	29	6·2	4·5	288	28	10·4	5·7	49	29	6·7	4·2	79	29	4·0	2·2	293	29	6·7	4·5	318	29	5·7	2·7	**331**
0·6 a. s. l.	29	6·0	3·9	286	28	10·1	5·9	46	29	5·8	3·5	81	29	3·7	2·1	288	29	8·5	5·6	327	29	7·8	4·0	**340**
1·0 „	29	5·9	3·7	289	28	9·5	3·3	39	29	6·3	0·9	41	29	4·7	2·7	284	28	7·2	4·0	328	29	6·6	3·7	**326**
1·5 „	29	6·0	3·6	290	27	7·3	3·9	258	29	6·4	3·6	281	29	4·4	3·0	265	28	6·9	3·6	301	29	7·2	4·8	**298**
2·0 „	29	6·5	4·1	283	24	8·8	7·8	256	28	9·5	8·3	275	29	6·6	5·4	261	27	8·8	7·3	289	29	8·3	6·7	**292**
2·5 „	29	7·3	5·3	283	18	10·6	9·0	248	26	11·7	10·4	271	29	10·7	9·8	266	20	8·5	6·9	284	29	10·6	9·1	**284**
3·0 „	27	8·2	6·2	277	12	11·6	10·6	252	21	13·1	12·0	271	28	13·6	12·9	268	18	9·9	7·7	279	27	13·4	12·3	**278**
4·0 „	25	12·6	11·1	278	1	17·0	17·0	245	14	14·5	13·7	280	21	17·6	16·8	276	6	11·7	11·1	273	19	16·5	15·7	**275**
5·0 „	24	16·3	15·1	284					8	15·6	15·5	280	17	23·4	22·9	279					10	18·8	18·5	**276**
6·0 „	16	17·9	16·8	285					4	17·5	17·3	274	14	27·1	26·1	280					6	22·4	22·4	**277**
7·5 „	5	30·1	29·2	278					1	21·5	21·5	265	4	22·0	21·2	263					2	23·5	23·5	**276**
9·0 „	2	55·3	50·8	271									2	27·5	27·5	264					1	19·5	19·5	**265**

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	BHUJ.				BIKANER.								BOMBAY.											
	1600				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . . .	29	3·5	1·9	322	29	2·3	0·6	141	29	1·9	1·1	253	29	0·7	0·6	4	29	1·4	1·1	55	29	5·9	5·7	309
0·15 a. g. . . .	29	5·0	2·9	325	27	6·3	2·4	133	29	3·7	2·3	278	29	5·1	4·6	354	29	4·5	3·7	20	29	5·5	5·1	310
0·6 a. s. l. . .	29	4·9	3·5	312	27	5·5	0·2	53	29	3·6	2·0	271	29	6·3	5·3	357	28	6·3	4·8	19	29	5·4	3·9	326
1·0 ,, ...	29	4·8	3·1	315	27	4·6	1·7	310	28	4·2	2·1	268	29	5·1	3·6	344	28	5·3	3·9	3	29	4·8	2·0	326
1·5 ,, ...	29	5·9	4·3	295	26	5·6	3·7	302	28	4·5	2·3	264	29	5·0	3·1	297	27	5·7	3·0	298	29	4·7	1·9	293
2·0 ,, ...	29	8·0	6·4	280	25	7·1	4·6	298	28	6·0	3·7	278	28	5·2	2·9	278	28	6·3	3·5	273	29	5·6	2·7	264
2·5 ,, ...	27	10·8	9·1	278	23	7·2	4·3	306	28	7·3	5·7	276	25	6·5	3·1	283	28	7·2	3·8	261	29	6·6	3·8	271
3·0 ,, ...	25	13·6	12·3	275	21	8·5	6·4	287	28	9·7	7·8	276	16	8·6	4·4	296	28	8·7	5·1	277	29	8·4	5·6	288
4·0 ,, ...	19	19·7	14·4	269	17	10·5	9·3	282	20	14·4	13·3	279	5	8·6	7·2	278	25	12·4	11·3	290	29	11·8	10·4	295
5·0 ,, ...	18	18·6	17·4	268	11	13·6	13·1	279	17	18·3	16·9	283	2	12·0	11·3	267	23	13·5	12·7	286	27	13·4	12·2	287
6·0 ,, ...	12	22·3	21·5	276	7	17·3	16·9	279	8	18·4	18·1	281					19	16·9	15·9	281	26	17·2	16·3	282
7·5 ,, ...	7	27·4	26·3	274					2	28·3	28·3	280					7	22·1	21·1	279	19	21·3	20·2	277
9·0 ,, ...	2	24·3	24·1	269													1	23·5	23·5	285				

Height in km.	CALCUTTA.												COCHIN.											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . . .	29	1·7	0·4	251	29	1·2	0·6	338	29	2·6	1·2	268	29	1·0	0·9	44	29	0·9	0·8	48	29	6·8	5·9	277
0·15 a. g. . . .	29	8·4	2·7	238	29	3·9	1·7	310	29	3·9	1·6	260	28	2·6	2·0	349	29	3·6	2·9	43	29	5·6	5·2	272
0·6 a. s. l. . .	29	8·4	3·6	263	28	4·7	2·4	283	29	3·9	2·3	276	28	2·5	1·9	327	29	3·3	2·5	357	29	3·4	2·3	307
1·0 ,, ...	28	6·7	3·8	275	26	5·3	2·9	280	28	4·2	3·2	286	27	2·4	0·5	63	28	3·2	1·7	13	29	2·9	2·0	29
1·5 ,, ...	28	7·5	5·7	284	26	6·3	5·1	280	26	5·9	5·5	292	26	3·7	2·7	87	28	4·0	2·6	60	29	5·0	4·2	69
2·0 ,, ...	25	10·5	9·6	295	25	8·5	7·2	290	26	9·5	8·8	297	24	4·8	3·9	69	27	5·1	4·2	66	29	6·0	5·5	71
2·5 ,, ...	18	13·5	12·5	297	23	10·7	10·0	296	23	11·4	10·7	296	21	6·4	4·9	57	26	4·8	3·6	76	29	6·3	5·5	69
3·0 ,, ...	15	16·1	15·3	297	20	13·3	12·3	290	22	13·2	12·6	296	17	6·1	3·7	62	25	4·9	3·3	65	29	6·3	4·7	60
4·0 ,, ...	1	5·5	5·5	305	8	14·3	14·1	282	20	15·8	15·4	290	8	5·2	3·0	73	22	5·3	3·5	58	28	5·9	4·0	51
5·0 ,, ...					4	15·4	14·9	283	13	18·9	18·5	290	3	5·0	4·9	78	22	6·4	3·8	58	26	6·6	4·2	57
6·0 ,, ...					1	13·5	13·5	275	12	24·0	22·0	280	2	6·3	5·9	88	21	8·0	5·0	41	25	8·4	5·1	58
7·5 ,, ...									2	25·7	24·9	277					18	8·4	2·8	54	23	9·7	3·0	26
9·0 ,, ...																	15	7·3	2·1	36	19	9·6	1·4	331

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	COOCH BEHAR.								CUTTACK.												DEOLALI.			
	0700				1600				0100				0700				1600				0830			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	1·7	1·4	78	29	1·5	1·1	259	29	0·5	0·3	176	29	0·3	0·2	317	29	0·7	0·6	206	19	1·1	0·3	17
0·15 a. g.	29	4·9	3·8	87	29	3·1	2·2	252	29	4·6	2·9	198	28	3·9	0·7	301	26	3·2	1·1	200	19	3·2	0·5	32
0·6 a. s. l. . .	28	4·3	2·2	102	29	3·5	3·0	241	29	5·6	4·0	218	28	5·3	2·4	236	26	2·9	1·2	215	19	1·7	0·4	11
1·0 ,, ...	28	3·6	0·5	191	29	3·8	3·3	241	28	5·1	3·3	253	28	4·4	2·4	263	26	3·5	2·1	257	19	5·7	1·0	14
1·5 ,, ...	29	4·0	1·9	258	28	5·0	4·3	252	26	6·0	5·0	294	27	5·3	4·3	289	25	5·6	4·7	291	19	6·2	3·7	277
2·0 ,, ...	28	6·1	3·8	266	28	6·2	5·2	262	20	8·9	8·3	301	25	8·0	7·0	300	24	8·8	8·3	303	19	6·9	5·1	255
2·5 ,, ...	24	7·8	5·5	276	27	7·9	6·8	270	12	10·5	10·2	294	25	9·6	8·9	297	24	10·8	10·3	302	18	7·6	5·8	242
3·0 ,, ...	23	10·3	9·1	283	25	10·4	9·8	277	6	13·3	12·1	301	23	11·2	10·6	294	22	11·7	11·3	297	18	8·4	6·1	264
4·0 ,, ...	14	13·4	13·1	281	19	17·3	16·8	275					20	15·7	14·7	282	21	12·7	12·0	290	15	13·1	12·1	289
5·0 ,, ...	9	16·4	16·3	282	14	19·5	18·9	279					12	15·7	15·4	283	17	16·3	15·9	284	14	17·1	16·2	285
6·0 ,, ...	5	19·6	19·4	277	8	20·4	20·1	284					6	20·0	19·8	288	15	20·2	19·4	284	12	19·5	18·3	282
7·5 ,, ...	1	26·0	26·0	275	5	34·1	33·7	285					3	20·3	19·8	278	8	22·6	22·0	286	4	18·1	18·0	279
9·0 ,, ...					1	23·0	23·0	280									1	24·0	24·0	290	1	23·5	22·5	265

Height in km.	GADAG.								GAYA.												GOPALPUR.			
	0700				1600				0100				0700				1600				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	2·9	1·0	190	29	3·5	1·0	150	29	1·8	0·9	181	29	1·8	0·9	176	29	3·0	2·4	301	29	2·7	1·4	298
0·15 a. g.	29	5·4	0·1	67	29	4·3	1·2	121	28	5·1	2·5	314	29	4·9	2·3	232	29	4·9	3·9	308	29	4·7	1·9	235
0·6 a. s. l. . .									28	5·5	3·7	314	29	5·2	2·3	311	29	5·2	4·1	295	28	4·9	3·0	202
1·0 ,, ...	29	6·8	1·7	132	29	4·3	1·0	142	28	6·2	4·8	288	29	5·7	3·9	301	29	5·7	4·8	281	29	4·1	2·1	219
1·5 ,, ...	29	5·8	2·3	149	29	4·1	1·0	160	27	7·6	4·6	277	28	7·5	6·8	289	28	7·2	6·7	277	28	4·8	2·8	290
2·0 ,, ...	29	4·9	2·5	147	29	4·1	0·4	153	15	9·7	9·3	268	26	10·3	9·5	279	28	10·1	9·7	280	28	6·8	4·9	304
2·5 ,, ...	29	4·6	0·2	90	29	3·9	0·2	314	4	11·3	9·9	257	26	12·4	11·7	282	28	12·3	11·9	285	27	8·2	6·6	302
3·0 ,, ...	29	6·2	2·4	359	28	5·5	1·7	341	1	19·0	19·0	295	23	13·6	13·2	282	27	14·7	14·0	284	27	9·5	8·1	300
4·0 ,, ...	28	6·4	3·3	313	27	6·6	4·1	333					5	11·4	11·2	282	24	19·5	18·8	283	25	11·9	10·5	287
5·0 ,, ...	26	7·0	5·5	310	26	7·3	5·4	311									17	24·4	23·5	283	16	12·8	11·7	285
6·0 ,, ...	25	7·4	6·6	301	22	8·3	7·4	300									6	28·0	27·2	279	13	16·3	15·1	280
7·5 ,, ...	13	7·7	6·8	279	16	9·3	8·6	280													4	15·6	14·7	264
9·0 ,, ...	11	9·2	8·1	268	7	11·6	11·1	265													2	19·5	19·5	256

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	GOPALPUR.				GORAKHPUR.								HYDERABAD (DN.).											
	1600				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	5·6	4·5	161	29	2·0	0·5	282	29	3·0	1·7	264	29	2·5	1·3	115	29	2·5	0·3	175	29	2·9	1·2	14
0·15 a.g.	27	7·8	6·9	160	29	2·0	1·4	341	29	4·3	2·9	274	29	6·6	3·9	128	29	6·6	2·3	135	29	4·1	1·5	14
0·6 a.s.l.	27	4·4	2·6	182	29	6·1	3·2	308	29	5·4	3·4	274	29	4·7	2·4	119	29	4·1	0·8	141	29	3·7	1·5	14
1·0 „	26	3·7	1·5	251	29	6·0	3·5	294	29	5·4	3·3	274	29	7·4	4·9	135	29	7·5	3·7	134	29	4·3	1·2	16
1·5 „	25	5·1	3·7	289	29	6·1	4·8	286	29	6·1	4·3	280	29	5·1	1·8	152	28	5·4	2·1	159	29	3·8	0·8	18
2·0 „	25	6·8	5·7	298	29	7·4	6·9	285	29	8·0	6·5	288	29	4·9	2·6	273	27	5·2	2·1	266	29	4·0	1·3	24
2·5 „	25	8·9	8·0	304	25	8·2	7·5	279	26	9·7	9·0	283	29	6·4	4·1	282	27	6·6	3·3	287	28	5·1	2·4	28
3·0 „	26	9·1	8·4	300	22	9·1	8·7	280	23	10·3	9·5	283	29	8·0	6·0	299	26	7·4	4·5	303	28	7·0	4·4	28
4·0 „	21	11·5	10·4	284	10	10·4	9·8	271	13	12·6	11·7	283	5	10·7	10·0	327	26	9·7	8·1	301	20	8·8	6·8	28
5·0 „	17	12·7	12·0	282	2	9·0	8·5	263	7	17·1	15·7	279	1	4·0	4·0	165	26	12·9	11·8	294	18	12·0	10·1	287
6·0 „	16	11·5	15·0	286	2	13·7	13·7	285	2	15·5	15·3	278					26	15·9	15·0	295	17	14·9	13·7	282
7·5 „	7	20·0	17·6	282													19	16·5	15·3	284	15	15·8	15·0	280
9·0 „	3	22·2	22·0	258													6	16·6	15·3	273	14	18·0	17·6	269

Height in km.	JAMSHEDPUR.								JHARSUGUDA.												JODHPUR.			
	0700				1600				0100				0700				1600				0100			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	0·9	0·7	282	29	2·3	1·3	323	29	1·7	1·1	26	29	1·6	1·3	28	29	1·6	0·8	305	29	2·1	1·3	20
0·15 a.g.	29	2·8	2·2	290	29	3·4	1·9	319	29	4·8	1·8	37	29	4·9	3·4	51	29	3·5	2·0	301	27	5·9	1·9	27
0·6 a.s.l.	29	4·1	1·6	296	29	3·3	2·2	292	29	4·9	1·1	359	29	5·7	2·3	61	29	3·5	2·4	291	27	5·0	1·1	13
1·0 „	29	4·6	2·1	269	29	4·1	2·9	284	29	4·4	2·1	265	28	5·2	1·5	268	29	3·7	2·9	273	27	4·2	1·7	290
1·5 „	29	5·5	4·2	271	29	5·5	4·7	275	29	5·7	4·9	274	28	5·7	3·7	270	29	4·7	3·9	273	26	5·0	3·5	267
2·0 „	28	8·6	7·5	281	28	8·1	7·3	277	27	9·2	7·4	275	28	8·4	7·4	286	29	7·4	6·7	275	24	5·6	4·7	274
2·5 „	27	10·4	9·7	287	28	10·9	10·1	281	18	9·8	8·9	288	28	11·0	10·0	284	29	11·1	10·1	281	16	7·3	5·9	281
3·0 „	23	12·5	12·0	287	26	13·6	12·8	284	10	12·1	11·2	291	28	12·8	12·5	283	29	13·7	12·3	284	9	11·8	11·1	279
4·0 „	6	12·5	12·2	285	22	15·5	14·5	287	1	15·5	15·5	290	20	15·6	14·8	289	21	14·4	13·7	288	1	6·5	6·5	305
5·0 „	3	15·3	15·3	291	21	17·4	16·6	285					17	16·3	15·6	283	19	17·2	16·8	285				
6·0 „	1	12·0	12·0	285	16	21·0	20·6	282					16	21·0	20·0	278	17	21·2	20·8	279				
7·5 „					3	25·8	25·5	274					5	27·3	25·2	269	8	27·8	27·4	269				
9·0 „					1	17·5	17·5	295					1	19·5	19·5	265	2	39·7	39·5	268				

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	JODHPUR								JUBBULPORE								MADHOSAGAR							
	0700				1600				0700				1600				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	1·5	1·1	37	29	2·4	0·9	348	29	1·0	0·4	149	29	1·7	0·8	297	29	1·1	0·1	258	29	2·1	0·9	341
0·15 a.g.	29	4·9	1·5	88	29	3·5	1·5	303	29	4·7	1·6	117	29	3·8	2·3	310	29	4·9	1·5	31	29	3·7	1·3	302
0·6 a.s.l.	29	4·9	0·7	9	29	3·6	1·4	304	29	5·4	1·8	102	29	3·7	2·2	305	28	6·2	1·7	28	29	3·7	1·4	321
1·0 „	29	4·7	1·7	280	29	3·6	1·7	287	29	6·0	0·5	9	29	4·1	2·7	289	28	5·6	1·2	326	29	4·1	1·9	300
1·5 „	28	6·1	3·9	283	29	5·1	3·3	281	28	6·1	4·4	278	29	4·6	3·4	279	27	6·5	2·8	295	28	4·8	2·5	276
2·0 „	27	7·4	5·5	281	26	6·6	4·9	277	27	9·2	8·3	276	29	7·3	6·3	270	26	8·4	6·0	274	28	6·4	5·2	268
2·5 „	26	8·2	6·9	279	25	9·6	7·8	275	27	11·8	10·7	276	29	10·7	9·6	270	24	10·4	8·6	268	28	9·7	8·7	267
3·0 „	24	9·8	8·4	279	25	13·2	11·3	274	27	12·2	11·0	270	28	13·2	12·4	272	21	12·2	10·7	267	27	12·9	11·8	271
4·0 „	21	13·5	11·9	275	21	17·5	15·3	283	18	16·2	14·8	276	26	17·7	16·9	277	18	12·7	11·6	274	18	15·6	14·8	274
5·0 „	14	17·6	16·6	276	18	19·0	18·3	278	10	19·9	19·6	277	20	21·2	20·9	282	15	16·9	16·7	279	11	18·5	18·1	279
6·0 „	8	20·3	19·9	281	11	25·0	24·0	289					18	27·4	27·0	282	11	20·7	20·4	279	7	21·5	21·3	283
7.5 „					4	23·6	22·4	292					9	29·8	28·5	277	5	25·2	25·0	285	4	37·0	36·1	290
9.0 „					3	30·7	27·5	288					1	31·0	31·0	250	2	42·3	41·0	280	1	43·5	43·5	275

Height in km.	MADRAS												MALEGAON CAMP											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	1·3	0·6	149	29	1·5	1·1	268	29	5·8	4·9	114	28	1·8	1·7	297	29	1·2	1·1	290	29	2·6	1·2	300
0·15 a.g.	29	4·7	3·8	137	29	4·2	2·2	185	29	5·5	4·9	126	29	5·1	3·3	327	29	3·6	1·7	320	29	3·6	1·6	288
0·6 a.s.l.	29	5·2	4·2	132	29	5·1	3·6	155	29	4·8	3·2	135	29	5·1	3·3	327	29	3·6	1·7	320	29	3·6	1·6	288
1·0 „	29	4·8	3·3	112	29	5·6	4·2	142	28	4·5	0·8	126	29	5·9	3·3	325	29	4·9	1·6	12	29	3·5	2·1	278
1·5 „	27	4·6	2·5	87	28	5·1	2·4	82	28	5·1	3·4	74	29	4·9	2·9	290	29	4·2	2·2	292	29	3·8	2·7	268
2·0 „	25	5·5	2·7	37	27	5·6	3·2	51	28	5·9	4·1	50	29	5·7	4·0	245	29	6·5	5·1	263	29	4·4	3·5	267
2·5 „	19	5·5	2·6	31	26	6·9	3·6	31	28	6·5	3·7	24	29	6·5	5·2	249	29	8·2	6·7	256	29	6·0	5·1	265
3.0 „	14	4·9	2·4	347	25	·0	3·7	39	28	6·8	2·8	24	29	8·1	6·3	255	28	9·4	7·4	264	29	8·2	7·2	267
4.0 „	3	7·0	6·8	327	23	7·1	2·8	14	23	5·0	2·6	323	8	11·8	11·0	302	23	11·8	10·5	277	29	13·6	12·5	286
5 0 „					21	5·9	2·1	354	22	6·8	3·4	341					19	14·3	13·4	284	28	16·6	15·8	288
6·0 „					17	8·2	5·1	348	17	7·4	4·6	341					12	16·0	15·2	283	22	18·4	17·3	279
7·5 „					8	6·1	5·0	357	12	8·6	3·2	302					5	15·2	15·2	274	16	22·2	20·6	279
9·0 „					3	5·8	3·3	158	9	10·0	7·2	272					2	16·0	16·0	300	8	25·6	24·0	277

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	MANGALORE												MASULIPATAM											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	2·5	2·0	17	29	2·8	2·4	65	29	4·3	3·6	292	29	0·7	0·4	124	29	0·4	0·2	146	29	2·8	2·6	14
0·15 a.g.	29	4·4	3·8	352	29	4·2	3·4	50	29	5·5	4·9	288	29	5·3	4·3	157	29	4·5	3·0	163	29	5·1	4·7	15
0·6 a.s.l.	29	4·1	3·6	331	29	4·1	2·6	349	29	4·3	3·8	301	28	5·6	4·6	149	28	5·1	4·5	162	29	4·6	3·5	17
1·0 ,, ...	29	3·3	2·2	301	29	4·3	2·2	358	29	3·1	0·7	6	27	4·3	2·4	142	27	4·8	4·0	152	29	4·3	2·3	16
1·5 ,, ...	29	4·2	0·9	102	29	5·1	2·0	108	29	4·8	2·9	88	27	3·8	0·5	117	26	4·3	1·6	121	29	4·1	0·8	14
2·0 ,, ...	29	6·0	3·7	104	29	5·6	3·3	106	29	7·1	5·3	83	26	5·0	1·5	349	25	4·9	1·7	31	29	5·2	1·3	34
2·5 ,, ...	21	7·3	5·7	93	29	5·9	3·9	86	29	8·3	5·7	63	25	6·3	2·5	353	23	6·1	2·4	9	29	6·5	2·7	34
3·0 ,, ...	15	5·6	3·9	78	28	5·9	3·6	66	29	7·6	4·8	48	23	6·6	2·4	344	23	6·9	3·6	349	27	7·1	3·4	33
4·0 ,, ...					25	6·2	2·8	1	22	6·3	3·9	358	10	5·9	2·0	289	22	7·5	5·4	329	25	7·4	5·3	30
5·0 ,, ...					22	5·8	3·6	9	22	6·5	5·1	4					20	8·7	6·1	306	23	9·6	7·9	29
6·0 ,, ...					22	5·7	3·2	349	20	6·6	4·3	358					17	8·9	6·3	303	23	10·9	9·0	28
7·5 ,, ...					12	7·6	4·1	295	8	5·6	3·1	340					17	10·5	9·1	286	14	12·3	10·7	28
9·0 ,, ...					5	6·1	3·8	274	5	10·1	6·9	300					11	12·9	11·8	273	4	12·1	11·9	26

Height in km.	NAGERCOIL												NAGPUR											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	2·5	1·5	42	29	2·3	1·9	44	29	5·3	1·1	90	29	1·5	1·1	16	29	1·6	1·2	17	29	1·7	0·1	2
0·15 a.g.	29	5·2	3·2	25	29	5·0	4·0	50	29	7·0	1·9	80	29	5·7	3·0	61	29	5·8	4·2	35	29	2·9	0·4	2
0·6 a.s.l.	29	6·2	4·5	34	29	5·6	4·3	40	29	5·8	3·3	44	26	6·1	2·5	75	29	7·1	3·8	67	29	3·3	1·1	1
1·0 ,, ...	29	7·2	5·9	57	29	6·6	5·6	48	29	5·5	4·4	48	29	5·5	0·2	215	29	6·1	0·9	72	29	3·7	1·7	1
1·5 ,, ...	29	8·0	7·0	65	28	7·2	6·6	63	29	6·1	5·6	43	29	5·3	3·5	252	29	5·7	2·6	258	29	4·2	3·0	1
2·0 ,, ...	29	7·0	6·4	67	28	6·4	5·5	67	28	6·8	6·3	37	25	6·4	5·4	258	29	6·7	5·4	261	29	5·9	5·2	1
2·5 ,, ...	29	5·9	5·2	69	28	5·8	4·9	73	28	6·7	5·9	44	24	9·3	8·4	262	27	8·7	7·6	260	29	8·5	7·8	
3·0 ,, ...	27	4·8	3·3	71	28	5·4	3·8	73	26	6·5	4·5	58	19	10·0	9·7	266	26	10·5	9·5	265	27	11·4	10·5	
4·0 ,, ...	15	6·1	4·0	61	27	6·1	3·6	73	24	6·8	4·4	67	1	11·5	11·5	320	21	12·9	11·6	279	22	14·4	13·8	
5·0 ,, ...	7	6·7	3·8	59	25	6·2	4·1	77	21	7·0	5·1	73					10	16·9	15·5	279	19	18·3	17·6	
6·0 ,, ...					25	8·3	5·9	68	20	9·3	6·3	53					7	16·9	16·7	281	15	24·3	23·8	
7·5 ,, ...					22	8·7	4·0	67	16	10·3	6·2	62					6	21·2	19·3	283	6	23·5	22·4	
9·0 ,, ...					20	7·3	2·7	45	10	9·7	5·6	74					1	18·5	18·5	275	2	34·5	33·9	

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	NEW DELHI												POONA											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	2·2	1·1	325	29	1·9	0·9	286	29	4·6	2·4	321	25	1·1	0·8	255	28	0·4	0·4	266	29	2·0	1·3	300
0·15 a.g.	26	7·3	4·0	348	27	6·2	2·3	328	29	5·2	2·7	326	25	3·8	2·8	279	28	2·8	1·5	242	29	3·9	2·4	300
0·6 a.s.l.	26	7·2	3·9	338	27	6·7	3·5	319	29	5·4	2·9	309	25	2·6	1·9	258	28	1·2	0·7	247	29	2·8	1·7	298
1·0 ,,	26	6·6	3·8	317	27	7·0	4·0	302	29	5·6	3·1	298	25	5·7	4·4	316	28	5·6	2·5	15	29	4·2	2·9	288
1·5 ,,	26	7·5	5·5	295	27	7·8	5·4	288	28	7·0	4·9	291	25	5·9	3·2	317	28	6·1	1·1	3	29	4·0	2·8	277
2·0 ,,	22	8·3	7·2	284	27	8·0	5·8	288	27	7·5	5·9	281	25	4·3	1·0	254	28	5·1	1·9	239	29	4·3	2·7	258
2·5 ,,	20	8·2	7·5	278	25	8·1	6·4	295	25	8·8	7·2	279	25	5·3	1·5	164	28	6·3	2·8	241	29	4·8	3·4	266
3·0 ,,	7	10·8	9·9	274	24	9·5	8·4	290	22	9·5	7·9	278	22	7·2	1·3	271	28	7·3	3·9	273	28	6·9	4·9	293
4·0 ,,					19	12·3	11·6	285	17	11·8	10·6	281	13	11·5	8·5	293	28	11·1	9·4	296	28	11·0	9·7	296
5·0 ,,					11	14·2	13·5	285	15	14·9	14·0	282					24	12·5	11·4	285	27	12·1	11·1	292
6·0 ,,					8	17·6	16·7	282	13	21·7	20·6	284					23	15·4	14·6	285	25	15·3	14·4	289
7·5 ,,									7	23·7	22·4	294					15	17·0	16·6	279	22	18·8	17·4	280
9·0 ,,									3	28·3	27·5	288					8	19·7	19·1	270	14	22·3	21·6	270

Height in km.	PORT BLAIR												RAIPUR											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	2·0	1·7	32	29	1·4	1·1	22	29	2·6	2·4	56	29	1·9	0·4	65	29	1·2	0·5	25	29	2·0	1·2	286
0·15 a.g.	29	4·4	4·3	38	29	4·4	4·0	28	29	4·8	4·6	55	29	6·1	2·3	28	28	5·2	2·8	63	29	3·9	2·1	288
0·6 a.s.l.	29	4·7	4·4	48	29	4·9	4·0	48	29	3·6	3·2	41	29	5·5	1·7	13	28	5·8	2·6	58	29	3·9	2·3	283
1·0 ,,	26	3·9	2·7	79	27	3·7	2·2	70	27	3·3	1·9	7	29	4·5	1·9	266	28	5·9	0·7	310	29	3·5	2·3	271
1·5 ,,	21	3·6	2·0	103	26	3·5	2·0	99	27	3·4	1·6	94	29	5·1	3·9	253	28	5·6	3·5	254	29	4·7	4·0	267
2·0 ,,	19	3·6	1·7	99	25	4·4	2·1	110	27	3·7	1·5	105	28	6·5	5·8	268	28	7·2	6·1	271	29	6·7	5·9	267
2·5 ,,	15	4·0	2·5	70	23	4·7	2·7	99	27	4·2	0·9	77	23	9·3	8·6	273	27	9·5	8·5	280	29	9·0	8·0	271
3·0 ,,	10	3·7	1·5	39	23	4·2	2·0	103	25	4·2	0·5	347	16	10·2	9·5	278	27	12·4	11·1	279	28	11·5	10·2	273
4·0 ,,	1	8·0	8·0	80	22	4·0	0·8	103	23	4·7	0·7	342	5	11·7	11·5	282	25	14·1	13·2	284	24	13·8	13·1	274
5·0 ,,					19	4·4	0·5	6	22	4·5	0·5	9	1	15·5	15·5	280	20	16·4	15·7	287	20	16·7	16·7	278
6·0 ,,					17	5·4	0·7	33	14	5·8	0·8	235					17	19·7	19·0	283	18	21·8	21·2	275
7·5 ,,					12	7·7	3·2	220	6	5·0	1·9	270					13	23·8	22·6	277	15	28·8	27·9	274
9·0 ,,					7	4·7	3·3	243	3	5·5	3·9	209					4	26·1	25·6	270	11	35·8	35·1	279

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	SAHARSA								TEZPUR												TRICHINOPOLY			
	0700				1600				0100				0700				1600				0100			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	0·7	0·1	280	29	1·2	1·0	238	29	2·2	1·9	62	29	1·8	1·6	69	29	1·4	0·8	79	29	1·3	1·1	63
0·15 a.g.	28	6·0	2·0	285	29	4·4	3·1	276	29	6·3	5·6	74	29	5·2	4·9	72	29	3·9	1·2	73	29	4·9	3·6	90
0·6 a.s.l.	28	5·9	2·9	292	29	5·1	3·9	274	29	4·6	2·0	130	29	5·3	3·4	96	29	3·6	0·5	74	29	6·7	5·1	101
1·0 ,,	28	6·1	3·8	296	29	5·4	4·7	277	28	4·3	2·1	226	29	4·8	1·2	159	29	3·6	1·2	239	29	6·1	4·5	92
1·5 ,,	27	6·9	5·5	292	28	6·6	6·2	280	25	5·3	4·2	245	26	5·6	3·0	240	29	5·2	3·9	239	29	5·8	4·0	78
2·0 ,,	25	8·5	7·8	286	27	9·3	8·9	281	25	7·8	6·5	257	24	6·2	4·4	251	26	8·2	6·8	243	28	5·7	3·9	60
2·5 ,,	22	9·3	8·9	286	27	11·7	11·2	282	19	6·6	5·1	256	23	6·3	4·5	252	25	9·6	7·9	247	26	5·4	3·1	40
3·0 ,,	20	12·4	11·9	285	25	12·9	12·6	286	16	7·5	5·2	254	20	6·5	3·6	256	25	9·7	8·5	253	25	5·3	3·2	52
4·0 ,,	2	10·0	9·5	289	18	15·0	14·6	290	1	9·5	9·5	270	15	8·7	7·1	268	19	13·2	11·8	262	2	5·0	0·9	158
5·0 ,,					5	20·4	20·1	289					11	15·5	14·9	272	18	18·8	18·4	269				
6·0 ,,					2	28·0	27·9	271					8	12·6	12·5	276	17	25·1	24·4	273				
7·5 ,,													5	23·2	22·5	280	10	28·9	28·3	274				
9·0 ,,													4	31·5	30·1	273	3	31·5	31·1	269				

Height in km.	TRICHINOPOLY								TRIVANDRUM				UDAIPUR											
	0700				1600				0700				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	29	1·3	1·1	36	29	2·2	2·1	74	29	1·1	0·7	25	29	0·6	0·5	327	29	0·2	0·1	248	29	1·6	0·8	273
0·15 a.g.	29	4·0	2·7	53	29	3·7	3·2	76	29	2·6	1·1	21	28	3·9	2·3	356	29	3·2	1·8	315	29	4·1	1·2	270
0·6 a.s.l.	29	5·1	3·7	92	29	4·4	3·9	85	29	2·8	1·1	350												
1·0 ,,	28	5·7	3·9	99	29	4·4	3·6	86	29	3·0	1·7	41	28	5·1	2·3	342	29	5·1	0·8	16	29	4·2	2·0	266
1·5 ,,	28	5·2	3·7	81	29	4·4	3·1	68	29	3·7	2·5	67	28	5·6	4·2	262	28	6·8	3·6	291	29	4·6	3·1	274
2·0 ,,	28	5·0	3·9	62	29	5·2	3·1	57	28	4·7	3·5	73	28	7·7	6·4	261	28	8·1	7·1	274	29	6·1	5·1	280
2·5 ,,	26	5·1	3·7	49	28	5·1	3·0	52	28	4·2	3·2	78	25	8·6	7·5	264	28	10·1	8·7	275	28	8·2	7·3	274
3·0 ,,	25	5·5	3·2	51	28	4·9	2·7	46	28	4·8	3·0	90	23	11·0	9·7	269	27	12·5	10·7	277	27	12·2	11·3	275
4·0 ,,	22	5·5	3·2	64	26	5·0	2·9	51	23	5·4	3·5	83					18	15·9	13·3	283	25	19·5	18·0	27[illegible]
5·0 ,,	19	6·5	3·6	53	25	6·3	3·3	56	21	5·7	4·2	76					5	16·9	16·8	276	23	25·6	24·2	27[illegible]
6·0 ,,	17	7·1	4·2	42	24	7·8	4·4	40	19	7·9	5·0	69					3	24·8	24·3	287	18	31·8	31·1	27[illegible]
7·5 ,,	13	7·2	1·1	287	16	6·1	3·7	51	8	6·9	1·8	300									8	32·8	31·7	27[illegible]
9·0 ,,	8	8·4	3·4	272	14	6·7	3·4	45	4	8·5	5·1	302									3	37·0	35·8	28[illegible]

Table A.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height in km.	VENGURLA												VERAVAL											
	0100				0700				1600				0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . . .	29	0·9	0·9	4	29	0·4	0·3	15	29	4·1	3·5	260	28	4·6	4·1	356	29	3·4	2·9	6	29	6·5	5·1	267
0·15 a.g. . . .	29	5·5	5.3	359	29	4·2	2·2	25	29	5·4	4·8	280	28	8·7	7·4	342	29	9·4	8·2	8	29	7·7	6·7	264
0·6 a.s.l. . . .	29	6·7	6·4	346	29	6·1	3·8	4	29	3·2	2·0	295	27	8·9	6·5	349	29	7·1	5·0	350	29	4·9	3·8	310
1·0 ,, . . .	29	6·0	3·9	330	28	6·7	3·8	1	29	3·9	0·8	324	28	6·5	3·3	349	29	6·3	4·8	321	29	5·4	4·3	342
1·5 ,, . . .	29	5·1	0·1	85	28	5·5	0·4	360	29	4·5	0·6	131	28	5·4	2·3	305	29	6·8	5·4	292	29	6·5	4·9	330
2·0 ,, . . .	28	6·1	3·4	117	28	5·3	1·2	138	29	5·9	1·5	86	27	7·1	4·3	295	29	8·1	6·7	285	29	7·7	6·3	298
2·5 ,, . . .	25	6·4	1·8	87	28	5·0	0·7	128	29	6·3	2·4	39	13	7·7	6·6	267	29	9·2	7·5	276	29	9·0	7·4	280
3·0 ,, . . .	20	6·1	1·5	29	27	6·5	1·9	7	29	7·3	3·1	4	8	8·8	8·2	264	28	10·7	8·5	271	29	11·3	9·0	277
4·0 ,, . . .	11	6·6	3·1	332	26	7·9	4·3	332	29	7·0	4·3	320					23	12·9	11·4	268	29	15·0	13·6	281
5·0 ,, . . .	1	9·0	9·0	295	25	7·3	5·2	306	27	7·1	5·4	307					17	16·7	15·7	267	26	17·2	17·1	274
6·0 ,, . . .					23	9·2	7·4	289	27	9·4	8·6	306					11	17·8	15·7	267	22	19·9	18·7	275
7·5 ,, . . .					17	9·5	8·9	287	22	11·5	10·1	281					2	23·3	23·2	262	13	26·0	25·3	265
9·0 ,, . . .					10	12·1	10·7	275	19	15·6	14·2	284									5	32·5	31·2	270

Height in km.	VIZAGAPATAM												MINICOY							
	0100				0700				1600				0700				1400			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface . . .	29	1·0	0·2	261	29	0·8	0·2	335	29	3·1	2·2	173	29	1·6	1·2	24	29	2·4	1·9	15
0·15 a.g. . . .	28	4·3	2·2	235	29	4·6	1·6	277	29	5·1	3·6	172	28	3·9	3·3	26	28	4·6	3·7	13
0·6 a.s.l. . . .	28	4·7	2·8	225	29	5·0	2·3	215	29	4·5	2·4	198	28	4·1	3·3	40	27	4·4	4·1	23
1·0 ,, . . .	26	3·7	1·7	244	28	4·1	1·9	196	28	4·1	1·6	235	28	4·5	3·7	93	24	4·0	3·3	65
1·5 ,, . . .	24	3·1	1·1	313	28	3·2	1·2	271	27	4·7	1·5	273	27	6·6	5·9	87	20	5·5	4·3	80
2·0 ,, . . .	22	4·0	2·3	332	26	4·3	1·9	302	26	5·8	3·4	312	26	7·1	6·2	89	20	6·0	4·2	81
2·5 ,, . . .	21	5·4	3·7	338	25	5·8	3·5	330	24	6·3	5·1	325	22	6·0	4·1	89	20	5·5	3·8	64
3·0 ,, . . .	21	6·9	4·7	330	25	6·9	4·9	325	24	6·5	5·3	317	20	5·8	3·6	64	17	4·9	3·9	43
4·0 ,, . . .	8	5·3	3·0	327	23	8·3	6·3	298	22	8·4	7·0	286	14	5·0	3·1	77	12	4·5	3·3	50
5·0 ,, . . .					22	10·6	9·2	286	20	10·4	9·5	284	11	5·0	3·7	97	9	5·6	3·0	70
6·0 ,, . . .					18	11·8	9·6	286	20	12.5	10·8	288	6	9·3	5·8	54	8	7·4	3·3	57
7·5 ,, . . .					14	14·2	12·6	289	16	14·7	13·4	280	4	8·7	1·5	178	2	11·2	10·3	323
9·0 ,, . . .					9	15·4	14·5	271	10	16·5	15·9	274	3	10·3	6·0	333	1	9·5	9·5	295

Table B.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

FEBRUARY 1948.

Height (Km.)	n	V	v	D
		AHMEDABAD		
10·0	1	83·0	83·0	305
		AMBALA		
10·0	7	36·6	35·6	289
11·0	3	34·3	33·3	289
12·0	2	34·7	33·6	300
13·0	1	39·5	39·5	280
14·0	1	48·0	48·0	280
15·0	1	55·0	55·0	280
16·0	1	57·0	57·0	270
		ANANTAPUR		
10·0	1	6·5	6·5	265
		BANGALORE		
10·0	4	13·6	12·3	287
11·0	3	12·5	12·1	287
12·0	1	27·0	27·0	280
		BHUJ		
10·0	1	21·0	21·0	270
11·0	1	24·0	24·0	280
		BOMBAY		
10·0	1	34·5	34·5	265
		COCHIN		
10·0	15	9·6	4·7	189
11·0	10	13·3	8·1	293
12·0	8	16·7	9·5	304
13·0	2	15·5	11·7	296
14·0	1	4·0	4·0	165

Height (Km.)	n	V	v	D
		GADAG		
10·0	2	10·5	10·5	290
11·0	1	11·0	11·0	240
12·0	1	12·0	12·0	255
13·0	1	14·0	14·0	245
		GOPALPUR		
10·0	1	28·0	28·0	250
11·0	1	31·0	31·0	250
12·0	1	26·0	26·0	260
		HYDERABAD		
10·0	10	18·7	18·3	267
11·0	7	21·7	21·0	258
12·0	5	24·0	23·6	251
13·0	5	29·0	28·5	257
14·0	4	27·7	27·4	256
15·0	3	30·5	29·8	258
16·0	3	33·8	32·9	263
17·0	2	32·0	31·9	250
18·0	1	33·0	33·0	245
		JHARSUGUDA		
10·0	1	45·0	45·0	270
		MADRAS		
10·0	5	4·6	2·3	291
11·0	5	6·7	3·8	213
12·0	4	8·4	7·9	214
13·0	2	9·3	8·7	178
14·0	1	8·0	8·0	155
15·0	1	6·5	6·5	320

Height (Km.)	n	V	v	D
		MALEGAON CAMP		
10·0	1	21·0	21·0	275
		MASULIPATAM		
10·0	4	10·6	10·5	264
11·0	3	12·8	12·4	255
12·0	2	11·3	11·3	258
13·0	2	13·0	12·2	267
14·0	2	14·5	12·3	261
15·0	1	24·0	24·0	240
16·0	1	20·5	20·5	225
		NAGERCOIL		
10·0	6	8·2	0·7	333
11·0	2	8·7	3·3	19
12·0	1	13·0	13·0	115
13·0	1	21·0	21·0	90
		NEW DELHI		
10·0	1	33·0	33·0	280
11·0	1	35·5	35·5	280
12·0	1	31·0	31·0	275
		POONA		
10·0	9	25·3	24·1	273
11·0	6	28·3	27·3	269
12·0	2	26·0	25·9	252
		PORT BLAIR		
10·0	2	5·3	4·9	162
11·0	1	7·0	7·0	150
		RAIPUR		
10·0	8	42·0	41·0	276
11·0	4	41·0	40·5	287
12·0	2	39·0	38·1	264
13·0	1	40·0	40·0	270

Height (Km.)	n	V	v	D
		TEZPUR		
10·0	3	30·5	30·3	265
11·0	2	28·7	28·7	258
12·0	2	38·0	37·9	262
		TRICHINOPOLY		
10·0	8	6·0	1·6	67
11·0	7	5·1	1·1	302
12·0	7	6·6	1·9	297
13·0	5	4·8	1·5	169
14·0	5	8·5	4·5	150
15·0	5	11·4	9·1	141
16·0	5	11·8	8·5	130
17·0	5	12·7	10·4	138
18·0	5	13·9	10·7	117
19·0	4	14·3	9·9	131
20·0	3	15·6	9·4	127
21·0	2	12·5	9·7	124
22·0	2	11·5	5·7	93
23·0	1	15·0	15·0	85
24·0	1	14·5	14·5	75

Table B.—Monthly Mean Directions and Velocities of Upper Winds.

Winds up to 9 km. above sea level.

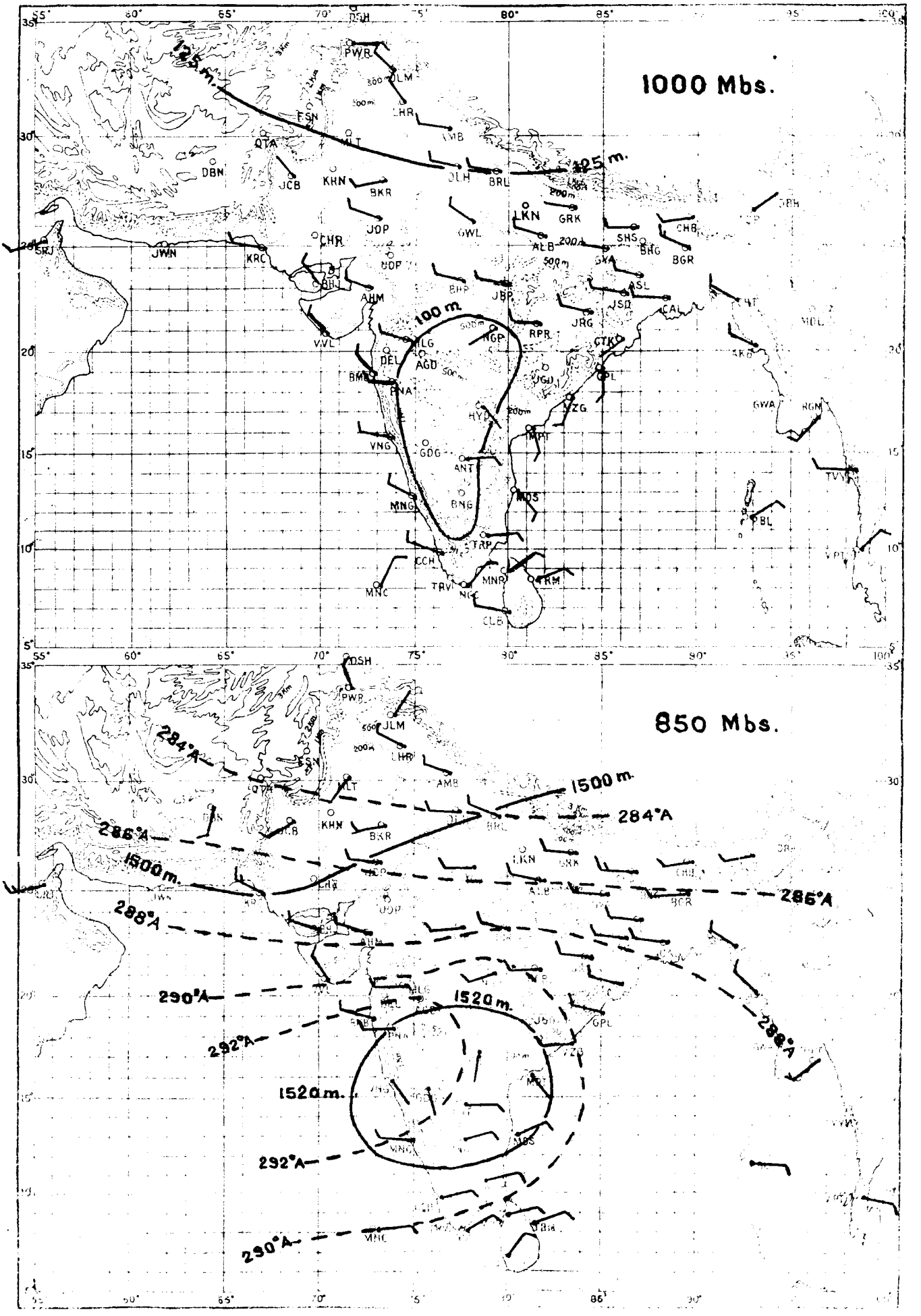
FEBRUARY 1948.

Height (Km.)	n	V	v	D	Height (Km.)	n	V	v	D	Height (Km.)	n	V	v	D
	VENGURLA					VIZAGAPATAM					MINICOY			
10·0	15	18·7	17·2	284	10·0	8	17·5	16·6	266	10·0	1	19·0	19·0	340
11·0	12	23·5	21·7	292	11·0	4	16·1	15·6	270					
12·0	8	20·4	19·3	273	12·0	3	16·3	16·3	256					
13·0	7	22·6	21·0	265	13·0	2	24·5	24·5	258					
14·0	7	24·4	22·7	258	14·0	2	25·5	25·4	263					
15·0	7	25·6	24·6	251	15·0	2	23·0	22·4	260					
16·0	3	29·3	29·3	243	16·0	1	25·5	25·5	265					
17·0	3	34·5	34·5	244										
19·0	3	37·3	37·3	248										

MGIPC—S6—21 DGO/52—18·11·52—325.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

FEBRUARY 1948

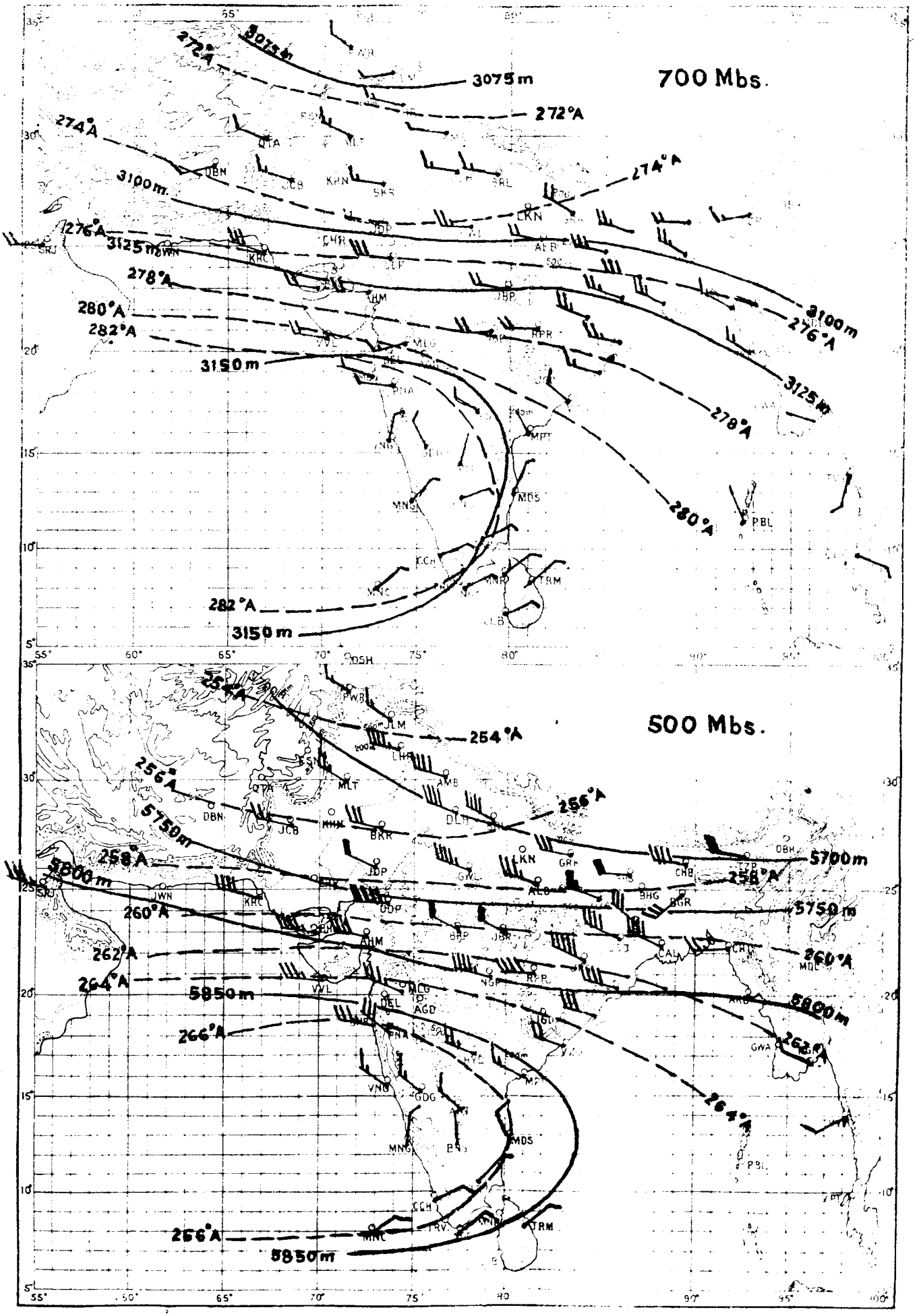


RESULTANT WIND — 5 Knots, 10 Knots, 50 Knots

— — — Isotherms in degrees Absolute ——— Contours in Metres.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

FEBRUARY 1948



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INDIA WEATHER REVIEW, 1948

Monthly Weather Report

March

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WEATHER BUREAU

Published by authority of the Government of India

Chief features :—(*i*) A succession of western disturbances and of active secondaries during the first fortnight, and (*ii*) a marked cold spell during the third week.

A low pressure area over the central parts of the country which moved away northeastwards at the end of the last month, induced a secondary "low" in the east Arabian Sea off the Kathiawar-Konkan coast on the 1st. The latter remained more or less stationary out in the sea till the 5th. Moving thereafter eastnortheastwards, it passed away across Assam and Eastern Pakistan by the 8th. Associated with this trough, local thunderstorm-rain occurred in the Bombay Deccan and north Hyderabad and a few thunder showers in the central parts of the country on the 6th and 7th.

Of the nine western disturbances that affected the weather during the month, the first three moved in quick succession during the first week of the month, the second and the third induced secondaries off Mekran, which later merged into one and gave rise to a period of disturbed weather over northwest India till the 13th. Fairly widespread rain occurred over the region from north Baluchistan and the North West Frontier Province to the west United Provinces between the 7th and 13th with locally heavy falls in the East Punjab hills between the 11th and 13th. A hailstorm which occurred in the Amritsar district on the 12th is reported to have caused great damage to crops in that district. The heavy rains in the East Punjab hills are also reported to have caused floods in the Ravi river with consequent damage to standing crops. The six western disturbances which followed subsequently were feeble. The fourth among these (*i.e.*, the seventh disturbance of the month), however, induced a low pressure area over Sind and the adjoining areas on the 25th, which moved eastwards upto Chota Nagpur and became unimportant by the 30th. Another low pressure area also appeared over Orissa and West Bengal on the 27th and moved away eastwards across Assam on the next day. In association with these two low pressure systems, local thunder-rain occurred in Assam, Chota Nagpur, Orissa and the Central Provinces between the 26th and 30th.

A low pressure wave moving from the north Deccan to Eastern Pakistan across the head of the Bay of Bengal caused local thunderstorm-rain in West Bengal and Eastern Pakistan on the 14th and 15th. Some of these thunderstorms were accompanied by hail and severe squalls. Another low pressure wave moving westwards through the extreme south of the Bay of Bengal caused fairly widespread rainfall in Malabar, Mysore and the Madras Deccan on the last day of the month.

The succession of active western disturbances was responsible for appreciably high day and night temperatures during the first fortnight in northern India. After the end of the wet spell, however, there was a vigorous surge of cold air from northern latitudes resulting in a marked cold spell over the country during the third week. Both day and night temperatures between the 14th and 17th were below normal over the whole country outside the southern half of the Peninsula. On the 15th, the night temperatures were more than 12°F. below normal over the region extending from the southeast Punjab and the west United Provinces to north Hyderabad and dropped to more than 16°F. below normal at some stations in the west United Provinces.

The total rainfall during the month was in large excess in West Bengal, Chota Nagpur, the East Punjab, west Rajputana, the Bombay Deccan, south Hyderabad and Malabar, in moderate excess in the Bay Islands and the west United Provinces and normal in the west Central Provinces and north Hyderabad. It was in slight to moderate defect in Assam, the east Central Provinces, Mysore, southeast Madras and the Madras Deccan and in large defect elsewhere except in Gujarat, east Central India and the Konkan where dry weather prevailed. Averaged over the plains of India, the rainfall during the month was 7% in defect.

Maximum temperatures were above normal in the Konkan, below normal in the west United Provinces and the East Punjab and normal elsewhere. Minimum temperatures were above normal in Gujarat, below normal in east Central India and normal elsewhere.

Humidity was in excess in the west United Provinces, the East Punjab, east Central India and Mysore and normal elsewhere.

Cloud amount was in excess in the Bay Islands, Chota Nagpur, the United Provinces, the East Punjab, east Rajputana, west Central India, the west Central Provinces and the Madras Presidency outside the north Madras coast and in defect in Berar, the Konkan, the Bombay Deccan, north Hyderabad and the north Madras coast.

Data for Kashmir are absent.

Table I contains the divisional and sub-divisional means of rainfall, temperatures, humidity and cloud amounts for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N.B.—**The Indian Standard Time used in this publication is 5 hours 30 minutes in advance of G.M.T.**

Poona 5;
The 9th January 1949.

C. RAMASWAMY,
for *Director General of Observatories*

—	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1. Assam	1·79	2·29	−0·50	22	−0·6	−0·7	0·8	−3	+0·1
2. West Bengal	1·83	1·21	+0·62	+51	−0·7	−0·1	−0·1	+4	0
3. Orissa	0·42	0·98	−0·56	−57	−0·3	−0·7	−1·4	−2	−0·4
4 Bihar	0·59	0·61	−0·02	−3	0	−0·7	0	+1	+0·5
5. United Provinces	0·42	0·48	−0·06	−13	−1·3	−0·4	+0·8	+8	+0·6
6. East Punjab	1·38	0·76	+0·62	+82	−2·3	−1·1	+2·6	+17	+0·6
7. Rajputana	0·28	0·22	+0·06	+27	+0·2	+1·1	+0·8	+3	+0·2
Sub-Division									
1. Bay Islands	1·47	1·12	+0·35	+31	+1·5	+1·7	+0·5	−2	+1·7
2. Assam	1·79	2·29	−0·50	−22	−0·6	−0·7	−0·8	−3	+0·1
3. West Bengal	1·83	1·21	+0·62	+51	−0·7	−0·1	−0·1	+4	0
4. Orissa	0·42	0·98	−0·56	−57	−0·3	−0·7	−1·4	−2	−0·4
5. Cohta Nagpur	1·37	0·88	+0·49	+56	−0·7	−1·5	+0·5	+4	+0·9
6. Bihar	0·20	0·48	−0·28	−58	+0·7	0	−0·4	−1	+0·1
7. United Provinces, East.	0·01	0·35	−0·34	−97	−0·3	−0·1	+0·3	+3	+0·6
8. United Provinces, West.	0·83	0·60	+0·23	+38	−2·5	−0·7	+1·3	+12	+0·6
9. East Punjab	1·38	0·76	+0·62	+82	−2·3	−1·1	+2·6	+17	+0·6
10. Kashmir	Data incomplete								
11. Rajputana, West	0·56	0·25	+0·31	+124	+1·3	+1·8	+0·4	+1	+0·1
12. Rajputana, East	0·01	0·20	−0·19	−95	−0·7	+0·5	+1·2	+5	+0·4
13. Gujarat	0	0·07	−0·07	−100	+1·8	+2·4	+0·9	+4	−0·2
14. Central India, West	0·04	0·26	−0·22	−85	+0·8	+1·1	+0·4	+5	+0·4

—	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division—*contd.*	"	"	"		°	°	mb.	%	
8. Bombay	0·15	0·12	+0·03	+25	+1·7	+1·6	+0·7	+2	−0·4
9. Central India	0·02	0·36	−0·34	−94	+0·5	−0·4	+0·2	+7	+0·1
10. Central Provinces and Berar.	0·43	0·57	−0·14	−25	+0·1	−0·2	0	+1	+0·2
11. Hyderabad	0·39	0·34	+0·05	+15	−0·6	−0·2	−0·1	+2	0·5
12. Mysore	0·30	0·54	−0·24	−44	−0·4	+1·2	+1·4	+7	+0·4
13. Madras	0·57	0·56	+0·01	+2	−0·5	+0·7	0	0	+0·5
Mean of India	0·50	0·54	−0·04	−7	−0·1	+0·2	+0·3	+3	+0·1
Sub-Division—*contd.*									
15. Central India, East.	0	0·48	−0·48	−100	+0·2	−2·3	0	+9	−0·3
16. Berar	0·15	0·35	−0·20	—	−0·1	+0·4	+0·2	+1	−0·7
17. Central Provinces, West.	0·43	0·45	−0·02	−4	+0·4	+0·2	−0·2	0	+0·6
18. Central Provinces, East.	0·54	0·79	−0·25	−32	−0·1	−1·0	+0·1	+2	0
19. Konkan	0	0·03	−0·03	−100	+2·6	+1·6	+1·6	+1	−0·7
20. Bombay Deccan	0·39	0·21	+0·18	+86	+1·2	+0·9	+0·1	0	−0·5
21. Hyderabad, North.	0·29	0·32	−0·03	−9	−0·7	+0·4	−0·2	0	−0·7
22. Hyderabad, South	0·53	0·35	+0·18	+51	−0·5	−0·8	0	+4	−0·3
23. Mysore	0·30	0·54	−0·24	−44	−0·4	+1·2	+1·4	+7	+0·4
24. Malabar	2·32	1·11	+1·21	+109	+1·3	+1·5	+1·3	+1	+1·1
25. Madras, South-East.	0·33	0·59	−0·26	−44	−0·4	+1·5	−0·3	−1	+0·8
26. Madras Deccan	0·11	0·17	−0·06	−35	−1·4	−1·7	−0·6	+2	+0·8
27. Madras Coast, North.	0·02	0·40	−0·38	−95	−1·4	+0·2	−0·1	0	−0·6

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Bay Islands																						
Port Blair	259	1003·5	+0·5	1000·7	89·0	+1·5	93	12	73·2	+1·7	68	19	82·6	81·4	76·0	74·9	27·7	+0·5	26·6	73	—2	7
Assam																						
Dibrugarh	348	1002·2	+1·0	998·3	78·6	—0·3	87	4,8	59·1	—1·7	50	18	65·8	73·7	62·0	66·0	17·6	—0·6	18·4	80	+1	
Sibsagar	317	1003·3	+1·3	999·4	78·1	—1·1	87	5	59·3	—0·7	51	18	66·8	73·3	63·2	69·1	18·2	—0·8	22·5	81	—3	
Tezpur	258	1005·2	+1·1	1000·3	82·3	—1·2	90	8	61·4	—0·9	53	18	67·1	77·6	62·2	65·8	16·9	—0·9	16·3	75	+1	
Gauhati	182	1007·3	+1·3	1002·4	84·8	—1·1	95	4	..	..	..	..	68·9	80·6	63·3	66·2	17·4	—0·1	15·4	73	0	
Dhubri	115	1009·3	+1·7	1005·6	84·9	—1·1	94	13	63·5	+0·3	53	17	66·9	83·3	62·5	67·4	17·3	—0·2	15·7	76	+7	
Silchar	96	1010·8	+1·0	1006·0	86·4	—0·1	91	6,7,13	63·6	+0·6	53	18	70·2	81·6	65·4	70·2	14·3	—5·5	15·2	76	+1	
West Bengal																						
Dum Dum	33	1011·0	..	1007·4	90·7	..	99	11,12,13	68·2	..	57	17,18	75·3	87·5	69·5	71·7	21·9	..	19·2	75	..	
Calcutta	21	1011·5	+0·5	1007·7	92·2	—0·3	100	12,13	69·2	+0·4	57	18	74·5	86·7	69·3	70·0	22·5	—0·4	17·7	76	—3	
Saugor Island	10	1011·6	+0·2	1008·6	85·3	—1·3	94	13	73·4	—0·8	61	18	79·3	82·1	72·5	73·4	24·1	—2·1	24·2	71	—5	
Sandheads	28	1012·2	+1·1	1009·2	..	..	..	..	..	..	..	..	79·8	82·3	77·2	78·4	30·7	+3·0	31·3	88	+11	
Midnapore	149	1006·6	+0·1	1002·9	92·7	—2·4	101	12,13	67·5	—1·9	58	18	72·5	89·8	65·9	69·0	18·8	—0·6	14·7	69	+7	
Burdwan	106	1008·3	+0·4	1004·3	..	..	..	..	67·1	—0·4	58	1,18	73·9	89·7	67·6	69·2	20·1	+1·2	15·1	71	+5	
Krishnagar	48	1010·0	—0·1	1006.8	92·7	0	100	4 days	65·5	—0·2	54	1	69·1	89·4	65·9	70·6	20·4	+0·3	16·9	83	+17	
Asansol	414	997·9	+0·9	993·8	92·2	—1·6	101	29	65·8	—0·1	57	18	74·5	89·0	65·9	71·1	17·9	+3·4	17·8	62	+13	
Berhampore	62	1009·9	+0·3	1005·5	92·2	+0·1	99	29	65·0	—0·3	55	1,17,18	73·2	87·9	65·4	68·6	17·7	—0·2	15·0	67	+4	
Malda	103	1008·7	+1·0	1004·5	89·8	—0·3	96	12,13,24	63·0	+1·4	53	2,16	74·2	86·5	63·4	66·5	14·9	—1·2	13·1	53	+1	
Jalpaiguri	271	1003·3	+1·0	998·7	85·0	—0·2	92	13,14	61·5	+1·2	50	17	65·9	82·1	60·7	66·1	15·9	—1·1	14·6	73	0	
Orissa																						
Balasore	65	1010·2	+0·6	1006·4	91·0	—1·7	99	11	68·7	—0·7	60	3,4,17	77·7	82·6	69·5	73·0	21·0	—1·3	23·4	65	—5	
Chandbali	20	1011·6	+0·5	1008·0	93·6	0	102	12	69·6	—1·1	59	3	76·4	86·9	71·3	72·3	23·9	—1·3	20·5	77	—2	
Puri	20	1011·8	+0·5	1008·4	86·8	+0·5	97	22	75·1	—0·5	68	4 days	79·3	82·8	73·7	75·5	25·9	—1·8	26·7	76	—4	
Gopalpur	56	1010·3	+0·4	1006·7	87·2	+0·2	95	22	72·4	—0·4	66	4,18	77·6	82·9	72·0	69·3	24·3	—0·9	18·3	76	—1	
Cuttack	87	1008·9	—0·2	1004·6	95·7	—0·9	104	15	71·0	—0·8	64	17,18	75·6	91·0	70·2	71·2	22·7	—1·4	16·9	75	—1	
Angul	455	996·5	+0·3	992·2	95·4	—0·4	102	12,13	68·1	0	57	17	72·8	92·1	65·1	66·6	17·3	—1·5	10·7	62	—1	
Sambalpur	486	995·7	+0·5	991·1	96·1	+0·4	102	5 days	65·4	—1·4	55	17	74·6	93·1	63·5	66·8	15·0	—1·4	10·4	51	—3	
Chota Nagpur																						
Jamshedpur	423	997·7	+0·7	993·1	92·9	—1·1	100	12,29,31	64·9	+0·1	55	1,17,18	72·7	90·1	63·2	66·3	15·5	+0·1	11·2	56	+1	
Chaibasa	742	986·6	+0·6	981·7	93·5	—0·7	102	13	65·6	—0·2	56	16,18	70·4	90·7	64·8	74·2	18·5	+1·6	21·3	73	+12	
Ranchi	2,150	938·9	+0·2	936·2	87·1	+0·2	95	4 days	60·1	—3·3	51	16,18	70·5	83·1	58·2	62·7	11·2	+0·4	10·6	47	+5	
Hazaribagh	2,006	944·0	+0·8	940·8	86·2	—1·5	94	24,29	60·7	—2·4	52	2,3	71·3	82·4	57·6	60·1	10·4	—0·1	8·1	41	+2	
Daltonganj	725	987·4	+0·4	983·0	90·6	—0·6	98	31	58·2	—1·7	48	16	69·3	87·7	60·4	64·9	14·0	+0·6	10·6	57	(	
Dhanbad	839	983·6	..	..	91·0	..	99	29,31	64·7	..	57	2,17	73·6	..	60·8	..	12·3	..	..	45	..	
Bihar																						
Purnea	124	1007·8	+0·7	1003·5	90·7	+1·3	96	6,7,24	58·9	—0·5	46	17	69·5	87·2	60·7	66·0	14·1	—1·5	12·3	58	—	
Darbhanga	161	1006·7	+1·0	1002·3	90·7	+1·8	96	1,12,29	61·4	+0·9	51	17	70·3	88·5	60·6	66·5	13·8	—1·0	12·2	54	—	
Motihari	218	1004·7	+1·3	1000·5	89·0	+0·5	95	25,28	57·7	—0·4	47	17	72·6	85·1	61·8	66·4	15·0	—0·1	14·6	52	—	
Patna	173	1005·9	+0·5	1002·0	91·5	+1·7	100	29	64·7	+0·4	55	1	72·5	88·2	59·9	65·0	12·0	—1·5	10·6	44	—	
Dehri	352	999·7	..	995·7	91·9	..	101	31	64·2	..	57	17,18	72·2	89·3	61·1	67·1	13·5	..	12·7	50	..	
Gaya	365	999·2	+0·4	995·2	92·5	+0·8	100	29,30,31	62·6	—0·5	53	2,16	72·1	89·9	59·2	64·1	11·3	+1·3	8·6	43	+	
Naya Dumka	489	994·8	+0·2	990·8	89·7	—2·0	100	4 days	63·6	—1·0	50	2	73·2	88·6	62·1	66·1	14·1	+0·2	11·7	50	+	
Sabour	122	1007·7	+1·0	1003·5	91·0	+0·4	97	9,29	60·0	+0·8	48	16	72·7	87·2	61·8	66·6	13·9	0	13·0	51	—	

Cloud amount (tenths of sky)			Rainfall, inches.				Number of rainy days (0.10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I. S. T.										17 hrs. I. S. T.									
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
5·3	+1·7	6·6	1·47	+0·35	0·46	30	5	+2·9	6·0	+0·1	3	16	7	1	0	0	1	2	1	2	14	12	1	1	0	0	0	1	Port Blair
																													Assam
5·0	−0·3	5·3	3·38	−0·68	0·60	10	11	+2·5	1·4	0	6	4	9	0	1	0	1	0	10	0	3	4	0	0	0	0	0	24	Dibrugarh
5·6	−0·6	5·3	2·12	−2·28	0·54	29	9	+0·5	3·1	+0·7	4	13	6	1	1	0	0	1	5	11	10	0	0	1	1	0	3	5	Sibsagar
4·1	+1·0	2·9	2·38	+0·46	0·69	29	6	+1·5	3·4	+0·1	0	10	18	1	1	0	0	0	1	0	6	13	1	0	1	0	0	10	Tezpur
3·5	+0·6	3·3	1·51	−0·48	1·01	28	4	+0·2	3·6	+1·7	4	10	5	4	2	2	0	2	2	3	11	6	1	0	1	3	2	4	Gauhati
1·6	−0·7	1·3	0·88	−0·78	0·46	31	2	−0·5	6·3	+1·8	2	10	15	0	3	0	0	0	1	1	15	7	1	3	1	0	0	3	Dhubri
3·5	+0·1	2·5	4·50	−2·26	1·35	20	9	+0·9	1·3	−0·6	1	5	11	7	0	0	0	0	7	0	0	0	2	0	3	4	1	21	Silchar
																													West Bengal
2·2	..	1·9	3·16	..	1·33	15	5	..	..	..	2	4	1	6	5	3	2	3	5	1	1	2	1	8	5	5	6	2	Dum Dum
2·4	−0·4	2·1	4·82	+3·46	2·70	15	4	+1·7	2·6	−0·9	3	1	2	2	3	8	1	3	8	2	1	1	1	5	8	3	2	8	Calcutta
2·7	−1·0	2·5	0·05	−1·24	0·05	15	0	−1·8	11·1	+1.5	4	1	2	1	1	15	2	3	2	4	2	0	3	10	10	0	2	0	Saugor Island
1·3	−1·4	1·5	0	−0·82	0	..	0	−1·0	..	..	2	2	1	1	0	16	2	5	2	2	1	1	7	10	6	0	0	4	Sandheads
2·3	+0·1	3 1	3·34	+1·93	1·91	15	3	+0·6	3·6	+1·0	6	5	0	2	8	2	2	1	5	4	5	2	4	5	5	0	2	4	Midnapore
2·1	−0·8	2·0	3·10	+1·54	2·10	15	4	+1·7	3·3	+1·3	2	1	2	2	5	5	3	2	9	1	1	0	4	6	2	3	5	9	Burdwan
3·2	+0·2	2·0	3·09	+1·57	2·65	15	4	+1·9	3·3	+0·4	1	0	1	10	2	2	0	1	14	2	1	1	7	4	0	1	14	1	Krishnagar
2·4	+0·2	3·1	0·56	−0·26	0·37	15	2	+0·2	4·0	−0·2	1	0	2	2	0	3	5	11	7	0	0	0	0	2	3	7	10	9	Asansol
3·2	+0·4	2·9	0·36	−0·68	0·32	15	1	−0·9	1·8	−0·4	2	0	5	1	8	7	1	2	5	1	1	2	0	7	4	2	3	11	Berhampore
2·2	+0·8	2·5	0	−0·77	0	..	0	−1·3	3·8	+0·1	3	4	3	2	3	5	4	2	5	0	5	6	1	2	1	5	7	4	Malda
2·5	+0·6	2·5	1·21	−0·06	0·87	26	2	−0·3	4·7	+2·9	13	5	9	0	1	0	1	1	1	1	4	5	3	3	4	1	1	9	Jalpaiguri
																													Orissa
2·4 (a)	0	3 5 (a)	1·32 (b)	−0·52	0·57	15	4	+1·1	4 1 (b)	+0·2	6	4	0	0	5	6	0	4	6	1	0	0	14	12	0	0	0	4	Balasore
1·7	−1·5	1·1	0·07		..	..	0	..	5·9	−0·1	4	1	0	0	4	10	0	7	4	1	0	6	14	8	1	0	0	0	Chandbali
2·5	−0·4	2·1	0	−0·50	0	..	0	−0·9	11·8	+1·2	9	2	1	0	1	16	2	0	0	0	0	2	6	12	10	1	0	0	Puri
2·0	+0·7	1·3	0·11	−0·52	0·10	30	1	−0·1	10·6	+0·8	13	0	0	1	8	4	0	3	2	0	0	0	9	19	3	0	0	0	Gopalpur
2·4	−0·7	1·8	0·52	−0·52	0·52	31	1	−0·4	3·6	+1·2	1	2	0	0	2	1	0	1	24	1	1	0	1	12	5	0	4	7	Cuttack
2·2	−0·7	3 2	0·42	−0·31	0·30	30	2	+0·3	5·2	+1·1	4	1	1	2	0	1	7	8	7	2	5	5	4	4	1	5	5	0	Angul
1·9	+0·1	3·4	0·53	−0·33	0·36	24	1	−0·7	3·4	+0·9	5	8	6	0	1	1	1	1	8	4	3	2	1	1	6	7	6	1	Sambalpur
																													Chota Nagpur
2·3	+0·1	3 3	2·25	+1·53	1·13	15	4	+2·0	3·5	+0·8	0	0	2	0	0	1	15	6	7	3	1	7	0	1	0	3	10	6	Jamshedpur
..	..	..	1·69	+0·82	0 69	24	6	+4·3	1·7	−0·3	0	1	0	0	1	13	2	1	13	8	6	1	1	0	0	2	4	9	Chaibasa
1·3	−0·7	1·6	1·38	+0·19	0·93	25	3	+0·5	3·6	−1·0	6	0	0	0	8	2	2	2	11	9	0	1	0	4	3	2	3	10	Ranchi
3·8	+1·7	3·5	1·14	+0·20	0·39	26	3	+1·1	5·7	−0·7	1	0	0	0	6	8	1	10	5	3	2	1	1	1	3	0	17	3	Hazaribagh
2·3	+0·8	3·3	0·38	−0·29	0·23	25	1	−0·6	2·7	−0·1	2	0	6	8	1	0	3	1	10	7	0	1	1	0	2	3	15	2	Daltonganj
..	..	..	0·56	..	0·31	26	1	..	5·1	..	2	2	4	0	0	10	10	1	2	..	..	..	..	..	..	..	..	..	Dhanbad
																													Bihar
1·7	0	1·7	0 02	−0·48	0·02	14	0	−1·1	3·5	+0·7	0	5	9	3	1	2	5	0	6	0	0	2	0	0	5	11	2	11	Purnea
1·5	−0·1	1·7	0	−0·51	0	..	0	−1·1	2·5	−0·2	0	5	12	0	0	1	8	1	4	0	3	1	0	0	5	11	4	7	Darbhanga
1·9	+0·6	0·7	0	−0·49	0	..	0	−0·9	2·6	−0·4	0	0	15	0	0	0	7	1	8	0	0	0	1	0	0	10	1	19	Motihari
1·0	0	1·9	0·02	−0·40	0 02	25	0	−1·1	4·2	+0·7	0	4	5	4	1	7	6	2	2	2	4	0	0	0	2	9	8	6	Patna
1·6	..	1·9	0·50	+0·06	0·29	14	2	+1·0	3·7	..	1	0	0	0	6	9	3	2	10	5	2	0	2	1	1	2	15	3	Dehri
1·7	0	1 9	1·02	+0·53	0·92	25	1	−0·2	4·9	+0·2	0	1	0	5	16	3	2	0	4	1	3	0	0	0	0	9	15	3	Gaya
2·2	+0·7	2·3	0·31	−0·60	0·17	24	2	+0·4	2·8	+0·9	0	1	0	5	1	13	0	4	2	0	2	0	5	0	16	1	6	1	Naya Dumka
2·2	0	2·1	0·07	−0·35	0·05	25	0	−0·9	4·3	−0·9	2	6	5	2	4	3	8	0	1	3	2	1	0	2	2	7	10	4	Sabour

(a) Mean of 30 days. (b) Mean or total of 29 days.

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2·30 HRS. G. M.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative humidity %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
U.P., East																					
Gonda	360	999·3	..	996·3	89·4	−0·6	98	31	58·7	−0·4	49	15	67·7	86·2	57·8	63·1	12·0	+0·3	9·3	52	+
Gorakhpur	254	1003·0	+0·8	999·3	90·5	+0·5	97	25,28,31	62·8	+1·4	54	16	69·9	88·7	59·1	65·2	12·2	−1·1	10·7	49	−
Banaras	250	1003·2	+0·4	999·5	92·3	+0·7	101	29	60·9	+0·6	53	1,15,16	69·4	90·6	59·1	66·3	12·5	−0·7	11·1	51	
Allahabad (Bamrauli).	322	1000·9	+0·5	997·3	91·3	−0·4	100	28,29,31	61·3	+0·3	51	16	69·1	90·2	57·4	63·5	10·9	−0·4	8·0	45	−
Fatehpur	375	999·4	..	995·8	90·5	−0·7	100	31	59·2	−1·0	49	15	68·2	88·4	59·9	64·0	11·8	−1·3	9·4	51	−
Kanpur	413	997·9	+0·9	995·2	89·2	−0·2	100	31	60·0	−0·1	50	15,16	67·4	86·3	57·0	63·3	11·2	+0·5	9·5	50	+
Lucknow	371	999·3	+0·9	970·5	89·5	−1·3	100	31	60·0	−0·6	52	16	67·8	86·8	65·2	67·6	15·8	+3·5	15·3	67	+1
Bahraich	407	997·9	+1·3	995·0	88·4	−0·3	97	29,31	58·8	0	49	16,17	67·3	85·1	60·5	69·0	15·3	+1·9	17·0	66	+
U.P., West																					
Jhansi	824	983·8	0	980·5	91·1	−1·3	101	28	60·7	−1·4	51	15,16	65·4	89·5	56·3	56·3	11·4	+1·1	11·7	53	+1
Agra	553	994·4	+1·8	990·7	86·8	−2·0	99	31	58·7	+0·4	49	15,16	63·8	88·5	56·1	63·1	12·1	+2·6	8·2	60	+1
Mainpuri	516	994·0	+0·5	993·8	88·2	−1·8	100	31	56·7	−1·7	45	15	63·5	86·2	57·2	64·8	13·2	+1·7	7·9	65	+1
Aligarh	615	990·9	..	988·6	84·1	−2·0	97	31	57·4	−1·0	52	1	61·3	83·1	57·8	63·5	14·8	+4·8	11·2	72	+2
Bareilly	568	992·0	+0·7	989·5	84·2	−2·8	96	31	59·2	+0·6	48	16	65·7	81·5	58·7	62·9	13·9	+0·7	11·0	65	+
Roorkee	899	980·2	−0·1	978·6	79·7	−4·1	93	31	54·7	−0.3	45	14,15	59·1	78·2	50·0	61·4	12·9	+1·3	10·9	77	+
Dehra Dun	2,239	935·4	+0·8	934·1	75·5	−3·8	87	31	52·9	−1·2	43	14,16	59·1	73·2	53·5	58·7	11·7	+1·4	10·9	69	+
East Punjab																					
New Delhi	714	986·9	0	984·9	81·6	−3·4	94	31	57·7	+0·6	49	14,15	62·4	80·3	55·8	61·9	12·4	+1·7	10·6	65	+
Hissar	725	987·4	+0·8	985·1	82·3	−5·5	95	30	53·4	−3·4	43	15,16,17	57·7	80·5	54·3	64·4	12·7	+2·3	13·4	80	+
Ambala	892	979·8	−0·4	978·5	80·4	−3·9	94	31	56·5	0	49	14,15	61·2	77·4	56·0	62·7	13·1	+1·9	12·8	72	+
Ludhiana	812	983·4	+0·2	982·2	79·6	−3·6	90	29,30,31	54·9	−1·4	47	6 days	58·2	77·1	55·4	62·7	13·7	+2·4	13·2	83	+
Kashmir																					
Srinagar	5,205	843·3	+0·3	841·4	51·4	−5·5	64	28	35·6	−1·4	03	1,13,16	38·9	49·8	37·2	43·5	6·9	−0·6	7·5	86	-
Gulmarg	8,569	Closed during winter months.																			
Dras	10,059	703·5	+0·3	702·6	25·9	−3·8	37	5	..	..	..	..	15·8	24·7	..	..	..	..	..		
Leh	11,529	666·6	+1·5	664·4	37·2	−7·0	46	4,31	16·3	−4·7	3	17	20·6	34·1	18·5	27·9	2·7	0	3·4	69	+
Skardu (R)	7,505																				
Gilgit (R)	4,890																				
Misgar (R)	10,190																				
Rajputana, West																					
Sri Ganganagar	580	992·5	..	990·4	82·8	−0·1	93	30	54·8	+2·6	43	15	61·5	80·5	57·0	64·0	13·9	+3·2	12·9	76	+
Bikaner	734	986·3	+0·3	983·5	87·5	..	100	31	58·5	..	48	14,15	64·0	86·7	55·9	65·5	11·6	..	11·6	58	
Phalodi	800	984·1	..	982·7	88·7	..	101	31	61·1	..	49	13,14,15	63·7	88·1	59·7	..	15·7	..	..	76	
Jodhpur	736	986·4	+1·3	983·5	91·1	+0·6	101	31	63·6	+2·1	48	14	67·9	89·8	55·8	65·5	9·8	+1·6	10·7	43	
Barmer	638	989·3	−0·1	986·6	93·7	+3·5	104	27	65·0	+0·8	49	13	68·7	92·5	56·3	64·9	9·8	−3·7	8·6	42	−
Rajputana, East																					
Sikar	1,406	963·4	..	961·1	86·0	..	98	31	58·3	..	47	13,15	64·2	84·2	54·8	61·7	10·5	..	8·6	55	
Jaipur	1,431	963·2	−0·1	960·6	86·3	−2·0	98	31	60·9	+2·1	47	14	67·8	84·9	55·3	60·5	9·4	+1·2	7·0	42	
Ajmer	1,593	958·2	+0·4	954·8	85·7	−2·0	96	28,31	60·2	0	49	15	71·4	84·1	58·2	64·1	11·4	+1·7	12·3	46	
Kotah	843	983·4	+0·3	979·5	93·0	+0·3	103	31	64·1	−1·1	55	1,16	68·7	91·1	55·9	63·6	9·5	+0·4	7·6	40	
Jhalawar	1,053	975·4	−0·5	971·6	92·3	+0·9	101	28,31	61·8	+1·1	49	15	67·5	91·7	55·8	63·5	10·5	+1·5	8·6	44	
Udaipur	1,910	947·4	..	944·3	88·8	..	96	28,29	59·7	..	51	16	64·4	87·3	54·9	63·8	10·9	..	10·7	54	

(R) Register not received.

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days, (0.10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I.S.T.									17 hrs. I. S. T.										
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., East
2·7	+0·9	2·4	0	−0·18	0	..	0	−0·8	3·7	−0·9	3	0	4	1	0	0	4	5	14	0	1	0	0	0	0	4	21	5	Gonda
2·3	+0·9	2·2	0	−0·39	0	..	0	−0·8	2·9	+0·6	0	5	4	0	0	2	9	0	11	0	1	0	1	1	0	18	4	6	Gorakhpur
1·8	0	2·2	0	−0·37	0	..	0	−0·9	4·8	+1·3	0	0	5	0	5	13	6	0	2	5	0	2	0	0	0	9	15	0	Banaras
1·7	−0·3	2·5	0	−0·56	0	..	0	−1·3	3·5	−0·3	1	1	2	0	1	9	7	1	9	4	2	0	0	0	3	12	10	0	Allahabad (Bamrauli)
1·7	+0·1	1·7	0	−0·28	0	..	0	−0·9	3·2	−0·2	2	2	3	1	1	2	5	6	9	4	3	0	0	1	0	1	13	9	Fatehpur
2·2	+1·2	2·4	0·02	−0·27	0·02	10	0	−0·8	6·8	+0·8	7	2	2	0	0	3	6	6	5	5	2	2	0	0	0	8	14	0	Kanpur
2·3	+0·5	2·6	0	−0·34	0	..	0	−0·3	2·2	−0·1	5	1	4	0	0	1	4	4	12	6	1	3	0	2	0	10	7	2	Lucknow
3·2	+1·7	2·6	0·10	−0·29	0·08	12	0	−0·8	3·9	+1·1	1	2	3	3	0	0	5	9	8	0	0	1	0	0	3	10	10	7	Bahraich
																													U. P., West
1·2	−0·2	2·9	0	−0·33	0	..	0	−0·8	0·5	−2·7	2	1	0	0	0	3	1	2	22	1	0	0	1	0	0	8	7	14	Jhansi
2·8	+0·7	2·2	0	−0·32	0	..	0	−0·8	2·5	−1·2	1	2	0	0	0	0	7	3	18	2	1	0	0	0	0	8	11	9	Agra
2·7	+0·7	2·7	0	−0·34	0	..	0	−0·8	3·1	+0·7	2	1	1	3	0	3	4	8	9	0	3	0	2	1	2	8	11	4	Mainpuri
2·7	+0·9	3·6	0·35	−0·22	0·20	10	2	+0·7	5·0	+0·7	0	0	4	0	0	0	15	3	9	1	3	3	0	1	0	2	19	2	Aligarh
3·5	+1·2	4·1	0·57	−0·04	0·22	12	3	+1·7	3·8	+1·3	3	0	6	1	0	4	6	6	5	7	0	2	0	0	2	6	9	5	Bareilly
3·3	+0·9	4·3	1·41	+0·63	0·59	10	5	+3·4	2·7	+0·2	1	4	0	5	0	1	0	9	11	0	2	0	5	0	2	0	20	2	Roorkee
3·4	−0·1	5·3	3·49	+2·23	0·85	10	7	+4·3	1·8	−0·3	3	1	0	0	0	0	2	1	24	2	1	0	0	4	8	5	6	5	Dehra Dun
																													East Punjab
3·0	+0·7	4·2	0·81	+0·30	0·38	11	4	+2·7	7·3	..	2	1	1	3	2	2	11	6	3	7	1	3	3	1	0	0	13	3	New Delhi
2·3	+0·2	3·0	0·82	+0·18	0·31	12	3	+1·5	4·8	+0·5	2	1	2	5	4	6	4	4	3	6	4	1	5	1	1	3	8	2	Hissar
3·0	+0·1	2·5	0·83	−0·11	0·46	11	3	+1·4	..	..	0	5	1	4	0	1	0	14	6	0	0	0	5	0	2	0	21	3	Ambala
4·0	+1·3	4·2	3·10	+2·16	2·23	10	4	+2·2	2·2	0	6	1	1	3	0	1	0	4	15	0	2	1	4	0	1	0	9	14	Ludhiana
																													Kashmir
7·4	+1·3	7·7	6·25	+2·64	1·47	11	8	+0·6	3·0	−0·2	3	1	0	7	2	0	5	1	12	1	0	0	2	2	0	7	14	5	Srinagar
																													Gulmarg
5·5	+1·2	7·2	5·53	+0·09	1·30	11	11	+1·2	..	..	1	0	0	0	0	0	0	0	30	1	0	0	0	0	0	0	0	30	Dras
6·8	+0·7	7·3	1·36	+1·08	0·36	9	6	+5·1	1·8	−0·2	0	13	7	0	3	0	0	0	8	0	5	2	0	5	6	10	0	3	Leh
																													Skardu (R)
																													Gilgit (R)
																													Misgar (R)
																													Rajputana, West
2·3	−0·7	1·8	1·31	+0·80	1·16	11	2	+0·6	3·2	−2·2	1	1	3	6	3	1	0	0	16	5	8	2	1	0	1	1	5	8	Sri Ganganagar
2·3	+0·1	2·4	0·61	+0·38	0·30	11	3	+2·4	3·7	−0·5	0	6	0	12	0	3	0	3	7	2	3	0	4	1	8	0	11	2	Bikaner
3·2	..	3·6	0·54	+0·40	0·51	12	1	+0·6	6·2	..	2	4	0	13	1	4	0	3	4	0	4	0	4	0	7	5	9	2	Phalodi
2·9	+0·4	3·0	0·17	+0·06	0·15	11	1	+0·8	3·9	−3·0	0	17	1	0	0	3	1	0	9	1	5	1	4	1	4	6	4	5	Jodhpur
2·5	+0·5	2·2	0·15	−0·10	0·15	11	1	+0·4	4·5	−1·3	1	0	0	0	0	2	2	11	15	1	2	2	2	0	3	9	6	6	Barmer
																													Rajputana, East
2·9	..	4·0	0·69	..	0·34	11	2	..	2·8	..	1	0	8	6	2	4	0	1	9	3	0	6	1	1	4	5	10	1	Sikar
3·1	+1·0	3·3	0	−0·34	0	..	0	−0·9	4·8	+0·5	2	3	16	5	0	0	1	0	4	5	1	4	3	0	2	4	11	1	Jaipur
2·3	+0·5	3·3	0	−0·23	0	..	0	−0·7	3·7	+0·5	2	2	2	3	3	3	3	0	13	2	5	0	2	4	9	5	2	2	Ajmer
1·6	−0·3	2·3	0	−0·17	0	..	0	−0·5	2·2	+0·1	1	1	0	0	0	2	4	1	22	2	1	0	0	1	2	4	8	13	Kotah
1·8	+0·3	2·4	0·04	−0·10	0·04	7	0	−0·6	2·1	−0·9	1	2	1	1	1	0	0	4	21	6	5	1	0	0	1	5	10	3	Jhalawar
2·2	..	3·0	0	−0·10	0	..	0	−0·3	2·6	..	3	0	1	0	1	2	2	8	14	2	3	3	3	2	5	7	3	3	Udaipur

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative humidity %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Gujarat																					
Deesa*	466																				
Bhuj	343	1000·5	+0·1	997·4	95·3	+2·5	102	27	66·4	+2·1	59	5 days	69·2	94·0	62·5	66·4	16·3	+0·7	9·7	68	+9
Dwarka	37	1011·0	−0·6	1008·8	84·4	+2·1	97	24	71·5	+0·9	64	1	73·4	80·6	69·8	73·0	23·3	+2·2	24·3	83	+4
Jamnagar	60	1012·1	+1·6	..	90·7	+0·2	97	26,27	..	..	..	..	70·2	..	65·1	..	18·9	−0·2	..	72	−1
Rajkot	432	997·1	−0·1	993·5	97·7	+2·6	104	27	65·0	+2·9	56	3,14	68·8	95·7	63·7	77·7	18·1	+3·1	25·1	75	+12
Veraval	26	1010·5	−1·2	1008·2	87·6	..	100	4	65·5	..	58	15	70·0	81·8	64·8	75·5	18·7	..	27·3	75	+9
Surat	39	1010·3	−0·5	1007·2	97·0	+0·9	104	4 days	69·0	+2·0	63	14,15,16	71·5	94·5	65·4	75·7	18·6	+0·9	21·8	71	+8
Bhavnagar	55	1009·9	−0·7	1006·5	97·8	+2·1	105	19,20	66·8	+1·2	57	1,9,13	69·5	96·5	59·4	67·7	12·8	−0·7	10·1	52	+2
Ahmedabad	163	1006·3	−0·4	1002·7	97·5	+0·5	105	27	69·9	+2·4	60	13,14	72·6	96·1	61·0	68·2	13·1	+1·2	10·9	49	+3
Dohad	1,093	974·4	..	971·2	96·4	+2·1	104	27	67·3	+3·4	55	15	71·3	94·0	56·2	66·1	8·7	−2·4	9·3	32	−15
Baroda	115	1008·0	..	1004·0	99·4	+3·3	106	26,28	64·2	+4·3	52	14,15	69·7	98·3	61·2	68·8	14·6	+2·9	10·7	59	+9
Central India, West																					
Neemuch	1,626	957·0	+0·3	953·8	91·4	+0·8	99	19,31	62·7	+1·6	47	15	67·8	90·1	56·3	65·4	10·9	+1·2	11·4	47	+7
Indore	1,823	949·9	−0·3	946·6	92·3	+0·2	99	30	61·5	+1·2	46	15	67·6	91·3	55·6	62·4	10·3	+0·2	7·6	45	+5
Bhopal	1,643	956·1	0	952·5	92·1	+0·9	99	30,31	62·7	+0·8	49	15	70·2	90·2	55·6	63·8	9·2	+0·6	9·5	36	+1
Guna	1,571	958·5	−0·4	955·5	91·5	+1·2	99	29	58·5	+0·8	43	15	63·8	89·7	52·5	62·2	8·9	−0·3	8·0	48	+8
Gwalior	681	988·9	..	985·5	89·3	..	100	28,31	57·0	..	50	3	69·1	88·1	56·9	62·8	10·4	..	8·2	43	..
Madhosagar	757	986·1	..	982·9	89·4	..	100	28,31	61·4	..	53	15,16	67·9	87·6	58·0	63·0	12·0	..	8·6	51	..
Central India, East																					
Nowgong	750	986·6	+0·6	982·8	90·9	0·8	101	28	57·0	−2·6	45	15	66.5	89·1	56·3	65·2	10·9	−0·5	10·6	50	+1
Sutna	1,041	975·8	0	972·4	91·5	+1·0	100	29,31	59·4	−2·0	49	3,15	65·7	90·5	55·8	65·0	10·7	0	9·6	51	+18
Umaria	1,506	960·5	..	957·2	90·7	+0·3	100	29	57·0	−2·3	45	1	67·0	88·1	56·8	63·4	11·7	+0·5	10·0	52	+7
Berar																					
Akola	925	979·5	−0·5	975·4	99·0	+0·2	105	30	66·6	+0·6	52	15	72·7	96·3	57·9	68·4	9·7	+0·2	11·0	36	+1
Amraoti	1,213	970·3	+0·2	966·2	97·2	−0·3	102	6 days	69·6	+0·2	56	15	74·9	95·0	59·7	67·3	10·6	+0·2	10·4	35	0
C. P., West																					
Khandwa	1,044	976·0	0	971·7	98·0	+0·6	105	27	64·8	+0·3	50	15	71·5	96·1	55·6	65·7	7·9	−1·2	7·9	30	−9
Hoshangabad	992	977·7	−0·5	973·6	94·3	+0·8	101	27,29,30	65·3	+0·5	52	15	70·6	93·3	56·8	64·3	9·6	−1·0	7·5	38	+1
Saugor	1,808	950·3	+0·1	947·4	89·4	1·2	97	29,31	64·8	0	56	15	69·4	87·4	53·7	60·4	7·7	+0·6	7·0	33	0
Jubbulpore	1,289	967·9	+0·4	964·2	94·0	+2·4	101	29	59·5	+0·7	47	15,16	69·3	90·8	57·0	64·4	10·4	−0·9	8·8	43	−3
Seoni	2,027	943·7	+0·6	940·3	91·5	0·4	99	24	62·3	−0·4	52	15	70·7	85·8	58·8	65·6	12·0	+1·4	13·4	49	+9
Nagpur	1,010	977·2	+0·2	973·0	96·5	0·2	104	20,24	65·1	−1·6	53	15	73·4	94·8	57·6	64·9	11·2	+0·4	7·5	39	+3
C. P., East																					
Gondia	1,026	977·1	..	973·4	94·2	..	101	26	66·8	...	61	3	72·9	92·1	61·5	65·9	13·5	..	10·1	50	..
Pendra	2,040	943·0	+0·1	939·8	88·6	+1·3	95	12,20,30	61·8	−0·6	51	16	70·9	82·4	58·2	63·1	11·4	+0·1	11·9	44	0
Champa	805	984·4	..	980·3	94·9	..	102	20	66·5	..	58	16,17	70·2	94·0	60·2	66·3	8·3	..	9·6	52	..
Raipur	970	978·7	+0·3	974·6	95·5	+0·3	101	23,24	68·2	+0·2	57	16	74·8	93·5	62·0	68·4	13·4	+0·7	12·5	46	+3
Titilagarh	691	988·2	..	983·6	96·2	..	102	14,23	68·7	..	57	16,17	73·3	94·9	63·2	67·1	15·3	..	10·0	33	..
Kanker	1,318	967·4	+0·8	963·2	93·9	+0·4	100	23	64·7	−0·8	50	7	73·9	91·7	66·2	72·2	18·5	+3·0	18·1	66	+10
Chanda	634	990·2	+0·3	986·0	97·9	−0·9	104	23,24	65·0	−2·0	51	5	75·8	96·6	63·4	68·4	14·4	0	11·1	47	+2
Jagdalpur	1,815	950·5	0	946·5	93·2	−1·8	100	13,21,24	62·0	−1·6	49	17	71·7	90·5	61·4	64·1	14·4	−3·3	9·7	55	−5
Konkan																					
Dahanu	15	1011·1	..	1008·4	87·6	..	97	19	69·5	..	64	15,17	74·0	84·3	68·7	78·7	21·5	..	30·8	77	.
Bombay	37	1010·1	0·8	1007·3	89·3	+3·1	95	2,14	73·5	+1·6	69	14,15	77·1	85·3	71·9	75·4	24·4	+1·3	25·5	77	+1
Alibag	23	1011·2	+0·1	..	87·7	+2·3	94	18	71·0	+1·6	66	14	74·4	..	69·6	..	22·6	+2·4	..	77	+9

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days, (0.10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :— 8 hrs. I. S. T.									17 hrs. I. S. T.									STATION.
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Gujarat
																													Deesa*
1·1	−0·4	0·6	0	−0·11	0	..	0	−0·2	4·9	−0·7	0	0	0	0	0	2	4	0	25	5	3	0	1	0	5	6	4	7	Bhuj
2·1	−0·2	1·3	0	−0·11	0	..	0	−0·2	10·4	+1·0	6	3	1	0	0	3	7	8	3	0	1	0	0	0	2	10	18	0	Dwarka
2·0	+0·6	..	0	−0·08	0	..	0	−0·1	6·7	−2·2	1	1	0	0	0	6	7	0	16	..	..	..	..	..	..	..	..	..	Jamnagar
1·6	−0·6	0·8	0	−0·06	0	..	0	−0·1	8·4	+2·4	2	3	2	0	2	4	5	5	8	8	1	1	0	2	1	4	14	0	Rajkot
0·7	−0·7	0·2	0	−0·05	0	..	0	−0·1	10·5	..	15	8	0	1	0	0	1	6	0	1	0	0	0	0	6	16	8	0	Veraval
1·3	0	0·6	0	−0·01	0	..	0	−0·1	3·6	−0·3	4	3	1	10	1	0	0	0	12	4	1	0	0	0	14	1	10	1	Surat
1·1	−0·4	1·3	0	−0·11	0	..	0	−0·2	4·7	−0·1	1	0	0	0	2	9	15	2	2	1	4	9	5	4	1	3	3	1	Bhavnagar
1·5	+0·1	1·4	0	−0·05	0	..	0	−0·2	4·2	+0·5	4	6	5	0	1	2	4	7	2	1	2	1	1	0	5	11	9	1	Ahmedabad
1·0	−0·5	0·6	0	−0·06	0	..	0	−0·2	8·9	+5·6	2	4	3	2	2	7	6	1	4	1	4	1	0	2	8	12	2	1	Dohad
1·6	−0·1	0·9	0	−0·02	0	..	0	0	2·1	−0·6	1	3	1	0	1	5	0	0	20	3	3	0	0	0	4	8	7	6	Baroda
																													Central India, West
2·5	+0·9	3·1	0·03	−0·09	0·03	6	0	−0·3	5·3	+0·2	1	18	2	3	1	1	2	0	3	1	10	0	1	0	10	6	3	0	Neemuch
1·2	−0·2	2·9	0·12	+0·04	0·12	6	1	+0·7	3·2	+0·3	1	4	3	4	1	1	3	2	12	5	4	1	0	0	7	9	5	0	Indore
1·9	+0·5	2·7	0	−0·34	0	..	0	−0·8	3·7	+0·6	2	4	1	1	1	4	4	5	9	2	6	2	1	0	2	8	8	2	Bhopal
1·7	+0·5	2·3	0	−0·50	0	..	0	−0·9	4·0	+1·0	2	0	9	0	2	0	1	0	17	2	0	3	0	0	2	15	2	7	Guna
2·3	..	3·3	0	..	0	..	0	..	2·4	..	1	5	1	0	1	0	2	4	17	8	10	2	0	0	1	0	6	4	Gwalior
2·6	..	3·0	0	..	0	..	0	..	4·1	..	1	3	0	1	3	9	1	2	11	7	10	0	1	0	0	3	8	2	Madhosagar
																													Central India, East
2·2	0	3·0	0	−0·30	0	..	0	−0·5	2·9	+1·0	2	3	2	2	3	8	2	4	5	5	5	0	0	0	3	3	14	1	Nowgong
1·4	−0·5	2·0	0	−0·45	0	..	0	−1·1	3·7	+0·6	0	0	2	5	3	5	2	4	12	4	1	2	1	0	4	9	10	0	Sutna
1·9	−0·3	2·7	0·01	−0·69	0·01	13	0	−1·7	3·0	+0·1	2	0	4	5	4	1	2	1	12	7	4	2	0	0	2	6	9	1	Umaria
																													Berar
0·5	−1·1	2·6	0·28	−0·08	0·28	27	1	+0·3	4·5	+0·9	0	0	3	4	3	1	8	0	12	4	1	2	1	2	0	7	13	1	Akola
1·2	−0·3	3·1	0·01	−0·34	0·01	7	0	−0·8	6·1	+1·9	0	10	4	3	1	11	0	2	0	0	4	0	3	1	7	0	16	0	Amraoti
																													C. P., West
1·0	−0·1	2·7	0	−0·17	0	..	0	−0·5	5·1	+1·0	1	3	1	1	3	3	2	5	12	2	2	2	1	4	5	1	14	0	Khandwa
4·9	+3·4	5·8	0·20	−0·04	0·20	8	1	−0·4	3·5	+1·3	4	5	8	0	2	2	1	1	8	7	2	0	1	1	6	6	5	3	Hoshangabad
3·6	+1·0	4·5	0	−0·33	0	..	0	−0·9	(a) 10·7	+0·7	3	8	4	6	1	5	1	3	0	7	2	1	2	0	1	10	8	0	Saugor
0·9	−0·6	2·7	0	−0·56	0	..	0	−1·4	3·3	+1·3	0	3	0	13	5	1	0	2	7	7	2	0	3	1	7	2	5	4	Jubbulpore
1·5	−0·1	3·8	1·55	+0·76	0·63	31	4	+2·0	3·8	+0·9	3	5	2	0	2	2	2	0	15	9	5	1	2	4	5	0	5	0	Seoni
1·6	−0·1	3·0	0·81	+0·21	0·72	31	1	−0·5	4·5	..	7	7	2	2	0	1	0	4	8	4	6	3	3	0	6	4	4	1	Nagpur
																													C. P., East
0·8	..	1·0	0·07	..	0·07	27	0	..	3·2	..	10	3	1	4	4	2	1	5	1	7	2	0	1	0	10	4	6	1	Gondia
1·9	+0·1	4·7	0·64	−0·45	0·25	9	2	−0·3	4·0	+0·2	6	1	1	1	9	0	0	6	7	6	2	2	2	6	3	1	7	2	Pendra
1·5	..	2·7	0·09	..	0·05	24	0	..	5·0	..	11	3	2	1	0	1	0	6	7	5	1	0	0	1	1	13	8	2	Champa
1·5	−0·1	2·5	0·34	−0·37	0·15	27	2	+0·3	4·1	+0·9	0	6	2	0	0	10	0	3	10	0	6	0	0	0	3	0	17	5	Raipur
1·4	..	1·7	0·41	..	0·31	27	1	..	2·0	..	3	3	1	3	4	2	0	0	15	5	2	2	2	2	3	5	5	5	Titilagarh
1·9	−0·2	2·6	0·41	−0·44	0·24	30	2	−0·1	3·6	+0·4	0	0	0	0	5	3	1	0	22	3	3	0	0	0	3	6	11	5	Kanker
1·9	+0·4	3·0	0·60	−0·17	0·21	27	3	+1·8	3·2	+0·8	0	1	3	6	0	1	0	8	12	0	6	0	2	0	3	0	16	4	Chanda
1·5	−0·1	2·6	0·73	+0·20	0·35	30	2	+0·8	4·0	+1·4	0	1	0	2	0	8	0	4	16	0	4	0	0	0	15	1	9	2	Jagdalpur
																													Konkan
2·0	..	0·7	0	..	0	..	0	..	8·0	..	1	3	16	11	0	0	0	0	0	6	0	0	0	0	1	15	9	0	Dahanu
1·1	−0·5	0·7	0	−0·05	0	..	0	−0·1	7·5	+0·3	12	6	2	3	0	0	0	0	8	1	0	0	0	0	2	8	20	0	Bombay
0·5	−1·1	..		−0·02	0	..	0	−0·1	4·1	−1·9	6	8	3	0	0	0	0	0	14	..	..	..	..	..	..	..	..	..	Alibag

(a) Mean of 30 days.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relativ humidi %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Konkan—*contd.*																					
Harnai	66	1008·8	..	1006·9	84·7	..	97	5	75·5	..	72	14	78·3	82·7	70·2	76·5	21·6	..	28·4	67	..
Devgad	110	1007·5	..	1004·3	89·6	..	99	17	77·3	..	72	16	78·4	85·7	75·3	79·9	28·6	..	32·2	84	..
Marmagao	202	1004·6	−0·1	1001·2	87·8	+2·4	99	18	..	..	..	..	81·0	85·1	73·8	76·7	25·2	+1·0	27·6	70	..
Honavar	85	1009·2	..	1005·4	94·5	..	100	17	73·8	..	68	15,16,17	77·8	87·9	72·6	78·4	25·1	..	28·9	78	..
Bombay Deccan																					
Jalgaon	660	987·9	..	983·8	100·5	..	106	4 days	65·8	..	49	16	72·1	99·6	57·6	69·1	9·8	..	11·2	35	..
Malegaon	1,432	963·1	−0·1	958·2	98·2	+0·7	103	4 days	62·9	+0·2	50	14	72·4	95·6	60·0	64·5	12·1	+0·9	6·7	45	+
Ahmednagar	2,154	939·7	+0·5	935·0	..	..	..	..	66·6	+3·5	54	15	70·8	94·7	57·8	68·4	11·1	+0·1	13·0	44	+
Poona	1,834	949·8	+0·1	945·7	98·2	+1·3	103	22	62·1	+0·4	52	14,15	67·4	95·1	57·5	65·3	12·2	−1·0	9·2	54	−
Sholapur	1,570	958·6	+0·5	954·2	99·9	+0·8	106	21	70·1	+0·8	58	15	76·0	97·7	60·9	68·8	12·2	+1·2	12·3	40	+
Miraj	1,817	950·0	−0·2	945·4	98·9	+3·3	104	21,23	65·1	+0·6	56	16	69·9	96·7	59·4	68·7	13·0	−1·6	12·6	53	−
Kolhapur	1,885	948·1	..	943·7	97·5	..	102	21	66·5	..	63	14,18	70·5	94·1	59·5	66·4	12·4	..	9·6	52	.
Bijapur	1,950	946·0	+0·4	942·0	97·2	+0·2	103	21	70·5	+0·3	58	17	75·4	95·3	65·4	77·2	17·3	+3·1	23·6	57	+
Belgaum	2,562	926·3	+0·6	922·3	93·7	+0·1	99	21	63·6	0	60	7	70·8	90·3	59·4	67·2	12·7	−0·8	13·4	50	−
Gadag	2,131	941·0	+1·3	935·9	97·2	+1·7	102	21	70·1	+1·3	62	16	76·7	94·9	64·5	67·4	15·8	−0·7	11·7	52	−
Hyderabad, North																					
Aurangabad	1,905	947·9	+0·1	944·9	96·3	+0·4	102	20	67·8	+0·9	58	15	74·5	94·4	60·9	69·9	12·7	+3·4	15·0	44	+
Parbhani	1,350	964·7	..	960·2	98·8	..	106	20	66·8	..	56	15	75·9	96·7	63·3	71·6	15·1	...	15·1	51	.
Bidar	2,178	938·3	..	934·4	92·6	−2·5	100	22	71·0	+0·1	66	5 days	73·7	91·8	60·7	64·9	12·9	−2·1	10·1	42	−
Nizamabad	1,250	968·8	−0·3	964·7	98·2	−0·1	104	20	69·0	+0·1	56	15,16	75·0	96·1	61·8	66·4	12·9	−2·0	8·8	43	−
Ramakundam	527	994·6	..	990·1	98·0	..	105	21	71·7	..	59	16,17	77·7	96·1	66·0	68·3	17·1	..	11·7	51	.
Hyderabad, South																					
Gulbarga	1,503	960·2	−0·1	956·3	98·6	−0·5	105	21	70·7	+0·2	59	17	77·1	95·8	64·3	72·1	15·4	+1·6	17·2	49	−
Raichur	1,311	967·0	+0·4	962·9	97·5	−1·0	105	21	73·5	−0·3	65	16	77·3	95·9	66·6	74·1	17·5	+0·6	18·9	55	−
Hyderabad (Begumpet)	1,778	951·7	+0·5	948·0	96·6	−0·1	103	22	67·1	−1·3	56	17	74·4	92·8	64·7	68·7	17·0	−0·6	14·1	59	
Hanamkonda	881	981·8	0	977·7	95·6	−0·4	103	22	70·5	−0·7	63	7,16,17	73·9	94·2	67·7	68·5	20·4	−0·1	12·3	71	.
Khammameth	367	999·9	..	995·1	97·7	..	105	21	71·6	..	63	16	77·7	96·1	70·9	70·5	22·7	..	13·9	71	.
Mysore																					
Chitaldrug	2,405	930·8	−0·1	926·7	93·8	−1·1	98	21,22,23	69·9	−0·5	65	5	74·7	92·5	66·1	66·6	18·5	+2·3	11·7	63	+
Hassan	3,149	907·3	..	903·7	90·9	−0·7	95	21	65·9	+1·8	60	1,2	70·5	88·6	64·7	64·9	18·5	+0·7	11·4	74	.
Bangalore	3,021	911·4	+0·1	907·6	90·2	−0·1	96	21	66·1	+1·6	60	4,5	70·0	88·5	64·1	62·7	18·0	+0·4	9·0	78	.
Mysore	2,518	927·5	0	923·5	92·3	−1·4	96	21	69·1	+1·5	65	1,2	72·9	91·8	67·5	66·8	20·8	+1·2	12·3	76	.
Malabar																					
Mangalore	72	1009·1	−0·2	1005·4	90·1	+0·5	93	29	77·7	+2·0	72	31	80·7	87·4	75·9	78·7	28·4	+1·9	29·5	79	.
Calicut	27	1010·2	−0·5	1006·5	92·3	+2·2	95	22	77·9	+1·8	74	1	80·1	89·7	75·7	80·2	29·3	+1·7	30·9	81	.
Palghat	319	1000·9	..	995·6	98·6	..	102	24	76·8	..	72	1	80·3	95·8	73·8	74·5	25·6	..	19·5	73	.
Cochin	10	1011·1	−0·4	1007·0	89·2	+1·3	91	5 days	78·6	+0·6	75	1,31	82·6	87·4	76·3	79·1	27·8	−0·1	30·1	76	.
Alleppey	12	1011·0	..	1007·1	91·9	..	95	20	77·5	..	74	4 days	82·8	88·2	77·8	79·3	30·3	...	16·4	79	.
Trivandrum	211	1004·0	−0·3	1000·8	89·9	..	92	17,24,25	75·1	..	71	1	76·3	86·0	74·6	77·4	28·6	+1·6	28·2	84	.
Nagercoil	195	1004·7	..	1001·1	96·0	..	100	25,26,29	77·7	..	71	1	81·8	88·5	73·5	76·0	24·4	..	25·0	66	.
Madras, South-East																					
Pamban	37	1011·6	+1·1	1008·2	86·1	−2·5	90	31	77·2	+0·5	74	2,4,6	82·5	81·8	76·4	76·2	28·3	−0·3	28·3	75	.
Madura	437	997·0	−0·1	992·2	95·7	+0·4	100	4 days	74·7	+2·2	68	1	79·9	94·1	73·4	72·6	25·2	+0·3	17·6	72	.
Negapatam	31	1011·2	+0·2	1008·1	86·6	−1·6	90	15	77·3	+1·0	71	1,11	80·8	84·3	75·3	77·0	27·5	−0·1	28·4	76	.
Trichinopoly	255	1003·9	+0·2	999·1	96·6	−0·6	101	4 days	74·6	+1·5	69	3,4	79·7	94·8	74·3	74·0	26·5	+1·0	19·3	77	.

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

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days, (0.10" or more).		Wind velocity miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I.S.T.									17 hrs. I. S. T.										
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														Konkan—*contd.*
0	..	0·1	0	..	0	..	0	..	10·2	..	1	5	2	8	1	1	3	10	0	0	0	0	1	0	3	14	13	0		Harnai
2·3	..	1·1	0	..	0	..	0	..	9·2	..	3	10	13	5	0	0	0	0	0	4	0	0	0	0	1	2	24	0		Devgad
2·2	−0·5	1·7	0	−0·01	0	..	0	−0·1	7·5	+1·1	2	4	8	10	5	1	1	0	0	0	0	0	0	0	2	15	14	0		Marmagao
3·0	..	3·1	0	−0·05	0	..	0	..	3·0	..	0	1	20	4	0	0	0	1	5	0	0	0	0	0	4	20	6	1		Honavar
																														Bombay Deccan
2·2	..	2·0	0	−0·15	0	..	0	−0·5	5·3	..	0	1	7	2	1	6	6	0	8	1	7	0	2	1	1	11	8	0		Jalgaon
0·3	−1·1	2·0	0	−0·08	0	..	0	−0·3	4·5	−0·6	0	0	0	0	0	0	0	0	31	2	4	1	2	2	5	6	8	1		Malegaon
0·9	−0·1	3·0	0	−0·21	0	..	0	−0·3	4·6	−0·7	4	0	0	1	0	0	0	5	21	7	6	0	1	2	3	2	6	4		Ahmednagar
0·8	−0·2	2·6	0·20	+0·14	0·12	6	1	+0·8	2·3	−2·8	0	0	0	0	0	6	1	0	24	1	3	5	0	0	2	7	9	4		Poona
0·7	−0·5	2·6	0·43	+0·20	0·28	28	2	+1·5	6·7	+1·0	5	4	0	9	0	2	1	0	10	8	4	1	9	0	2	0	4	3		Sholapur
0·7	−0·5	3·9	0·28	+0·13	0·15	7	2	+1·3	5·1	−0·2	1	2	1	0	0	1	4	3	19	3	4	10	2	1	1	6	3	1		Miraj
0·5	..	1·8	2·17	..	1·91	28	2	..	6·1	..	0	2	3	0	1	3	3	0	19	1	6	5	1	0	2	12	4	0		Kolhapur
0·6	−0·5	2·9	0	−0·21	0	..	0	−0·6	4·4	+0·4	3	1	0	7	3	7	1	6	3	3	11	3	4	1	3	2	4	0		Bijapur
0·3	−0·8	1·6	0	−0·41	0	..	0	−0·9	3·8	+0·5	2	5	15	1	0	0	8	0	0	3	7	9	0	0	1	11	0	0		Belgaum
0·7	−0·4	2·9	2·56	+2·34	2·43	31	2	+1·3	5·3	+0·4	0	3	8	6	1	4	4	1	4	1	8	12	6	1	0	1	1	1		Gadag
																														Hyderabad, North
0·1	−1·3	1·6	0·06	−0·14	0·06	8	0	−0·5	5·9	−0·3	1	4	11	1	1	1	5	0	7	3	4	1	1	4	1	7	9	1		Aurangabad
0·8	..	2·6	0·70	+0·49	0·70	7	1	+0·5	..	..	1	7	7	1	2	0	10	2	1	0	8	3	4	1	1	8	4	2		Parbhani
1·6	−0·6	3·3	0·19	−0·23	0·09	27	0	−1·2	7·1	+0·9	0	4	3	1	8	5	3	7	0	3	6	6	1	4	2	4	5	0		Bidar
1·2	−0·3	1·5	0·20	−0·20	0·12	24	1	+0·2	3·5	+0·8	0	1	1	5	0	2	0	0	22	8	7	1	4	0	5	0	2	4		Nizamabad
1·4	..	1·4	0·02	..	0·02	27	0	..	4·8	..	2	3	0	13	6	1	0	0	6	6	3	1	7	4	2	0	1	7		Ramakundam
																														Hyderabad, South
..	..	..	0·10	−0·27	0·10	27	1	+0·2	7·9	+2·2	6	9	5	4	3	2	2	0	0	6	7	4	4	3	3	2	2	0		Gulbarga
1·0	−0·3	1·8	0·59	+0·45	0·59	31	1	+0·6	6·8	+1·3	0	6	4	13	4	2	0	1	1	1	8	7	10	3	0	0	2	0		Raichur
1·2	−0·5	1·7	0·08	−0·38	0·05	8	0	−0·9	5·4	+1·7	0	2	4	10	0	1	0	2	12	1	7	5	12	2	0	0	3	1		Hyderabad (Begumpet)
2·3	−0·2	1·5	0·91	+0·45	0·91	7	1	+0·2	5·8	+0·6	2	0	3	13	9	1	0	0	3	6	4	0	8	7	1	1	3	1		Hanamkonda
2·7	..	1·9	0	..	0	..	0	..	5·7	..	3	0	4	19	3	1	0	0	1	1	3	2	13	3	2	1	4	2		Khammameth
																														Mysore
1·0	−0·6	2·8	0·18	+0·01	0·18	31	1	+0·6	4·7 (n)	+0·8	0	1	2	9	0	3	3	0	13	0	8	9	5	0	2	1	3	3		Chitaldrug
1·8	−0·1	3·5	0·64	+0·27	0·64	31	1	+0·4	5·0	+1·8	1	2	6	7	0	2	3	1	9	1	8	16	4	0	0	2	0	0		Hassan
3·3	+1·6	2·7	0	−0·40	0	..	0	−0·8	6·9	+2·4	0	1	8	10	4	3	3	0	2	3	10	11	5	1	0	0	1	0		Bangalore
3·2	+0·7	4·2	0·47	−0·04	0·47	31	1	+0·2	5·9	+1·3	0	0	4	7	5	3	5	1	6	2	6	18	2	1	0	0	1	1		Mysore
																														Malabar
2·0	−0·3	3·1	1·31	+1·10	1·07	31	2	+1·7	4·8	−0·1	0	4	25	2	0	0	0	0	0	1	0	0	0	0	6	15	9	0		Mangalore
4·7	+2·1	5·3	2·72	+2·04	2·67	31	1	+0·2	8·3	+1·7	4	11	13	2	1	0	0	0	0	0	0	0	0	0	4	17	10	0		Calicut
2·3	..	2·5	3·50	..	3·10	17	3	..	5·7	..	0	1	19	1	0	1	7	0	2	0	0	17	2	0	1	9	1	1		Palghat
5·5	+3·0	4·8	3·24	+1·13	1·54	18	6	+3·2	6·2	+0·7	0	6	16	4	0	0	0	0	5	0	0	0	0	0	9	18	4	0		Cochin
5·9	..	4·2	3·89	..	1·90	28	4	..	6·4	..	0	8	12	4	0	0	0	0	7	0	0	0	2	0	2	20	8	0		Alleppey
2·5	−0·3	4·5	2·01	+0·47	0·97	29	3	−0·5	4·5	+1·2	5	14	2	4	0	0	1	3	2	1	0	0	0	2	17	8	2	1		Trivandrum
4·9	..	6·2	0·52	..	0·43	18	1	..	7·3	..	7	13	7	0	0	0	0	3	1	0	4	9	4	2	6	5	1	0		Nagercoil
																														Madras, South-East
5·2	+2·0	3·8	0	−0·72	0	..	0	−1·4	7·7	+2·2	5	11	6	4	4	1	0	0	0	12	13	1	2	2	1	0	0	0		Pamban
4·3	+0·1	4·7	0	−0·70	0	..	0	−1·0	4·0	+0·6	4	8	2	0	0	0	0	2	15	1	10	11	1	1	0	0	0	7		Madura
4·8	+0·4	3·5	0·11	−0·68	0·11	26	1	0	9·8	+3·5	0	7	5	1	0	4	1	8	5	0	13	11	5	2	0	0	0	0		Negapatam
3·5	+0·6	2·7	0·25	−0·11	0·09	17	0	−0·7	3·6	+0·9	4	7	4	0	2	0	1	0	13	0	8	18	3	0	0	0	0	2		Trichinopoly

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2·30 HRS. G. M. T.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature °F.		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Madras, South-East—*contd.*																						
Coimbatore	1,341	966 3	−0 2	961·9	95·3	−0·1	100	16,22.23	72·7	+2·5	67	1	76·1	93 6	69·9	69·5	22·2	−1·3	14·8	72	−6	2
Salem	913	980·9	−0·1	975·7	98·1	+0·1	104	22	72·6	+1·2	65	1	75·2	95·4	69·2	71·2	21·7	−9·2	15·2	73	0	2
Cuddalore	39	1011·1	+0·1	1007·6	87·8	−0·6	93	21	73·7	+1·0	66	5	76·9	84·7	73·6	76·5	26·8	−1·1	27·5	85	+2	6
Vellore	703	988 3	+0 6	983·6	95·3	+1·1	102	21,22	71·9	+2·1	63	1	76·1	93·6	71·3	73 5	24·0	+0·7	19·1	78	−1	3
Madras	51	1010·6	+0·1	1007·2	91·3	−0·1	99	21	74·2	+1·8	67	5	79·3	85·8	74·5	75·6	27 0	+0·5	25·6	79	−1	6
Arogyavaram	2,299	934·9	..	931·2	91·5	..	98	21	67 7	..	62	4,5	73·2	89·1	66·1	66·2	19·5	..	15 6	71	..	2
Madras Deccan																						
Cuddapah	428	997·1	+0·3	992·3	100·9	0	108	21,22,23	75·5	+0 7	71	4 days	85·6	96·4	73·3	74·5	22·4	+0·3	19·2	54	−6	
Bellary	1,473	961·5	−0·4	957·2	97·3	−2·2	103	21	72·3	0	67	17,19	77·5	95·9	65·1	70·2	15·7	−0·3	13·6	49	0	
Kurnool	923	930·1	+0·3	975·7	99·3	−0·7	105	21,22	70·2	−1·8	59	16,17	76·7	97·6	64·8	67·5	15·6	−1·5	9·4	50	−2	
Rentichintala	348	999·9	..	995 7	98·2	−1·2	107	22	72·4	−3·2	64	16,17	77 9	97·4	71·4	74 7	23·3	−0·1	19·0	72	+7	
Anantapur	1,147	972·7	..	966·6	98·2	..	105	21	70·6	..	65	1,10	77·6	96·3	67·3	71·9	18·2	..	15·6	57	..	
Madras Coast, North																						
Nellore	66	1009·8	+0·2	1006·3	94·5	+0·2	103	22	73·7	+0·8	69	1,5	79·9	87·9	74·2	75·9	26·3	−0·4	25·1	76	−5	
Ongole	38	1010·9	..	1007·1	92·4	..	106	21	74·0	..	69	1	79·5	87·3	74·5	75·2	26·9	..	24·4	78	..	
Masulipatam	10	1012·9	+0 3	1008·7	89·4	−1·1	95	20	73·8	+1·5	70	4,12	79·5	85·7	75·0	75·9	27·6	+0·7	26·1	81	−1	
Cocanada	26	1012·1	+0·4	1008·3	89·1	−2·1	95	5 days	73 6	+0·1	69	6	81·0	85·9	74·8	76·4	27·6	+1·1	26.8	74	−3	
Vizagapatam	126	1008·4	+0·4	1005·0	86 5	−0·6	94	21	74·2	−0·4	69	4,6	79·1	83·4	73·1	75·6	25·1	−0·1	26·7	74	0	
Calingapatam	19	1011·1	−0·5	1008·3	87·2	−3·4	93	12,13	71·6	−1·2	66	4,17	74·3	84·8	71·0	76·5	24·6	−1·6	27·4	85	+7	
Hill Stations excluding Kashmir																						
Shillong	4,921	851·2	+0·7	848·9	69·9	−0·5	78	12	49·8	−1·0	38	17,18	61·9	62·8	51·3	53·4	8·8	−0·4	10·2	47	−1	
Cherrapunji	4,309	870·6	+0·8	868·1	69 5	+0·8	78	4	54·6	−0·3	45	17	63·1	63·8	54·0	55·8	10·7	−1·4	12·1	56	−5	
Aijal	3,599	892·7	..	891·4	76·8	..	83	6 days	58·9	..	50	17	65·9	70·2	58·1	62·5	13·4	..	16·3	64	..	
Darjiling	7,432	776·5	+0·7	774·3	57·7	+2·3	65	14	42·6	−0·4	33	17	49·5	49·4	45·9	46·2	9·2	+0·6	9·5	77	+5	
Kalimpong	3,965	880·4	+0·4	878·0	69·0	−0·4	76	25	53·2	−1·4	44	17	57·5	64·0	59·6	58·1	12·5	+0·7	14·1	77	+12	
Katmandu	4,383	869·0	..	865·7	78 8	+1·4	85	28,30	44·1	−1·3	34	16	53·2	69·2	48·2	55·3	9·5	+0·2	9·5	69	(	
Muktesar	7,592	771·6	−0·7	769·9	57·5	−1·8	67	2,29,31	42·0	−0·6	29	15	47·0	53·1	39·2	44·8	5·4	+0·1	7·2	53	+(	
Mussooree	6,699	796·5	..	795·8	57·5	−2·2	71	31	43·6	−1·2	32	15,16	49·9	52·9	42·8	46·8	6·9	+0·9	8·9	58	+7	
Simla.	7,224	781·4	+0·2	781·3	55·1	−1·9	66	4,31	42·2	−1·4	30	14,15,16	46·9	50·9	37·7	42·3	4·5	−0·1	6·0	46	+7	
Abu	3,945	882·0	+0·7	894·5	78·7	+2·1	89	30	60·6	−0·4	51	13	64·7	73·5	51·6	63·9	7·8	+0·3	16·5	37	—	
Pachmarhi	3,528	895·2	−0·3	893·1	84·2	+0·1	91	29	59·0	−0·4	44	15	69·4	81·9	55·0	59·3	9·0	−0 5	8·1	37	—	
Mahabaleshwar	4,534	864·4	+0·5	862·6	85·3	+2·9	90	22	64·4	+1 8	55	7,15	66·4	79·6	52·3	61·8	7·7	−0 7	11·8	34	—	
Mercara	3,781	895 3	+0·6	893·4	81·3	−2·9	86	29	62·3	+0·7	58	1.15	66·5	81·5	62·8	67·3	18·2	+1·7	17·7	82	+1	
Ootacamund	7,364	781·8	−0·7	718·1	73·0	+3 0	78	22	46·6	−1·3	34	25	53·0	68·9	47·4	56·5	9·1	+0·7	11·2	68	+1	
Coonoor	5,730	828·2	..	..	73 0	−0 1	77	22,23	52·5	+0·2	47	1,5	61·9	..	54·7	..	12·0	+0·7	..	64	+	
Kodaikanal	7,683	772 6	+0·6	771 5	66·5	+0·3	71	21,22	49·9	−0·3	41	1,25	54·7	60·7	48·1	54·0	9·1	+1·3	11·8	64	+1	
Ceylon																						
Colombo	24	1010 6	−0·1	1007 2	89·0	+0 1	92	26,27	73·6	−0 6	69	30	77·2	85·1	73·9	76·8	27·1	−0·7	27·5	85	—	
Trincomalee	24	1011·0	+0 8	1007·8	86·1	−1 9	90	15	76·7	+0·6	72	20	79·6	83·2	75·6	76·2	28·4	0	27·7	82	—	
Hambantota	61	1009·3	−1·0	1005·2	87·7	+0 8	90	23,27,28	74·3	+0·3	72	18	77·2	84·3	73·7	78·0	26·8	+0·1	29·9	84	—	
Mannar	12	1012·1	..	1007·5	90·0	..	95	26	75·1	..	71	1	78·0	87·4	74·7	77·1	27·9	..	27·0	85	.	

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days, (0.10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I.S.T.									17 hrs. I.S.T.									
Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Madras, South-East—*contd.*
3·5	+0·2	2·7	0·18	−0·32	0·16	7	1	+0·1	4·9	+2·4	7	13	7	2	1	0	1	0	0	8	13	7	1	1	1	0	0	0	Coimbatore
1·8	−0·1	3·1	0	−0·49	0	..	0	−0·9	7·3	+2·8	0	8	20	0	0	0	1	0	2	0	3	18	2	1	0	3	0	4	Salem
3·4	+0·3	3·3	0	−0·69	0	..	0	−0·6	6·2	+2·1	2	0	0	0	4	1	3	14	7	0	0	14	17	0	0	0	0	0	Cuddalore
5·8	+3·6	5·8	0	−0·27	0	..	0	−0·5	5·1	+2·0	1	1	0	0	0	7	3	0	19	0	2	15	11	1	0	0	0	2	Vellore
2·9	+0·3	2·9	0	−0·29	0	..	0	−0·4	10·4	+0·8	0	1	3	2	2	10	4	9	0	0	1	13	17	0	0	0	0	0	Madras
1·8	..	1·8	0·06	..	0·06	8	0	..	4·6	..	1	0	0	4	13	0	0	0	13	3	14	9	4	0	0	0	1	0	Arogyavaram
																													Madras Deccan
0·8	−0·7	1·8	0	−0·18	0	..	0	−0·3	9·1	+1·5	0	0	6	3	0	0	0	0	22	1	1	22	5	0	0	0	1	1	Cuddapah
5·1	+3·6	3·4	0·04	−0·17	0·04	31	0	−0·6	4·5	+1·2	0	3	10	5	1	1	0	5	6	1	3	17	3	1	1	1	1	3	Bellary
1·6	+0·3	2·0	0·18	−0·03	0·18	31	1	+0·6	5·1	+1·2	0	0	0	6	3	0	0	0	22	2	3	4	6	4	0	0	3	9	Kurnool
2·4	−1·5	2·2	0	−0·09	0	..	0	−0·3	5·4	−0·4	1	1	3	8	7	2	0	0	9	5	5	6	12	0	1	0	1	1	Rentichintala
1·2	..	1·2	0·20	+0·05	0·20	31	1	+0·7	5·3	..	0	2	2	6	2	6	0	1	12	1	11	7	6	0	0	0	1	5	Anantapur
																													Madras Coast, North
2·8	+0·2	1·9	0	−0·17	0	..	0	−0·3	4·5	+0·2	0	0	0	3	10	0	0	0	18	0	0	15	14	2	0	0	0	0	Nellore
1·7	..	1·8	0	..	0	..	0	..	5·5	..	2	1	2	5	4	3	0	0	14	0	0	13	18	0	0	0	0	0	Ongole
2·1	−0·8	1·7	0·03	−0·39	0·03	16	0	−0·5	5·5	+1·2	2	3	1	8	3	2	0	5	7	2	0	0	17	12	0	0	0	0	Masulipatam
1·1	−2·3	1·7	0	−0·48	0	..	0	−0·7	6·4	+1·9	0	3	0	1	0	13	0	9	5	0	0	0	26	2	3	0	0	0	Cocanada
1·3	−1·6	2·2	0·07	−0·40	0·07	30	0	−0·8	4·4	+0·3	0	1	0	0	0	2	12	1	15	0	0	1	7	21	2	0	0	0	Vizagapatam
3·6	+1·5	3·0	0	−0·44	0	..	0	−0·6	7·3	+1·0	0	0	1	1	0	4	15	10	0	0	0	2	6	13	10	0	0	0	Calingapatam
																													Hill Stations excluding Kashmir
4·0	+1·6	6·4	2·21	+0·24	1·02	31	7	+3·1	4·9	+0·7	0	1	0	0	3	14	2	2	9	2	1	0	0	2	13	1	4	8	Shillong
3·3	−0·5	3·9	1·48	−5·79	0·64	15	4	−3·1	7·3	+0·7	0	6	3	3	2	12	3	2	0	0	1	0	0	6	17	5	1	1	Cherrapunji
2·6	..	2·8	2·78	..	1·34	21	4	..	4·1	..	0	3	12	1	1	1	5	0	0	0	0	2	1	1	9	13	3	2	Aijal
4·1	+0·3	6·8	2·69	+0·81	0·80	26	8	+4·4	7·5	+2·5	0	2	14	2	0	0	8	1	4	0	0	1	0	0	4	24	0	1	Darjiling
4·3	+2·0	5·9	3·72	+2·61	1·67	26	6	+3·0	7·2	−0·5	1	0	1	1	0	0	4	18	6	1	0	0	21	5	0	1	3	0	Kalimpong
2·0	−1·7	4·7	0·05	−0·54	0·05	31	0	−1·7	1·0	−0·4	0	2	0	3	0	0	0	0	26	0	1	1	1	1	9	3	4	11	Katmandu
3·0	−0·3	4·2	5·13	+3·23	1·00	10	8	+3·9	6·5	+0·2	1	6	6	1	0	3	7	4	3	0	0	2	1	1	7	17	3	0	Muktesar
2·9	−0·9	5·2	6·21	+3·95	1·30	9	7	+3·3	3·9	−0·8	11	11	1	3	2	0	0	0	3	1	2	1	8	16	2	1	0	0	Mussooree
3·7	−0·3	2·8	4·75	+2·39	1·34	11	8	+3·3	2·3	−1·7	2	8	2	5	5	1	0	4	4	1	1	2	4	10	7	1	3	2	Simla
0·6	−1·3	0·2	0	−0·17	0	..	0	−0·5	4·3	+0·3	0	4	1	0	0	0	1	1	24	0	1	0	0	0	4	0	0	26	Abu
1·9	−0·1	3·8	0·42	−0·14	0·42	31	1	−0·3	2·3	−1·2	1	3	3	0	2	4	2	1	15	4	2	1	0	1	5	8	10	0	Pachmarhi
0·5	−0·4	2·3	1·48	−1·31	1·19	7	3	+2·6	1·2	−5·4	0	9	4	2	0	0	0	3	13	0	0	1	1	0	1	0	11	17	Mahabaleshwar
2·3	+0·9	2·9	0·08	−0·68	0·08	8	0	−1·6	5·0	+1·9	0	10	10	0	0	0	1	1	9	0	14	15	0	0	0	1	1	0	Mercara
2·0	−0·1	4·2	0·06	−1·22	0·06	8	0	−2·6	3·3	0	3	9	10	0	0	0	0	0	9	6	12	9	1	0	0	1	0	2	Ootacamund
4·6	+1·9	..	0·44	−2·80	0·35	15	1	−1·8	4·7	+1·2	5	4	3	3	3	0	0	0	13	..	..	..	..	..	..	..	..	..	Coonoor
2·6	+0·5	6·1	1·35	−0·46	0·64	17	4	+0·9	9·3	+1·1	8	12	6	2	0	0	0	1	2	3	7	3	11	3	0	0	2	2	Kodaikanal
																													Ceylon
4·7	+0·1	5·8	1·62	−2·66	0·44	12	6	−0·1	..	..	1	4	15	10	0	0	0	0	1	0	0	0	1	1	6	13	10	0	Colombo
5·3	+1·6	5·2	0·43	−1·53	0·24	7	2	−0·7	..	..	3	5	6	3	5	5	1	1	2	5	11	14	1	0	0	0	0	0	Trincomalee
6·8	+3·1	7·4	0·11	−3·35	0·04	23	0	−0·5	..	..	26	0	0	0	0	0	2	3	0	2	6	10	3	7	2	0	0	1	Hambantota
3·2	..	4·2	0·31	..	0·20	31	2	..	..	..	1	3	17	6	4	0	0	0	0	10	10	3	0	1	2	4	1	0	Mannar

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2·30 HRS. G. M. T.) AT 4TH CLASS STATIONS—MARCH 1948.

STATION.	Maximum temperature, °F.				Minimum temperature, °F.				Mean dry bulb temperature, 8 hrs. I.S.T. °F.	Mean wet bulb temperature, 8 hrs. I.S.T. °F.	Vapour pressure, millibars.		Relative humidity, %		Mean cloud amount 8 hrs. I.S.T.	Rainfall, inches.				Number of rainy days, (0·10" or more).		Wind.	
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I.S.T.	Departure from normal.	Mean 8 hrs. I.S.T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant Direction 8 hrs. I.S.T.	Velocity in miles per hour
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assam																							
Lumding	86·8	+0·6	97	13	57·8	—0·4	49	4	74·8	64·5	16·0	—2·0	54	—25	..	0·81	—0·99	0·28	15	2	—2·3	..	..
Kashmir																							
Jammu	75·5	—3·4	89	31	58·1	—1·2	48	14	61·5	54·8	11·7	+1·3	65	+10	5·4	10·44	+8·41	2·30	8, 12	8	—4·3	..	..
Kargil (R)																							
Mysore																							
Balehonnur	88·6	+1·1	91	4 days	64·5	+1·7	59	21	68·6	66·0	20·8	+2·5	88	+6	..	0·19	—1·05	0·08	30	0	—1·8	..	..
Tibet																							
Yatung (Chumbi)	52·0	+0·4	65	3	26·0	—1·5	14	16	33·3	32·5	5·9	0	94	+7	4·0	3·18	+1·12	0·86	26	5	—0·4	..	..

R—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2·30 HRS. G. M. T.) AT 5TH CLASS STATIONS—MARCH 1948.

Division.	Station.	Rainfall, inches.				Number of rainy days, (0.10" or more).		Division.	Station.	Rainfall, inches.				Number of rainy days, (0 .10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Assam	Mawsynram	0	..	0	..	0	..	Kashmir	Sonamarg	7·06	—6·35	2·36	8	9	—0·9
West Bengal	Bankura	1·81	+0·72	1·55	15	2	+0·1		Gurez	10·30	—1·18	1·95	12	9	—2·3
	Cooch Behar	0·73	—0·91	0·45	30	2	—0·5	Bombay, Deccan	Khandala (R)						
Bihar	Muzaffarpur	0	—0·38	0	..	0	—0·9	Madras, Southeast	Palamcottah	2·75	+1·71	2·04	30	4	+2·0
	Chapra	0·04	—0·32	0·04	12	0	—0·9	Sikkim	Lachung	2·85	—2·17	0·41	31	14	+2·6
	Arrah	0	—0·38	0	..	0	—0·9								
United Provinces, West	Meerut	0·81	+0·21	0·30	3	3	+1·6								
East Punjab	Dharampore	4·65	+2·76	1·40	11	8	+5·1								
	Kyelang (R)														
	Dalhousie	19·94	+16·07	3·80	10	10	+4·1								

R—Register not received.

MONTHLY MEANS OF UPPER WINDS

Note.—Data upto 9·0 Km. a.s.l. are given under table A and data above 9·0 Km. under table B.

In tables A & B

n represents the number of observations,

V represents the mean wind speed in m/second irrespective of direction,

v represents the resultant mean velocity in m/second,

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

For the coordinates of the stations for which data have been published in these tables and other particulars please refer to the Monthly Weather Report, January 1948, and subsequent issues. From this month onwards night and morning ascents were restricted to 10 Km. a.s.l. instead of 9 Km. as in previous months. A new station was started this month at Jagdalpur, coordinates being Lat. 19°05′ N, Long. 73°05′ E ; Ht. 553 metres a.s.l.

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	AHMEDABAD												ALLAHABAD											
Time in I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	1·0	306	31	1·8	0·8	345	31	2·7	1·7	288	31	1·4	0·3	325	31	1·1	0·7	268	31	3·5	2·3	299
0·15 a.g.	31	7·8	4·0	313	31	9·1	4·2	357	31	4·9	3·1	283	31	8·2	5·0	3	31	5·2	1·5	313	31	5·2	3·8	312
0·6 a.s.l.	31	7·1	4·2	313	31	9·5	3·3	345	31	4·7	3·6	288	31	8·6	5·3	356	31	6·7	3·1	356	31	5·4	4·2	314
1·0 ,,	31	6·3	4·0	292	31	7·3	2·4	305	31	4·8	3·8	279	31	6·9	3·7	326	31	6·0	3·1	325	31	5·4	4·0	310
1·5 ,,	31	5·8	4·1	274	31	6·8	3·6	278	31	5·2	3·9	275	31	7·4	5·1	295	31	6·9	4·8	300	31	6·3	5·2	300
2·0 ,,	30	6·0	4·9	257	31	7·6	5·8	271	31	6·5	5·0	281	29	8·1	6·6	283	31	8·3	6·9	292	31	7·9	6·4	291
2·5 ,,	26	7·6	6·2	244	31	9·0	7·0	268	31	8·7	7·0	281	17	9·1	7·9	273	30	9·9	8·8	288	31	9·6	8·3	283
3·0 ,,	25	9·2	7·3	242	31	11·7	9·1	266	31	10·9	9·1	275	13	11·5	10·3	278	28	11·6	10·6	284	31	11·9	10·7	28
4·0 ,,	4	8·4	6·0	261	25	12·5	9·7	271	30	12·9	11·2	280	3	11·5	10·6	252	21	13·0	12·1	284	28	14·7	13·9	283
5·0 ,,					18	10·9	9·6	289	29	14·9	13·8	283	1	2·5	2·5	240	13	10·2	8·7	291	23	16·5	15·4	277
6·0 ,,					15	9·8	9·4	276	24	16·9	16·0	284					9	9·0	7·0	269	19	16·7	15·9	279
7·5 ,,					7	12·5	12·0	283	14	17·9	17·2	293					4	5·0	2·0	262	14	19·3	18·1	281
9·0 ,,					1	4·0	4·0	305	7	23·2	22·8	292					4	6·3	5·7	292	8	18·6	17·0	291

Station	AMBALA												ANANTAPUR								ASANSOL			
Time in I.S.T.	0100				0700				1600				0700				1600				0100			
Ht. in Km.	n	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	345	31	2·7	1·2	355	31	3·0	0·7	320	31	1·6	0·7	186	31	2·8	2·4	62	31	2·1	0·7	270
0·15 a.g.	31	8·7	4·9	348	31	9·2	4·1	360	31	6·5	2·4	317	31	4·8	2·1	178	31	4·6	4·0	68	31	6·6	1·3	245
0·6 a.s.l.	31	8·8	4·3	349	31	9·3	4·2	352	31	6·7	1·5	335	31	5·2	2·6	166	31	4·4	3·8	72	31	7·5	1·7	285
1·0 ,,	31	8·0	3·0	329	31	9·1	3·4	332	31	7·7	1·8	311	31	6·3	4·0	143	31	4·3	3·4	68	31	5·8	3·2	296
1·5 ,,	31	6·7	3·1	301	31	7·6	3·5	312	31	7·9	3·0	292	31	6·8	4·7	101	31	4·9	4·1	70	30	6·6	4·8	284
2·0 ,,	31	6·9	4·5	290	30	7·1	4·9	307	31	7·9	4·0	286	30	7·0	5·2	69	31	5·4	4·6	72	27	7·8	6·9	289
2·5 ,,	22	7·3	5·4	289	30	8·5	6·5	302	31	7·9	5·0	280	30	6·9	5·6	39	31	5·6	4·7	62	17	8·8	7·2	283
3·0 ,,	18	7·1	5·1	273	30	9·8	7·9	295	29	8·0	5·4	278	30	7·5	6·2	30	31	5·6	4·6	51	11	8·9	5·7	268
4·0 ,,	5	3·8	3·4	219	23	9·5	8·1	275	24	8·4	6·5	286	30	7·1	5·8	35	31	5·5	3·7	27				
5·0 ,,	1	8·0	8·0	295	15	11·6	10·6	264	21	10·9	8·9	288	30	5·9	3·0	18	31	5·3	3·2	347				
6·0 ,,					12	14·6	13·7	274	19	14·2	13·4	286	30	6·9	4·2	337	30	7·0	4·7	335				
7·5 ,,					4	15·5	14·5	287	14	21·1	19·9	277	25	10·7	9·2	322	24	9·5	7·6	323				
9·0 ,,					1	11·5	11·5	280	14	23·5	22·4	278	19	13·4	11·4	313	13	13·7	11·8	320				

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	ASANSOL												BANGALORE											
Time in I. S. T.	0700				1100				1600				0100				0700				1600			
Ht. in Km.	n	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	291	31	2·6	1·6	288	31	2·8	2·0	286	30	3·9	3·2	115	31	2·7	1·4	128	31	3·3	2·5	96
0·15 a.g.	31	4·0	2·0	298	30	4·0	1·9	295	31	4·3	2·7	290	24	8·9	7·4	106	29	5·8	3·7	140	28	5·5	4·1	80
0·6 a.s.l.	31	5·8	2·3	285	30	3·9	1·9	292	31	5·2	3·6	286												
1·0 „	31	5·7	2·5	279	30	4·7	2·7	267	30	5·6	4·2	280	24	7·3	6·3	107	30	4·6	3·1	138	28	5·0	3·9	81
1·5 „	30	6·4	4·3	284	30	6·1	4·3	280	29	5·3	3·9	282	26	8·8	7·2	96	29	6·7	4·6	98	29	6·2	5·0	74
2·0 „	30	7·4	6·1	285	23	7·3	5·3	271	28	6·1	4·7	284	26	7·7	5·7	79	31	6·6	5·3	65	29	6·2	5·5	73
2·5 „	25	8·8	7·1	283	12	8·7	7·1	269	25	8·4	6·6	284	15	6·6	4·1	77	31	6·9	5·9	42	28	6·2	5·6	66
3·0 „	20	10·3	8·3	278	11	10·8	8·5	280	23	10·5	9·4	286	8	6·3	4·8	58	30	7·8	7·1	43	28	6·8	6·1	64
4·0 „	11	9·8	7·8	294	1	25·0	25·0	260	16	12·4	10·8	286	1	11·0	11·0	111	27	8·0	5·8	52	22	7·7	6·3	48
5·0 „	6	8·0	4·6	292					10	10·5	7·7	280					23	6·7	2·4	47	17	8·4	6·0	42
6·0 „	2	7·3	7·1	233					6	8·4	5·6	271					19	6·4	2·3	29	13	6·0	2·5	38
7·5 „	1	10·5	10·5	225					4	11·3	7·2	266					10	11·4	8·8	327	10	8·5	4·8	7
9·0 „									2	18·0	18·0	244					7	13·6	11·4	326	5	7·5	4·3	262

Station	BAREILLY								BHOPAL												BHUJ			
Time in I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	0·3	40	31	2·1	1·2	300	31	2·9	1·4	46	31	2·2	0·8	32	31	4·0	2·3	305	31	1·9	1·6	250
0·15 a.g.	31	7·1	4·0	341	30	5·9	4·1	307	31	8·5	3·6	50	31	8·3	2·4	54	31	4·4	2·4	309	31	7·9	5·9	290
0·6 a.s.l.	31	7·3	4·7	324	30	5·3	3·7	302	31	7·9	3·6	49	31	6·9	1·8	53	31	4·5	2·4	309	31	8·7	6·4	310
1·0 „	31	7·3	4·9	308	30	5·9	4·4	302	30	8·1	3·2	45	31	8·7	1·2	11	31	4·7	3·5	290	31	6·3	3·7	31
1·5 „	31	7·6	5·6	305	30	6·5	5·5	298	30	7·1	2·6	307	31	7·9	3·1	313	31	5·3	4·0	284	29	5·6	2·2	28
2·0 „	31	8·7	7·2	296	29	7·3	6·3	293	26	8·1	4·8	282	29	8·3	5·9	277	31	6·0	4·8	289	28	7·4	4·4	26
2·5 „	31	9·6	8·2	298	29	8·8	7·9	291	16	8·3	6·0	278	25	9·8	7·5	278	30	8·1	7·0	286	21	7·8	5·0	26
3·0 „	30	11·4	10·4	278	29	10·3	9·2	293	9	7·7	6·0	264	25	10·3	8·0	279	29	11·0	9·6	288	18	9·5	6·7	26
4·0 „	18	11·5	9·8	280	26	11·8	10·9	287					11	7·4	6·6	279	27	13·1	11·9	285	2	6·3	5·1	24
5·0 „	10	8·7	7·2	276	20	13·6	12·5	291					10	8·7	7·9	285	20	12·5	11·3	279				
6·0 „	6	10·0	9·0	275	19	16·4	15·4	286					8	9·9	9·1	309	15	10·9	9·9	286				
7·5 „	2	9·3	8·3	282	11	16·1	14·3	283									11	11·7	11·3	288				
9·0 „					7	18·6	14·6	274									5	9·2	8·9	280				

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	BHUJ								BIKANER								BOMBAY							
Time in I. S. T.	0700				1600				0700				1600				0100				0700			
Ht. in Km.	n	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	1·0	242	31	3·9	2·2	83	31	2·4	1·4	133	31	2·4	0·5	289	31	0·8	0·7	354	31	1·0	0·7	22
0·15 a.g.	31	0·6	4·0	309	31	5·0	2·9	287	30	8·6	5·1	120	31	5·5	2·0	279	31	4·3	3·4	355	31	4·1	3·3	359
0·6 a.s.l.	31	9·2	6·1	319	31	4·9	2·8	293	30	7·9	1·9	112	31	5·0	1·8	268	31	5·9	4·7	356	31	5·8	5·0	18
1·0 „	28	8·0	4·5	324	31	5·1	3·3	289	30	6·5	1·3	265	30	5·1	2·1	283	31	6·0	4·5	1	31	6·1	4·6	14
1·5 „	28	7·4	4·0	292	31	6·3	4·5	289	30	6·7	3·2	279	29	5·2	2·5	253	31	5·7	4·5	344	31	5·8	2·9	335
2·0 „	27	8·3	5·2	279	31	7·8	5·8	284	30	7·5	5·3	271	28	6·1	4·4	261	30	5·6	3·4	326	31	5·8	2·6	310
2·5 „	26	8·2	5·5	270	31	9·8	7·4	282	30	8·9	6·9	269	28	7·4	6·3	265	23	5·5	0·6	239	31	5·8	1·3	282
3·0 „	26	9·6	7·5	277	31	11·1	8·3	280	29	9·7	8·0	276	27	8·7	7·3	273	20	7·2	2·3	256	31	7·3	1·1	242
4·0 „	21	10·3	8·8	285	27	11·9	9·8	287	21	8·5	7·5	289	25	11·9	10·9	274	3	8·3	1·0	259	28	6·5	3·2	285
5·0 „	16	7·9	7·0	285	24	14·0	12·7	290	19	12·3	11·1	291	17	13·2	12·4	282					24	8·2	7·3	301
6·0 „	15	10·9	10·2	291	18	15·3	14·6	279	12	13·9	13·0	290	12	13·2	12·7	275					19	11·3	10·7	300
7·5 „	11	15·2	14·5	287	10	14·3	13·3	289	2	9·5	9·2	250	10	20·3	18·8	281					7	14·3	13·0	293
9·0 „	3	11·7	11·5	300	3	17·7	16·7	297	1	14·5	14·5	260	3	21·8	21·7	290					2	14·5	13·2	280

Station	BOMBAY				CALCUTTA																COCHIN			
Time in I. S. T.	1600				0100				0700				1100				1600				0100			
Ht. in Km.	n	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	5·8	306	31	2·0	1·1	203	31	1·8	0·5	203	31	2·9	0·8	231	31	3·2	0·8	236	31	1·5	0·2	57
0·15 a.g.	31	6·3	5·3	301	31	9·3	5·7	223	31	6·0	1·0	265	31	3·4	1·0	215	31	4·5	1·2	239	29	2·4	0·5	321
0·6 a.s.l.	31	5·5	4·0	318	31	9·3	5·9	238	30	6·1	2·5	266	31	4·4	1·8	251	31	4·9	1·8	239	29	2·4	1·0	299
1·0 „	31	2·9	2·3	338	31	7·8	4·5	246	30	5·8	2·9	267	31	5·5	3·0	253	31	4·9	2·3	266	26	2·2	1·5	117
1·5 „	31	4·6	1·8	328	29	7·8	4·5	273	30	6·2	4·0	262	31	6·2	4·0	258	31	5·8	3·5	282	20	4·3	3·7	92
2·0 „	31	5·7	2·5	309	25	8·3	6·4	295	30	7·3	5·4	269	27	7·0	4·9	275	30	6·9	5·6	289	16	6·0	5·1	73
2·5 „	31	5·8	1·5	281	21	10·2	8·2	281	25	9·0	7·1	283	19	8·4	5·4	278	30	8·9	7·5	288	10	8·1	7·4	54
3·0 „	31	6·7	1·6	265	13	9·8	7·9	284	23	10·8	8·5	292	17	9·2	7·3	293	29	10·6	9·0	293	5	6·5	6·0	26
4·0 „	31	6·9	3·7	314	1	5·5	5·5	305	11	9·1	7·1	287					29	13·3	11·8	292	1	8·0	8·0	130
5·0 „	30	7·7	6·1	316					7	7·2	6·7	271					20	12·5	10·1	279				
6·0 „	26	10·5	9·6	304					4	9·6	8·0	293					17	13·5	11·3	273				
7·5 „	16	14·1	12·8	298					1	15·0	15·0	285					7	15·4	13·6	286				
9·0 „	6	22·6	19·2	306					1	23·0	23·0	280					2	22·7	22·7	253				

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	COCHIN								COOCH BEHAR												CUTTACK			
Time in I. S. T.	0700				1600				0700				1100				1600				0100			
Ht. in Km.	n	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	1·3	1·2	56	31	6·5	5·9	259	31	2·6	2·2	83	31	2·8	2·0	91	31	2·0	0·3	243	31	1·1	0·3	20
0·15 a.g.	31	3·4	2·4	63	31	5·7	5·4	259	31	6·9	5·6	84	30	4·3	3·1	101	31	3·9	0·8	217	31	5·8	3·9	21
0·6 a.s.l.	31	3·2	1·7	357	31	3·6	2·4	268	31	7·3	4·3	89	30	4·9	3·1	106	31	4·6	1·8	238	31	8·2	5·4	22
1·0 „	31	2·7	1·4	15	31	3·4	1·5	57	31	5·4	1·2	121	30	4·8	1·2	163	30	4·5	3·1	239	30	6·2	3·6	23
1·5 „	29	3·9	2·9	52	31	5·8	5·3	62	30	5·2	2·7	251	28	5·3	2·9	231	29	4·9	4·0	248	30	6·5	3·9	28
2·0 „	28	6·1	5·1	57	30	8·4	8·2	59	28	5·1	3·4	259	23	6·8	5·2	246	28	7·4	6·3	254	23	6·5	3·9	30
2·5 „	29	7·0	6·4	58	30	9·2	9·0	63	27	6·8	5·1	271	19	7·8	6·3	265	25	8·7	7·8	263	16	7·3	5·9	30
3·0 „	27	7·4	6·9	64	30	9·2	8·8	64	27	9·1	7·0	267	13	7·1	5·0	268	23	9·3	8·3	266	10	7·9	4·7	31
4·0 „	23	6·9	5·6	69	30	6·6	5·2	73	16	11·8	9·8	272	1	5·0	5·0	245	21	12·4	11·8	269				
5·0 „	19	6·6	3·7	74	28	7·1	5·3	62	9	11·8	9·3	278					13	11·1	9·3	277				
6·0 „	15	8·6	4·9	50	26	8·5	5·1	44	4	12·6	3·5	263					13	12·8	11·2	276				
7·5 „	10	11·3	6·4	73	21	10·1	5·6	30	2	10·0	10·0	288					6	16·1	14·9	289				
9·0 „	5	11·4	5·0	321	12	12·2	4·7	348									2	18·5	18·1	301				

Station	CUTTACK												DEOLALI				GADAG							
Time in I. S. T.	0700				1100				1600				0830				0700				1600			
Ht. in Km.	n	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	0·1	306	31	1·7	0·7	257	31	2·1	1·0	194	22	0·9	0·5	25	31	3·5	1·2	151	31	2·4	1·4	9
0·15 a.g.	31	4·6	1·9	232	31	3·8	1·3	239	31	5·1	2·5	209	22	3·0	0·9	31	31	5·8	2·1	122	31	3·8	2·6	7
0·6 a.s.l.	30	6·4	4·3	233	31	4·9	2·1	234	31	4·8	2·8	223	22	1·6	0·5	48								
1·0 „	30	5·8	3·1	247	31	5·9	2·7	246	31	4·5	2·7	246	21	6·0	2·4	28	31	7·1	4·6	99	31	3·8	2·6	7
1·5 „	29	6·3	3·0	275	29	6·3	3·3	280	31	5·2	3·6	279	21	6·7	1·5	19	31	6·3	4·0	102	31	4·1	3·0	6
2·0 „	23	6·7	3·6	284	22	7·2	3·9	302	31	6·4	4·7	294	22	6·5	1·4	300	31	5·9	3·7	93	31	5·2	3·7	6
2·5 „	27	7·0	3·9	205	9	6·8	4·8	309	31	8·4	6·2	302	22	6·9	1·1	274	31	5·8	4·2	52	28	4·9	3·3	6
3·0 „	21	7·8	4·4	310	5	4·0	0·7	249	31	9·9	7·4	303	22	8·3	2·9	275	31	6·2	4·8	44	26	5·7	3·9	6
4·0 „	20	9·0	6·6	319					30	12·1	9·6	299	20	8·8	4·9	296	31	6·2	4·1	24	22	6·0	4·1	2
5·0 „	17	9·0	6·6	300					26	13·4	11·3	207	17	9·5	8·3	299	30	4·7	2·9	347	18	5·5	2·3	
6·0 „	13	8·5	6·9	275					21	14·0	12·5	275	14	12·3	11·7	303	30	7·1	5·6	325	16	6·9	5·2	
7·5 „	5	12·5	11·8	266					10	15·3	13·9	284	9	13·1	11·9	295	28	10·9	9·1	319	10	9·5	6·3	32
9·0 „	1	19·5	19·5	270					4	26·1	22·8	308	6	16·3	15·2	297	19	13·7	12·6	311	4	11·3	8·3	27

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	GAYA																GOPALPUR							
Time in I. S. T.	0100				0700				1100				1600				0700				1600			
Ht. in Km.	n	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	0·4	133	31	2·2	1·5	176	31	2·3	1·1	266	31	3·6	3·0	309	31	3·1	1·6	251	31	5·6	4·8	181
0·15 a.g.	31	4·8	1·7	352	31	5·3	2·8	213	31	4·2	2·4	271	30	6·5	5·7	300	31	6·1	4·2	233	31	9·3	8·0	180
0·6 a.s.l.	31	5·1	2·5	334	31	5·5	1·1	306	31	3·9	1·9	267	30	6·1	5·1	299	31	6·1	4·4	233	31	4·8	3·5	188
1·0 „	31	5·3	4·0	303	31	4·4	2·2	300	31	5·3	3·4	280	30	5·5	4·7	293	30	6·2	2·3	259	31	3·6	1·3	227
1·5 „	31	6·3	5·4	286	31	5·9	4·5	288	31	6·4	4·9	276	30	6·6	5·9	284	30	5·8	2·0	304	31	4·5	2·7	306
2·0 „	30	7·6	6·8	284	31	8·3	6·8	287	30	7·8	6·7	278	30	8·2	7·5	283	30	6·4	2·9	316	31	6·0	3·9	314
2·5 „	15	7·7	7·2	281	31	10·2	8·6	285	26	10·1	9·0	284	30	10·3	9·5	279	30	7·1	3·4	312	30	7·3	4·8	316
3·0 „	10	7·5	7·3	272	26	12·0	10·9	286	15	10·9	9·6	282	30	12·1	11·3	280	28	7·7	3·9	314	30	8·0	5·5	318
4·0 „	1	8·0	8·0	235	13	11·4	9·0	286					27	15·8	15·0	284	22	8·9	4·5	301	29	8·5	6·3	303
5·0 „					6	7·4	5·5	234					22	16·6	15·8	285	15	5·6	3·5	291	26	10·0	8·1	287
6·0 „					3	4·3	4·2	249					17	19·5	17·9	282	14	7·0	5·9	284	24	14·0	11·5	278
7·5 „					3	6·8	6·7	227					8	18·1	16·4	269	8	11·8	9·9	289	16	17·0	14·8	281
9·0 „					3	8·2	7·4	254					3	9·5	7·6	251	6	16·2	13·9	287	9	20·8	16·7	290

Station	GORAKHPUR								HYDERABAD (Dn.)												JAGDALPUR			
Time in I. S. T.	0700				1600				0100				0700				1600				0700			
Ht. in Km.	n	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	0·4	23	31	2·3	1·9	282	31	2·8	1·6	120	31	2·1	1·0	115	31	3·0	1·2	78	7	0·9	0·8	135
0·15 a.g.	31	6·2	1·6	1	31	4·8	3·6	287	31	7·5	5·0	125	31	5·9	3·3	133	31	4·7	2·6	83	7	3·1	2·7	175
0·6 a.s.l.	31	5·7	2·5	307	31	5·4	4·3	287	31	5·2	3·3	120	31	3·8	1·9	117	31	4·5	2·5	99	7	2·4	2·0	187
1·0 „	31	5·5	3·7	303	31	5·3	4·5	285	31	8·5	6·1	125	31	8·1	4·6	138	31	4·8	2·6	88	7	4·2	3·1	245
1·5 „	31	6·7	4·7	302	31	6·4	5·4	281	31	6·5	3·4	102	31	7·7	3·4	115	31	4·9	2·6	88	7	4·2	1·6	243
2·0 „	29	7·4	6·0	292	30	7·7	6·8	284	31	6·4	2·2	40	31	7·3	2·9	52	31	4·9	1·9	77	7	2·4	1·2	327
2·5 „	26	8·5	7·1	290	24	8·9	7·9	285	31	7·1	3·3	1	31	7·2	3·7	18	31	5·7	1·9	52	7	3·7	2·7	348
3·0 „	24	9·9	7·9	287	22	9·5	7·8	286	31	7·7	4·4	345	31	7·5	5·1	7	31	6·6	3·7	20	7	4·7	4·2	356
4·0 „	10	7·7	6·8	276	10	8·7	6·5	275	3	6·3	5·8	324	31	8·1	6·6	351	30	6·7	4·4	333	7	7·1	6·1	351
5·0 „	6	5·6	4·7	260	4	7·5	6·1	259					28	7·3	4·8	324	29	7·7	5·8	308	5	8·3	7·6	313
6·0 „	6	6·7	5·2	255	3	8·8	7·7	286					28	10·0	8·4	310	29	9·4	8·2	310	4	9·0	8·9	305
7·5 „	1	5·0	5·0	250	1	10·5	10·5	235					22	12·8	11·4	298	27	14·2	12·5	299	2	16·0	15·5	297
9·0 „	1	5·5	5·5	275	1	14·5	14·5	245					12	17·1	14·5	290	21	18·4	17·4	290				

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	JAMSHEDPUR												JHARSUGUDA											
Time in I. S. T.	0700				1100				1600				0100				0700				1600			
Ht. in Km.	n	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	270	31	2·1	1·5	283	31	2·4	1·0	324	31	1·3	0·8	36	31	1·0	0·6	28	31	2·2	1·2	293
0·15 a.g.	31	3·6	2·9	278	31	2·9	1·9	280	31	3·5	1·3	323	31	5·8	1·3	60	31	5·1	2·4	64	31	4·4	2·1	302
0·6 a.s.l.	31	4·4	2·0	260	31	3·2	1·2	264	31	3·6	1·9	307	31	6·6	0·3	29	31	5·9	0·4	173	31	4·3	2·4	298
1·0 „	31	5·6	4·9	284	31	5·1	2·4	263	31	4·5	2·8	294	31	6·2	2·0	265	31	6·8	1·6	255	31	4·4	2·7	289
1·5 „	31	6·8	3·9	278	30	6·2	4·0	280	31	5·7	4·1	280	31	5·5	3·2	271	31	6·3	3·7	269	31	4·6	3·6	287
2·0 „	30	7·4	5·3	273	23	8·2	6·0	288	31	7·3	5·9	280	28	6·0	4·2	278	31	7·2	5·7	285	31	5·4	4·3	282
2·5 „	27	8·2	6·4	280	18	9·1	7·6	292	30	8·7	7·4	275	21	7·1	4·9	288	31	8·4	6·8	284	31	6·5	4·9	289
3·0 „	20	8·5	6·2	285	13	9·2	7·2	284	28	9·5	8·0	280	15	6·8	4·6	289	30	9·5	7·5	285	31	8·8	6·5	286
4·0 „	12	9·5	5·5	278					23	12·8	11·0	289	4	10·9	9·7	277	25	11·2	8·0	295	25	11·9	9·9	292
5·0 „	8	8·3	5·0	288					20	12·8	11·0	288	2	11·7	11·4	291	18	10·1	8·1	306	20	11·9	8·7	287
6·0 „	5	8·0	6·7	261					16	13·7	12·1	278					16	9·1	7·5	293	16	11·3	9·8	282
7·5 „									5	15·8	14·9	268					10	8·1	7·5	263	9	13·9	12·9	270
9·0 „									2	20·7	20·6	280					7	13·1	11·9	260	6	18·1	17·6	260

Station	JODHPUR												JUBBULPORE								MADHOSAGAR			
Time in I. S. T.	0100				0700				1600				0700				1600				0700			
Ht. in Km.	n	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	1·4	34	31	2·1	1·4	46	31	3·1	1·7	278	31	1·1	0·5	138	31	2·8	1·3	287	31	0·8	0·5	249
0·15 a.g.	30	7·9	2·5	68	31	7·0	2·5	104	31	4·3	2·2	268	31	4·4	1·4	135	31	5·1	3·1	298	31	4·3	1·3	57
0·6 a.s.l.	30	7·5	1·4	105	31	7·1	1·3	122	31	4·4	2·3	259	31	5·4	1·3	122	31	5·1	3·1	300	31	6·5	2·9	50
1·0 „	30	6·5	0·9	233	31	6·9	1·4	271	31	4·8	3·0	264	31	6·0	0·3	298	31	4·9	3·4	303	31	6·4	2·0	346
1·5 „	30	5·3	3·7	246	31	7·2	3·7	269	31	4·9	3·2	264	31	6·4	2·3	289	31	5·2	3·9	297	31	7·3	4·2	305
2·0 „	28	6·2	5·4	257	29	7·7	5·0	272	30	5·7	4·0	262	31	7·8	5·1	286	31	6·5	5·4	290	31	8·7	6·9	289
2·5 „	22	7·6	6·6	265	28	8·3	5·7	278	28	6·9	5·5	262	31	9·2	7·7	290	30	7·6	6·6	284	31	9·8	8·0	284
3·0 „	12	7·3	6·1	282	26	9·4	7·4	282	28	9·6	8·0	265	29	11·1	9·5	296	30	9·5	8·5	283	29	11·2	9·9	285
4·0 „	1	23·0	23·0	240	23	12·2	9·1	280	24	13·1	11·8	278	23	11·9	10·8	287	28	13·0	11·5	284	19	10·9	10·2	271
5·0 „					16	12·4	11·0	275	41	14·7	13·8	283	20	13·6	12·2	287	24	17·2	15·0	278	14	10·6	9·3	271
6·0 „					10	11·2	10·5	272	18	19·3	18·1	287	15	11·7	10·6	285	17	18·1	16·5	293	11	11·6	10·4	29
7·5 „					4	12·7	12·2	260	11	21·4	20·6	282	8	13·0	11·3	278	10	16·3	12·5	297	7	11·4	10·0	28
9·0 „					2	10·0	10·0	275	6	19·2	18·1	275	6	15·2	12·6	288	7	18·4	14·9	311	5	13·7	11·5	28

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	MADHOSAGAR				MADRAS												MALEGAON							
Time in I. S. T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	1·3	325	31	1·7	0·9	157	31	1·7	1·4	263	31	6·1	5·1	122	31	2·6	2·2	294	31	1·6	1·4	285
0·15 a.g.	30	4·6	2·5	327	31	4·5	3·9	143	31	4·2	2·3	191	31	5·6	5·1	119	31	6·1	4·5	324	31	4·8	2·1	309
0·6 a.s.l.	30	4·4	2·5	331	31	5·1	4·3	140	31	4·9	3·8	160	31	4·9	3·4	126	31	6·1	4·5	324	31	4·8	2·1	309
1·0 ,,	31	4·6	2·9	322	30	4·6	3·1	119	31	5·2	3·7	139	31	4·5	2·1	109	31	8·0	5·8	333	31	6·0	2·5	349
1·5 ,,	31	5·1	3·6	306	29	5·1	3·1	79	30	5·6	3·5	81	29	4·6	2·8	58	31	6·6	4·2	330	31	6·0	2·4	344
2·0 ,,	31	5·9	4·1	289	28	6·5	4·6	54	30	6·6	5·1	67	29	5·2	4·2	49	30	5·8	1·9	302	31	6·6	2·3	311
2·5 ,,	31	7·9	6·7	276	21	6·6	5·1	57	28	7·0	5·9	49	28	6·8	5·5	44	26	5·8	1·7	308	31	7·2	2·8	281
3·0 ,,	30	10·3	8·9	282	14	6·1	4·9	46	27	6·6	5·0	46	28	7·4	6·1	40	25	6·8	2·3	270	31	8·3	4·2	275
4·0 ,,	26	15·5	13·6	278	4	4·3	1·6	33	23	6·7	5·2	44	26	6·8	4·7	23	7	8·9	4·1	215	27	8·7	6·3	283
5·0 ,,	21	15·1	13·6	277					21	5·8	4·0	32	22	5·6	3·4	42					25	10·5	9·4	287
6·0 ,,	18	17·8	16·1	284					19	6·5	3·3	341	19	6·9	2·3	26					21	12·6	11·7	297
7·5 ,,	9	16·1	14·9	274					12	9·2	5·3	309	11	9·2	4·5	350					19	15·2	14·3	295
9·0 ,,	1	14·0	14·0	270					5	11·2	8·1	297	6	9·0	6·2	341					12	20·1	18·4	297

Station	MALEGAON				MANGALORE												MASULIPATAM							
Time in I. S. T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	309	31	2·2	1·2	26	31	2·3	2·1	90	31	4·5	4·1	277	31	0·8	0·5	156	31	0·7	0·3	115
0·15 a.g.	31	4·2	2·3	300	31	3·4	2·3	348	31	3·3	2·5	74	31	6·7	6·3	273	31	5·6	5·1	167	31	3·6	1·9	168
0·6 a.s.l.	31	4·2	2·3	300	31	3·3	2·6	328	31	2·9	0·8	341	31	5·4	4·5	276	31	5·8	4·9	162	31	5·0	4·1	173
1·0 ,,	31	3·8	2·1	303	29	2·6	1·7	344	30	3·3	0·5	37	30	3·6	1·0	344	31	4·5	2·7	146	30	4·8	3·3	151
1·5 ,,	31	4·0	2·6	301	27	4·1	3·2	34	29	4·8	3·0	84	29	4·8	3·6	57	31	4·9	2·0	88	30	5·5	3·2	81
2·0 ,,	31	4·7	3·0	294	17	6·9	6·1	72	29	5·5	3·9	94	27	7·0	6·3	67	31	5·5	2·8	59	27	6·7	4·0	59
2·5 ,,	31	4·9	3·5	285	9	8·1	7·9	92	29	5·7	5·2	64	26	8·9	8·6	67	27	6·6	3·8	32	26	7·6	4·7	44
3·0 ,,	31	6·8	4·8	279	5	7·8	7·2	105	28	7·4	6·8	58	24	8·3	7·9	71	24	7·1	3·8	25	26	7·8	5·1	33
4·0 ,,	29	8·7	7·0	282					25	7·7	5·5	42	21	7·4	5·4	64	12	5·5	1·7	327	22	5·9	3·7	18
5·0 ,,	24	10·5	9·0	295					22	5·9	3·7	33	16	6·3	4·1	38					20	4·6	3·0	340
6·0 ,,	21	12·9	11·8	295					20	6·2	3·3	347	13	7·8	5·2	31					20	6·3	4·7	315
7·5 ,,	15	12·9	11·8	288					14	9·1	7·7	342	11	12·3	9·9	21					17	9·1	7·3	298
9·0 ,,	10	18·9	17·4	296					8	13·8	12·8	334	5	9·3	5·9	21					10	13·4	11·5	284

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	MASULIPATAM				MINICOY								NAGERCOIL											
Time in I. S. T.	1600				0700				1400				0100				0700				1600			
Ht. in Km.	n	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	149	31	1·6	1·1	336	31	2·2	1·5	352	31	3·1	2·1	28	31	2·6	2·2	45	31	5·5	1·8	[illegible]
0·15 a.g.	31	4·8	4·2	153	31	3·6	2·4	345	31	3·9	2·9	350	31	6·1	3·7	30	31	6·3	4·3	43	31	8·3	2·8	[illegible]
0·5 a.s.l.	31	4·8	2·3	158	31	3·2	1·9	357	31	3·9	2·9	4	31	6·5	4·2	32	31	6·9	4·8	33	31	6·3	2·1	[illegible]
1·0 ,,	31	4·2	1·0	108	31	3·6	2·0	49	29	3·9	2·7	54	31	7·8	6·3	54	31	7·2	5·8	45	31	6·1	4·1	[illegible]
1·5 ,,	30	5·3	2·1	45	30	5·9	5·3	83	27	5·5	4·6	70	31	9·0	8·5	64	31	7·9	7·1	55	30	7·7	7·1	[illegible]
2·0 ,,	30	6·5	3·3	44	29	8·3	8·0	80	23	8·0	7·5	78	31	9·6	9·3	62	31	8·0	7·6	61	29	9·2	8·7	[illegible]
2·5 ,,	29	6·5	4·2	39	29	8·4	8·2	75	21	7·1	6·9	62	28	8·7	8·3	62	31	8·0	7·8	60	28	8·9	8·7	[illegible]
3·0 ,,	29	7·0	4·9	27	25	7·1	6·6	77	19	6·3	5·9	64	26	8·3	7·5	66	31	6·9	5·7	67	28	8·5	7·8	[illegible]
4·0 ,,	28	7·2	4·8	2	22	6·7	4·9	91	14	6·0	4·9	84	7	5·8	4·7	86	30	6·8	4·9	87	26	7·1	5·5	[illegible]
5·0 ,,	27	6·6	4·1	314	16	6·3	4·2	82	9	5·9	4·0	89	2	9·3	9·1	42	30	7·6	5·4	76	25	8·5	6·3	[illegible]
6·0 ,,	25	8·3	6·6	302	13	7·6	4·1	47	7	6·8	3·4	85					30	8·2	5·1	62	23	9·4	5·4	[illegible]
7·5 ,,	18	13·1	10·6	291	8	11·5	7·9	357	6	7·4	4·5	45					28	11·2	6·8	43	20	10·7	5·8	[illegible]
9·0 ,,	15	13·4	11·3	293	4	12·5	8·3	20	4	11·9	8·0	48					25	12·5	6·9	32	15	13·6	8·0	[illegible]

Station	NAGPUR												NEW DELHI										
Time in I. S. T.	0100				0700				1600				0100				0700				1600		
Ht. in 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	2·1	0·5	9	31	1·4	0·7	356	31	2·5	1·3	298	31	2·7	1·6	351	31	2·3	1·3	288	31	4·2	2·0
0·15 a.g.	30	7·5	2·1	80	31	5·8	1·3	5	29	4·5	2·1	287	30	8·2	5·2	352	31	6·5	3·4	344	30	4·9	2·2
0·6 a.s.l.	30	8·4	2·2	81	31	7·0	0·6	249	29	4·9	2·5	276	30	8·1	4·7	341	31	7·8	4·5	320	29	5·1	2·5
1·0 ,,	30	7·3	0·9	48	31	7·1	2·6	242	29	5·1	2·4	266	30	7·4	5·1	313	31	7·9	6·0	311	29	6·5	3·7
1·5 ,,	30	6·7	1·1	290	31	6·9	3·3	259	30	4·6	2·7	290	30	7·8	6·6	294	30	8·7	7·6	311	30	6·8	5·1
2·0 ,,	30	6·7	3·1	283	31	7·1	4·1	278	29	5·2	3·1	304	27	9·0	7·9	291	30	10·3	8·9	304	29	8·2	7·0
2·5 ,,	23	7·4	4·6	296	30	7·5	4·5	299	29	6·4	4·2	299	21	9·4	8·3	283	27	11·2	9·9	301	27	9·1	8·3
3·0 ,,	15	7·3	5·3	293	28	8·0	5·2	294	29	7·5	5·4	299	11	7·8	6·8	293	26	12·2	10·9	298	26	10·2	9·2
4·0 ,,	3	11·0	10·9	314	24	8·8	6·1	291	26	10·1	8·2	287	3	3·8	3·3	291	14	12·1	10·5	285	21	12·3	11·7
5·0 ,,	1	7·5	7·5	305	17	7·5	6·0	294	22	10·1	9·1	285					7	13·8	12·1	266	17	12·8	11·9
6·0 ,,					14	8·7	7·1	282	18	12·8	11·3	294					5	10·9	10·5	264	16	14·8	14·2
7·5 ,,					11	11·1	10·4	283	10	13·8	13·3	262					2	11·2	11·2	264	12	18·8	17·3
9·0 ,,					6	15·0	13·4	295	7	12·1	11·4	261					1	12·5	12·5	279	7	14·4	12·1

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	POONA												PORT BLAIR											
Time in I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	0·8	242	31	0·5	0·2	267	31	1·6	1·3	284	31	2·2	1·2	43	31	1·8	1·3	47	31	2·9	2·5	64
0·15 a.g.	31	3·6	2·4	277	31	2·4	0·8	251	31	2·8	1·9	305	29	4·3	3·6	37	30	4·3	3·5	42	31	5·0	4·5	57
0·6 a.s.l.	31	2·6	1·8	251	31	1·3	0·5	255	31	2·1	1·5	302	29	4·9	4·3	47	30	6·1	5·0	58	31	4·6	3·9	42
1·0 „	31	6·2	4·0	330	31	4·6	2·2	40	31	2·9	1·6	311	25	5·0	3·4	64	27	5·8	4·3	67	30	4·5	3·2	51
1·5 „	31	6·6	3·9	351	31	6·1	2·8	45	31	3·1	1·5	316	23	4·5	2·7	76	26	5·4	3·8	86	29	5·0	3·9	75
2·0 „	31	5·4	1·9	25	31	5·7	2·2	34	31	3·3	1·7	308	21	4·0	2·4	88	26	5·2	4·1	98	24	5·0	3·7	88
2·5 „	31	5·9	2·0	80	31	5·5	1·7	46	31	4·3	1·5	294	21	4·9	3·2	87	26	5·1	3·9	100	21	4·9	3·0	90
3·0 „	30	6·7	2·8	81	31	6·0	1·5	32	31	4·5	1·5	301	16	4·0	1·9	87	26	5·0	3·8	109	20	4·2	2·1	87
4·0 „	14	6·5	2·4	9	31	6·2	2·7	318	30	5·5	3·4	312	1	3·5	3·5	195	22	4·8	2·3	117	18	4·2	1·8	133
5·0 „					31	8·1	6·0	306	24	8·3	6·8	299					20	5·3	1·5	96	14	4·5	1·3	145
6·0 „					30	10·1	9·4	306	22	10·8	9·9	305					18	7·1	3·2	70	9	6·5	3·8	47
7·5 „					25	14·7	13·5	302	20	16·7	15·5	299					11	9·5	2·8	359	3	10·8	7·7	5
9·0 „					18	18·9	17·5	293	17	20·4	18·9	293					8	8·2	1·4	340	1	13·0	13·0	340

Station	RAIPUR												SAHARSA											
Time in I. S. T.	0100				0700				1600				0700				1100				1600			
Ht. in Km.	n	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	0·4	139	31	1·3	0·4	220	31	2·4	1·7	291	31	1·8	0·7	55	31	2·5	0·3	64	31	1·8	1·0	265
0·15 a.g.	31	6·2	0·9	85	31	6·1	0·9	153	31	5·3	3·9	282	31	6·7	1·8	91	31	4·8	0·4	82	31	4·7	3·1	271
0·6 a.s.l.	31	6·1	0·3	303	31	7·0	0·8	196	31	5·2	4·1	278	31	6·8	0·9	309	31	5·9	1·0	265	31	5·5	4·2	272
1·0 „	31	4·8	1·6	281	31	6·4	1·4	261	31	5·3	4·0	280	31	6·1	2·9	288	31	6·0	2·9	263	31	6·0	5·1	268
1·5 „	31	4·5	3·1	274	31	5·7	3·6	267	31	5·6	4·0	282	31	6·8	5·2	282	31	6·8	4·7	268	31	7·1	6·6	271
2·0 „	31	5·6	4·1	272	30	6·7	4·6	275	31	5·9	4·0	290	31	8·3	7·0	287	29	7·1	5·5	274	31	9·1	8·7	278
2·5 „	26	6·6	4·8	284	30	7·9	6·0	286	30	6·6	4·3	289	27	8·4	7·4	290	23	8·3	6·8	282	30	11·8	10·4	282
3·0 „	14	7·4	6·3	310	30	9·0	7·0	293	30	7·9	5·7	291	23	10·1	9·4	288	20	10·7	8·9	286	29	12·2	11·1	278
4·0 „	2	8·0	7·1	282	26	10·6	8·1	298	29	10·9	8·7	287	17	11·5	10·5	289					26	14·9	14·3	280
5·0 „	1	16·0	16·0	15	21	11·0	9·1	302	22	12·6	10·6	285	9	11·5	10·5	289					17	16·2	15·3	284
6·0 „					19	11·4	10·0	292	21	15·5	14·1	283	8	12·7	12·2	283					9	12·7	11·0	296
7·5 „					11	11·7	11·0	279	18	22·0	20·7	281	1	18·5	18·5	255					1	5·5	5·5	245
9·0 „					9	15·2	14·0	271	8	21·5	19·4	291												

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	TEZPUR																TRICHINOPOLY							
Time in I. S. T.	0100				0700				1100				1600				0100				0700			
Ht. in Km.	n	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	48	31	1·7	1·6	64	31	2·3	1·7	73	31	2·1	1·4	61	31	1·7	1·4	68	31	1·6	0·8	2
0·15 a.g.	31	6·7	5·6	65	31	5·7	5·5	71	31	6·1	4·9	77	31	5·3	3·0	68	31	5·5	3·9	86	31	4·0	2·3	5
0·6 a.s.l.	31	7·3	4·7	91	31	7·8	6·1	92	31	6·0	4·7	85	31	4·4	1·9	76	31	7·1	5·5	98	31	4·7	2·7	8
1·0 ,,	31	5·7	1·3	148	31	5·8	3·2	101	30	4·4	1·8	114	30	3·4	0·7	227	31	7·3	6·2	94	31	5·1	3·2	9
1·5 ,,	25	4·7	3·8	249	30	4·9	2·3	239	29	4·3	2·7	233	30	5·3	4·4	247	30	6·9	5·5	77	29	6·5	4·2	7
2·0 ,,	21	7·5	7·0	257	28	6·7	6·4	253	25	6·4	5·6	248	28	9·1	8·8	250	28	6·6	5·2	54	29	6·9	6·0	5
2·5 ,,	17	1·8	7·1	253	24	8·4	7·8	254	21	8·0	7·6	253	28	12·2	11·8	250	23	7·9	6·0	51	29	7·8	6·7	4
3·0 ,,	12	9·7	8·0	249	22	10·1	9·4	259	17	9·2	8·2	252	25	14·1	13·8	252	22	6·3	5·3	48	28	7·8	6·9	5
4·0	4	10·5	6·7	269	17	12·0	11·6	264					22	12·7	12·3	261	3	3·8	2·2	73	25	7·0	5·0	6
5·0					10	12·2	10·9	269					18	14·6	13·5	269					22	8·0	4·5	7
6·0					8	13·1	11·6	269					18	16·1	14·4	276					22	8·9	3·0	6
7·5					3	11·2	8·0	273					9	15·2	12·6	288					18	10·5	3·9	2
9·0 ,,					1	27·5	27·5	255					6	22·9	21·0	296					11	10·7	5·2	32

Station	TRICHINOPOLY				TRIVANDRUM				UDAIPUR												VENGURLA			
Time in I. S. T.	1600				0700				0100				0700				1600				0100			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	1	2·7	2·4	85	31	1·4	1·3	23	31	0·8	0·5	303	31	0·5	0·4	272	31	2·5	0·9	257	31	0·5	0·4	35
0·15	1	4·8	4·3	83	31	3·2	2·1	28	31	4·1	1·7	336	31	3·4	1·9	306	31	4·8	1·5	270	31	4·1	3·6	
0·6	1	5·3	4·9	85	31	3·3	1·1	339													31	5·6	5·1	35
1·0	1	5·0	4·6	83	31	3·0	1·5	14	31	5·7	2·4	332	31	5·8	0·6	349	31	4·6	1·6	270	31	7·1	6·2	34
1·5	1	5·4	4·7	70	31	4·6	3·7	50	31	6·2	3·9	273	31	7·4	2·6	277	31	4·8	2·8	264	31	6·0	4·0	1
2·0	1	6·3	5·5	51	31	6·1	5·6	57	30	7·2	5·6	265	30	8·4	5·8	281	31	5·7	4·5	269	29	5·6	3·5	7
2·5	1	6·6	6·0	47	30	6·7	6·0	58	28	8·5	7·4	269	29	9·4	7·3	281	31	7·6	6·7	268	27	6·3	5·0	9
3	1	7·1	6·1	46	30	6·1	5·6	63	21	9·9	8·5	273	27	10·1	7·9	276	31	10·5	9·2	265	23	6·8	5·7	9
4	1	6·9	5·1	51	28	5·7	3·9	80					18	9·6	7·5	277	28	13·0	12·2	276	12	4·8	1·2	4
	9	6·7	4·1	47	20	6·2	3·7	84					13	10·3	9·3	287	25	16·1	14·9	284				
6	9	8·3	3·8	35	18	6·9	3·2	43					6	11·6	10·6	288	19	17·5	17·2	286				
	3	10·0	6·3	19	11	9·4	5·7	347					1	15·0	15·0	270	12	21·1	19·6	292				
	4	11·7	5·9	359	5	12·8	6·9	328									2	8·5	6·9	287				

Table A.—Monthly Mean Directions and Velocities of Upper Winds

Winds upto 9 Km. above sea-level

March 1948

Station	VENGURLA								VERAVAL												VIZAGAPATAM			
Time in I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	60	31	3·9	3·4	262	31	4·1	3·5	326	31	3·1	2·7	354	31	5·9	4·9	271	31	1·2	0·9	253
0·15 a.g.	31	3·9	2·1	71	31	5·0	4·6	281	31	7·5	6·9	318	31	8·6	7·3	346	31	7·8	6·6	266	30	5·1	4·6	250
0·6 a.s.l.	31	5·6	2·4	52	31	4·6	2·8	281	31	7·1	5·9	318	30	9·3	7·3	335	31	6·3	4·7	304	30	5·3	4·7	235
1·0 ,,	31	6·8	4·2	36	31	3·6	1·5	326	31	6·2	4·4	316	30	7·8	5·8	324	31	6·1	4·7	320	30	5·2	2·7	233
1·5 ,,	31	6·8	3·8	41	31	3·8	2·0	23	31	6·4	3·5	303	29	6·7	4·5	295	31	6·4	4·2	317	30	5·1	0·8	355
2·0 ,,	31	5·5	2·6	60	31	4·7	3·6	57	31	7·2	3·6	290	28	6·9	4·3	275	31	7·3	3·9	302	28	5·1	1·8	5
2·5 ,,	31	4·6	2·5	81	31	6·6	5·7	63	13	8·5	3·2	292	27	8·1	4·4	267	31	8·1	4·7	283	27	5·3	1·4	250
3·0 ,,	29	5·7	3·7	68	30	7·3	6·5	64	4	4·9	2·3	58	27	9·9	5·0	261	31	8·8	5·5	279	22	6·2	3·9	21
4·0 ,,	27	5·8	2·6	39	30	6·7	4·5	41					23	10·2	5·1	276	31	10·0	7·1	290	6	5·4	3·9	53
5·0 ,,	24	6·5	4·4	348	28	6·6	4·6	17					19	8·2	6·0	289	28	11·1	9·3	286	1	7·0	7·0	244
6·0 ,,	22	8·2	6·8	323	25	8·3	6·6	347					17	11·3	9·2	290	26	13·0	10·8	290				
7·5 ,,	18	11·5	10·3	317	15	10.2	7·9	310					6	14·8	14·1	286	20	15·9	13·3	296				
9·0 ,,	10	14·1	13·6	310	12	14.5	11·8	335					1	20·5	20·5	310	14	24·7	23·9	300				

Station	VIZAGAPATAM																							
Time in I. S. T.	0700				1600																			
Ht. in Km.	n	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	262	31	3·3	2·7	176																
0·15 a.g.	31	3·9	2·9	271	31	4·6	3·7	176																
0·6 a.s.l.	31	4·9	3·3	233	31	4·1	2·2	207																
1·0 ,,	31	4·9	2·3	220	31	3·8	0·9	227																
1·5 ,,	31	4·6	0·5	319	30	4·7	0·8	310																
2·0 ,,	31	5·3	1·8	352	31	5·6	2·4	343																
2·5 ,,	30	5·5	3·2	5	31	6·3	3·6	340																
3·0 ,,	30	6·9	3·5	3	30	6·7	4·9	347																
4·0 ,,	30	7·1	3·9	322	30	7·1	4·7	332																
5·0 ,,	28	7·1	5·0	297	30	8·7	6·2	300																
6·0 ,,	24	9·7	7·8	297	30	10·7	9·0	294																
7·5 ,,	15	13·0	11·5	273	29	16·3	13·6	284																
9·0 ,,	11	17·3	14·9	270	20	18·4	15·1	278																

Table B.—Monthly Mean Directions and Velocities of Upper Winds

Winds above 9·0 Km. above sea-level

March 1948

Height (Km.)	n	V	v	D
	AHMEDABAD			
10·0	5	28·7	27·8	290
11·0	3	23·3	23·3	282
	ALLAHABAD			
10·0	7	10·6	9·3	273
11·0	4	11·0	9·9	282
	AMBALA			
10·0	7	28·3	26·8	282
11·0	4	26·9	26·1	288
12·0	3	32·2	32·0	292
13·0	2	27·5	27·3	293
14·0	2	27·5	26·9	285
15·0	1	34·0	34·0	285
16·0	1	36·0	36·0	280
	ANANTAPUR			
10·0	20	11·4	9·8	310
11·0	2	9·7	9·7	296
	ASANSOL			
10·0	2	22·3	22·2	252
	BANGALORE			
10·0	8	11·8	8·5	300
11·0	2	15·0	10·4	251
12·0	2	16·0	13·8	276
13·0	2	19·0	17·1	261
	BAREILLY			
10·0	3	28·7	28·2	282
11·0	2	27·7	27·3	286
	BHOPAL			
10·0	2	18·5	18·5	262
11·0	2	22·0	21·9	259
12·0	1	45·5	45·5	255
13·0	1	58·0	58·0	250
	BHUJ			
10·0	1	27·5	27·5	315
	BIKANER			
10·0	1	10·5	10·5	265
	BOMBAY			
10·0	3	25·5	21·2	281
11·0	1	22·0	22·0	300
12·0	1	26·0	26·0	295

Height (Km.)	n	V	v	D
	CALCUTTA			
10·0	1	15·0	240	240
11·0	1	19·5	19·5	235
	COCHIN			
10·0	15	13·3	5·1	327
11·0	5	13·7	7·0	359
	CUTTACK			
10·0	3	34·2	28·0	307
11·0	1	14·5	14·5	310
12·0	1	18·0	18·0	305
13·0	1	18·5	18·5	285
14·0	1	22·0	22·0	300
	DEOLALI			
10·0	5	18·5	16·2	297
11·0	2	34·0	30·8	313
12·0	1	17·0	17·0	265
13·0	1	18·0	18·0	275
	GADAG			
10·0	10	8·0	7·0	296
11·0	1	6·5	6·5	300
12·0	1	4·5	4·5	295
	GAYA			
10·0	2	10·5	9·2	271
	GOPALPUR			
10·0	11	25·5	19·6	290
11·0	3	28·3	21·2	330
12·0	1	21·0	21·0	245
	HYDERABAD (Dn.)			
10·0	23	22·2	19·3	293
11·0	6	30·2	27·2	306
12·0	3	28·8	26·9	312
13·0	3	31·7	27·2	310
14·0	1	36·5	36·5	345
15·0	1	26·0	26·0	335
16·0	1	16·0	16·0	285
	JAMSHEDPUR			
10·0	1	10·5	10·5	250
11·0	1	9·5	9·5	265

Height (Km.)	n	V	v	D
	JHARSUGUDA			
10·0	7	19·6	18·0	276
11·0	4	18·3	13·4	283
12·0	1	29·0	29·0	270
13·0	1	35·5	35·5	260
14·0	1	43·5	43·5	255
15·0	1	52·5	52·5	255
16·0	1	62·0	62·0	260
17·0	1	69·5	69·5	260
18·0	1	56·0	56·0	265
	JODHPUR			
10·0	3	24·8	24·3	282
11·0	2	36·3	36·0	290
	JUBBULPORE			
10·0	10	14·5	12·1	297
11·0	6	17·7	15·6	305
12·0	4	13·0	11·7	258
13·0	4	15·7	14·7	261
14·0	2	24·0	23·9	270
15·0	2	25·3	25·0	267
16·0	2	27·0	26·7	268
17·0	2	33·0	32·5	276
18·0	1	50·0	50·0	270
	MADHOSAGAR			
10·0	4	13·1	10·5	277
11·0	1	8·0	8·0	295
12·0	1	10·5	10·5	285
	MADRAS			
10·0	6	14·4	11·2	316
11·0	3	14·3	12·2	337
12·0	1	15·0	15·0	285
13·0	1	18·0	18·0	260
	MALEGAON			
10·0	7	24·9	22·7	319
11·0	2	27·3	27·1	317
12·0	1	25·5	25·5	295
	MANGALORE			
10·0	8	9·9	8·7	328
11·0	2	5·5	2·7	287
12·0	1	6·0	6·0	215
13·0	1	9·0	9·0	195

Height (Km.)	n	V	v	
	MASULIPATAM			
10·0	17	17·1	12·9	299
11·0	6	29·1	22·7	313
12·0	4	25·6	21·1	290
13·0	2	27·3	21·3	316
14·0	1	35·5	35·5	350
	MINICOY			
10·0	5	11·2	6·4	11
11·0	1	5·5	5·5	105
12·0	1	7·5	7·5	115
13·0	1	8·5	8·5	110
	NAGERCOIL			
10·0	36	11·9	6·1	19
11·0	5	16·9	10·8	332
12·0	4	18·9	16·1	319
13·0	3	19·2	18·7	308
14·0	2	24·5	24·2	294
15·0	1	24·0	24·0	295
16·0	1	27·0	27·0	230
17·0	1	30·0	30·0	230
	NAGPUR			
10·0	8	16·2	11·4	300
11·0	5	12·9	12·3	283
12·0	1	12·0	12·0	265
13·0	1	13·0	13·0	280
14·0	1	16·0	16·0	265
15·0	1	14·0	14·0	290
	NEW DELHI			
10·0	5	20·1	19·2	292
11·0	4	24·1	24·1	286
12·0	2	23·5	23·5	276
13·0	1	22·0	22·0	270
14·0	1	27·5	27·5	266
	POONA			
10·0	16	22·3	18·8	273
11·0	9	26·4	24·7	297
12·0	5	18·1	16·0	294
13·0	2	18·3	18·3	310
14·0	1	20·0	20·0	300

Table B.—Monthly Mean Directions and Velocities of Upper Winds

Winds above 9·0 Km. above sea-level

March 1948

Height (Km.)	n	V	v	D	Height (Km.)	n	V	v	D	Height (Km.)	n	V	v	D	Height (Km.)	n	V	v	D
		RAIPUR					TRICHINOPOLY					UDAIPUR					VIZAGAPATAM		
10·0	15	23·7	20·9	283	10·0	22	12·3	4·6	333	10·0	1	12·0	12·0	300	10·0	16	20·3	16·0	283
11·0	4	28·6	20·1	287	11·0	5	14·8	6·0	275	11·0	1	14·0	14·0	285	11·0	7	22·1	18·3	278
12·0	4	32·3	21·6	277	12·0	4	13·3	5·8	210	12·0	1	14·5	14·5	300	12·0	1	31·5	31·5	330
13·0	3	29·3	24·9	279	13·0	2	10·7	6·2	232										
14·0	2	29.5	29·0	249	14·0	2	9·0	3·3	98			VENGURLA							
15·0	1	47·0	47·0	240	15·0	1	9·5	9·5	180	10·0	11	15·5	12·2	301					
16·0	1	43·0	43·0	260	16·0	1	6·5	6·5	230	11·0	4	14·0	8·9	277					
17·0	1	27·0	27·0	255	17·0	1	5·0	5·0	270	12·0	3	14·3	12·0	249					
					18·0	1	3·0	3·0	310	13·0	2	18·7	18·5	248					
		TEZPUR					TRIVANDRUM												
10·0	6	24·8	21·0	278	10·0	3	7·0	5·1	348			VERAVAL							
11·0	3	23·7	20·0	292	11·0	1	14·5	14·5	310	10·0	4	27·9	27·4	303					

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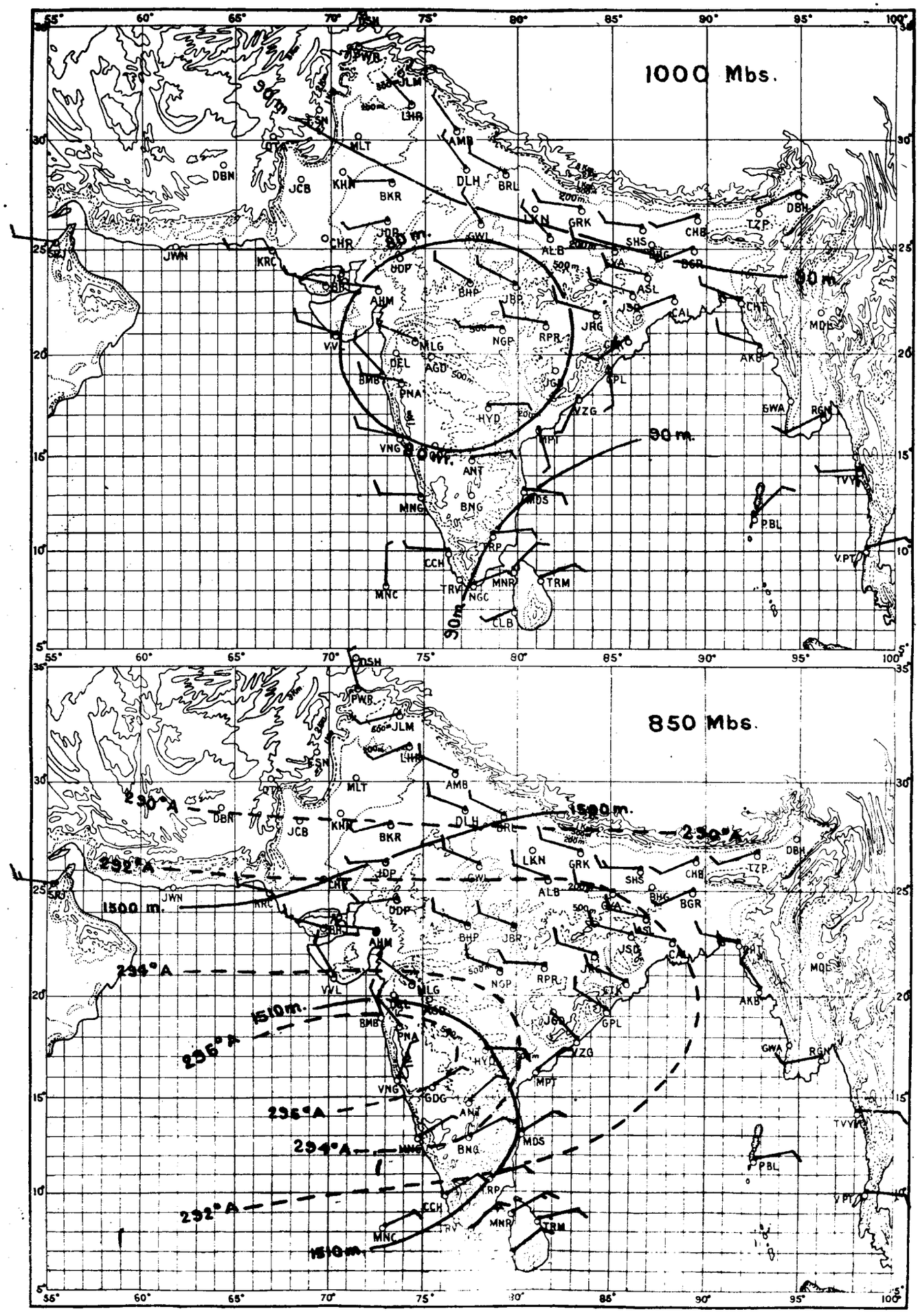
MONTHLY MEAN CONSTANT PRESSURE CHARTS
MARCH 1948.



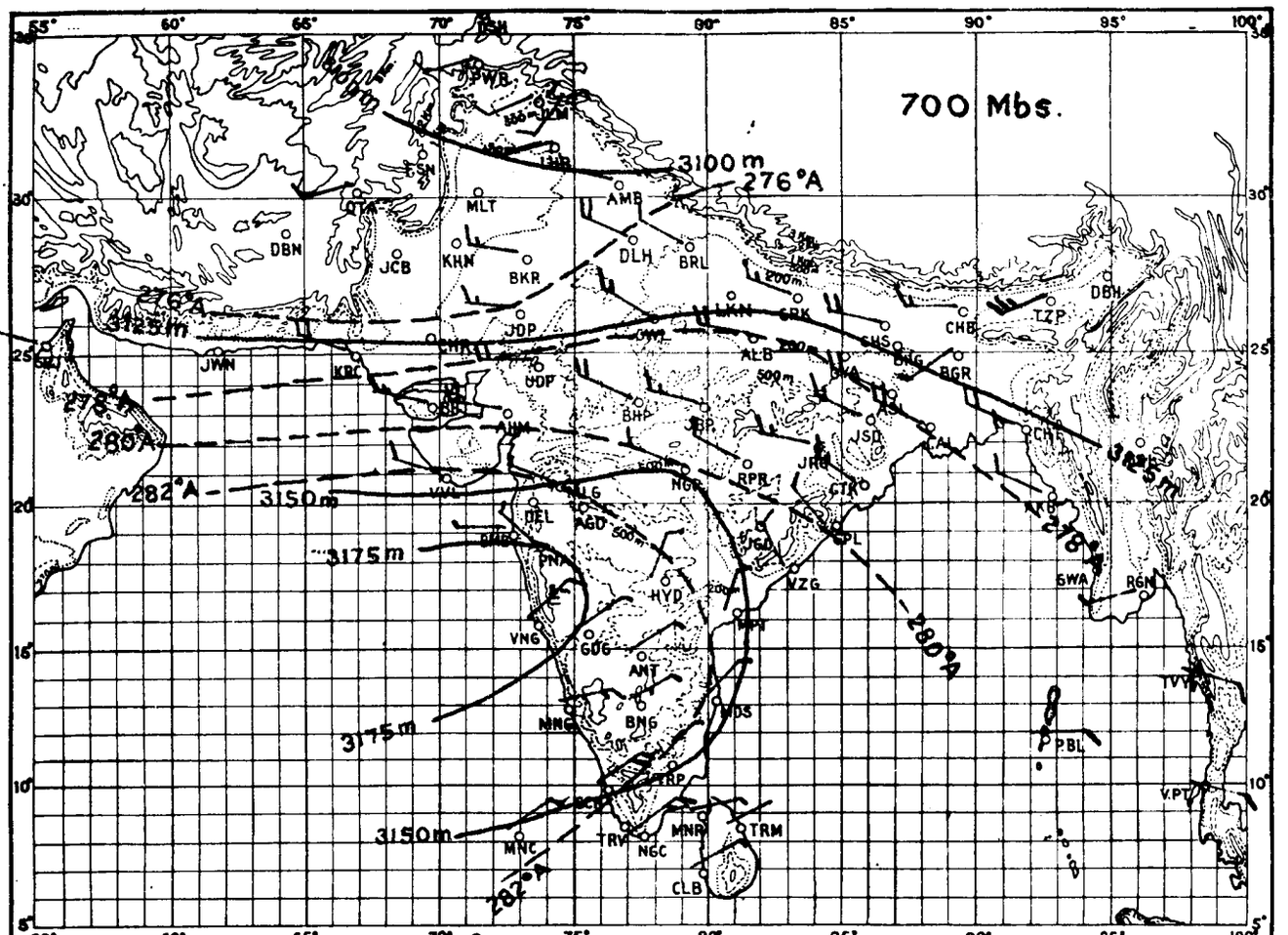
RESULTANT WIND ——— = 5 Knots, ——— = 10 Knots, ——— = 50 Knots.

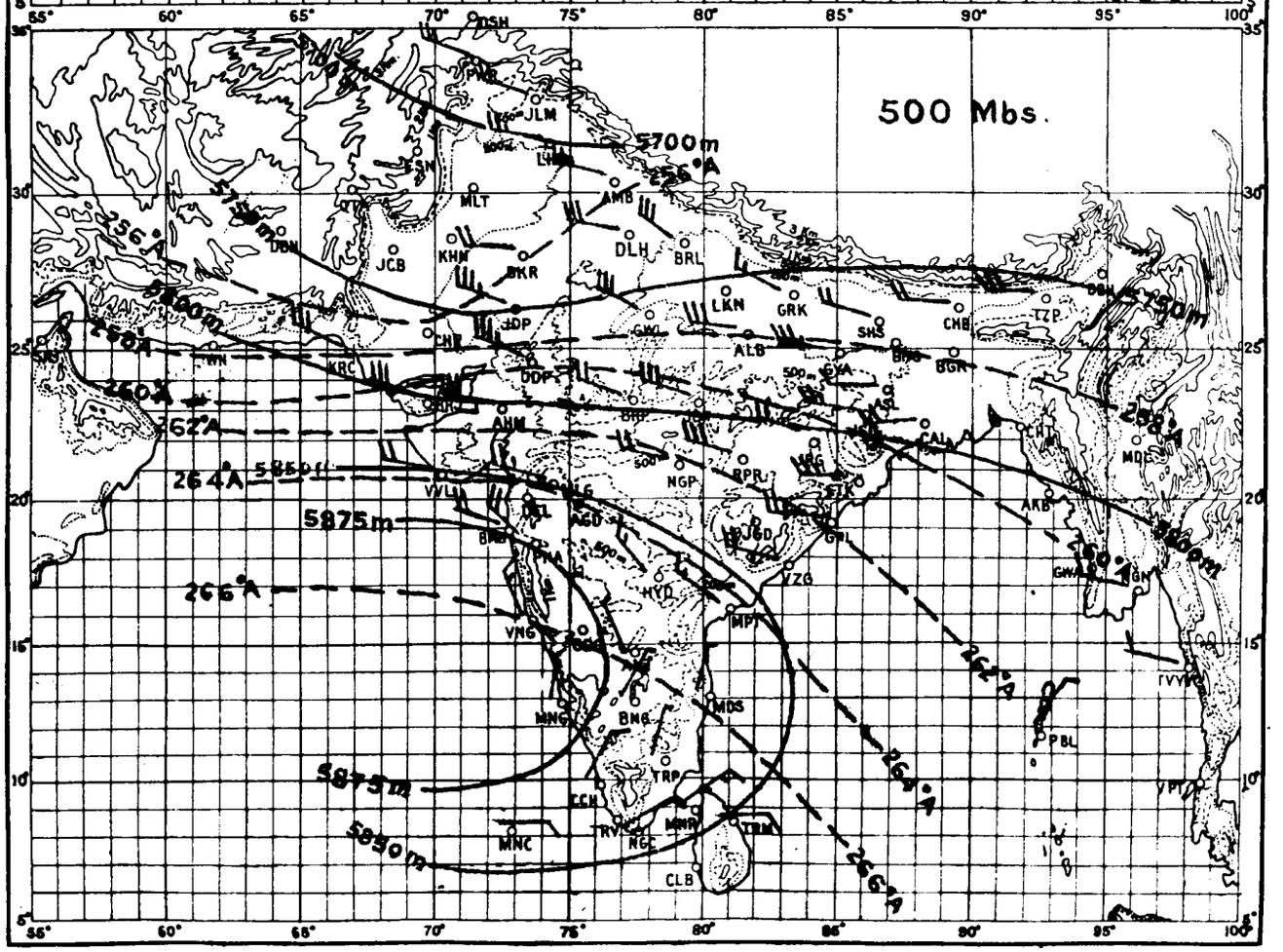
— — — *Isotherms in degrees Absolute.* ——— *Contours in Metres*

G.P.Z.P. POONA, 1951.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

MARCH 1948





RESULTANT WIND —\ = 5 Knots, —\ = 10 Knots, —\ = 50 Knots. G.P.Z.P. POONA, 1951.

— — — Isotherms in degrees Absolute. ——— Contours in Metres.

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INDIA WEATHER REVIEW, 1948

MONTHLY WEATHER REPORT

APRIL

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WEATHER BUREAU

Published by authority of the Government of India.

The chief features of the weather during the month were (*i*) deficient rainfall due to western disturbances and (*ii*) pronounced thunderstorm activity in Assam, Eastern Pakistan and the Peninsula in the second half of the month.

Of the seven western disturbances which affected northwest India and Western Pakistan during the month only the first, second and fourth were active. The first disturbance which began affecting Baluchistan at the end of the last month moved to Kashmir by the 3rd and caused fairly widespread thundershowers in the North West Frontier Province and Kashmir on the 2nd and 3rd and in the West and the East Punjab on the 3rd. The second western disturbance which affected Baluchistan and the adjoining parts of the North West Frontier Province on the 9th moved across north Rajputana and the East Punjab during the next two days. In association with this disturbance, widespread thundershowers occurred in north Baluchistan on the 10th and local thundershowers in the North West Frontier Province and Kashmir on the 11th. The fourth western disturbance moved northeastwards across northeast Baluchistan, the North West Frontier Province and Kashmir between the 15th and 18th and caused local thundershowers in the North West Frontier Province on the 15th and 17th and in Kashmir on the 17th and 18th. The fifth disturbance of the month lay as a secondary over Sind and the adjoining parts of west Rajputana on the 18th, and passed away through the Eastern Himalayas on the 20th after causing local showers in west Rajputana and west Central India on the 18th.

There was good thunderstorm activity in many parts of the Peninsula on the 1st and 2nd and also on several days in the second fortnight. Some of the thunderstorms during the latter period were accompanied by severe squalls. According to newspaper reports, the thunderstorms which passed over the north Malabar district of the Madras Presidency on the 18th, destroyed many banana plantations and tapioca gardens and uprooted numerous trees. The city of Hyderabad (Deccan) is also reported to have experienced a very severe squall on the 26th which uprooted trees and caused dislocation of communications in that city.

Thunderstorm activity was also very well-marked in Assam on most of the days between the 10th and the end of the month and in Eastern Pakistan between the 19th and 25th and on the 30th. A severe thunderstorm in the Jhenidah sub-division in the Jessore district is reported to have caused the death of several human beings and a very large number of cattle.

A depression formed in the Andaman sea with its centre about 180 miles northeast of Port Blair on the morning of the 3rd. It moved towards the Gulf of Martaban and became unimportant by the 6th morning. It did not, however, cause any weather over India or Eastern Pakistan.

Day temperatures were appreciably above normal over the country north of Lat. 20°N. on most days and were markedly so over the region extending from the North West Frontier Province and Baluchistan to Bihar and Orissa during the last few days of the month.

The total rainfall during the month was in large excess in West Bengal, south Hyderabad, Mysore and Madras Deccan and in moderate excess in Assam. It was normal in west Central Provinces and in slight defect in the Bay Islands, Bihar, the Bombay Deccan, north Hyderabad and Malabar and in moderate defect in southeast Madras and north Madras coast. Elsewhere it was in large defect except in east United Provinces, Gujarat and east Central India where no rain fell. Averaged over the plains of India the rainfall during the month was 3 percent in defect.

Maximum temperatures were normal over the country outside Chota Nagpur, Bihar, the United Provinces, the East Punjab, Rajputana, Central India and the Central Provinces where they were above normal.

Minimum temperatures were above normal in Bihar, the United Provinces, the East Punjab, Rajputana, Gujarat and the central parts of the country and were normal elsewhere.

M/H49DGOb (*Price : Re. 1.*)

—	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION	"	"	"		°	°	mb	%	
1. Assam ..	8·88	6·05	+2·83	+47	—0·2	—0·8	+0·6	—1	+0·9
2. West Bengal	2·61	1·73	+0·88	+51	—0·8	+0·8	+2·2	+9	+0·8
3. Orissa ..	0·44	1·02	—0·58	—57	0	+0·8	+1·2	+3	0
4. Bihar ..	0·32	0·61	—0·29	—48	+2·2	+1·6	+2·0	+4	+0·2
5. United Provinces	0·03	0·31	—0·28	—90	+3·2	+3·4	+2·3	+4	—0·9
6. East Punjab	0·15	0·47	—0·32	—68	+3·6	+2·5	+1·6	+5	—0·9
7. Rajputana ..	0·02	0·18	—0·16	—89	+3·3	+2·9	+1·1	—1	—0·8
8. Bombay ..	0·31	0·44	—0·13	—30	+1·2	+1·7	+1·1	+4	—0·3
SUB-DIVISION									
1. Bay Islands..	2·01	2·36	—0·35	—15	0	—0·8	—1·6	—7	—0·1
2. Assam ..	8·88	6·05	+2·83	+47	+0·2	—0·8	+0·6	—1	+0·9
3. West Bengal	2·61	1·73	+0·88	+51	—0·8	+0·8	+2·2	+9	+0·8
4. Orissa ..	0·44	1·02	—0·58	—57	0	+0·8	+1·2	+3	0
5. Chota Nagpur	0·11	0·76	—0·65	—86	+2·5	+1·0	+1·3	+2	+1·0
6. Bihar ..	0·43	0·53	—0·10	—19	+2·0	+2·1	+2·5	+5	—0·5
7. United Provinces, East.	0	0·28	—0·28	—100	+3·0	+3·4	+1·9	+3	—1·1
8. United Provinces, West.	0·05	0·35	—0·30	—86	+3·4	+3·5	+2·7	+5	—0·6
9. East Punjab	0·15	0·47	—0·32	—68	+3·6	+2·5	+1·6	+5	—0·9
10. Kashmir ..	Data incomplete.								
11. Rajputana, West.	0·01	0·19	—0·18	—95	+4·2	+2·4	+2·0	0	—0·9
12. Rajputana, East.	0·04	0·18	—0·14	—78	+2·7	+3·3	+0·5	—1	—0·7
13. Gujarat ..	0	0·03	—0·03	—100	+1·5	+2·3	+1·8	+7	—1·0
14. Central India, West.	0·03	0·19	—0·16	—84	+2·7	+3·0	+1·1	+3	—0·1

—	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION—*contd.*	"	"	"		°	°	mb	%	
9. Central India	0·02	0·24	—0·22	—92	+3·1	+2·6	+2·0	+4	—0·5
10. Central Provinces and Berar.	0·31	0·60	—0·29	—48	+2·2	+3·0	+0·9	+1	+0·5
11. Hyderabad	0·87	0·76	+0·11	+14	+0·3	+0·7	+0·3	+2	+0·9
12. Mysore ..	3·73	2·13	+1·60	+75	—0·7	+0·3	+0·7	+5	+0·7
13. Madras ..	1·27	1·55	—0·28	—18	—0·1	+0·3	+0·1	+1	+0·5
Mean of India	0·88	0·91	—0·03	—3	+1·6	+1·8	+1·1	+2	0
SUB-DIVISION—*contd.*									
15. Central India, East.	0	0·30	—0·30	—100	+3·6	+2·1	+3·1	+6	—0·9
16. Berar ..	0·05	0·27	—0·22	—81	+1·3	+2·9	+0·4	—1	+0·4
17. Central Provinces, West.	0·30	0·33	—0·03	—9	+2·5	+3·1	+0·8	0	+1·0
18. Central Provinces East.	0·42	1·07	—0·65	—61	+2·2	+3·1	+1·1	+3	0
19. Konkan ..	0·23	0·53	—0·30	—57	+1·3	+1·2	+1·4	—1	—0·1
20. Bombay Deccan.	0·70	0·86	—0·16	—19	+0·9	+1·1	+0·3	+1	+0·3
21. Hyderabad, North.	0·49	0·65	—0·16	—25	+0·4	+1·7	—0·6	—2	+0·8
22. Hyderabad, South.	1·37	0·91	+0·46	+51	+0·2	—0·2	+1·1	+6	+1·0
23. Mysore ..	3·73	2·13	+1·60	+75	—0·7	+0·3	+0·7	+5	+0·7
24. Malabar ..	2·79	3·65	—0·86	—24	+0·7	—0·3	+0·4	+1	+0·6
25. Madras, South-east.	1·01	1·55	—0·54	—35	—0·2	+1·0	—0·8	—2	+0·9
26. Madras, Deccan.	1·49	0·78	+0·71	+91	—0·5	—0·5	+2·1	+5	+0·4
27. Madras Coast, North.	0·37	0·66	—0·29	—44	—0·2	+0·3	—0·3	+1	—0·2

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.)

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
BAY ISLANDS—																						
Port Blair ..	259	1002·6	+0·6	999·3	89·1	0	92	17,23,25	73·9	—0·8	70	21	84·5	82·3	76·7	76·0	27·7	—1·6	27·7	69	—7	75
ASSAM—																						
Dibrugarh ..	349	998·6	—0·2	994·1	84·0	+3·0	92	28	66·9	+1·1	63	5 days	73·6	79·2	69·2	72·6	22·3	+0·7	24·4	80	—2	73
Sibsagar ..	317	999·7	+0·2	995·1	83·7	+2·1	92	29	67·4	+1·4	62	1, 4	73·8	79·3	70·3	72·7	23·7	+1·4	25·4	84	0	72
Tezpur ..	258	1002·3	+0·7	996·9	85·6	+0·5	93	12, 29	68·6	+0·7	63	1	74·1	81·4	70·0	72·8	23·2	+1·5	23·7	81	+4	66
Gauhati ..	182	1003·9	+0·5	999·0	86·9	—0·7	93	6, 29	68·8	+0·9	..	..	74·6	82·5	70·2	72·5	23·2	+0·9	22·7	78	+2	61
Dhubri ..	115	1006·3	+1·0	1001·5	84·5	—3·7	93	29	68·6	—1·5	58	5	72·9	83·7	70·6	75·2	24·5	+1·9	26·0	88	+14	66
Silchar ..	96	1007·7	+0·3	1003·5	86·9	—1·1	93	2, 3	68·9	+0·1	65	7	74·9	82·7	70·2	73·7	19·8	—4·4	24·6	79	+1	65
WEST BENGAL																						
Dum Dum ..	33	1006·9	..	1002·8	94·4	..	97	5 days	76·7	..	70	1	83·1	89·7	77·3	78·1	29·3	..	28·0	76	..	59
Calcutta ..	21	1007·4	—0·2	1003·1	95·2	—1·6	99	9	77·5	+2·0	71	26	82·6	89·7	77·8	79·4	30·8	+2·1	29·9	80	+4	62
Saugor Island ..	10	1008·0	—0·2	1004·1	87·4	—2·3	89	18, 30	78·9	—0·5	65	22	84·1	84·3	79·1	79·3	31·7	+1·0	31·9	79	+2	79
Sandheads ..	28	1007·4	—1·0	1003·5	..	..	..	..	..	..	..	..	82·8	83·7	81·8	82·6	36·6	+4·8	37·7	96	+15	95
Midnapore ..	149	1002·6	—0·4	998·0	100·2	—0·7	108	12	75·8	—0·4	68	26	81·2	92·7	76·3	77·1	28·7	+2·9	24·7	79	+12	48
Burdwan ..	106	1003·8	—0·5	998·7	99·6	—0·1	105	12,13,23	76·2	+1·2	70	7	82·3	95·1	76·7	76·6	28·9	+2·8	22·8	75	+4	41
Krishnagar ..	48	1005·9	—0·5	1001·9	98·6	—0·3	106	13	73·9	—0·3	67	7	78·2	93·2	75·3	77·7	28·6	+1·9	25·3	87	+19	50
Asansol ..	414	993·0	—0·5	988·0	103·3	+1·5	111	13	75·5	+1·3	70	1, 19	83·9	98·5	74·4	74·2	24·7	+4·1	17·7	63	+10	31
Berhampore ..	62	1005·9	—0·1	1000·5	100·0	+1·0	109	13	74·6	+0·6	67	1	81·9	93·9	75·0	74·1	26·4	+1·5	19·6	72	+5	40
Malda ..	103	1004·5	+0·2	999·2	97·4	—0·1	106	13, 16	73·2	+1·9	66	2	80·8	94·3	73·2	73·4	24·5	+2·0	18·5	69	+16	36
Jalpaiguri ..	271	1000·1	+0·5	995·0	85·3	—4·2	92	7	69·7	+1·6	64	2	73·8	83·1	69·5	73·2	23·1	+1·1	23·4	80	+7	61
ORISSA—																						
Balasore ..	65	1005·8	—0·2	1001·6	96·1	—0·9	102	12, 13, 22	76·8	+0·8	71	30	83·4	87·3	77·8	78·9	30·0	+2·3	29·9	77	+5	69
Chandbali ..	20	1007·7	—0·5	1003·6	99·2	+0·6	..	..	77·3	+0·6	..	..	83·3	88·6	78·6	78·8	31·3	+2·0	29·1	80	+5	64
Puri ..	20	1008·0	—0·2	1004·2	87·1	—0·6	89	2, 4, 27	80·5	+1·4	74	26	83·0	83·8	79·4	80·0	32·7	+1·3	33·1	84	+1	84
Gopalpur ..	56	1006·2	—0·6	1002·8	87·1	—1·1	90	4	77·1	0	72	1, 3	81·4	82·6	77·8	79·1	30·9	+0·9	32·4	83	+2	84
Cuttack ..	87	1005·1	—0·8	1000·5	99·6	—1·6	105	23	78·1	+0·6	72	26	82·4	92·0	77·6	78·5	30·1	+1·6	27·1	79	+6	53
Angul ..	455	992·4	—0·5	987·0	102·6	+0·6	109	26	75·6	+0·3	69	28	81·0	98·4	74·0	71·7	25·5	+1·5	14·4	70	+6	22
Sambalpur ..	486	991·3	—0·4	985·7	106·1	+3·1	110	13, 16, 26	76·5	+1·6	69	4, 10	85·6	103·7	70·5	71·6	18·7	—1·0	11·9	45	—6	16
CHOTA NAGPUR—																						
Jamshedpur ..	423	992·6	—0·9	987·4	104·2	+2·2	109	12, 13	76·3	+2·5	70	9	84·1	100·4	71·8	71·1	20·9	+2·1	12·5	53	+4	19
Chaibasa ..	742	982·1	—0·5	976·8	104·8	+2·7	110	13	76·4	+1·7	69	1	82·4	100·2	74·2	79·0	25·2	+4·2	24·2	66	+10	37
Ranchi ..	2,150	935·3	—0·6	931·6	99·1	+3·4	104	4	70·6	—0·7	59	9	82·7	95·1	66·3	69·9	14·9	+1·3	14·1	41	+2	27
Hazaribagh ..	2,006	940·0	—0·9	936·1	98·6	+1·4	103	30	72·1	+0·3	64	9	86·3	94·3	64·3	65·3	11·1	—1·6	8·8	32	+1	1
Daltonganj ..	728	962·3	—0·8	977·1	104·1	+2·7	109	30	71·2	+1·2	61	8	85·4	100·9	67·6	70·7	14·9	+0·3	12·0	37	—5	1
Dhanbad ..	839	978·9	..	..	102·8	..	108	13	75·0	..	69	4, 9	83·3	..	69·5	..	18·3	..	..	49	..	..
BIHAR—																						
Purnea ..	124	1003·8	+0·1	998·3	96·9	+0·6	105	16	71·5	+2·3	60	8	80·2	93·6	71·8	73·3	22·8	+2·1	18·6	66	+3	3
Darbhanga ..	161	1002·4	+0·3	996·8	98·9	+1·9	106	16	72·1	+2·3	61	8	81·0	96·8	71·8	74·1	22·5	+1·7	18·5	61	+2	3
Motihari ..	218	999·6	—0·1	994·4	98·4	+1·4	103	4 days	70·7	+3·0	59	8	83·5	93·2	71·8	73·8	21·6	+1·9	19·5	54	+7	3
Patna ..	173	1000·7	—0·7	995·9	101·9	+3·0	106	13, 16	75·3	+1·8	70	8, 9	82·8	98·8	68·7	71·3	17·6	+0·2	13·6	47	0	3
Dehri ..	352	994·1	..	989·6	104·9	..	109	12, 30	76·9	..	68	9	85·8	101·7	67·9	72·1	11·8	..	13·5	37	..	3
Gaya ..	365	993·8	—1·0	989·0	105·2	+3·3	108	8 days	76·1	+3·4	67	9	86·9	101·9	66·9	69·2	13·5	+2·5	9·6	31	+6	1
Naya Dumka ..	439	990·1	—0·9	985·2	102·0	+2·1	110	13	74·3	+0·5	67	19	83·0	95·7	73·2	71·3	23·4	+3·9	15·0	59	+9	1
Sabour ..	122	1003·2	—0·2	997·7	100·2	+1·0	106	13, 16	72·2	+2·6	65	9	82·7	96·9	71·9	71·8	21·7	+4·6	18·2	58	+11	1

Cloud amount (tenths of sky)			Rainfall, inches				No. of rainy days, (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :— 8 hrs. I. S. T.									17 hrs. I. S. T.									STATION
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	calm	N	NE	E	SE	S	SW	W	NW	calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													BAY ISLANDS—
4·5	—0·1	5·9	2·01	—0·35	1·16	30	5	—0·1	5·2	—0·7	4	4	3	4	3	0	5	7	0	0	1	8	9	1	0	6	3	2	Port Blair.
																													ASSAM—
6·8	+0·4	7·1	12·95	+3·46	2·21	15	12	—1·6	1·7	+0·1	5	4	14	0	0	2	0	0	5	2	5	3	0	1	1	1	0	17	Dibrugarh.
7·3	—0·2	7·2	11·06	+0·94	2·87	12	17	+2·9	3·1	+0·4	5	8	5	3	1	1	1	1	5	6	6	3	0	0	2	0	4	9	Sibsagar.
6·7	+1·6	4·9	8·00	+1·99	1·34	13	12	+1·3	4·5	+0·3	1	10	12	1	0	1	3	0	2	1	10	7	0	0	0	2	2	8	Tezpur.
6·6	+1·9	4·9	6·19	+0·48	2·23	22	11	+1·0	3·0	+1·0	3	7	4	1	4	4	4	2	1	2	8	9	1	3	3	2	1	1	Gauhati.
4·5	—0·2	2·4	16·30	+10·88	7·78	29	15	+6·9	6·3	0	3	9	9	0	5	0	0	0	4	1	11	8	0	5	1	0	0	4	Dhubri.
6·5	+1·3	4·6	8·41	—6·76	1·80	15	15	+0·7	..	..	0	5	11	5	1	0	0	0	8	0	2	5	1	1	2	1	3	15	Silchar.
																													WEST BENGAL—
4·9	..	3·8	0·98	..	0·60	30	2	..	..	..	0	0	1	5	16	7	0	0	1	1	0	1	2	19	7	0	0	0	Dum Dum.
4·5	+0·7	3·9	0·73	—1·02	0·63	26	1	—2·0	5·1	+0·2	0	0	0	2	10	15	0	0	3	0	0	0	1	19	9	1	0	0	Calcutta.
5·3	—0·2	5·0	1·58	+0·41	0·80	20	3	+0·9	19·5	+5·8	0	0	0	1	9	20	0	0	0	0	0	0	0	20	10	0	0	0	Saugor Island.
3·6	—0·3	3·3	0	—0·58	0	..	0	—1·1	..	..	0	0	0	0	3	25	2	0	0	0	0	0	1	10	19	0	0	0	Sandheads.
3·2	+0·6	4·6	2·49	+0·79	0·70	26	5	+1·9	5·9	+2·2	0	0	0	0	19	9	0	1	1	0	3	0	0	20	3	0	1	3	Midnapore.
2·5	—0·1	3·1	0·76	—1·18	0·60	7	2	—1·2	7·2	+4·2	0	0	2	3	11	13	1	0	0	0	0	4	5	12	9	0	0	0	Burdwan.
2·0	+1·5	3·6	5·97	+3·69	2·46	30	7	+3·3	6·8	+1·7	0	0	1	20	4	3	0	0	2	0	0	1	14	4	8	0	3	0	Krishnagar.
1·8	—1·0	3·0	1·31	+0·48	0·71	28	2	+0·2	4·9	0	0	0	0	9	5	2	6	1	7	0	0	2	5	2	2	5	8	6	Asansol.
4·6	+0·6	3·6	1·56	+0·08	1·24	30	2	—0·7	4·1	+0·6	0	1	5	4	13	5	0	0	2	0	1	3	5	9	3	1	3	5	Berhampore.
4·2	+1·8	1·6	0·30	—0·88	0·30	19	1	—1·0	5·7	+0·7	0	3	9	6	7	4	1	0	0	2	7	8	4	2	0	3	4	0	Malda.
6·9	+3·6	4·4	10·38	+6·69	2·62	30	9	+3·5	5·2	+2·8	5	5	18	1	0	0	0	1	0	0	8	14	2	0	0	0	0	6	Jalpaiguri.
																													ORISSA—
4·0	+0·8	6·1	1·17	—0·58	0·68	30	4	+0·5	8·3	+2·9	0	0	0	0	13	15	0	0	2	1	0	0	12	15	2	0	0	0	Balasore.
3·5	—0·5	2·5	(l) 0·49	—0·95	..	..	(l) 1	..	(m) 9·1	+0·4	0	0	0	1	10	7	1	0	0	1	0	0	6	13	0	0	0	0	Chandbali.
5·0	+1·0	5·4	0·01	—0·57	0·01	28	0	—1·0	17·5	+5·0	0	0	0	1	0	27	2	0	0	0	0	0	1	7	22	0	0	0	Puri.
1·8	—0·2	5·4	0·27	—0·43	0·23	14	1	—0·4	(i) 17·4	+5·0	1	0	0	0	16	11	1	1	0	1	0	0	0	20	9	0	0	0	Gopalpur.
3·4	—0·5	5·0	0·69	—0·38	0·32	26, 28	2	+0·3	4·8	+1·2	0	0	0	0	4	4	3	0	19	0	0	0	2	16	8	0	0	4	Cuttack.
3·1	—0·4	5·5	0·45	—0·58	0·30	26	2	—0·2	5·7	+1·0	3	3	4	3	2	2	3	5	5	1	4	5	5	6	2	1	2	4	Angul.
2·4	0	3·8	0·02	—0·57	0·02	26	0	—1·6	4·0	+1·1	2	4	2	4	3	7	1	3	4	3	3	0	0	3	6	6	4	5	Sambalpur.
																													CHOTA NAGPUR—
1·7	—0·5	3·5	0	—0·90	0	..	0	—2·1	4·4	+1·1	0	0	5	1	0	3	9	5	7	3	1	2	4	0	4	3	8	5	Jamshedpur.
..	..	..	0·39	—0·67	0·25	29	2	—0·2	2·2	—0·3	0	0	0	4	4	8	0	0	14	4	2	1	4	1	4	2	4	8	Chaibasa.
1·1	—1·1	1·2	0·05	—0·84	0·05	20	0	—2·4	4·2	—0·7	1	0	0	1	6	7	1	2	12	2	0	0	0	5	2	0	7	14	Ranchi.
3·8	+1·5	4·4	0·08	—0·47	0·04	26, 29	0	—1·5	6·5	0	0	0	0	2	5	10	3	6	4	3	1	0	2	1	0	0	22	1	Hazaribagh.
0·9	—0·7	3·1	0·03	—0·38	0·03	30	0	—0·8	3·5	0	2	2	5	5	1	0	0	1	14	3	0	3	0	0	0	2	22	0	Daltonganj.
..	..	..	0·01	..	0·01	26	0	..	5·5	..	0	0	3	5	1	9	5	0	7	..	..	..	..	..	..	..	..	..	Dhanbad.
																													BIHAR—
3·2	+0·5	1·2	0·08	—1·20	0·08	30	0	—1·8	4·9	+1·5	0	7	19	2	0	0	0	0	2	0	5	10	3	0	0	6	0	6	Purnea.
0·9	—0·8	1·0	0·30	—0·38	0·28	29	1	—0·3	5·4	+1·6	0	6	20	0	0	0	3	0	1	0	0	12	1	0	0	8	5	4	Darbhanga.
0·6	—0·8	1·3	0·48	—0·34	0·48	29	1	—0·4	3·4	—0·5	0	0	26	0	0	0	2	0	2	0	0	4	0	0	0	6	0	20	Motihari.
0·6	—1·0	0·3	0	—0·27	0	..	0	—0·6	5·8	+1·5	0	9	8	5	0	3	3	0	2	2	9	1	0	0	0	6	11	1	Patna.
0·6	..	0·4	0·07	—0·16	0·07	29	0	—0·6	4·1	..	0	3	2	1	4	4	1	3	12	3	2	1	1	0	1	0	20	2	Dehri.
1·0	—0·6	1·0	0	—0·24	0	..	0	—0·6	(m) 6·0	+0·2	1	2	2	5	8	8	2	0	2	2	2	2	0	0	1	3	20	0	Gaya.
1·8	—0·2	2·4	3·84	+3·00	1·60	19	4	+2·1	3·4	+0·8	0	2	2	15	0	7	0	0	4	1	2	1	9	1	14	0	2	0	Naya Dumka.
1·7	—0·7	0·3	0	—0·72	0	..	0	—1·3	6·0	0	2	4	17	1	1	3	2	0	0	3	3	6	2	0	0	9	6	1	Sabour.

(i) mean of 22 days.

(l) Observations for 19 days.

(m) mean of 18 days.

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Pressure: Departure from normal.	Pressure: Mean 17 hrs. I. S. T.	Maximum temperature, °F: Mean.	Maximum: Departure from normal.	Maximum: Highest.	Maximum: Date.	Minimum temperature, °F: Mean.	Minimum: Departure from normal.	Minimum: Lowest.	Minimum: Date.	Dry bulb temperature, °F: Mean 8 hrs. I. S.	Dry bulb: Mean 17 hrs. I. S. T.	Wet bulb temperature, °F: Mean 8 hrs. I. S. T.	Wet bulb: Mean 17 hrs. I. S. T.	Vapour pressure, millibars: Mean 8 hrs. I. S. T.	Vapour pressure: Departure from normal.	Vapour pressure: Mean 17 hrs. I. S. T.	Relative humidity, %: Mean 8 hrs. I. S. T.	Relative humidity: Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
U. P., EAST—																					
Gonda ..	360	993·7	+0·1	989·7	102·4	+2·6	107	12	72·6	+4·1	65	6, 8, 9	82·1	99·4	66·3	68·9	14·9	+2·7	10·0	41	+6
Gorakhpur ..	254	997·9	—0·7	993·2	101·9	+2·6	106	12	74·9	+3·6	67	9	82·2	100·0	69·1	73·3	18·3	+1·1	16·3	49	0
Basti ..	230	997·6	—1·1	993·2	104·8	+3·0	109	25	74·3	+2·7	65	2	85·1	103·5	70·2	76·1	18·3	+2·7	18·1	45	+3
Allahabad (Bamrauli).	322	995·0	—1·4	990·7	105·0	+2·4	111	30	75·6	+4·2	67	2	85·4	103·6	65·8	69·5	13·0	—0·1	9·3	31	—4
Fatehpur ..	375	993·6	..	989·4	104·5	+3·5	113	30	74·1	+4·2	63	1	85·2	100·7	67·1	71·7	14·5	—0·9	10·4	38	—2
Kanpur ..	413	992·5	—0·5	988·7	104·2	+4·8	113	30	73·6	+3·0	64	3, 7	83·8	101·9	66·0	69·9	13·7	+1·4	10·6	35	—1
Lucknow ..	371	993·7	—0·7	989·5	103·2	+1·8	108	4 days	73·5	+2·7	64	8	81·7	100·8	68·5	73·1	17·4	+3·2	15·6	49	+10
Bahraich ..	407	992·8	—0·2	988·7	102·0	+3·1	106	4 days	72·2	+2·4	64	7	82·1	99·3	71·6	79·4	21·6	+5·4	25·0	58	+10
U. P., WEST—																					
Jhansi ..	324	978·5	—1·6	974·8	104·5	+1·9	113	30	75·7	+3·5	67	1	80·4	103·5	67·0	75·3	16·5	+4·3	17·1	46	+14
Agra	558	987·9	—0·7	984·4	102·7	+2·7	111	31	73·6	+4·0	64	7	80·9	101·9	65·0	70·7	13·9	+3·3	11·8	40	+9
Mainpuri ..	510	989·4	—0·2	986·1	104·7	+3·5	114	30	73·1	+3·9	62	7	81·5	102·7	67·9	74·3	17·3	+4·2	15·9	49	+10
Aligarh ..	615	985·4	..	981·8	102·7	+6·1	112	29	72·6	+4·5	60	7	80·6	101·1	64·8	67·7	13·5	+3·6	9·4	38	+6
Bareilly ..	568	986·3	—1·2	982·7	101·7	+3·9	109	30	72·5	+3·7	64	1, 8	81·0	99·6	65·5	69·1	14·5	—0·8	10·5	40	—7
Roorkee ..	909	975·2	—1·3	971·7	98·4	+2·7	106	29, 30	66·8	+1·8	57	1, 3	75·2	96·9	62·9	67·6	14·0	+1·4	10·0	48	+4
Dehra Dun ..	2,239	931·7	—0·3	928·9	93·0	+3·1	101	30	65·5	+3·0	57	7	76·2	91·0	62·3	65·5	13·3	+2·6	11·1	45	—2
EAST PUNJAB—																					
New Delhi ..	714	981·8	—1·3	978·2	100·1	+3·5	100	29, 30	72·5	+4·8	61	7	79·8	98·7	62·1	67·1	11·1	—1·0	8·5	33	—7
Hissar ..	725	982·2	—0·6	979·2	101·0	+3·2	113	28	67·5	+0·8	57	7	73·0	98·9	62·7	72·0	14·9	+2·0	14·6	55	+11
Ambala ..	892	975·4	—1·1	972·4	100·6	+4·6	111	29, 30	71·0	+4·6	61	8	76·9	97·5	64·4	69·0	15·1	+2·6	11·3	47	+7
Ludhiana ..	812	978·4	—1·0	976·9	98·9	+3·2	111	28, 29	66·7	—0·2	56	7	74·0	96·0	64·0	69·7	15·9	+2·8	13·3	57	+8
KASHMIR—																					
Srinagar ..	5,205	843·2	+1·0	840·5	65·4	—1·4	82	27, 28	47·1	+2·5	40	1, 5	51·9	64·0	49·2	54·6	11·0	+0·4	11·1	84	—4
Gulmarg ..	8,569	(closed during winter months).																			
Dras (R) ..	10,059	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Leh ..	11,503	705·3	+1·5	704·2	36·7	—4·7	43	19	..	..	..	..	26·6	35·5	26·0	34·5	4·5	—0·2	6·4	93	+6
Skardu (R) ..	7,505	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gilgit (R) ..	4,890	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Misgar (R) ..	10,190	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..
RAJPUTANA, WEST—																					
Sri Ganganagar		987·1	..	984·1	100·0	+4·6	112	27, 28	66·8	+4·0	54	6	78·5	97·6	64·2	70·4	14·3	+2·8	13·3	46	+1
Bikaner ..	734	981·7	—0·5	975·0	102·3	..	113	26, 27	72·9	..	58	7	79·0	101·5	65·2	75·8	15·1	..	19·0	45	..
Phalodi ..	783	979·9	..	975·5	103·1	..	112	26	74·6	..	65	7	77·1	102·3	..	..	..	..	..	..	..
Jodhpur ..	736	982·6	+0·8	979·1	103·2	+3·8	112	26	71·4	+0·6	61	13	80·0	101·5	65·9	75·3	15·5	+4·9	18·3	45	+10
Barmer ..	638	985·5	—0·8	982·2	104·6	+11·3	112	26	77·0	+2·7	69	8	82·5	103·1	68·2	73·9	16·8	—1·8	15·1	46	—10
RAJPUTANA, EAST—																					
Sikar ..	1,406	959·5	..	956·4	100·7	..	110	26, 27	70·1	..	58	7	79·1	99·1	62·8	68·9	12·3	..	10·4	37	..
Jaipur ..	1,431	959·3	—0·7	956·0	100·6	+2·4	110	2	72·5	+3·7	62	8	83·5	98·9	63·1	66·0	10·6	+0·3	6·9	27	—4
Ajmer ..	1,593	954·5	—0·3	951·0	98·9	+1·6	108	26	75·2	+3·7	61	8	85·1	97·5	68·0	71·2	16·5	+4·0	14·8	40	+7
Kotah ..	843	979·0	—0·5	974·7	105·0	+3·3	113	29	78·4	+2·6	70	8, 9	85·5	103·2	63·7	68·3	10·1	—0·4	7·6	26	—2
Jhalawar ..	1,053	971·4	—1·5	967·6	103·8	+3·3	111	28, 29	73·3	+3·2	64	9	81·0	101·9	60·8	66·3	9·1	—1·9	6·2	25	—7
Udaipur ..	1,910	944·3	..	941·1	98·6	..	107	6, 27	70·8	..	63	8	79·0	96·6	64·0	68·8	14·3	..	12·4	43	..

(R) Register not received.

Cloud amount (tenths of sky.)			Rainfall, inches.				Number of rainy days, (0·10" or more.)		Wind velocity, miles per hour.		Wind direction—Number of winds from :— 8 hrs. I. S.T.									17 hrs. I. S. T.									STATION.
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST—
0·7	—1·1	1·6	0	—0·35	0	..	..	—0·1	5·0	—0·2	1	1	16	0	0	0	3	9	0	1	0	2	0	0	0	3	19	5	Gonda.
0·2	—1·2	1·1	0	—0·37	0	..	..	—0·7	4·7	+1·9	2	7	13	0	1	0	6	1	0	2	1	4	0	0	1	20	1	1	Gorakhpur.
0·1	—1·5	0·8	0	—0·20	0	..	..	—0·4	5·9	+2·6	0	2	6	2	2	14	2	0	2	0	3	0	0	0	0	15	12	0	Banaras.
0·7	—1·1	1·7	0	—0·17	0	..	..	—0·4	4·4	+0·3	0	3	2	1	3	9	8	0	4	1	1	0	0	0	0	19	9	0	Allahabad (Bamrauli)
0·8	—0·8	1·7	0	—0·33	0	..	..	—0·6	4·0	+0·5	0	1	3	4	2	2	5	8	5	1	1	1	0	0	1	0	21	5	Fatehpur.
0·3	—0·5	0·7	0·01	—0·21	0·01	20	..	—0·6	7·7	+0·4	1	1	5	2	0	6	8	4	3	3	0	1	0	0	0	10	15	1	Kanpur.
0·5	—1·0	1·3	0	—0·25	0	..	..	—0·6	2·7	+0·3	0	1	8	1	2	1	5	2	10	3	1	1	0	0	1	15	6	3	Lucknow.
0·8	—1·5	1·1	0	—0·32	0	..	..	—0·6	5·1	+1·6	0	0	9	8	0	2	6	3	2	0	0	1	2	0	4	10	8	5	Bahraich.
																													U. P., WEST—
0·9	—0·5	2·1	0	—0·14	0	..	0	—0·5	1·1	—2·5	0	1	1	0	1	1	9	8	9	0	0	0	0	0	0	15	7	8	Jhansi.
1·0	—0·6	0·8	0·07	—0·14	0·07	19	0	—0·6	2·6	—1·3	0	1	0	0	1	1	7	3	17	1	0	0	0	1	0	3	15	9	Agra.
1·0	—0·8	1·2	0	—0·23	0	..	0	—0·7	3·8	+1·5	0	1	0	3	3	1	14	3	5	0	1	0	0	0	2	15	11	1	Mainpuri.
1·3	0	1·7	0	—0·49	0	..	0	—1·0	5·6	+0·6	2	0	1	3	1	1	11	5	6	2	0	0	1	0	1	4	21	1	Aligarh.
1·8	—0·2	2·3	0	—0·27	0	..	0	—0·6	4·5	+1·9	2	2	5	4	0	3	9	3	2	2	1	0	1	0	1	17	8	0	Bareilly.
1·0	—0·9	1·8	0·03	—0·42	0·02	3	0	—1·1	3·8	+1·0	0	1	0	9	0	2	0	9	9	0	0	0	1	1	3	0	24	1	Roorkee.
1·6	—1·3	2·4	0·21	—0·44	0·11	3	1	—0·7	2·1	—0·3	1	4	0	1	0	0	6	3	15	2	0	0	0	2	9	9	3	5	Dehra Dun.
																													EAST PUNJAB—
1·8	—0·1	2·8	0	—0·33	0	..	0	—0·9	8·6	..	4	0	2	1	0	1	13	7	2	5	5	1	0	0	1	3	14	1	New Delhi.
0·4	—1·3	0·8	0·10	—0·16	0·10	3	1	+0·1	4·5	+0·2	3	1	0	0	2	6	6	7	5	7	1	0	0	0	2	7	12	1	Hissar
1·1	—1·2	1·2	0·35	—0·29	0·21	4	2	+0·4	..	..	0	0	0	0	0	0	0	23	7	0	0	0	0	0	0	0	28	2	Ambala.
1·4	—0·8	2·3	0·13	—0·52	0·08	11	0	—1·3	3·0	+1·0	0	1	2	1	1	0	9	9	7	4	2	0	0	0	1	3	19	1	Ludhiana.
																													KASHMIR—
6·4	+1·3	6·4	4·55	+0·90	0·93	19	9	+1·2	29	—0·3	2	1	1	4	1	1	4	7	9	5	1	1	0	1	1	9	7	5	Srinagar.
																													Gulmarg.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Dras (R)
5·9	+1·0	5·9	5·94	+1·85	1·28	5	12	+4·0	0·1	—1·3	0	0	0	0	0	0	1	0	29	2	0	0	0	0	0	0	0	28	Leh.
																													Skardu (R)
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Gilgit (R)
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Miagar (R)
																													RAJPUTANA, WEST—
0·4	—1·5	1·1	0	—0·30	0	..	0	—0·9	3·6	—1·9	5	3	2	3	2	3	2	0	9	4	1	1	0	1	3	5	12	3	Sri Ganganagar.
0·5	—1·2	1·3	0·03	—0·16	0·03	18	0	—0·5	4·4	—0·3	0	5	1	1	0	8	2	1	11	1	1	0	0	0	13	3	11	1	Bikaner.
1·5	..	3·1	0	—0·12	0	..	0	—0·3	8·2	..	1	1	2	4	5	12	1	0	4	1	2	0	3	2	8	4	9	1	Phalodi.
1·6	—0·5	2·0	0·01	—0·12	0·01	18	0	—0·5	3·7	—3·1	0	5	0	0	0	6	3	0	16	2	1	0	0	0	12	4	3	8	Jodhpur.
1·2	—0·4	1·2	0	—0·19	0	..	0	—0·4	4·8	—1·0	1	0	0	0	2	5	8	5	9	1	1	0	2	3	10	5	3	5	Barmer.
																													RAJPUTANA, EAST—
1·3	..	2·4	0	..	0	..	0	..	3·4	..	1	0	5	7	2	3	4	0	8	2	0	0	0	1	2	17	7	1	Sikar.
1·3	—0·5	2·1	0	—0·17	0	..	0	—0·5	4·4	—0·2	5	5	6	0	0	1	0	5	8	7	0	0	0	0	1	8	13	1	Jaipur.
1·1	—0·6	2·1	0	—0·15	0	..	0	—0·4	5·6	+1·1	1	2	0	0	1	8	8	1	9	1	1	0	1	1	11	12	3	0	Ajmer.
0·8	—1·0	1·7	0	—0·21	0	..	0	—0·5	3·2	+0·5	0	0	2	0	0	1	6	5	16	3	1	0	0	0	1	11	8	6	Kotah.
0·7	—0·7	2·0	0·19	—0·06	0·19	19	1	+0·5	2·2	—1·3	1	1	0	0	0	1	4	1	22	1	1	3	0	0	0	10	8	7	Jhalawar.
0·8	..	2·8	0·01	—0·10	0·01	18	0	—0·2	3·1	..	2	3	1	0	0	0	7	9	8	1	3	1	2	3	10	6	1	3	Udaipur

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
GUJARAT— ..																						
Deesa* ..	466	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhuj ..	343	997·3	—0·1	994·3	101·3	+1·5	105	7 days	74·3	+3·0	70	5	78·1	99·1	71·5	72·2	23·4	+2·6	14·8	71	+13	2
Dwarka ..	37	1008·1	—0·7	1006·1	86·8	+1·7	89	4 days	78·2	+1·8	74	8	79·8	84·7	76·8	78·6	30·1	+2·9	30·7	87	+1	7
Jamnagar ..	60	1008·3	+0·4	..	96·2	+0·6	103	2	..	..	..	..	77·7	..	75·0	..	28·4	+4·8	..	88	+13	..
Rajkot ..	432	994·3	—0·4	990·7	103·9	+2·1	108	24, 25,26	72·1	+2·6	66	5	75·8	101·0	72·3	78·9	25·5	+5·0	23·6	84	+18	3
Veraval ..	26	1008·3	—0·8	1005·7	89·4	..	103	9·	71·2	..	65	7	76·7	84·8	73·6	78·3	27·1	..	30·4	84	+7	7
Surat ..	39	1007·9	—0·5	1004·6	100·1	+1·0	105	8,9, 10	74·9	+1·2	72	4 days	80·2	96·5	73·4	82·9	25·1	+1·5	32·2	71	+6	5
Bhavnagar ..	55	1007·2	—0·6	1003·3	103·9	+1·9	108	27, 30	74·4	+0·9	70	28	78·0	101·2	67·3	72·3	18·0	—0·3	14·0	55	+2	2
Ahmedabad ..	163	1003·5	—0·5	999·1	103·7	—0·1	107	25,26,27	76·7	+2·2	73	5, 6	79·3	102·3	68·9	71·3	19·5	—2·0	12·1	57	+6	1
Dohad ..	1,093	971·8	..	968·0	103·5	+2·1	108	11, 26	77·0	+2·9	72	9	81·2	100·5	65·2	68·4	14·0	—2·0	9·2	39	—3	1
Baroda ..	115	1005·2	..	1000·7	105·6	+2·7	110	11, 26	72·5	+3·7	68	4 days	79·4	104·3	69·4	71·7	20·0	+3·6	11·8	58	+8	1
CENTRAL INDIA, WEST—																						
Neemuch ..	1,626	953·8	—0·2	950·2	101·7	+2·6	109	26, 27	73·2	+2·3	64	8	80·0	99·7	66·0	74·4	16·1	+3·2	18·7	46	+9	2
Indore ..	1,823	947·0	—0·7	943·2	101·5	+1·9	107	26,27,29	72·4	+2·6	63	8	78·9	100·5	61·5	66·1	11·6	—1·7	8·0	34	—3	1
Bhopal ..	1,643	952·5	—0·8	948·4	102·8	+3·6	109	27,28,29	74·8	+3·5	65	9	82·9	100·9	62·1	67·3	10·6	+1·5	9·2	28	+1	1
Guna ..	1,571	954·7	—0·9	951·2	102·5	+2·9	110	28, 29	70·6	+3·7	63	1, 2	79·3	100·7	61·3	67·2	11·2	+1·4	9·2	33	+4	1
Gwalior ..	681	983·8	..	979·5	103·7	..	112	27	74·5	..	62	8	87·8	101·9	66·3	70·0	12·4	..	10·6	28	..	1
Madhosagar ..	757	980·9	..	977·0	104·1	..	112	4 days	77·6	..	68	7	85·9	101·9	66·4	70·2	13·3	..	10·9	31	..	1
CENTRAL INDIA, EAST—																						
Nowgong ..	750	981·6	—0·7	977·1	104·5	+2·7	113	30	71·3	+1·2	59	8	84·4	102·9	70·3	79·0	18·9	+5·8	22·9	47	+10	3
Sutna ..	1,041	971·4	—0·8	967·7	104·5	+4·0	111	30	73·3	+1·8	64	8, 9	82·0	101·4	64·6	68·9	12·9	+1·1	9·4	35	+3	1
Umaria ..	1,506	956·3	..	952·5	103·0	+4·1	108	26, 30	72·0	+3·3	63	8, 9	82·5	100·8	64·5	67·4	13·5	+2·4	9·3	36	+5	1
BERAR—																						
Akola ..	925	976·2	—1·0	971·3	106·5	+1·0	111	12,26,27	77·6	+2·7	69	2, 8	81·2	104·3	63·4	69·3	11·9	+0·1	8·6	27	—4	1
Amraoti ..	1,213	966·6	—0·7	961·7	105·9	+1·6	110	4 days	79·6	+3·1		2	84·4	103·8	65·6	72·7	13·1	+0·7	13·4	32	+1	1
C. P., WEST—																						
Khandwa ..	1,044	972·6	—0·6	967·8	106·6	+2·2	112	27	78·1	+3·4	68	8	83·6	104·9	65·3	71·7	13·0	+1·6	11·5	33	+2	1
Hoshangabad ..	992	974·1	—0·9	968·9	105·0	+3·2	111	27	76·1	+2·6	66	1	81·6	103·6	62·1	67·8	10·4	—0·2	7·0	30	—1	1
Saugor ..	1,808	946·7	—0·7	943·1	101·2	+1·5	108	27	77·4	+3·9	71	7	83·6	98·9	60·9	64·9	9·1	—0·3	7·2	24	—3	1
Jubbulpore ..	1,289	963·8	—0·6	957·0	104·6	+4·0	110	27	71·2	+2·8	62	8, 9	83·4	101·9	64·0	68·8	11·7	—0·3	9·1	30	—4	1
Seoni ..	2,027	940·4	—0·1	936·2	101·3	+1·8	105	4 days	73·3	+2·7	65	1, 2	82·1	96·7	65·7	69·9	15·0	+3·1	14·1	41	+8	1
Nagpur ..	1,010	973·3	—0·9	968·5	106·1	+1·9	110	25, 26	75·6	+1·1	61	2	85·8	103·5	68·6	73·3	16·1	+0·8	14·3	38	+1	1
C. P., EAST—																						
Gondia ..	1,020	973·1	..	968·8	104·6	..	109	26	77·1	..	71	10	85·3	102·4	70·9	77·0	19·8	..	20·1	47	..	1
Pendra ..	2,040	939·3	—0·6	935·2	100·3	+4·9	105	, 26	74·7	+3·6	66	1, 2	84·5	96·7	63·9	67·4	11·9	—0·3	11·0	30	+4	
Champa ..	878	980·3	..	975·0	106·0	..	111	26	75·7	..	71	2	82·9	103·9	66·5	70·9	14·8	..	10·9	39	..	
Raipur ..	970	974·6	—0·8	969·8	105·2	+2·4	109	23,26	79·6	+3·3	70	2	86·7	102·8	68·9	71·7	16·1	+1·4	12·4	37	0	
Titilagarh ..	601	983·9	..	979·0	[illegible]	..	109	16	78·5	.	73	2	83·9	101·2	69·9	71·6	18·6	..	13·0	47	..	
Kanker .	1,318	963·6	—0·5	959·2	[illegible]	+2·6	105	4 days	77·8	+4·6	70	3	87·0	99·2	73·6	76·7	22·2	+4·6	21·1	51	+4	
Chanda ..	634	986·3	—0·7	981·2	[illegible]	+0·8	110	26	78·8	+2·9	72	2,7,23	85·3	104·7	70·9	73·4	19·3	+2·3	13·9	47	+7	
Jagdalpur ..	1,815	946·9	—1·5	943·5	[illegible]	+0·5	104	12,14,16	71·7	+0·9	66	3,4,5	79·6	93·0	68·7	69·9	19·5	—2·5	15·6	57	—2	

* Data not reliable.

Cloud amount, (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10″ or more.)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure form normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													GUJARAT—
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Deesa.*
0·3	—0·9	0·4	0	—0·07	0	..	0	—0·1	6·8	—0·6	0	0	0	0	0	9	5	0	16	1	0	0	0	0	6	15	5	3	Bhuj.
1·5	—0·9	1·0	0	—0·03	0	..	0	0	10·9	+1·3	3	0	0	0	0	7	13	6	1	0	0	0	0	0	4	18	8	0	Dwarka.
1·4	—0·2	..	0	—0·02	0	..	0	0	8·2	2·8	0	0	0	0	0	14	14	0	2	..	..	..	..	..	..	..	..	..	Jamnagar.
0·6	—1·7	1·1	0	—0·03	0	..	0	—0·1	10·7	+2·6	2	0	0	0	2	7	11	7	1	2	0	0	1	0	2	13	12	0	Rajkot.
1·5	—0·6	0·9	0	0	0	..	0	0	12·3	..	11	1	0	0	0	1	2	13	2	0	0	0	0	0	2	16	12	0	Veraval.
0·8	—1·1	0·8	0	—0·03	0	..	0	—0·1	4·4	—10·2	2	4	0	1	5	4	0	1	13	1	0	0	0	2	13	0	7	1	Surat.
0·2	—1·4	1·0	0	—0·10	0	..	0	—0·3	5·1	—10·6	0	0	1	0	3	10	13	2	1	1	0	2	10	10	2	1	1	3	Bhavnagar.
0·4	—1·0	1·0	0	—0·05	0	..	0	—0·1	4·1	—10·2	5	1	1	0	0	4	7	10	2	2	0	0	1	0	7	11	8	1	Ahmedabad.
0·4	—1·2	0·3	0	—0·02	0	..	0	0	12·3	—16·6	0	0	1	1	3	8	14	0	3	1	0	0	0	1	6	21	1	0	Dohad.
0·3	—0·6	0·6	0	0	0	..	0	0	2·7	—0·6	1	0	0	0	3	8	4	1	13	2	2	0	0	1	4	12	8	1	Baroda.
																													CENTRAL INDIA, WEST—
1·5	+0·1	4·0	0·03	—0·09	0·03	18	0	—0·3	5·3	—0·6	2	6	0	0	0	7	11	1	3	2	4	0	0	0	7	6	7	4	Neemuch.
1·6	—0·1	2·9	0·11	—0·02	0·11	18	1	+0·7	4·3	+0·5	0	1	1	1	0	5	11	8	3	3	0	1	0	1	4	15	6	0	Indore
0·7	—1·0	2·2	0	—0·22	0	..	0	—0·7	4·8	+1·0	1	1	2	1	0	5	11	5	4	0	3	2	0	0	2	12	10	1	Bhopal.
1·5	+0·5	2·8	0	—0·29	0	..	0	—0·5	4·2	+0·6	1	0	2	1	0	3	5	1	17	2	0	1	0	1	1	12	6	7	Guna.
1·0	..	2·7	0	..	0	..	0	..	3·0	...	1	1	0	0	0	0	8	7	13	10	1	0	0	0	0	4	12	3	Gwalior.
1·3	..	2·9	0·02	..	0·02	19	0	..	4·7	..	3	1	0	0	1	4	6	1	14	1	1	0	1	0	1	8	17	1	Madhosagar.
																													CENTRAL INDIA EAST—
0·9	—1·2	3·4	0	—0·17	0	..	0	—0·3	3·0	+0·7	0	1	0	1	2	13	3	1	9	1	1	0	0	0	4	14	10	0	Nowgong.
1·2	—0·7	2·1	0	—0·28	0	..	0	—0·7	3·7	0	1	0	1	1	2	5	5	3	12	3	0	1	0	0	1	11	13	1	Sutna.
1·5	—0·9	3·3	0·01	—0·45	0·01	26	0	—0·9	3·1	—0·4	1	0	2	2	4	5	1	3	12	7	1	0	0	0	0	9	13	0	Umaria.
																													BERAR—
1·7	—0·2	3·7	0·07	—0·13	0·07	29	0	—0·5	5·6	+1·1	0	1	1	1	2	0	15	7	3	2	8	0	1	0	5	1	8	0	Akola.
2·9	+1·0	4·9	0·02	—0·14	0·02	1	0	—0·8	5·8	+1·2	0	4	3	0	4	13	2	2	2	2	1	0	0	0	13	3	11	0	Amraoti.
																													C. P., WEST—
1·8	+0·3	3·5	0	—0·11	0	..	0	—0·3	7·4	+2·2	1	1	1	0	0	5	13	8	1	2	1	0	1	0	9	5	12	0	Khandwa.
..	..	..	0·20	+0·07	0·20	1	1	+0·7	3·5	+1·0	1	1	1	1	3	8	3	2	10	3	2	0	0	2	6	9	3	5	Hoshangabad.
..	..	..	0·03	—0·18	0·03	19	0	—0·5	10·0	—0·5	3	3	1	4	4	6	6	3	0	6	2	1	0	0	1	12	8	0	Saugor.
1·2	—0·4	3·3	0·57	+0·25	0·29	29	2	+1·2	3·2	+0·8	1	0	0	5	9	5	2	1	7	6	1	0	1	0	4	5	10	3	Jubbulpore.
2·1	+0·2	5·3	0·50	—0·10	0·30	30	1	—0·7	3·3	—0·1	5	5	0	1	5	4	1	0	9	6	1	1	4	4	3	2	6	3	Seoni.
1·9	—0·4	5·0	0·51	—0·09	0·38	27	2	+0·7	5·1	..	6	3	1	1	4	5	5	4	1	6	1	2	1	1	6	8	4	1	Nagpur.
																													C. P., EAST—
1·3	..	2·4	0·19	..	0·13	3	1	..	3·1	..	4	1	0	4	6	7	1	2	5	8	2	2	2	2	4	5	5	0	Gondia.
1·5	—1·0	5·1	0·10	—0·87	0·09	29	0	—2·1	4·1	—0·2	8	1	1	2	5	4	1	5	3	12	2	0	1	4	4	3	3	1	Pendra.
2·3	..	3·5	0·60	..	0·35	27	3	..	4·5	..	6	0	2	1	4	1	3	2	11	1	1	1	1	0	4	10	7	5	Champa.
1·9	—0·7	4·0	0·02	—0·87	0·02	27	0	—2·1	4·7	—0·4	0	2	0	1	0	18	1	0	8	0	3	0	0	0	10	0	5	12	Raipur.
2·6	..	4·1	0·38	..	0·31	30	1	..	3·3	..	0	1	0	4	10	5	0	0	10	2	1	0	4	10	6	2	1	4	Titilagarh.
3·0	0	5·6	0·24	—0·93	0·15	1	1	—1·3	6·0	+2·5	1	0	0	0	5	4	2	3	15	3	0	0	1	2	1	8	12	3	Kanker.
3·1	+1·0	4·9	0	—0·78	0	..	0	—1·8	3·4	+0·5	0	1	0	16	0	6	0	2	5	0	2	0	4	0	8	0	11	5	Chanda.
2·7	+0·5	5·2	1·73	—0·05	1·01	21	4	+0·5	5·3	+2·3	0	2	0	5	1	21	0	0	1	0	4	0	2	0	19	0	4	1	Jagdalpur.

TABLE II—ABSTRACT OF OBSERVATIONS AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
KONKAN—																						
Dahanu ..	15	1009·4	..	1006·0	90·0	..	95	16	76·0	..	70	9	80·6	88·1	76·5	82·3	29·3	..	35·1	83	..	80
Bombay ..	35	1008·4	—0·6	1005·2	90·9	+1·8	94	10, 16	77·8	+1·7	75	8	82·3	88·1	76·7	78·4	28·8	+1·6	28·8	76	—2	63
Alibag ..	23	1009·6	—0·1	..	88·5	+0·9	94	10	76·0	+0·7	73	5 days	80·3	..	75·5	..	28·0	+2·3	..	80	+8	..
Harnai ..	66	1006·8	..	1004·9	86·4	..	92	16,17,18	77·3	..	63	17	81·0	84·4	74·9	78·4	26·8	..	30·4	74	..	75
Devgad ..	110	1005·9	..	1002·4	90·8	..	93	3,26,29	81·0	..	79	6 days	82·5	87·4	76·8	79·2	29·7	..	30·1	77	..	69
Marmagao ..	202	1003·5	+0·4	999·6	88·9	+1·3	92	17	..	..	..	..	84·3	86·1	76·9	77·6	28·2	+0·2	28·4	70	—8	67
Honavar ..	85	1007·7	..	1004·4	91·7	..	95	17	77·4	..	73	2, 22	81·3	88·1	76·8	79·6	29·4	..	30·6	81	..	68
BOMBAY DECCAN—																						
Jalgaon ..	660	984·5	..	980·3	108·2	..	114	4 days	76·5	..	65	1	82·5	106·8	67·7	72·9	16·4	..	12·2	44	..	15
Malegaon ..	1,432	960·5	—0·5	955·7	104·7	+1·5	108	4 days	70·9	0	63	19	83·7	101·4	65·8	69·0	13·6	—1·2	9·5	35	—6	14
Ahmednagar ..	2,154	936·8	—0·7	932·5	101·7	+1·4	105	25,26,27	72·5	+2·7	66	5, 19	79·5	100·0	61·8	66·7	11·7	—2·2	8·8	33	—1	14
Poona ..	1,834	947·9	—0·2	943·6	101·8	+0·9	106	10	70·4	+2·1	65	3,6,7	76·7	98·0	64·6	69·3	15·9	+0·1	13·4	50	—3	21
Sholapur ..	1,570	956·5	+0·2	951·2	104·5	+1·0	110	24	77·7	+2·4	72	2, 6	82·9	101·7	66·5	72·3	15·5	—10·5	15·0	41	0	23
Miraj ..	1,817	948·2	—0·5	943·1	101·8	+2·6	105	24, 26	71·2	+1·2	68	4 days	75·7	98·6	68·9	73·9	21·3	+1·2	18·4	73	+8	30
Kolhapur ..	1,885	946·5	..	941·8	99·8	..	104	16·25	71·1	..	65	11	74·9	94·4	68·3	71·7	20·9	..	17·3	72	..	33
Bijapur ..	1,950	944·0	+0·1	939·1	101·2	+0·5	105	24	76·8	+2·3	70	2, 30	80·3	98·4	68·1	71·7	18·5	+0·4	15·7	53	—1	27
Belgaum ..	2,562	924·4	0	920·9	95·2	—0·6	98	4 days	65·5	—1·7	61	4 days	71·1	88·1	67·2	71·5	21·2	+2·8	19·6	82	+15	44
Gadag ..	2,131	938·5	0	933·6	98·9	+0·1	103	23,26	72·6	+0·2	67	27,28	77·1	96·5	70·0	71·5	22·2	+0·5	16·2	70	—3	28
HYDERABAD, NORTH—																						
Aurangabad ..	1,905	945·5	—0·3	941·0	102·5	+1·2	108	26	75·7	+2·0	69	2, 3	83·1	100·9	64·9	70·3	13·7	+2·1	12·9	35	+1	1
Parbhani ..	1,350	961·6	..	956·8	105·1	..	110	26, 28	76·8	..	67	2	83·8	102·5	69·3	74·9	17·9	..	17·1	46	..	2
Bidar ..	2,178	935·9	..	931·6	97·9	—0·9	104	25	76·4	+1·0	68	29	81·1	96·9	66·3	70·8	16·2	—2·1	15·1	46	—4	2
Nizamabad ..	1,250	965·7	—0·9	961·4	104·5	+0·9	109	26	78·5	+2·2	73	1, 2	83·6	102·4	67·9	70·9	16·2	—1·7	11·1	42	—3	1
Ramakundam ..	527	991·0	..	985·4	104·7	..	109	13	79·7	..	73	2, 3	85·0	102·6	72·9	74·9	22·2	..	16·9	54	..	[illegible]
HYDERABAD, SOUTH—																						
Gulbarga ..	1,503	958·3	+0·2	953·2	102·3	—1·1	106	21, 25	76·6	+0·3	65	28	83·2	99·3	68·8	72·6	18·2	+0·5	16·5	48	0	
Raichur ..	1,311	964·8	+0·2	960·0	101·0	—1·5	105	14,21,25	78·2	—0·6	68	26, 27	82·2	99·6	73·5	78·1	24·3	+3·0	23·1	65	+11	
Hyderabad (Begumpet)	1,778	949·1	+0·1	944·9	101·1	+0·6	106	16	74·6	—0·5	66	26	81·4	96·3	70·4	74·2	20·9	—0·5	19·9	59	+2	
Hanamkonda	881	978·8	—0·5	973·8	102·2	+1·5	108	13	77·5	+0·4	71	26	81·3	100·4	72·6	72·7	23·4	+0·7	14·9	65	+4	
Khammamett	368	996·9	..	991·4	102·3	..	108	13, 14	78·4	..	72	16	82·6	100·9	76·3	76·9	28·1	..	20·7	74	..	
MYSORE—																						
Chitaldrug ..	2,405	929·2	—0·2	924·6	96·1	—1·2	99	5 days	72·4	—0·5	67	25, 27	76·8	94·2	70·6	71·7	23·0	+2·1	18·0	73	+8	
Hassan ..	3,149	906·1	..	902·5	90·8	—1·6	96	16	68·1	—0·8	63	27	71·7	85·1	68·0	69·3	22·0	+0·9	18·0	82	+8	
Bangalore ..	3,021	909·9	0	906·0	92·9	+0·4	96	16, 20	70·5	+1·4	66	2, 22	74·5	88·5	68·3	66·5	21·1	—0·6	13·3	73	+1	
Mysore ..	2,518	926·2	—0·1	(b) 922·0	93 3	—1·3	97	16	70·5	+0·1	65	25	74·0	(b) 90·1	69·7	(b) 68·9	23·0	+0·2	15·6	80	+5	
MALABAR—																						
Mangalore ..	72	1007·7	—0·1	1004·4	90·8	—0·4	92	6 days	78·6	—0·1	73	27	82·4	87·9	76·8	79·3	28·9	+0·7	30·3	76	+2	
Calicut ..	27	1008·9	—0·3	1005·7	92·1	+1·1	94	13,21,27	77·9	—0·5	71	9	81·5	89·3	77·1	80·5	29·8	+0·1	31·6	81	+1	
Palghat ..	319	999·4	..	994·5	98·2	..	104	16	78·5	..	75	2,27,2	82·0	92·9	77·0	78·6	29·4	..	26·9	79	..	
Cochin ..	10	1010·0	0	1006·3	90·1	+1·5	93	11	78·5	—0·2	73	25	83·6	87·9	77·8	80·2	29·9	+0·1	31·7	76	—2	
Alleppey ..	12	1009·7	..	1006·2	91·4	..	94	21	77·3	..	70	13,16,18	83·6	88·9	79·4	80·6	32·4	..	31·9	83	..	
Trivandrum ..	211	1003·1	+0·3	999·7	90·3	..	95	6	77·4	..	72	2	80·7	85·3	77·4	78·4	30.2	+0·7	30·1	86	+4	
Nagercoil ..	195	1003·5	..	1000·2	93·9	..	98	20	78·8	..	74	2	82·9	86·3	76·5	77·5	28·3	..	28·2	73	..	

Cloud amount, (tenths of sky)			Rainfall, inches.				No. of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :— 8 hrs. I. S. T.									17 hrs. I. S. T.									STATION.
Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													KONKAN—
3·2	..	0·5	0	..	0	..	0	..	9·3	..	0	1	13	14	2	0	0	0	0	1	0	0	0	0	5	19	5	0	Dahanu
2·8	—0·1	0·5	0	—0·03	0	..	0	0	7·0	—0·1	4	2	0	2	2	1	0	0	19	0	0	0	0	0	2	11	17	0	Bombay
2·2	+0·7	..	0	—0·01	0	..	0	0	5·2	—1·6	1	2	10	3	0	0	0	0	14	..	..	..	..	..	..	..	..	..	Alibag
1·3	..	1·3	0·03	..	0·02	11	0	..	10·6	..	1	10	2	7	0	0	1	9	0	0	0	0	0	0	5	13	12	0	Harnai
4·9	..	2·9	0	..	0	..	0	..	10·0	..	1	9	8	4	2	0	1	2	3	0	0	0	0	0	3	4	23	0	Devgad
3·5	—0·8	3·3	0·08	—1·24	0·05	25	0	—0·8	8·0	+1·5	6	7	3	3	2	1	4	4	0	0	0	0	0	1	2	16	11	0	Marmagao
4·4	..	4·9	0·83	+0·09	0·38	2	2	+0·9	3·1	..	0	3	19	2	0	0	0	1	5	0	0	0	0	0	2	22	4	2	Honavar
																													BOMBAY DECCAN—
1·7	..	2·9	0·17	+0·10	0·09	1	0	—0·2	8·2	..	0	1	9	1	1	2	19	4	2	2	0	1	0	0	3	10	13	1	Jalgaon
1·1	—0·3	2·1	0·13	—10·01	0·13	1	1	+0·7	5·5	—0·8	1	0	0	1	0	0	6	8	14	3	0	2	0	1	0	10	14	0	Malegaon
2·8	+1·3	5·4	0	—0·40	0	..	0	—1·1	5·6	—0·5	3	0	0	1	0	0	1	15	10	6	0	0	1	0	4	2	14	3	Ahmednagar
1·2	—0·5	2·8	0·01	—0·58	0·01	16	0	—1·3	3·0	—3·4	0	0	0	0	1	6	8	1	14	1	0	1	0	0	0	9	16	3	Poona
3·4	+1·4	2·4	0·04	—0·49	0·04	1	0	—1·2	6·7	+0·3	2	2	0	4	1	4	1	10	6	2	7	3	6	0	1	1	5	5	Sholapur
3·2	+1·0	5·3	1·02	—0·97	0·43	12	3	—0·1	6·0	0	2	0	0	2	0	2	10	1	13	3	2	4	3	1	5	5	4	3	Miraj
2·1	..	3·0	0·48	..	0·23	30	2	..	8·2	..	1	1	1	0	0	4	17	1	5	2	1	0	0	0	3	23	1	0	Kolhapur
2·0	0	5·2	0·55	—0·30	0·55	30	1	—0·8	5·4	+0·8	2	1	1	0	1	10	8	7	0	9	6	1	7	1	1	1	3	1	Bijapur
1·7	—0·6	3·5	2·50	+0·75	0·96	18	5	+1·7	4·2	+0·6	1	0	1	1	0	1	25	1	0	1	0	0	0	0	4	25	0	0	Belgaum
2·5	+0·2	6·6	1·88	+0·42	0·75	27	4	+1·2	6·2	+0·1	0	1	3	2	0	11	10	1	2	1	5	6	2	0	6	8	2	0	Gadag
																													HYDERABAD, NORTH—
1·2	—0·5	2·6	0·10	—0·14	0·10	11	1	+0·4	7·5	0	1	2	4	1	2	4	12	2	2	3	0	1	0	0	3	15	7	1	Aurangabad
3·2	..	4·3	0·04	—0·02	0·20	1	2	+0·8	..	..	0	0	3	1	1	2	16	6	1	2	1	4	0	1	2	11	5	4	Parbhani
4·8	+2·5	5·6	0·87	—0·20	0·63	29	2	—0·5	7·0	+0·6	0	1	0	0	5	10	5	8	1	7	2	3	3	3	4	4	4	0	Bidar
2·8	+0·4	2·6	0·60	+0·20	0·35	26	2	0	3·3	+0·1	1	1	0	4	6	6	2	1	9	8	2	0	3	2	3	0	5	7	Nizamabad
3·1	..	4·3	1·12	..	1·04	26	1	..	4·8	..	0	0	0	13	6	4	2	0	5	2	1	1	10	4	4	3	1	4	Ramakundam
																													HYDERABAD, SOUTH—
2·3	+0·5	3·9	1·47	+0·64	1·15	28	3	+0·9	7·4	+1·0	4	5	4	3	4	3	4	3	0	8	4	5	3	4	2	2	2	0	Gulbarga
3·3	+1·2	4·1	1·04	+0·40	0·72	27	2	+0·6	6·7	+0·7	2	2	3	3	1	13	3	3	0	0	8	5	12	1	2	1	1	0	Raichur
3·6	+1·0	5·2	2·07	+0·90	1·06	26	3	+1·1	5·0	+0·4	0	1	3	2	1	6	8	1	8	4	0	5	7	1	4	1	3	5	Hyderabad (Begumpet)
4·2	+0·9	3·7	1·00	+0·09	0·92	26	1	—0·6	7·3	+1·4	0	0	0	12	12	4	2	0	0	4	1	0	7	10	4	2	1	1	Hanamkonda
4·9	..	2·7	0·73	..	0·70	16	1	..	6·9	..	1	0	0	18	3	5	0	2	1	2	1	1	11	6	7	1	1	0	Khammameth
																													MYSORE—
3·0	0	6·4	1·06	+0·09	0·41	30	5	+3·0	5·0	+0·7	0	0	0	0	1	9	11	3	6	1	3	9	2	0	1	3	3	8	Chitaldrug
4·3	+0·9	6·4	4·39	+1·19	1·08	20	7	+2·8	(g) 5·8	+1·9	3	0	1	0	0	5	9	5	7	0	2	10	1	2	2	9	2	2	Hassan
3·8	+0·5	6·2	1·02	+0·59	0·32	22	5	+2·4	5·5	+1·2	2	0	0	3	4	6	10	3	2	4	6	6	5	2	0	2	2	3	Bangalore
5·5	+1·3	(b) 7·0	2·22	—0·08	1·25	25	4	—0·6	5·5	+0·8	1	0	1	2	3	4	15	1	3	5	4	8	3	1	2	3	1	2	Mysore
																													MALABAR—
4·1	—0·3	4·2	1·17	—0·36	0·34	16	4	+1·7	5·2	+0·3	3	5	19	1	0	0	0	0	2	2	0	0	0	1	2	10	15	0	Mangalore
5·2	+0·3	6·1	3·96	+0·28	1·57	30	7	+2·8	7·4	+0·7	1	14	14	1	0	0	0	0	0	1	1	1	0	0	6	14	7	0	Calicut
3·6	..	5·1	0·53	..	0·24	21	1	..	5·4	..	0	0	4	0	1	1	18	1	5	0	0	2	1	0	4	18	5	0	Palghat
6·0	+1·3	6·9	1·95	—2·99	1·17	27	5	—1·7	5·8	+0·5	0	3	14	7	1	0	0	0	5	0	0	1	0	0	1	19	9	0	Cochin
7·4	..	6·2	7·32	..	1·50	13	12	..	6·1	..	0	9	13	4	0	0	1	0	3	0	0	0	0	0	2	17	11	0	Alleppey
5·9	+1·0	6·9	4·08	—0·47	1·25	13	7	+0·1	5·0	+0·7	12	6	1	3	0	0	1	4	3	1	3	1	2	3	5	9	6	0	Trivandrum
6·2	..	8·1	0·90	..	0·38	2	2	..	6·0	..	3	4	1	0	1	1	8	8	4	1	0	0	1	2	5	17	4	0	Nagercoil

(b) Mean of 29 days (g) Mean of 24 days

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TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Day bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MADRAS, SOUTH EAST—																						
Pamban ..	37	1009·6	+1·2	1005·7	89·8	—1·3	92	4	80·8	+1·1	76	4	86·1	85·3	79·3	78·5	31·1	—0·2	30·2	73	—6	7
Madura ..	437	995·0	0	990·0	99·8	+2·0	104	23	78·2	+1·5	73	6	83·9	96·7	76·6	75·7	28·0	+0·1	20·8	71	0	3
Negapatam ..	31	1009·2	+0·3	1004·9	90·3	—1·7	99	22	81·0	+1·3	77	4	85·2	87·1	78·9	80·0	30·8	+0·1	31·7	74	—2	7
Trichinopoly ..	295	1001·8	+0·4	996·4	100·0	—0·6	102	6	78·6	+0·6	73	2, 28	84·0	97·8	77·4	77·0	29·1	+1·5	22·2	73	+3	3
Coimbatore ..	1,341	964·4	—0·1	959·8	97·7	+1·2	101	20	75·3	+1·7	72	2,6,17	78·9	93·8	73·0	72·2	25·0	—2·0	17·2	74	—6	3
Salem ..	913	878·8	—0·1	973·4	100·2	0	103	19	77·8	+1·3	73	2,6,30	81·0	95·8	73·0	73·3	24·1	—3·6	17·8	67	—7	3
Cuddalore ..	39	1008·9	+0·2	1004·5	90·9	—1·3	97	13	78·1	+0·4	72	5	81·9	86·9	77·0	79·3	29·5	—2·7	30·7	79	+1	7
Vellore .	703	986·0	+0·4	980·8	99·6	+0·8	103	20	76·7	+0·5	70	5, 6	81·4	97·5	74·9	75·7	26·6	—0·4	20·5	73	0	3
Madras ..	51	1008·3	+0·3	1004·0	95·0	—0·5	99	19	78·3	+0·2	72	5	83·8	88·4	77·8	78·6	29·8	+0·2	28·9	76	+2	6
Arogyavaram ..	2,299	933·2	..	928·9	95·3	..	99	14, 16	71·9	..	66	22	78·9	90·8	70·7	70·9	22·3	..	17·5	67	..	3
MADRAS, DECCAN—																						
Cuddapah ..	428	994·8	+0·2	989·1	104·6	—0·2	109	18	81·6	+0·7	72	27	88·6	100·5	79·0	83·9	29·5	+3·9	32·0	65	+7	4
Bellary ..	1,473	958·8	—0·5	954·2	100·4	—2·3	105	21	77·2	—0·2	67	27	82·5	98·8	71·8	71·8	21·8	+2·0	14·6	58	+5	2
Kurnool ..	923	978·0	+0·4	972·5	102·3	—1·3	106	9, 14	77·2	—1·8	67	26	83·6	100·6	71·1	72·9	20·3	—1·3	15·0	52	—2	2
Rentichintala ..	348	997·0	..	992·1	103·3	+1·8	110	18	78·4	—0·8	68	26	83·7	106·0	76·4	78·1	28·1	+3·8	23·8	71	+11	3
Anantapur ..	1,147	970·2	..	964·7	101·4	..	104	11 days	77·4	..	68	1	83·3	99·7	73·0	75·2	23·1	..	18·7	59	..	2
MADRAS COAST, NORTH—																						
Nellore ..	66	1006·9	—0·2	1003·0	100·6	+1·2	105	4 days	77·4	0	73	10	83·7	91·3	76·9	78·9	28·6	—1·1	28·1	72	—2	5
Ongole ..	38	1008·0	..	1003·4	96·6	..	104	13	78·4	..	74	4,14	83·1	89·8	77·2	78·1	29·2	..	27·5	76	..	5
Masulipatam ..	10	1009·1	—0·7	1005·3	94·9	+0·7	100	5 days	78·3	+0·6	72	7	84·2	88·1	78·7	79·5	30·8	—1·1	29·8	78	—1	6
Cocanada ..	26	1009·0	—0·1	1004·8	95·1	—1·0	100	23	79·1	+0·6	76	1,3,4	84·0	90·4	78·7	79·9	31·1	+0·7	30·1	78	+2	6
Vizagapatam	126	1005·1	—0·2	1006·4	89·3	—0·3	94	7	79·6	+1·4	72	26	83·9	85·6	77·0	78·8	28·6	+0·4	30·6	72	0	7
Calingapatam	19	1007·7	—1·0	1004·7	90·7	—1·8	95	2	77·2	—1·0	70	23	80·9	86·4	76·9	79·9	29·9	—0·5	32·1	82	+7	7
HILL STATIONS EXCLUDING KASHMIR																						
Shillong ..	4,921	849·9	+0·5	846·8	72·0	—2·1	77	13,14,16	56·3	—0·7	50	1,2,3	65·7	65·4	58·5	60·1	14·0	+1·4	15·6	65	+8	7
Cherrapunji ..	4,309	869·3	+0·7	865·9	70·5	—0·8	74	3,18,28	57·5	—1·4	51	23	65·0	65·4	60·6	62·1	16·3	0	17·7	79	+2	8
Aijal ..	3,599	980·9	..	888·3	78·3	..	83	12	59·3	..	51	23	68·2	72·6	62·2	65·6	16·8	..	18·7	71	..	7
Darjiling ..	7,432	775·6	—0·2	773·0	61·9	+0·7	67	29	49·7	+0·9	43	2	54·1	55·7	52·8	53·9	13·0	+1·9	13·3	92	+17	8
Kalimpong ..	3,965	879·4	+0·8	876·4	71·8	—2·3	74	9 days	59·8	+0·3	43	7	63·1	67·7	60·9	63·6	17·5	+3·0	18·5	88	+20	8
Katmandu ..	4,388	866·4	..	862·8	84·9	+1·0	93	14	55·5	+3·0	46	7	64·3	76·7	58·9	63·4	14·8	+4·0	14·6	72	+14	4
Muktesar ..	7,592	771·8	—0·4	770·3	72·3	+4·4	79	26	54·1	+3·8	41	6	59·2	67·2	47·4	52·9	6·9	—0·9	8·5	42	+2	3
Mussooree ..	6,699	796·4	..	793·6	72·0	+2·8	80	30	57·6	+4·8	41	5	64·1	68·3	51·4	55·6	8·3	+1·1	10·4	43	—4	4
Simla ..	7,224	782·0	+0·8	781·2	70·4	+4·5	79	27, 30	54·7	+4·1	41	4	61·7	67·1	47·2	51·5	6·0	+0·1	7·5	34	—2	3
Abu ..	3,945	880·9	+0·8	881·0	88·0	+3·7	98	26	69·6	+1·3	63	30	74·3	83·0	62·5	69·4	14·4	+6·0	19·2	51	+20	5
Pachmarhi ..	3,528	893·4	—0·3	890·3	93·9	+2·0	100	26,27,29	70·4	+1·6	60	1	80·6	91·6	60·4	64·6	9·8	—0·4	9·8	30	—2	1
Mahabaleshwar	4,534	863·2	—0·4	861·2	88·4	+3·0	94	10	67·3	+1·2	64	1,19,29	71·3	82·3	56·2	66·7	9·3	—0·8	16·1	38	—1	4
Mercara ..	3,781	885·7	—0·2	882·6	78·2	—5·5	86	12	63·8	—0·1	60	27	68·5	77·2	65·7	70·0	20·5	+1·0	22·2	86	+6	7
Ootacamund ..	7,364	781·3	+0·7	779·5	74·4	+2·9	79	18	51·0	—0·5	47	1	56·9	66·4	52·4	59·4	11·9	+1·3	14·8	76	+16	7
Coonoor ..	5,730	827·5	..	..	74·3	—0·3	79	14	55·7	—0·8	51	10	65·2	..	58·7	..	14·5	0	..	68	+2	..
Kodaikanal ..	7,688	772·3	+0·7	770·7	69·0	+0·8	73	23	53·4	+0·3	50	11, 27	59·2	61·6	50·7	55·9	9·6	—1·0	13·2	58	—3	7
CEYLON—																						
Colombo ..	24	1009·8	+0·2	1006·5	87·6	—1·2	90	5	75·2	—0·7	72	19	78·6	84·8	75·3	77·5	28·4	—1·5	29·1	85	—5	7
Trincomalee ..	24	1009·8	+1·3	1006·0	90·1	—1·6	94	4 days	77·7	+0·1	74	28	81·8	84·9	77·3	78·9	30·2	+0·3	31·1	80	—5	7
Hambantota ..	61	1007·6	—0·3	1005·2	87·0	—0·8	89	5	76·3	+0·2	71	5	79·1	84·1	76·6	78·1	30·1	+1·1	30·1	89	0	7
Mannar ..	12	1009·8	..	1006·2	91·1	..	94	10	77·5	..	70	16	80·6	88·1	77·1	79·8	30·2	..	30·9	85	..	6

Cloud amount, (tenths of sky).			Rainfall, inches				Number of rainy days, 0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			
											8 hrs. I. S. T.									17 hrs. I. S. T.										STATION.
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													MADRAS SOUTH-EAST—
6·1	+2·6	4·2	0·07	—1·77	0·07	2	0	—3·2	7·4	+1·3	1	2	1	7	15	3	0	1	0	2	2	1	11	13	1	0	0	0	Pamban.
5·7	+0·6	6·0	0·39	—1·77	0·39	27	1	—2·1	3·3	+0·4	2	4	2	0	2	1	0	1	18	0	2	8	8	1	0	1	0	10	Madura.
6·5	+1·8	4·0	0	—1·11	0	..	0	—1·3	8·2	+1·9	0	0	2	6	4	9	3	0	6	0	0	5	19	6	0	0	0	0	Negapatam.
3·4	—0·4	3·5	1·78	—0·02	1·27	30	3	+1·0	(e) 3·8	+0·3	0	2	1	1	8	3	2	2	11	1	3	9	7	2	1	0	1	6	Trichinopoly.
3·9	0	4·8	0·22	—1·36	0·19	24	1	—2·2	4·6	+2·0	2	4	2	1	4	7	3	0	7	3	4	3	1	7	9	3	0	0	Coimbatore.
3·6	+0·2	4·7	2·24	+0·31	1·40	30	4	+0·4	5·3	+1·4	0	2	12	4	0	5	4	0	3	1	3	13	2	5	3	1	0	2	Salem.
4·1	—0·1	3·4	0	—0·98	0		0	—1·1	7·8	+2·7	0	0	0	0	7	12	3	1	7	0	0	1	27	1	0	0	1	0	Cuddalore.
..	..	..	0·41	—0·59	0·39	22	1	—0·5	4·2	+0·5	0	1	1	0	4	5	3	1	15	0	0	7	15	6	0	0	0	2	Vellore.
5·1	+0·9	2·7	0·44	—0·17	0·44	27	1	+0·1	13·1	+2·0	0	0	0	6	10	10	2	2	0	0	0	0	28	0	1	0	1	0	Madras.
3·7	..	3·2	0·29	..	0·25	22	1	..	4·2	..	1	1	0	7	6	1	0	1	13	1	4	11	5	2	1	1	0	5	Arogyavaram.
																													MADRAS, DECCAN—
2·5	—0·3	3·0	0·46	—0·11	0·22	27	2	+0·9	6·4	—0·6	0	0	1	3	0	0	1	1	24	1	2	13	8	1	0	0	2	3	Cuddapah.
5·6	+3·0	5·9	2·10	+1·26	1·16	22	3	+1·1	3·8	—0·1	1	1	2	1	0	0	5	3	17	4	3	5	4	1	0	2	1	10	Bellary.
3·2	+0·8	3·6	1·33	+0·66	0·52	26	3	+1·5	5·0	+0·3	1	1	2	2	2	6	6	5	5	2	3	7	7	2	3	2	3	1	Kurnool.
3·7	—1·8	4·6	3·20	+2·01	2·72	26	2	—0·7	5·7	—0·9	0	1	0	4	8	8	2	3	4	0	1	5	7	6	2	1	2	6	Rentichintala.
3·1	..	3·0	0·37	—0·27	0·21	22	2	+0·7	4·5	..	0	3	0	1	0	7	4	3	12	1	6	1	4	0	2	0	0	16	Anantapur.
																													MADRAS COAST, NORTH—
3·8	0	2·8	0·02	—0·46	0·02	22	0	—0·6	6·6	+1·0	0	0	1	5	18	0	0	0	6	0	0	11	17	1	0	0	0	1	Nellore.
4·0	..	3·2	0·02	..	0·02	22	0	..	7·7	..	1	0	0	18	9	1	0	0	1	0	0	7	23	0	0	0	0	0	Ongole.
4·2	—0·1	2·1	0	—0·69	0	..	0	—0·9	8·0	+2·2	1	0	0	7	15	4	0	1	2	0	0	0	11	19	0	0	0	0	Masulipatam.
3·9	—1·2	2·4	0	—0·64	0	..	0	—1·0	7·3	+2·2	0	0	0	1	1	27	0	1	0	0	0	0	10	10	9	1	0	0	Cocanada.
3·9	—1·5	4·4	0·33	—0·38	0·31	26	1	—0·3	7·2	+1·7	0	0	0	0	3	18	7	0	2	0	0	0	0	18	11	1	0	0	Vizagapatam.
5·2	+1·9	5·8	1·52	+0·76	0·60	23, 26	4	+2·5	11·0	+2·7	0	0	0	0	1	13	14	2	0	0	0	0	0	6	24	0	0	0	Calingapatam.
																													HILL STATIONS EXCLUDING KASHMIR
6·0	+2·0	7·2	11·62	+6·52	1·62	3	18	+8·8	5·2	0	2	1	0	0	2	10	2	3	10	1	0	0	1	2	11	1	4	10	Shillong.
6·5	—0·1	6·3	32·18	+5·95	8·45	30	20	+4·0	7·1	+0·5	0	4	2	1	11	9	2	1	0	2	3	0	0	4	14	5	2	0	Cherrapunji.
4·0	..	4·9	9·44	..	2·08	30	14	..	6·8	..	0	1	13	0	2	9	2	1	2	0	0	3	0	2	17	5	3	0	Aijal.
7·9	+3·0	(b) 7·7	8·33	+4·19	2·97	30	14	+6·5	6·6	+0·9	0	1	14	1	0	0	10	0	4	0	0	1	1	0	3	23	0	1	Darjiling.
6·2	+2·9	6·1	5·46	+2·73	2·74	30	10	+4·2	7·4	—0·5	0	0	0	1	0	0	2	20	7	0	0	0	23	4	0	0	3	0	Kalimpong.
8·0	+1·4	7·1	3·65	+2·64	0·82	20	9	+5·8	0·8	—0·5	0	1	0	0	1	0	0	0	28	2	1	3	0	4	0	3	1	16	Katmandu.
1·2	—1·5	6·5	0·23	—1·18	0·21	6	1	—2·3	7·6	+0·9	1	4	4	1	1	2	8	4	5	0	1	0	0	0	8	17	3	1	Muktesar.
2·3	—0·6	4·2	0·59	—0·74	0·34	4	1	—2·8	3·7	—1·5	8	7	2	4	4	2	0	0	3	3	3	1	2	14	7	0	0	0	Mussoorie.
2·3	—1·1	4·0	0·78	—1·03	0·40	3	3	—1·1	1·6	—2·3	5	5	3	2	2	2	0	0	11	1	1	0	2	5	9	3	7	2	Simla.
0	—1·5	0	0	—0·11	0	..	0	—0·3	5·1	—0·8	4	4	1	0	0	1	0	2	18	0	0	0	1	0	4	1	0	24	Abu.
1·4	—0·8	4·3	0·05	—0·32	0·05	1	0	—0·9	2·6	—1·6	4	0	2	0	0	3	3	6	12	2	1	0	1	1	1	14	8	2	Pachmarhi.
1·1	0	3·1	0·06	—1·12	0·02	17	0	—1·5	1·1	—5·9	8	7	2	1	0	0	0	4	8	4	0	0	0	0	2	6	10	8	Mahabaleshwar.
5·8	—0·8	5·3	7·82	+5·26	2·66	2	9	+3·9	5·0	+1·8	0	4	5	0	0	0	6	6	9	0	3	4	0	0	0	11	12	0	Mercara.
3·5	—0·2	5·8	3·43	+0·39	0·54	21	10	+3·5	3·1	—0·2	0	5	8	1	0	0	0	0	16	2	7	11	0	1	0	0	0	9	Ootacamund.
5·3	+0·6	..	1·82	+4·05	0·35	2	7	+0·1	4·4	+1·2	1	1	1	3	1	0	0	4	19	..	..	..	..	..	..	..	..	..	Coonoor.
3·9	+0·6	6·5	2·07	—1·85	1·74	27	5	—2·7	8·3	+0·8	5	14	3	3	3	0	0	2	0	1	7	1	11	7	0	0	0	3	Kodaikanal.
																													CEYLON—
7·3	+1·2	6·3	10·43	+1·00	3·46	18	13	+2·1	..	..	0	1	5	7	3	0	1	0	3	0	0	1	3	4	14	7	1	0	Colombo.
7·6	+0·7	4·9	1·64	—0·38	1·09	28	3	—0·3	..	..	0	1	0	1	6	12	4	2	4	2	4	16	5	1	0	1	0	1	Trincomalee.
7·4	+3·0	8·2	9·48	+5·71	2·10	3	8	+1·8	..	..	4	1	0	0	0	9	13	2	1	0	0	2	3	8	12	5	0	0	Hambantota.
[illegible]	..	5·4	0·92	..	0·52	13	2	..	..	..	0	0	0	9	21	0	0	0	0	2	1	0	0	3	20	4	0	0	Mannar.

(b) Mean of 29 days. (e) Mean of 26 days.

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.) AT 4TH CLASS STATIONS—APRIL 1948.

STATION.	Maximum Temperature, °F.				Minimum temperature, °F.				Mean dry bulb temperature 8 hrs. I. S. T. °F.	Mean wet bulb temperature 8 hrs. I. S. T. °F.	Vapour pressure, millibars.		Relative Humidity, %		Mean cloud amount 8 hrs. I. S. T.	Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind.	
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I. S. T.	Departure from normal.	Mean 8 hrs. I. S. T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hrs.	Date.	Total in the month.	Departure from normal.	Resultant direction 8 hrs. I. S. T.	Velocity in miles per hour.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ASSAM—																							
Lumding	91·8	+2·0	98	29	60·9	—5·4	57	7	82·5	70·5	20·0	—1·9	53	—21	..	0·97	—2·64	0·35	21	3	—4·2	..	..
KASHMIR—																							
Jammu	94·3	+4·3	107	29	72·1	+3·2	63	7	78·7	64·2	14·2	+2·5	43	0	3·5	0·36	—0·93	0·25	29	1	—1·6	..	..
Kargil(R)																							
MYSORE—																							
Balehonnur ..	87·3	0	91	4 days	65·8	—0·3	60	27	69·7	68·6	23·1	+0·8	94	+5	..	9·94	+6·39	2·57	20	11	+4·5	..	..
TIBET—																							
Yatung (Chumbi)	59·6	+2·5	69	25	34·8	—0·1	29	7, 24	46·5	45·0	9·7	+2·0	90	+5	4·9	3·35	—0·56	0·72	7	10	—0·4	..	..

R.—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.) AT 5 TH CLASS STATIONS—APRIL 1948.

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days, (0·10" or more)		DIVISION.	STATION.	Rainfall, inches.				Number of rainy days (10·10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Dep ti fro nor
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
ASSAM	Mawsynram ..	24·38	..	8·10	28	14	..	KASHMIR ..	Sonamarg ..	7·66	—2·27	1·35	29	13	+1
WEST BENGAL ..	Bankura ..	1·03	—0·22	0·48	26	3	+0·3		Gurez (R) ..						
	Cooch Behar ..	14·03	+8·38	5·76	29	9	+1·7	BOMBAY, DECCAN	Khandala (R) ..						
BIHAR ..	Muzaffarpur ..	0	—0·48	0	..	0	—0·9	MADRAS, SOUTH-EAST	Palamcottah ..	4·51	+2·03	1·93	3	4	+
	Chapra ..	0	—0·32	0	..	0	—0·7	SIKKIM ..	Lachung ..	8·13	+2·10	2·10	18	9	—
	Arrah ..	0	—0·25	0	..	0	—0·5								
UNITED PROVINCES, WEST.	Meerut ..	0·08	—0·29	0·08	3	0	—0·8								
EAST PUNJAB ..	Dharampore ..	0·58	—0·80	0·34	3	1	—1·7								
	Kyelang ..	2·83	..	1·21	4	7	..								
	Dalhousie ..	4·00	+1·01	1·60	3	6	+0·3								

R—Register not received.

MONTHLY MEANS OF UPPER WINDS

Note.—Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 m. under Table B. In Tables A & B,

n represents the number of observations,

V represents the mean wind speed in m/seconds, irrespective of direction,

v represents the resultant mean velocity in m/second,

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

For the coordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report January 1948, and subsequent issues.

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9 km. above sea level.

APRIL 1948.

Station.	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	2·1	272	30	1·9	1·6	302	30	2·5	2·0	269	30	1·1	0·2	291	30	0·9	0·1	18	30	5·7	5·2	285
0·15 a. g. ..	30	10·1	8·9	279	30	7·6	6·1	306	30	4·8	4·1	272	30	8·9	5·1	348	30	6·5	1·8	298	30	7·0	6·5	306
0·6 a. s. l. ..	30	10·1	9·1	287	30	9·9	8·8	318	30	5·2	4·5	273	30	9·6	5·7	339	29	7·3	4·1	328	30	6·7	6·3	300
1·0 „ ..	30	7·1	6·6	285	30	8·1	6·7	309	30	5·4	4·7	273	30	8·0	6·3	322	30	6·5	4·9	318	30	7·1	6·4	296
1·5 „ ..	30	4·9	4·1	277	30	6·3	4·9	274	30	5·6	5·0	274	29	8·3	7·6	306	30	7·5	6·5	305	30	7·1	6·7	292
2·0 „ ..	30	5·2	3·7	261	30	6·5	5·0	248	30	6·3	5·6	269	25	9·6	9·0	297	30	9·0	8·6	300	30	7·3	7·0	290
2·5 „ ..	29	5·6	3·6	249	29	6·3	5·0	244	30	7·2	6·5	263	13	10·0	9·3	286	27	10·6	10·0	299	29	9·0	8·7	284
3·0 „ ..	26	6·2	3·9	261	29	6·8	5·3	243	30	7·2	6·1	256	9	11·9	11·3	308	25	12·5	11·7	298	29	10·7	10·4	282
4·0 „ ..	29	5·6	3·6	249	28	7·8	5·6	287	30	7·5	5·8	249					15	12·1	11·4	283	27	12·6	12·1	281
5·0 „ ..	26	6·2	3·9	243	26	8·5	4·9	272	30	8·8	6·1	276					11	13·7	12·2	292	24	12·5	11·9	288
6·0 „ ..	3	3·8	3·8	309	24	9·0	6·6	291	29	9·9	7·4	282					10	13·9	12·0	296	21	14·1	13·5	290
7·5 „ ..					21	11·4	9·5	285	26	13·2	11·5	278					9	16·6	13·6	286	19	17·4	16·2	291
9·0 „ ..					18	17·6	15·3	291	19	16·7	14·2	273					9	20·8	19·3	289	9	24·3	22·8	300

Station ..	AMBALA												ANANTAPUR								ASANSOL			
Time in I. S. T.	0100				0700				1600				0700				1600				0100			
Ht. in Km. ..	n	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	1·9	332	30	2·3	1·4	343	30	3·7	3·3	308	30	2·0	1·4	264	30	1·0	0·7	65	30	2·4	1·9	164
0·15 a. g. ..	30	9·7	7·1	339	30	9·4	5·6	349	30	7·9	6·9	308	30	5·1	3·8	253	30	2·7	1·7	62	30	5·9	4·3	179
0·6 a. s. l. ..	30	10·5	8·2	341	30	11·0	6·8	346	30	7·5	6·6	307	30	5·6	4·2	253	30	2·5	1·4	66	30	6·5	4·7	197
1·0 „ ..	30	9·8	8·6	334	30	10·5	7·6	333	30	7·5	6·7	305	30	5·5	3·2	239	30	2·2	1·1	74	30	6·1	2·7	237
1·5 „ ..	29	8·3	7·4	323	30	9·2	7·1	323	30	7·7	6·5	305	30	4·6	1·8	191	30	2·5	1·8	70	29	6·2	3·7	288
2·0 „ ..	29	8·7	7·3	313	30	9·1	7·4	320	30	8·0	6·4	310	30	4·1	2·2	134	30	3·3	2·6	70	22	7·3	6·8	303
2·5 „ ..	23	8·2	7·0	297	30	9·4	7·7	315	30	8·4	6·5	309	30	4·5	3·3	91	30	4·9	4·0	79	13	8·6	8·3	299
3·0 „ ..	21	7·8	6·8	291	30	10·2	8·4	309	30	8·5	6·3	309	30	6·5	5·8	63	30	5·7	5·0	65	8	10·5	9·9	296
4·0 „ ..	6	8·6	7·2	294	27	9·9	8·0	293	30	9·3	7·3	298	30	8·5	7·7	46	29	6·0	4·2	55				
5·0 „ ..					25	9·9	8·1	279	30	10·6	8·7	290	28	7·1	4·8	40	29	5·8	2·3	16				
6·0 „ ..					25	11·9	10·0	275	30	12·2	10·9	283	27	7·2	2·4	10	29	6·7	3·2	342				
7·5 „ ..					17	15·6	13·9	279	24	16·0	14·6	276	22	9·7	6·1	305	25	10·1	6·9	300				
9·0 „ ..					13	18·0	16·0	283	18	17·2	15·2	282	19	12·0	10·0	271	11	15·2	13·2	308				

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

APRIL 1948.

Station	ASANSOL												BANGALORE											
Time in I. S. T.	0700				1100				1600				0100				0700				1600			
Ht. in Km. ..	n	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	1·0	176	30	1·5	1·0	230	30	2·9	0·9	264	12	2·5	1·9	138	30	2·3	1·5	238	30	2·9	1·9	92
0·15 a. g. ..	29	3·9	1·9	211	30	3·7	1·4	223	30	5·2	1·8	281	10	7·6	5·0	131	30	5·4	3·9	238	30	4·6	2·9	88
0·6 a. s. l. ..	29	5·7	3·4	245	30	3·5	1·7	247	30	5·5	2·5	275												
1·0 ,, ..	29	6·3	3·9	268	30	4·2	3·2	265	30	5·5	3·2	268	10	6·9	4·0	131	30	4·3	2·8	236	30	4·7	2·7	89
1·5 ,, ..	28	6·5	4·6	290	30	5·0	4·1	279	30	5·5	4·1	272	10	7·9	5·4	127	29	5·6	2·6	212	30	5·1	3·8	71
2·0 ,, ..	26	7·7	7·2	296	23	6·5	5·4	288	29	6·5	5·3	277	9	7·7	3·9	102	30	4·9	3·1	83	30	4·7	3·4	57
2·5 ,, ..	22	8·6	8·2	295	13	7·7	7·1	291	22	6·5	6·1	290	2	4·0	3·5	62	29	6·8	6·2	67	30	4·5	3·5	58
3·0 ,, ..	18	10·2	9·8	289	10	8·8	8·5	292	21	7·7	7·3	299	2	5·2	5·2	33	28	7·5	7·1	57	28	5·5	4·7	62
4·0 ,, ..	10	15·2	14·2	283					13	11·0	10·6	302					24	10·0	9·0	52	20	7·1	6·5	55
5·0 ,, ..	8	16·8	16·4	299					11	16·5	15·5	299					20	6·7	4·3	32	10	6·5	4·4	36
6·0 ,, ..	6	17·4	17·3	292					7	16·4	15·9	309					17	7·4	3·2	355	5	8·2	7·7	36
7·5 ,, ..	5	18·3	17·8	288					4	19·1	17·0	316					13	11·0	8·2	333	3	13·5	10·9	345
9·0 ,, ..	3	15·8	15·4	286					2	16·5	9·1	344					11	13·2	9·8	321	3	15·2	14·5	281

Station	BAREILLY								BHOPAL												BHUJ			
Time in I.S.T	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	0·3	72	30	3·1	2·6	305	22	3·7	2·0	327	30	2·4	1·2	304	30	3·4	2·9	306	30	2·5	2·4	242
0·15 a. g. ..	30	8·8	3·8	335	30	6·1	5·4	293	22	10·9	6·0	320	30	7·5	4·1	325	30	4·7	3·5	286	30	8·7	8·2	280
0·6 a. s. l. ..	30	9·2	4·8	308	30	6·7	6·0	295	22	10·4	4·7	334	30	6·3	3·4	317	30	4·3	3·0	285	30	11·7	11·0	287
1·0 ,, ..	30	9·1	6·1	301	30	7·5	6·7	294	22	11·6	6·4	320	30	8·6	5·8	344	30	5·0	4·2	288	30	6·9	6·0	289
1·5 ,, ..	30	9·1	7·4	298	30	7·8	7·1	292	20	9·1	5·0	321	30	6·5	4·7	336	30	5·8	5·0	286	30	5·3	3·9	285
2·0 ,, ..	30	9·3	8·4	302	30	8·5	7·9	295	17	6·4	3·0	308	30	5·8	3·7	314	30	6·1	5·5	285	29	6·0	3·6	273
2·5 ,, ..	29	8·8	8·9	301	29	9·4	8·5	294	11	4·8	3·8	302	29	6·0	4·4	290	29	6·2	5·5	277	24	5·3	2·4	269
3·0 ,, ..	26	11·0	9·1	296	28	10·7	9·7	300	6	5·7	5·5	276	29	7·1	5·4	270	29	5·9	5·2	277	20	4·7	1·8	274
4·0 ,, ..	21	11·4	10·5	288	28	11·8	11·1	300	2	7·0	6·0	286	24	8·4	5·9	264	28	8·3	7·3	267	3	4·0	3·7	339
5·0 ,, ..	17	11·8	10·3	289	24	12·1	11·3	301					21	9·0	6·9	290	28	7·7	6·7	273				
6·0 ,, ..	15	14·9	13·8	295	23	14·0	12·9	299					15	11·6	9·6	289	25	9·9	8·0	291				
7·5 ,, ..	8	20·1	18·8	283	19	18·4	16·8	292					9	14·3	12·4	296	21	14·5	11·3	292				
9·0 ,, ..	8	21·6	20·1	289	13	19·9	18·1	287					9	19·7	18·4	297	11	21·4	18·7	288				

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

APRIL 1948.

Station	BHUJ								BIKANER								BOMBAY						
Time in I.S.T.	0700				1600				0700				1600				0100				0700		
Ht. in 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 ..	30	1·5	1·2	244	30	4·9	4·2	256	30	2·8	0·7	173	30	3·2	2·5	273	30	1·2	1·0	343	30	0·8	0·4
0·15 a.g. ..	30	7·5	6·4	272	30	6·4	5·8	266	30	6·4	0·9	191	30	4·5	3·4	262	30	4·2	3·7	325	30	3·1	0·7 3
0·6 a.s.l. ..	30	11·5	10·7	296	30	6·3	5·8	263	30	7·0	1·3	292	30	4·9	4·0	260	30	6·3	5·7	334	29	5·2	3·8 3
1·0 „ ..	29	8·9	7·9	290	30	6·5	6·1	268	30	6·1	3·5	282	30	4·8	3·9	259	30	6·0	5·1	350	29	7·4	6·4 3
1·5 „ ..	29	7·3	6·0	274	30	5·9	5·4	271	30	6·3	5·0	280	30	5·3	4·2	253	26	6·3	5·3	2	29	6·1	4·6 3
2·0 „ ..	28	6·0	4·8	263	30	5·9	5·0	269	28	6·4	5·0	281	30	5·5	4·5	249	20	5·5	4·2	342	30	6·4	3·6 3
2·5 „ ..	28	6·1	4·3	254	30	6·5	5·1	263	26	6·5	4·6	282	30	5·8	4·9	253	11	4·6	2·4	323	30	5·6	3·2 2
3·0 „ ..	28	6·3	4·3	265	30	7·1	5·1	257	26	7·1	5·3	275	30	7·0	5·9	255	9	5·0	1·7	301	29	5·1	3·4 1
4·0 „ ..	25	6·8	4·3	277	30	7·5	6·1	270	25	7·8	5·5	274	30	8·6	7·1	259	5	4·0	2·9	157	27	5·4	3·6 1
5·0 „ ..	23	8·2	5·9	275	28	8·8	6·6	271	21	9·1	7·5	273	27	9·5	8·5	265	2	5·7	1·7	327	26	5·9	2·8 3
6·0 „ ..	21	8·6	7·1	275	28	10·6	8·7	272	19	9·9	8·7	276	22	12·9	12·0	267					24	7·5	4·8 3
7·5 „ ..	17	12·2	10·2	278	20	13·2	11·1	280	15	11·7	10·8	273	13	13·8	12·9	266					21	13·8	10·1 2
9·0 „ ..	11	15·3	14·4	289	13	16·1	14·2	276	9	13·7	12·6	290	7	16·9	16·5	275					11	21·3	18·5 2

Station	BOMBAY								CALCUTTA																COCHIN			
Time in I. S. T.	1600				0100				0700				1100				1600				0100			
Ht. in Km.	n	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	5·9	295	30	3·4	3·1	178	30	3·4	3·0	179	30	5·2	4·9	186	30	5·3	5·0	186	30	1·5	0·7	5
0·15 a.g. ..	30	5·9	5·3	296	30	10·5	9·1	182	30	7·1	6·6	193	30	6·1	6·0	195	30	6·8	6·7	192	30	2·3	0·3	31
0·6 a.s.l. ..	30	6·2	5·2	322	29	11·1	9·6	204	28	9·6	9·0	213	30	7·0	6·5	211	30	6·5	6·2	196	30	3·8	3·2	29
1·0 „ ..	30	5·5	4·5	332	27	9·3	8·1	214	27	8·0	6·8	228	29	6·1	4·7	235	30	5·0	4·0	215	29	3·0	2·1	29
1·5 „ ..	30	5·1	3·3	320	25	7·9	5·9	246	25	6·2	4·6	254	22	5·0	3·6	259	28	4·2	3·4	268	22	2·5	0·7	3
2·0 „ ..	30	6·1	4·1	290	22	7·7	6·4	281	24	5·4	4·3	268	15	5·1	4·1	276	27	6·3	5·8	282	20	3·5	2·8	7
2·5 „ ..	30	4·9	2·8	242	13	8·3	7·3	299	17	6·7	5·0	277	10	7·3	6·6	291	24	8·5	7·9	290	14	6·3	6·0	7
3·0 „ ..	30	5·0	3·3	197	9	10·1	8·8	304	14	9·0	7·0	299	6	9·2	9·0	295	24	10·4	10·0	300	12	8·5	7·9	6
4·0 „ ..	29	4·9	2·7	187	1	15·5	15·5	330	10	11·5	10·4	312	1	12·5	12·5	335	22	12·9	12·5	305	2	6·7	4·7	7
5·0 „ ..	29	5·9	1·0	337					5	8·5	7·0	331					19	12·6	11·9	298				
6·0 „ ..	28	7·7	3·7	311					5	10·1	6·8	338					13	13·7	12·2	295				
7·5 „ ..	21	11·2	8·1	291					2	11·3	3·7	267					4	14·4	14·0	275				
9·0 „ ..	16	18·3	14·5	281					2	18·0	10·5	271					2	25·5	24·4	251				

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

APRIL 1948.

Station	COCHIN								COOCH BEHAR												CUTTACK			
Time in I.S.T.	0700				1600				0700				1100				1600				0100			
Ht. in Km.	n	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	1·1	0·8	60	30	5·3	5·0	268	30	2·3	2·1	86	30	2·3	1·9	81	30	1·7	1·4	64	30	2·4	2·3	202
0·15 a.g. ..	30	2·9	1·5	68	30	4·9	4·6	268	28	5·4	4·7	90	28	4·2	3·5	93	29	3·5	2·5	77	30	7·5	7·1	199
0·6 a.s.l. ..	30	3·2	2·6	313	30	4·7	4·3	278	25	7·0	6·0	107	27	5·0	4·1	108	29	4·2	2·4	100	28	8·7	8·4	223
1·0 „ ..	29	3·3	2·5	310	29	3·4	1·5	290	21	5·4	3·8	127	25	4·2	2·7	143	29	3·9	2·0	192	28	7·3	6·8	227
1·5 „ ..	28	2·9	0·7	7	29	3·6	2·1	49	18	3·6	1·9	188	19	3·6	1·6	220	26	6·1	5·0	235	27	6·1	4·8	253
2·0 „ ..	27	4·3	3·3	66	29	5·8	4·9	66	17	5·3	3·9	235	16	5·0	4·0	239	26	9·1	8·5	249	23	5·4	4·1	279
2·5 „ ..	27	7·1	6·6	70	28	8·0	7·6	67	13	6·2	5·7	267	11	6·7	6·2	261	26	11·3	11·0	266	16	5·7	4·6	307
3·0 „ ..	27	9·9	9·3	67	24	8·8	8·4	64	10	8·3	8·2	275	8	9·6	9·3	275	23	11·4	11·2	271	7	5·4	4·7	331
4·0 „ ..	25	7·1	5·8	60	20	8·8	7·0	59	7	11·3	10·9	282					19	11·5	11·3	282				
5·0 „ ..	20	5·3	2·9	41	18	5·8	2·3	35	4	10·6	10·3	292					15	13·5	13·2	279				
6·0 „ ..	19	5·7	2·9	23	17	6·1	2·9	356	4	10·2	8·6	291					11	13·8	12·1	278				
7·5 „ ..	13	6·7	4·0	13	17	7.5	1·9	351	2	8·7	7·8	278					9	14·1	12·2	288				
9·0 „ ..	10	7·7	3·8	336	12	8·1	4·1	270	1	17·0	17·0	270					7	17·8	17·2	288				

Station	CUTTACK												GADAG								GAYA			
Time in I. S. T.	0700				1100				1600				0700				1600				0100			
Ht. in Km.	n	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	1·9	194	30	2·1	2·0	203	30	3·3	3·2	188	30	4·0	3·4	236	30	2·6	1·1	123	30	2·5	0·9	131
0·15 a.g. ..	30	5·3	4·8	202	30	4·6	4·3	202	30	6·9	6·7	188	30	4·9	3·8	246	30	3·2	1·3	117	30	6·0	0·1	253
0·6 a.s.l. ..	28	7·0	6·1	237	30	5·3	4·8	225	30	5·9	5·5	204									30	7·0	1·8	304
1·0 „ ..	25	6·5	5·6	266	28	5·3	4·5	272	30	3·9	3·1	244	30	5·6	3·2	325	30	3·0	1·1	85	30	6·3	4·3	305
1·5 „ ..	25	5·9	5·4	271	27	5·9	5·3	288	30	4·8	4·0	284	30	5·4	3·0	6	29	3·6	1·8	52	30	7·7	7·1	297
2·0 „ ..	24	5·3	4·8	281	18	4·7	4·1	290	30	5·3	4·6	293	30	4·4	1·9	32	29	3·7	2·6	37	23	8·6	8·3	285
2·5 „ ..	22·	5·1	4·5	301	7	3·5	2·5	305	30	5·7	5·1	300	30	4·2	2·3	61	30	4·1	3·2	46	8	8·6	8·6	287
3·0 „ ..	22	5·9	5·0	318	3	4·5	3·4	311	29	6·3	5·8	307	30	4·7	3·2	67	28	4·4	3·3	53	7	9·5	9·4	282
4·0 „ ..	17	9·0	7·9	329					28	7·5	6·6	316	27	6·9	5·8	59	20	6·7	4·7	51				
5·0 „ ..	15	7·1	5·7	333					23	7·9	7·0	310	25	6·9	4·7	28	12	7·6	5·1	33				
6·0 „ ..	12	7·0	5·3	320					19	8·8	7·8	305	24	7·0	4·2	352	6	7·2	4·4	24				
7·5 „ ..	8	13·2	12·7	277					14	10·9	9·7	292	22	10·7	7·0	319	5	7·1	3·9	351				
9·0 „ ..	6	17·2	15·1	265					8	15·1	13·1	273	17	12·2	10·3	278	3	9·5	6·5	244				

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

APRIL 1948.

Station	GAYA												GOPALPUR								GORAKHPUR			
Time in I.S.T.	0700				1100				1600				0700				1600				0700			
Ht. in Km.	n	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	1·1	165	30	3·1	2·0	298	30	4·5	4·0	314	30	5·4	5·1	205	30	9·2	9·0	190	30	2·6	1·0	71
0·15 a.g. ..	30	5·5	2·2	223	30	5·9	3·7	299	30	6·9	6·0	310	30	9·2	8·9	211	29	12·9	12·8	199	30	7·9	3·4	75
0·6 a.s.l. ..	30	6·6	3·6	264	30	4·5	3·4	284	30	7·6	6·9	303	30	6·3	5·7	232	29	6·3	5·9	203	30	8·8	1·0	101
1·0 „ ..	30	7·0	5·5	284	30	5·4	4·3	283	30	8·0	7·0	297	30	5·4	4·8	255	29	3·3	1·4	230	30	7·6	3·0	275
1·5 „ ..	30	8·1	7·3	295	30	7·0	6·0	288	30	8·2	7·6	293	30	4·8	3·8	267	29	3·4	2·3	297	30	7·6	5·3	294
2·0 „ ..	30	10·0	9·0	297	30	9·4	8·5	290	30	8·9	8·4	287	30	4·6	3·1	288	29	4·3	3·7	320	25	7·9	5·9	298
2·5 „ ..	29	11·0	10·1	292	25	10·3	9·6	294	29	9·7	9·4	284	29	5·2	3·0	318	27	4·3	3·7	328	23	9·9	7·7	298
3·0 „ ..	27	12·2	11·7	293	19	12·3	11·6	294	27	10·6	10·3	284	23	5·1	3·5	347	28	4·8	3·9	335	22	11·2	7·4	292
4·0 „ ..	14	13·2	12·5	287	3	16·0	15·9	280	27	13·7	13·3	283	17	7·1	6·0	356	26	6·3	3·9	332	16	14·2	10·4	283
5·0 „ ..	11	14·3	13·1	301	1	12·0	12·0	280	25	15·8	15·2	285	16	6·9	5·2	348	21	6·5	5·6	330	9	13·3	12·3	290
6·0 „ ..	8	14·1	12·6	296					19	17·0	16·4	288	16	7·5	5·2	318	19	7·5	6·1	308	8	12·3	11·4	298
7·5 „ ..	6	14·5	9·6	288					11	15·6	13·9	297	14	11·3	8·7	294	13	12·2	11·2	284	6	13·2	12·5	297
9·0 „ ..	4	14·0	7·6	321					8	17·3	15·8	307	10	15·9	10·4	275	9	18·1	16·4	264	3	14·3	14·1	302

Station	GORAKHPUR				HYDERABAD (Dn)												JAGDALPUR							
Time in I.S.T.	1600				0100				0700				1600				0700				1600			
Ht. in Km.	n	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	2·9	2·1	280	30	2·9	2·2	144	30	3·0	1·0	217	30	2·1	0·8	162	30	2·3	1·8	211	20	3·4	2·8	215
0·15 a.g. ..	30	6·0	4·4	280	30	7·1	6·1	153	30	6·0	3·9	226	30	4·1	1·3	143	30	4·8	4·3	219	19	4·8	4·0	215
0·6 a.s.l. ..	30	6·2	4·6	279	30	5·0	4·2	146	30	4·5	2·5	219	30	3·6	1·4	146	30	3·7	3·4	218	19	4·3	3·7	218
1·0 „ ..	30	6·3	4·8	277	30	8·4	7·3	154	30	6·7	4·7	221	30	3·4	0·4	182	30	6·8	6·3	238	19	5·2	4·3	228
1·5 „ ..	27	7·0	5·7	277	30	4·9	3·8	165	30	6·5	4·2	226	30	2·9	0·3	184	30	5·1	4·1	265	19	4·3	3·4	256
2·0 „ ..	25	8·6	7·2	277	30	3·4	0·5	164	30	5·1	1·7	235	30	3·2	0·6	22	30	4·5	3·0	305	19	4·2	3·2	280
2·5 „ ..	21	10·5	10·2	285	28	4·0	2·3	5	30	4·2	0·9	15	30	3·5	1·3	37	30	4·8	3·2	347	18	4·1	2·6	310
3·0 „ ..	16	11·5	11·3	289	23	5·3	3·8	2	30	4·5	3·2	30	30	4·1	2·2	42	29	5·1	3·7	2	18	4·3	2·8	335
4·0 „ ..	12	13·3	13·0	292	2	9·0	8·9	345	30	6·7	5·7	37	22	6·1	3·4	47	28	6·7	5·7	11	16	5·6	4·7	4
5·0 „ ..	9	14·0	13·6	291					27	6·5	5·1	30	14	6·8	3·0	358	26	6·2	4·3	2	14	5·9	4·0	347
6·0 „ ..	7	14·1	13·9	291					25	8·3	4·4	351	11	7·7	4·8	350	22	6·1	3·8	326	12	5·5	3·3	290
7·5 „ ..	6	15·9	15·5	296					17	12·3	9·7	312	9	11·3	8·6	341	16	9·9	7·1	305	9	8·3	6·3	292
9·0 „ ..	4	18·4	18·0	303					12	17·0	14·5	298	8	15·2	12·7	324	13	13·9	11·5	294	6	16·9	15·5	281

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

APRIL 1948.

Station	JAMSHEDPUR												JHARSUGUDA											
Time in I. S. T.	0700				1100				1600				0100				0700				1600			
Ht. in Km.	n	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	1·6	0·6	283	30	1·8	1·2	257	30	3·3	0·8	310	30	1·9	0·9	154	30	1·3	0·8	142	30	1·6	[illegible]·2	270
0·15 a.g. ..	30	2·9	1·5	256	30	2·7	1·9	248	30	4·9	2·2	319	30	6·4	3·3	178	30	5·0	2·2	179	30	3·6	2·5	269
0·6 a.s.l. ..	30	4·6	3·0	250	30	2·9	1·7	252	30	4·4	2·1	301	30	7·9	5·1	218	30	5·4	2·3	230	30	4·1	3·1	268
1·0 „ ..	30	6·5	4·0	265	30	3·9	2·4	269	30	4·6	30	303	30	8·5	5·6	233	30	5·9	2·4	270	30	4·6	3·8	272
1·5 „ ..	30	5·6	3·7	276	30	4·4	3·2	284	30	4·7	3·5	301	30	7·7	5·2	255	30	5·9	3·1	30	30	4·8	4·1	280
2·0 „ ..	30	5·6	4·5	280	29	5·8	4·9	277	30	5·6	4·9	302	29	6·7	5·0	274	30	5·5	4·3	302	30	4·9	4·4	286
2·5 „ ..	28	6·8	6·2	288	22	7·3	6·7	291	29	6·9	6·4	297	22	6·0	5·0	287	30	6·3	5·1	304	30	5·6	5·3	292
3·0 „ ..	25	8·7	8·3	291	20	8·8	8·3	295	27	7·9	7·6	299	13	5·9	5·1	285	30	7·1	6·2	301	29	6·5	6·2	289
4·0 „ ..	18	12·9	12·3	296					26	10·4	9·9	298	4	8·6	7·7	284	29	9·5	8·6	305	28	8·3	7·5	214
5·0 „ ..	12	12·1	11·3	312					23	11·9	11·1	300	1	8·0	8·0	265	24	10·2	8·9	307	25	7·8	7·1	292
6·0 „ ..	10	11·5	10·2	314					20	12·3	11·2	299					19	9·1	7·5	310	25	9·9	9·0	289
7·5 „ ..	8	14·3	13·4	293					12	16·3	15·0	289					15	11·8	8·5	296	19	14·3	12·[illegible]	291
9·0 „ ..	5	20·0	17·5	299					9	19·9	17·2	285					14	16·8	13·3	284	13	18·5	16·9	291

Station	JODHPUR												JUBBULPORE								MADHOSAGAR			
Time in I. S. T.	0100				0700				1600				0700				1600				0700			
Ht. in Km.	n	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	279	30	0·7	0·3	15	30	2·2	1·9	240	30	1·0	0·7	165	30	2·3	1·6	305	30	0·9	0·6	271
0·15 a.g. ..	30	5·9	5·1	259	30	6·7	2·7	233	30	4·9	3·9	251	30	3·9	1·6	218	30	5·1	4·2	306	30	6·4	2·5	298
0·6 a.s.l. ..	30	10·1	5·7	261	30	8·5	4·3	263	30	4·9	4·0	248	30	4·4	1·2	223	30	5·2	4·1	308	30	7·4	3·5	325
1·0 „ ..	30	8·5	5·7	257	30	7·8	4·6	253	30	4·9	4·0	246	30	5·2	1·5	339	30	5·9	4·8	307	30	6·4	4·0	326
1·5 „ ..	28	6·8	4·7	254	30	6·7	4·3	254	30	4·9	3·9	241	30	4·7	2·6	329	30	6·2	5·4	306	30	6·9	5·2	307
2·0 „ ..	23	5·4	3·3	260	30	6·4	4·2	249	30	5·3	4·1	241	30	5·0	3·9	310	30	6·2	5·4	306	29	8·2	7·4	302
2·5 „ ..	18	4·9	2·5	259	30	6·9	4·5	258	29	5·5	4·6	246	30	5·7	4·9	299	30	6·6	5·9	307	28	9·2	8·2	295
3·0 „ ..	9	6·1	2·5	253	29	7·9	2·9	249	29	6·9	5·6	250	30	7·4	6·4	293	30	7·1	6·4	295	26	10·3	9·4	283
4·0 „ ..					25	8·6	5·4	251	27	8·6	7·5	258	28	9·8	8·1	280	30	8·7	7·7	290	19	10·4	8·9	279
5·0 „ ..					20	8·0	6·7	269	27	9·5	8·2	267	27	10·2	8·9	291	27	9·4	8·6	285	14	11·5	9·9	274
6·0 „ ..					16	10·5	9·1	269	23	12·1	11·0	274	24	12·6	10·9	295	23	11·9	10·3	278	9	13·3	13·6	288
7·5 „ ..					9	13·8	13·3	270	17	17·4	15·2	272	16	16·9	15·1	290	17	14·4	12·2	287	8	14·0	13·0	289
9·0 „ ..					6	15·5	15·2	279	9	16·3	14·9	283	13	21·8	20·9	281	14	17·5	14·6	295	6	19·7	17·3	297

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

APRIL 1948.

Station	MADHOSAGAR				MADRAS												MALEGAON							
Time in I.S.T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	307	30	2·3	2·0	189	30	2·2	1·9	204	30	6·0	5·4	150	30	3·2	3·1	280	30	2·6	2·3	288
0·15 a.g. ..	30	6·1	5·3	306	30	6·3	6.0	173	30	5·7	5·4	192	30	6·4	5·5	153	30	6·7	6·4	301	30	6·0	5·2	309
0·6 a.s.l. ..	30	6·2	5·5	305	30	7·6	7·1	181	30	7·9	7·6	192	30	4·3	2·9	183	30	6·7	6·4	301	30	6·0	5·2	309
1·0 „ ..	30	6·5	5·9	303	27	5·6	4·5	185	30	6·3	5·3	188	30	3·6	1·6	183	30	8·9	8·3	323	30	7·5	6·3	336
1·5 „ ..	30	6·5	6·3	301	25	4·8	2·9	135	30	5·1	2·8	118	30	4·3	2·9	87	30	7·8	6·8	325	30	6·1	4.7	352
2·0 „ ..	30	6·6	6·1	299	24	5·1	3·4	81	30	5·0	3·9	78	30	5·6	4·5	71	30	6·2	3·8	295	30	5·5	3·6	311
2·5 „ ..	30	7·0	6·3	296	22	6·2	5·7	60	30	6·7	6·1	61	30	7·2	6·5	57	27	4·9	2·2	238	30	5·7	3·5	265
3·0 „ ..	29	8·5	7·5	292	15	7·1	6·5	59	30	8·1	7·5	51	30	8·3	7·5	53	24	4·4	2·5	207	30	5·7	4·3	232
4·0 „ ..	25	11·5	10·3	282	4	8·5	7·0	39	30	8·6	7·3	49	30	7·8	6·7	52	6	7·1	5·9	229	30	6·7	4·4	215
5·0 „ ..	23	13·9	12·8	286					29	6·7	4·2	26	29	5·8	2·3	32					29	6·7	3·7	297
6·0 „ ..	22	15·0	13·4	284					28	7·8	3·6	327	28	6·8	2·1	343					26	8·7	6·4	321
7·5 „ ..	19	17·0	15·2	288					23	11·6	6·0	291	24	10·1	5·2	288					25	12·9	10·0	300
9·0 „ ..	15	18·2	17·1	286					13	10·6	8·6	272	12	11·9	8·3	265					21	20·8	16·9	298

Station	MALEGAON				MANGALORE												MASULIPATAM							
Time in I.S.T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	2·6	307	28	1·9	1·1	39	30	1·9	1·5	74	30	4·1	3·1	286	30	2·9	2·7	187	30	1·5	1·4	192
0·15 a.g. ..	30	5·0	4·3	306	28	3·4	1·9	351	30	3·3	2·0	51	30	5·7	4·7	281	30	7·3	6·9	179	30	5·9	5·5	196
0·6 a.s.l. ..	30	5·0	4·3	306	28	3·6	2·5	327	30	3·7	2·1	331	30	5·4	4·0	287	30	7·7	6·8	182	30	7·8	7·4	196
1·0 „ ..	30	4·7	4·0	300	25	3·3	1·4	322	30	3·3	1·3	328	30	3·7	1·3	312	28	5·4	3·5	176	30	6·1	5·3	18
1·5 „ ..	30	4·3	3·7	301	21	3·0	1·0	317	28	3·9	1·6	25	27	3·9	2·5	54	27	3·3	0·5	123	29	3·3	1·8	15
2·0 „ ..	30	3·8	3·0	291	14	3·6	2·1	36	28	5·1	3·5	56	25	4·6	3·7	64	26	3·7	1·6	21	28	3·1	1·6	8
2·5 „ ..	30	3·8	2·6	276	12	6·3	5·3	64	27	5·3	4·4	69	25	6·0	5·6	74	19	3·7	2·4	40	28	4·2	3·0	4
3·0 „ ..	30	3·8	2·5	262	10	5·9	4·9	67	26	7·2	6·5	68	25	7·9	7·6	74	15	4·8	3·0	22	27	5·6	4·7	3
4·0 „ ..	30	5·1	3·0	243	1	3·5	3·5	75	23	8·5	7·2	61	24	7·9	6·8	70	7	6·7	5·2	27	26	7·0	5·7	1
5·0 „ .	29	5·7	2·7	274					17	6·3	2·6	42	20	6·4	5·0	27					25	6·0	5·2	1
6·0 „ ..	28	7·8	3·9	306					14	6·3	3·5	326	17	6·9	4·8	354					21	7·5	4·6	34
7·5 „ ..	24	13·4	9·3	309					11	10·2	7·1	309	9	11·3	9·9	329					19	11·4	8·5	31
9·0 „ ..	24	18·0	14·0	291					8	12·3	8·3	293	8	11·5	10·1	330					14	16·7	13·4	2

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

APRIL 1948.

Station	MASULIPATAM				MINICOY								NAGERCOIL											
Time in I. S. T.	1600				0700				1400				0100				0700				1600			
Ht. in Km.	n	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	3·7	171	30	1·6	1·1	330	30	2·0	1·6	312	30	2·5	2·3	291	30	1·8	1·1	299	30	5·2	4·3	241
0·15 a.g. ..	30	6·1	5·8	179	30	3·9	2·5	315	29	3·9	3·3	317	30	6·6	6·2	293	30	4·5	3·4	307	30	7·5	6·4	248
0·6 a.s.l. ..	30	5·0	4·3	208	29	3·4	2·3	312	29	3·5	2·9	319	30	7·7	7·1	290	30	6·5	5·5	298	30	6·7	5·5	263
1·0 „ ..	30	4·4	2·9	216	29	2·4	1·0	308	27	2·5	1·5	335	30	5·5	4·4	298	30	4·8	3·7	303	29	4·7	3·3	290
1·5 „ ..	30	3·3	0·8	218	29	3·0	2·0	298	26	2·5	1·8	64	30	4·0	1·6	334	30	3·5	1·3	326	29	4·0	2·8	357
2·0 „ ..	30	3·2	1·3	39	26	5·0	4·4	78	23	4·7	4·1	63	30	5·2	4·2	57	29	4·3	3·2	58	28	5·6	4·5	26
2·5 „ ..	30	4·6	3·8	48	25	7·2	6·5	70	22	6·1	5·3	68	28	7·5	6·8	52	29	6·7	5·7	60	26	7·5	7·0	42
3·0 „ ..	29	6·1	5·4	45	25	8·0	7·1	70	19	7·0	5·8	71	28	8·9	8·2	58	28	7·7	6·6	62	26	8·4	7·5	46
4·0 „ ..	29	6·7	5·9	47	18	6·3	4·0	69	17	5·9	3·7	76	16	7·0	3·7	59	28	6·6	3·8	71	24	6·2	4·1	58
5·0 „ ..	26	6·1	3·8	44	16	5·3	1·9	32	17	4·0	1·3	62	8	5·1	1·0	9	28	5·7	2·2	42	20	5·9	1·6	15
6·0 „ ..	26	6·3	2·7	331	13	5·9	2·2	69	16	5·6	2·3	53	6	4·8	2·4	5	26	5·4	1·9	60	19	5·9	1·6	57
7·5 „ ..	19	11·1	8·8	294	9	6·8	4·1	17	10	7·0	2·7	22	2	6·3	5·8	241	25	6·5	1·8	12	17	6·6	1·2	32
9·0 „ ..	15	14·7	12·7	282	8	3·9	1·2	296	4	3·4	1·8	197	1	2·5	2·5	175	21	5·3	2·1	229	13	9·5	1·9	338

Station	NAGPUR												NEW DELHI											
Time in I.S.T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	0·7	255	30	2·8	1·1	266	30	1·9	0·9	250	30	3·0	2·1	318	30	2·6	1·7	293	30	5·5	4·5	319
0·15 a.g. ..	30	6·9	1·1	231	30	6·1	1·2	280	30	3·6	1·1	283	30	9·8	7·1	347	30	7·7	5·2	313	30	6·2	5·1	320
0·6 a.s.l. ..	30	7·8	1·9	212	30	7·7	1·6	290	30	3·6	1·7	276	30	10·4	7·9	341	30	8·5	6·6	318	30	6·9	5·9	312
1·0 „ ..	30	7·0	1·7	276	30	8·2	2·8	303	30	3·9	2·2	284	29	10·1	8·6	325	30	9·3	7·6	318	30	6·7	6·0	304
1·5 „ ..	30	5·9	2·1	282	30	9·7	3·3	317	29	3·3	2·7	297	27	10·2	8·7	304	30	10·4	9·0	311	30	6·9	6·0	300
2·0 „ ..	23	4·9	2·9	299	30	5·1	2·8	324	29	3·3	2·9	291	19	10·4	9·2	297	29	11·3	10·1	306	30	8·0	6·9	295
2·5 „ ..	19	4·7	3·0	312	29	4·9	3·0	326	27	4·0	3·4	291	8	8·4	7·0	282	24	11·7	10·2	299	30	9·4	8·6	296
3·0 „ ..	12	4·2	3·1	317	28	5·2	3·3	324	27	4·7	4·0	299	2	10·0	8·5	261	19	10·4	9·2	298	30	10·7	9·6	289
4·0 „ ..	2	6·3	5·9	261	24	6·2	3·9	290	26	6·7	5·7	303	1	12·0	12·0	245	15	11·5	10·0	297	29	12·9	11·4	283
5·0 „ ..					19	7·8	5·5	292	23	7·5	6·3	304					11	12·8	10·6	296	24	12·1	10·4	287
6·0 „ ..					17	9·0	7·6	315	20	8·5	6·6	298					8	16·1	14·2	280	22	12·2	10·8	291
7·5 „ ..					15	12.0	11·2	287	19	11·5	7·8	289					3	19·7	19·7	270	17	13·1	11·9	281
9·0 „ ..					12	19·5	18·2	290	13	18·5	16·1	292					2	31·3	31·3	271	9	18·8	18·1	286

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

APRIL 1948.

Station	POONA												PORT BLAIR											
Time in I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in K.m.	n	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	1·6	1·6	261	30	1·3	1·2	265	30	2·7	2·1	304	30	1·8	1·0	284	30	1·1	0·8	286	30	1·9	0·5	128
0·15 a.g. ..	30	4·5	4·0	263	30	3·5	3·2	263	30	4·5	3·5	301	30	2·7	0·8	310	30	2·9	1·2	316	28	3·0	1·0	128
0·6 a.s.l. ..	30	3·6	3·2	253	30	2·1	2·0	263	30	3·5	2·7	300	29	2·2	0·3	143	30	3·0	0·2	337	28	2·7	0·0	168
1·0 „ ..	30	6·6	5·6	300	30	6·1	4·6	329	30	5·0	4·1	294	28	2·5	0·3	116	30	3·0	0·3	71	28	2·3	0·8	325
1·5 „ ..	30	8·0	6·7	318	30	6·3	4·8	351	30	4·0	3·1	301	27	3·3	0·1	236	30	3·5	0·6	78	26	2·6	0·6	10
2·0 „ ..	30	5·7	3·9	309	30	5·3	2·7	333	30	3·3	1·7	303	25	3·2	0·3	111	30	2·9	0·8	104	24	3·0	1·3	69
2·5 „ ..	30	4·2	1·0	34	30	4·5	0·4	21	29	3·3	0·8	343	22	4·0	1·0	56	30	3·3	1·3	88	19	3·4	1·4	59
3·0 „ ..	30	4·9	2·5	102	30	4·4	1·7	124	28	3·4	0·9	77	20	4·4	0·7	28	30	4·3	1·7	66	18	4·2	1·0	46
4·0 „ ..	11	5·0	3·7	142	30	4·5	2·6	149	27	4·4	1·5	72	7	6·4	4·1	236	28	4·3	0·5	212	17	4·9	1·3	234
5·0 „ ..					30	5·5	2·2	327	25	5·6	2·4	16					27	5·6	3·0	224	14	5·9	2·4	236
6·0 „ ..					29	7·1	4·6	331	22	7·0	3·4	321					24	5·8	2·6	243	8	7·4	2·4	260
7·5 „ ..					24	11·5	8·3	310	19	12·8	9·1	289					21	4·9	2·5	281	5	3·8	1·8	217
9·0 „ ..					18	18·5	16·5	289	12	21·3	19·6	278					13	6·2	4·8	257	5	4·6	3·1	246

Station	RAIPUR												SAHARSA											
Time in I.S.T.	0100				0700				1600				0700				1100				1600			
Ht. in Km.	n	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	1·5	217	30	1·7	1·4	241	30	1·5	1·2	266	30	3·4	3·2	77	30	3·0	2·4	84	30	2·3	1·0	66
0·15 a.g. ..	30	7·4	3·6	235	30	7·3	4·7	246	30	4·5	3·2	280	30	7·6	6·8	94	30	5·3	3·9	90	30	4·3	0·9	35
0·6 a.s.l. ..	30	7·5	3·8	251	30	8·2	4·9	253	30	4·2	3·0	277	30	5·9	3·8	112	30	5·4	3·8	96	30	4·8	0·3	330
1·0 „ ..	30	5·1	3·5	271	30	7·2	3·3	266	30	4·7	3·3	274	28	6·9	1·3	242	29	5·5	1·0	104	30	5·4	1·6	263
1·5 „ ..	30	4·9	3·5	297	30	5·3	2·8	290	30	4·5	4·0	276	28	7·3	5·0	279	29	7·2	4·5	260	30	7·0	5·6	263
2·0 „ ..	28	4·3	3·1	300	29	4·4	3·0	301	30	4·3	3·9	283	28	8·7	7·1	287	25	8·0	6·7	270	30	10·5	9·8	275
2·5 „ ..	16	4·9	4·5	313	28	4·8	5·7	298	30	5·0	4·4	288	27	9·9	9·3	292	19	9·2	8·4	276	29	12·6	12·3	283
3·0 „ ..	10	4·5	3·7	319	28	5·7	4·4	295	29	5·0	4·4	291	26	12·4	11·9	292	14	8·9	8·5	278	29	13·9	13·5	284
4·0 „ ..	1	3·5	3·5	290	27	7·0	4·7	295	26	7·6	6·3	298	21	13·2	12·6	291					24	15·4	15·1	287
5·0 „ ..					25	8·9	6·1	302	22	7·3	6·0	304	17	13·2	12·6	299					19	15·2	14·8	288
6·0 „ ..					24	9·3	6·8	297	20	7·9	6·6	301	15	15·2	13·6	304					14	15·9	15·4	289
7·5 „ ..					20	12·0	10·5	284	17	12·1	9·8	296	11	12·4	10·2	299					6	12·8	11·1	298
9·0 „ ..					16	16·7	14·1	283	15	16·3	14·2	293	8	19·0	14·3	297					4	14·3	13·5	288

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

APRIL 1948.

Station	TEZPUR																TRICHINOPOLY							
Time in I. S. T.	0100				0700				1100				1600				0100				0700			
Ht. in Km.	n	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	1·5	60	30	1·5	1·3	64	30	1·9	1·2	83	30	1·6	0·6	93	30	1·7	1·1	177	30	0·9	0·6	195
0·15 a.g. ..	30	5·6	5·0	72	30	5·2	4·2	72	29	5·2	3·7	86	30	4·4	1·7	81	30	4·9	3·6	177	30	3·6	2·2	212
0·6 a.s.l. ..	30	4·2	2·5	94	29	5·8	4·1	87	29	5·9	4·1	86	30	3·1	0·4	119	30	6·3	5·0	177	30	4·1	2·7	219
1·0 „ ..	30	3·7	1·0	201	26	4·1	1·6	122	29	5·1	3·3	94	30	3·0	1·8	231	30	5·5	4·1	165	30	4·1	2·0	216
1·5 „ ..	24	4·2	2·7	246	26	4·1	2·4	250	29	4·5	2·8	99	30	6·0	5·3	247	30	3·6	1·5	122	30	4·2	1·1	100
2·0 „ ..	20	5·6	4·3	246	25	6·1	5·1	260	29	4·1	1·4	136	28	8·5	8·0	247	29	4·9	3·8	67	29	5·8	4·8	62
2·5 „ ..	16	5·8	4·7	254	23	7·6	6·8	260	28	4·1	2·2	216	26	9·0	8·6	251	28	7·8	7·1	63	30	8·2	7·3	59
3·0 „ ..	15	7·0	6·0	252	20	9·2	8·7	268	24	5·7	4·3	243	25	8·9	8·1	255	28	9·3	8·5	60	30	9·5	8·9	60
4·0 „ ..	7	3·8	1·3	287	11	5·0	4·2	265	17	5·6	4·3	254	20	9·0	7·1	265	6	6·7	4·3	40	29	8·3	6·6	54
5·0 „ ..					9	7·9	5·6	288	15	5·9	5·1	266	16	10·6	8·2	266	1	8·5	8·5	80	27	6·5	2·3	49
6·0 „ ..					9	9·2	5·7	271					14	10·9	7·9	281					25	6·7	2·3	57
7·5 „ ..					7	11·1	6·5	260					13	13·5	9·2	293					23	7·8	3·5	306
9·0 „ ..					6	17·1	12·2	258					12	17·2	13·6	285					19	6·7	3·9	262

Station	TRICHINOPOLY				TRIVANDRUM				UDAIPUR												VENGURLA			
Time in I. S. T.	1600				0700				0100				0700				1600				0100			
Ht. in Km.	n	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	0·7	119	30	2·2	1·5	355	30	0·7	0·5	270	30	0·5	0·4	296	30	2·5	1·4	251	30	0·7	0·2	3
0·15 a.g. ..	30	3·1	1·5	106	30	4·4	3·4	349	30	4·9	3·8	289	30	3·9	2·7	298	30	5·6	3·5	261	29	3·6	2·5	330
0·6 a.s.l. ..	30	3·4	2·0	109	30	4·8	3·7	314													29	4·9	3·5	336
1·0 „ ..	30	3·5	2·1	106	30	4·1	3·1	323	30	6·9	5·3	248	30	5·7	3·7	296	30	4·9	3·3	262	28	6·9	5·9	336
1·5 „ ..	30	4·0	2·7	95	30	3·3	1·9	2	30	7·8	4·9	289	30	5·9	2·3	282	30	4·5	2·3	260	28	6·2	5·5	335
2·0 „ ..	30	5·6	4·6	66	30	4·7	3·9	59	30	6·3	3·2	280	30	5·7	2·2	235	30	4·3	3·2	264	26	4·3	2·6	356
2·5 „ ..	29	7·6	6·8	57	30	6·6	5·9	62	30	5·5	3·5	242	30	5·9	3·3	229	30	4·8	3·5	254	23	4·0	2·7	77
3·0 „ ..	29	8·5	7·4	58	30	7·4	6·2	64	27	5·8	4·1	224	30	6·5	4·2	242	30	5·5	4·5	252	22	5·5	3·9	86
4·0 „ ..	26	7·8	6·5	53	27	5·6	3·5	66	1	6·5	6·5	260	27	7·1	4·1	261	30	7·1	5·5	250	8	8·2	6·8	88
5·0 „ ..	23	6·2	3·3	27	22	6·2	2·4	59					26	8·7	6·6	277	28	9·5	6·7	266				
6·0 „ ..	23	7·3	3·2	9	17	5·7	1·0	24					21	10·4	8·1	289	28	12·0	9·2	275				
7·5 „ ..	18	8·3	4·1	320	13	6·6	2·4	35					15	13·3	11·8	280	21	14·4	11·6	283				
9·0 „ ..	13	8·7	4·7	269	11	4·4	1·3	333					12	19·6	17·5	288	16	18·2	16·6	283				

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

APRIL 1948.

Station	VENGURLA								VERAVAL												VIZAGAPATAM			
Time in I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	0·5	0·4	53	30	4·3	4·1	263	30	4·2	3·8	305	30	3·2	2·9	325	30	7·3	6·8	272	30	2·8	2·6	242
0·15 a.g. ..	30	2·9	1·3	33	30	5·2	4·9	283	30	8·2	7·7	306	30	6·8	6·0	318	29	9·2	8·7	278	30	6·9	6·4	239
0·6 a. s. l. ..	30	4·7	2·6	333	30	4·7	3·2	307	29	9·7	9·3	307	30	9·0	8·2	322	30	7·1	6·7	298	30	7·7	7·7	239
1·0 „ ..	29	6·0	3·9	349	30	4·5	2·4	351	29	8·4	7·3	237	29	7·5	6·5	316	30	5·5	5·1	311	28	6·1	5·0	250
1·5 „ ..	28	7·2	5·5	5	28	4·9	3·7	12	29	6·5	5·2	295	29	6·0	4·3	300	30	4·8	3·3	320	26	3·4	1·6	282
2·0 „ ..	27	5·7	4·0	28	28	4·7	3·7	40	26	6·1	4·2	283	27	5·9	3·5	272	30	5·3	3·2	295	24	2·6	1·3	344
2·5 „ ..	27	5·4	3·8	52	28	5·0	4·5	62	9	6·3	4·6	275	27	6·5	3·8	259	30	6·0	4·1	272	20	3·3	2·1	23
3·0 „ ..	27	5·4	4·1	70	27	5·5	5·0	75	6	6·3	4·9	268	27	6·8	4·7	245	30	6·9	5·0	258	15	4·5	3·4	25
4·0 „ ..	22	5·4	4·2	92	24	6·2	4·6	77	1	9·0	9·0	205	24	6·5	3·9	251	30	7·1	4·9	248	7	5·5	4·8	42
5·0 „ ..	18	5·5	3·2	23	23	6·7	4·2	47					24	6·8	4·8	289	30	6·3	4·5	275				
6·0 „ ..	16	9·5	6·3	323	23	7·8	3·1	9					24	8·4	5·8	289	30	7·9	6·0	285				
7·5 „ ..	12	12·2	9·5	308	20	10·4	7·0	290					20	13·5	11·8	287	28	11·3	9·4	281				
9·0 „ ..	10	16·0	11·3	298	18	16·1	12·6	273					17	20·0	17·3	278	26	16·1	13·0	282				

Station	VIZAGAPATAM																			
Time in I. S. T.	0700				1600															
Ht. in Km.	n	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	2·1	236	30	4·3	4·1	201																
0·15 a.g. ..	30	6·1	5·9	243	30	6·1	5·9	209																
0·6 a.s.l. ..	30	8·4	8·2	236	30	7·3	7·0	237																
1·0 „ ..	30	7·1	6·8	236	30	5·8	5·0	252																
1·5 „ ..	29	3·4	2·2	276	30	3·6	1·9	311																
2·0 „ ..	29	2·8	1·5	336	30	3·9	2·7	353																
2·5 „ ..	28	4·0	2·3	17	30	4·8	4·0	19																
3·0 „ ..	27	5·5	3·8	21	30	5·1	4·4	25																
4·0 „ ..	26	6·3	4·7	20	30	6·4	5·2	27																
5·0 „ ..	24	5·7	4·1	4	29	5·4	3·3	1																
6·0 „ ..	21	6·9	4·4	336	26	6·4	4·6	310																
7·5 „ ..	16	11·4	9·2	295	21	12·4	10·8	291																
9·0 „ ..	10	14·0	12·5	273	14	16·4	14·9	272																

Table B—Monthly mean directions and velocities of upper winds.

Winds at and above 10 km. above sea level.

APRIL 1948.

Height in km.	n	V	v	D
AHMEDABAD				
10·0	27	20·1	17·5	279
11·0	16	28·7	25·6	274
12·0	10	30·2	27·5	272
13·0	6	32·5	28·5	280
14·0	5	30·5	27·5	282
15·0	4	28·0	22·6	285
16·0	4	27·5	20·5	280
17·0	3	22·8	17·3	286
18·0	3	31·2	26·2	289
19·0	2	35·2	34·5	323
20·0	1	24·0	24·0	295
21·0	1	27·0	27·0	305
ALLAHABAD				
10·0	16	28·0	26·2	292
11·0	7	35·0	34·2	291
12·0	5	41·5	41·1	295
13·0	5	45·5	45·5	294
14·0	3	40·0	40·0	299
15·0	1	23·5	23·5	290
AMBALA				
10·0	23	20·5	19·1	281
11·0	15	23·8	22·0	283
12·0	11	26·4	25·2	288
13·0	10	30·4	29·1	285
14·0	9	30·8	30·2	286
15·0	9	34·4	32·4	284
16·0	7	34·2	32·6	278
17·0	7	32·7	30·2	271
18·0	6	29·8	28·8	278
19·0	5	28·6	26·2	273
20·0	3	30·0	29·7	298
21·0	2	30·7	29·5	270
22·0	2	32·5	32·2	267

Height in Km.	n	V	v	D
ANANTAPUR				
10·0	25	12·3	10·6	265
11·0	12	12·3	10·6	268
12·0	11	11·4	9·8	272
13·0	6	9·7	7·3	254
ASANSOL				
10·0	4	19·1	12·2	315
11·0	3	23·2	17·0	324
12·0	3	24·2	18·8	313
13·0	3	28·6	23·0	312
14·0	2	17·2	11·4	334
15·0	2	15·0	11·1	340
16·0	1	20·5	20·5	20
17·0	1	27·0	27·0	15
BANGALORE				
10·0	14	12·1	9·5	281
11·0	12	11·2	10·8	261
12·0	10	10·1	7·9	242
13·0	8	11·9	11·1	240
14·0	7	12·3	9·0	230
15·0	5	12·0	10·6	240
16·0	4	10·8	8·3	242
17·0	1	8·0	8·0	255
18·0	1	16·0	16·0	250
19·0	1	7·5	7·5	260
20·0	1	3·5	3·5	165
21·0	1	4·5	4·5	105
BAREILLY				
10·0	18	22·6	21·7	287
11·0	14	28·8	27·7	285
12·0	12	32·8	31·6	287
13·0	8	30·2	27·6	285
14·0	2	37·0	36·1	299

Height in km.	n	V	v	D
BHOPAL				
10·0	15	26·6	25·0	290
11·0	13	36·0	29·1	290
12·0	11	36·0	29·0	281
13·0	7	35·6	34·2	278
14·0	4	31·4	31·0	276
15·0	4	27·4	26·2	268
16·0	3	26·6	26·0	250
17·0	2	19·0	18·0	266
18·0	2	14·0	11·6	239
19·0	1	24·5	24·5	260
BHUJ				
10·0	15	22·4	20·3	283
11·0	5	33·8	30·4	276
12·0	3	40·3	29·6	274
BIKANER				
10·0	11	20·4	19·4	293
11·0	4	28·2	26·6	296
12·0	2	28·0	26·4	287
13·0	2	26·4	26·0	280
14·0	1	23·0	23·0	290
BOMBAY				
10·0	24	22·6	18·8	284
11·0	23	23·8	20·5	282
12·0	20	22·7	19·0	281
13·0	12	21·5	19·6	270
14·0	9	18·5	17·0	281
15·0	3	14·7	9·0	246
16·0	3	17·7	12·7	292
17·0	2	20·0	18·8	316
18·0	1	12·0	12·0	230
19·0	1	10·0	10·0	190
20·0	1	4·5	4·5	265
21·0	1	11·0	11·0	105

Height in Km.	n	V	v	D
CALCUTTA				
10·0	1	34·5	34·5	235
COCHIN				
10·0	20	7·3	4·3	246
11·0	13	6·3	4·9	234
12·0	12	5·5	4·3	234
13·0	12	7·0	3·5	249
14·0	11	6·8	2·1	347
15·0	11	7·8	2·0	96
16·0	10	7·9	1·1	135
17·0	10	6·7	1·9	49
18·0	9	6·8	5·1	92
19·0	6	8·8	7·7	92
20·0	3	7·5	1·2	91
21·0	1	11·0	11·0	170
COOCH BEHAR				
10·0	5	21·1	18·2	280
11·0	5	24·2	21·6	274
12·0	4	23·4	21·5	274
13·0	3	18·1	17·5	291
14·0	1	13·5	13·5	255
15·0	1	13·5	13·5	250
CUTTACK				
10·0	9	21·4	18·6	263
11·0	7	17·9	16·3	264
12·0	7	16·3	15·6	260
13·0	7	15·1	14·6	258
14·0	3	11·3	7·9	276
15·0	3	11·8	4·3	280
16·0	2	6·0	2·1	216
17·0	2	4·0	3·9	135
18·0	2	5·3	5·2	52
19·0	1	10·5	10·5	50
20·0	1	6·0	6·0	40

Table B—Monthly mean directions and velocities of upper winds.

Winds at and above 10 km. above sea level.

APRIL 1948.

Height in Km.	n	V	v	D
GADAG				
10·0	19	13·0	10·4	256
11·0	11	12·9	9·8	271
12·0	10	11·4	7·9	276
13·0	9	10·7	6·6	263
14·0	8	10·0	6·9	289
15·0	7	6·9	2·1	280
16·0	7	8·7	2·3	350
17·0	5	15·2	6·4	23
18·0	2	9·0	5·1	114
19·0	2	8·3	5·3	111
20·0	2	8·0	8·0	68
21·0	2	10·0	4·3	43
22·0	1	14·0	14·0	40
23·0	1	16·0	16·0	25
24·0	1	12·0	12·0	30
25·0	1	16·5	16·5	10
26·0	1	12·5	12·5	5
27·0	1	16·5	16·5	295
28·0	1	22·0	22·0	280
29·0	1	30·5	30·5	275
30·0	1	33·0	33·0	270
31·0	1	41·0	41·0	280
32·0	1	52·0	52·0	270
33·0	1	85·0	85·0	295
34·0	1	90·0	90·0	305
GAYA				
10·0	7	18·3	15·4	314
11·0	3	28·2	27·5	283
12·0	2	35·6	35·3	287
13·0	2	30·7	30·7	284
14·0	1	29·0	29·0	260
15·0	1	24·0	24·0	290
16·0	1	9·0	9·0	290

Height in Km.	n	V	v	D
GOPALPUR				
10·0	13	17·1	12·0	266
11·0	9	19·1	16·7	259
12·0	8	16·0	13·5	250
13·0	6	14·8	14·2	266
14·0	4	12·4	8·4	253
15·0	3	9·0	6·1	232
16·0	2	14·3	8·4	268
17·0	1	12·0	12·0	305
18·0	1	10·5	10·5	300
19·0	1	3·5	3·5	115
GORAKHPUR				
10·0	4	18·3	18·0	294
11·0	3	18·7	17·3	291
12·0	1	13·5	13·5	285
HYDERABAD (Dn.)				
10·0	18	17·6	14·0	287
11·0	13	19·4	17·9	289
12·0	13	18·6	16·7	274
13·0	13	19·0	17·1	272
14·0	12	19·8	16·3	267
15·0	12	20·7	16·8	272
16·0	10	22·5	11·0	272
17·0	8	22·2	14·7	272
18·0	4	25·0	18·0	255
19·0	8	19·3	14·3	249
20·0	3	17·8	13·6	245
21·0	2	16·7	7·9	263
22·0	1	30·5	30·5	275
23·0	1	47·0	47·0	280
JAGDALPUR				
10·0	14	17·0	13·6	284
11·0	5	16·0	8·4	297
12·0	2	15·3	2·0	315
13·0	1	14·0	14·0	240

Height in Km.	n	V	v	D
JAMSHEDPUR				
10·0	11	23·2	19·8	280
11·0	6	23·2	18·0	284
12·0	2	19·5	13·1	297
13·0	1	33·0	33·0	265
JHARSUGUDA				
10·0	25	20·7	18·3	278
11·0	14	24·2	21·5	270
12·0	11	21·3	18·2	270
13·0	7	19·6	13·7	259
14·0	5	15·2	7·8	284
15·0	5	15·9	7·9	253
16·0	5	13·9	5·9	264
17·0	5	12·1	3·1	276
18·0	3	12·5	9·2	274
19·0	3	20·0	16·9	270
20·0	2	30·5	29·3	269
21·0	1	13·5	13·5	285
22·0	1	17·0	17·0	270
23·0	1	23·5	23·5	240
24·0	1	19·5	19·5	260
25·0	1	22·0	22·0	260
26·0	1	20·0	20·0	245
27·0	1	22·5	22·5	270
28·0	1	23·0	23·0	275
29·0	1	25·0	25·0	295
30·0	1	32·0	32·0	285
JODHPUR				
10·0	9	21·4	20·5	292
11·0	7	48·7	27·6	303
12·0	3	40·0	39·7	298
13·0	3	35·3	35·0	298
14·0	3	35·7	33·9	291
15·0	1	33·5	33·5	310
16·0	1	28·0	28·0	305

Height in Km.	n	V	v	D
JUBBULPORE				
10·0	25	23·9	21·8	292
11·0	18	25·3	23·2	287
12·0	15	26·7	23·6	287
13·0	10	25·3	20·7	285
14·0	7	28·4	23·0	284
15·0	3	15·0	11·0	3
16·0	3	16·7	11·9	1
17·0	3	16·8	13·8	8
18·0	3	17·5	14·1	8
19·0	2	18·2	13·7	346
20·0	1	11·5	11·5	60
21·0	1	11·0	11·0	55
22·0	1	10·0	10·0	40
23·0	1	11·0	11·0	55
24·0	1	14·0	14·0	55
25·0	1	16·0	16·0	60
MADHOSAGAR				
10·0	18	19·9	18·5	288
11·0	15	24·1	22·5	291
12·0	10	27·7	26·4	284
13·0	9	28·6	27·6	279
14·0	7	28·3	27·1	275
15·0	2	16·5	16·5	315
16·0	2	18·5	16·9	301
17·0	2	25·3	22·1	289
18·0	2	22·0	14·9	323
19·0	1	2·5	2·5	110
20·0	1	11·0	11·0	155
21·0	1	42·0	42·0	300
MADRAS				
10·0	18	11·6	10·0	246
11·0	12	12·7	10·6	255
12·0	10	10·6	9·4	259
13·0	9	7·6	7·0	270
14·0	8	8·9	5·4	319
15·0	6	6·4	5·2	13
16·0	3	6·7	5·3	81
17·0	1	4·5	4·5	195

Table B—Monthly mean directions and velocities of upper winds.

Winds at and above 10 km. above sea level.

APRIL 1948.

Height in Km.	n	V	v	D
		MALEGAON		
10·0	41	22·9	19·0	284
11·0	25	24·0	20·8	284
12·0	21	26·7	22·9	287
13·0	15	27·5	24·0	274
14·0	12	27·6	23·1	271
15·0	11	25·4	21·8	262
16·0	7	19·0	9·9	312
17·0	4	22·8	11·9	302
		MANGALORE		
10·0	13	10·6	9·6	292
11·0	12	11·4	10·8	269
12·0	12	10·9	10·6	251
13·0	11	11·9	10·6	260
14·0	9	9·2	7·5	265
15·0	6	12·7	5·0	291
16·0	3	8·0	6·4	64
17·0	1	4·0	4·0	15
18·0	2	9·5	9·5	78
19·0	1	11·0	11·0	40
20·0	1	9·0	9·0	125
21·0	1	10·0	10·0	60
		MASULIPATAM		
10·0	27	18·1	14·4	284
11·0	17	16·5	15·3	259
12·0	15	15·7	14·4	252
13·0	14	12·9	11·6	246
14·0	13	11·3	9·1	247
15·0	12	11·0	5·9	265
16·0	11	8·2	4·5	234
17·0	10	8·6	1·3	117
18·0	8	7·7	2·9	115
19·0	6	5·7	2·4	143
20·0	3	6·3	6·2	80
21·0	1	9·5	9·5	80
22·0	1	7·0	7·0	90

Height in Km.	n	V	v	D
		MINICOY		
10·0	9	4·2	1·9	209
11·0	5	4·5	3·6	177
12·0	1	11·0	11·0	125
13·0	1	8·0	8·0	55
14·0	1	14·5	14·5	35
15·0	1	17·5	17·5	95
16·0	1	13·5	13·5	100
17·0	1	19·0	19·0	60
18·0	1	25·0	25·0	45
		NAGERCOIL		
10·0	34	6·1	3·9	204
11·0	20	6·3	4·1	214
12·0	19	7·4	2·7	279
13·0	16	6·6	2·7	214
14·0	15	8·2	2·5	198
15·0	12	9·1	2·9	127
16·0	10	8·3	2·5	259
17 0	10	8·9	2·1	277
18·0	9	9·6	1·6	135
19·0	7	6·9	1·9	74
20·0	4	9·0	5·9	79
21·0	3	10·2	10·1	76
22·0	3	13·7	6·0	129
23·0	3	9·3	5·2	135
24·0	2	8·3	2·9	107
25·0	1	15·0	15·0	60
26·0	1	10·0	10·0	105
		NAGPUR		
10·0	17	22·7	21·9	293
11·0	15	23·8	22·7	288
12·0	14	23·5	21·3	274
13·0	13	23·4	21·4	270
14·0	12	21·2	18·3	263
15·0	9	19·7	16·3	252
16·0	9	15·6	14·3	248

Height in Km.	n	V	v	D
		NAGPUR *contd.*		
17·0	6	16·5	15·6	263
18·0	5	15·9	14·5	242
19·0	5	15·9	12·7	257
20·0	3	10·2	5·8	257
21·0	3	7·3	3·1	297
22·0	3	6·3	3·9	73
23·0	3	6·7	4·2	96
24·0	3	6·3	2·9	9
25·0	2	5·5	0·7	252
26·0	1	6·0	6·0	85
27·0	1	7·5	7·5	85
28·0	1	7·0	7·0	130
29·0	1	11·0	11·0	50
30·0	1	14·0	14·0	55
31·0	1	11·0	11·0	120
32·0	1	11·5	11·5	85
33·0	1	9·0	9·0	90
		NEW DELHI		
10·0	7	26·9	20·2	292
11·0	7	25·6	24·1	295
12·0	3	22·8	22·0	280
		POONA		
10·0	24	21·1	19·1	278
11·0	18	22·4	20·1	282
12·0	15	22·7	19·8	275
13·0	13	19·3	17·0	263
14·0	12	15·0	12·5	259
15·0	9	12·4	9·5	261
16·0	6	12·7	10·3	280
17·0	4	8·9	5·0	271
18·0	4	9·3	2·7	190
19·0	2	8·0	7·9	239
20·0	1	21·0	21·0	285
21·0	1	36·0	36·0	285
22·0	1	50·0	50·0	270

Height in Km.	n	V	v	D
		PORT BLAIR		
10·0	15	6·7	4·5	239
11·0	5	13·1	13·1	104
12·0	4	15·9	15·5	157
13·0	2	12·0	11·1	172
14·0	1	9·5	9·5	180
15·0	1	12·0	12·0	180
16·0	1	11·5	11·5	200
17·0	1	11·0	11·0	180
18·0	1	4·5	4·5	125
19·0	1	14·5	14·5	75
20·0	1	13·0	13·0	110
21·0	1	12·5	12·5	35
		RAIPUR		
10·0	28	20·5	17·0	280
11·0	22	24·0	21·3	282
12·0	15	29·6	23·4	272
13·0	12	29·9	26·4	270
14·0	10	32·7	29·3	269
15·0	7	31·1	25·9	272
16·0	5	27·4	26·4	260
17·0	3	23·8	22·4	276
18·0	2	22·7	19·9	280
19·0	2	19·5	19·4	277
20·0	2	15·3	10·7	286
21·0	2	15·7	10·0	259
22·0	1	18·0	18·0	245
23·0	1	18·5	18·5	260
24·0	1	17·5	17·5	265
25·0	1	15·5	15·5	231
26·0	1	16·0	16·0	210
27·0	1	15·5	15·5	2·0
28·0	1	15·0	15·0	165

Table B—Monthly mean directions and velocities of upper winds.

Winds at and above 10 km. above sea level.

APRIL 1948.

Height in Km.	n	V	v	D
		SAHARSA		
10·0	8	18·3	16·8	282
11·0	5	19·2	16·4	281
12·0	4	24·0	20·8	289
13·0	3	26·2	24·7	268
14·0	2	21·7	21·0	284
15·0	2	17·0	16·5	269
16·0	1	22·5	22·5	270
17·0	1	27·0	27·0	280
		TEZPUR		
10·0	13	21·5	15·9	267
11·0	11	22·1	17·9	271
12·0	5	18·4	18·0	301
13·0	3	20·0	19·4	296
14·0	1	17·0	17·0	300
15·0	1	17·0	17·0	300
16·0	1	7·5	7·5	290
17·0	1	9·5	9·5	270
		TRICHINOPOLY		
10·0	28	7·6	5·7	247
11·0	18	8·4	7·0	248
12·0	16	7·0	5·3	248
13·0	16	6·6	3·2	256
14·0	14	7·6	2·2	293
15·0	13	6·7	2·8	276
16·0	9	8·9	2·1	219
17·0	6	7·6	2·1	130
18·0	4	8·0	4·5	63
19·0	2	13·0	10·5	6
20·0	1	5·0	5·0	90
21·0	1	8·0	8·0	105
22·0	1	8·0	8·0	35

Height in Km.	n	V	v	D
		TRIVANDRUM		
10·0	11	4·2	1·4	254
11·0	8	6·9	4·3	212
12·0	7	6·7	4·4	236
13·0	7	5·7	2·3	239
14·0	7	5·6	0·6	150
15·0	7	5·8	0·5	177
16·0	6	8·1	1·8	323
17·0	6	7·2	3·3	49
18·0	5	8·4	6·4	65
19·0	4	5·5	5·3	115
20·0	3	4·8	4·6	200
21·0	2	3·7	1·5	271
22·0	2	9·5	4·6	162
23·0	1	3·0	3·0	110
24·0	1	23·0	23·0	20
25·0	1	38·0	38·0	20
		UDAIPUR		
10·0	19	24·6	22·4	287
11·0	13	31·9	29·6	290
12·0	7	35·1	30·8	293
13·0	5	35·4	31·3	289
14·0	2	26·3	25·0	296
		VENGURLA		
10·0	21	18·1	15·5	278
11·0	17	18·9	16·9	285
12·0	13	16·7	14·7	286
13·0	12	14·3	15·7	268
14·0	11	14·9	12·9	281
15·0	10	17·7	15·0	286
16·0	8	16·3	12·1	287
17·0	8	10·5	7·1	275
18·0	8	11·6	6·9	276
19·0	7	13·8	8·2	298
20·0	7	14·9	7·2	308
21·0	5	14·0	7·2	289

Height in Km.	n	V	v	D
22·0	3	26·3	20·7	285
23·0	1	16·0	16·0	270
24·0	1	10·5	10·5	235
25·0	1	9·0	9·0	240
26·0	1	14·0	14·0	235
		VERAVAL		
10·0	34	23·7	21·1	279
11·0	23	29·0	25·9	275
12·0	15	27·4	25·3	263
13·0	7	28·7	26·7	274
14·0	5	7·2	6·9	273
15·0	2	41·3	39·9	267
16·0	2	41·7	40·9	257
17·0	1	47·0	47·0	245
18·0	1	36·0	36·0	255
19·0	1	29·0	29·0	255
		VIZAGAPATAM		
10·0	20	17·1	14·9	259
11·0	15	19·1	12·2	233
12·0	9	17·5	15·4	244
13·0	7	16·8	16·4	261
14·0	7	14·3	10·9	278
15·0	7	9·6	6·3	266
16·0	4	12·0	3·5	263
17·0	3	8·5	5·5	261
18·0	2	6·7	6·7	302
19·0	2	7·7	7·1	134
20·0	1	7·5	7·5	50

Height in Km.	n	V	v

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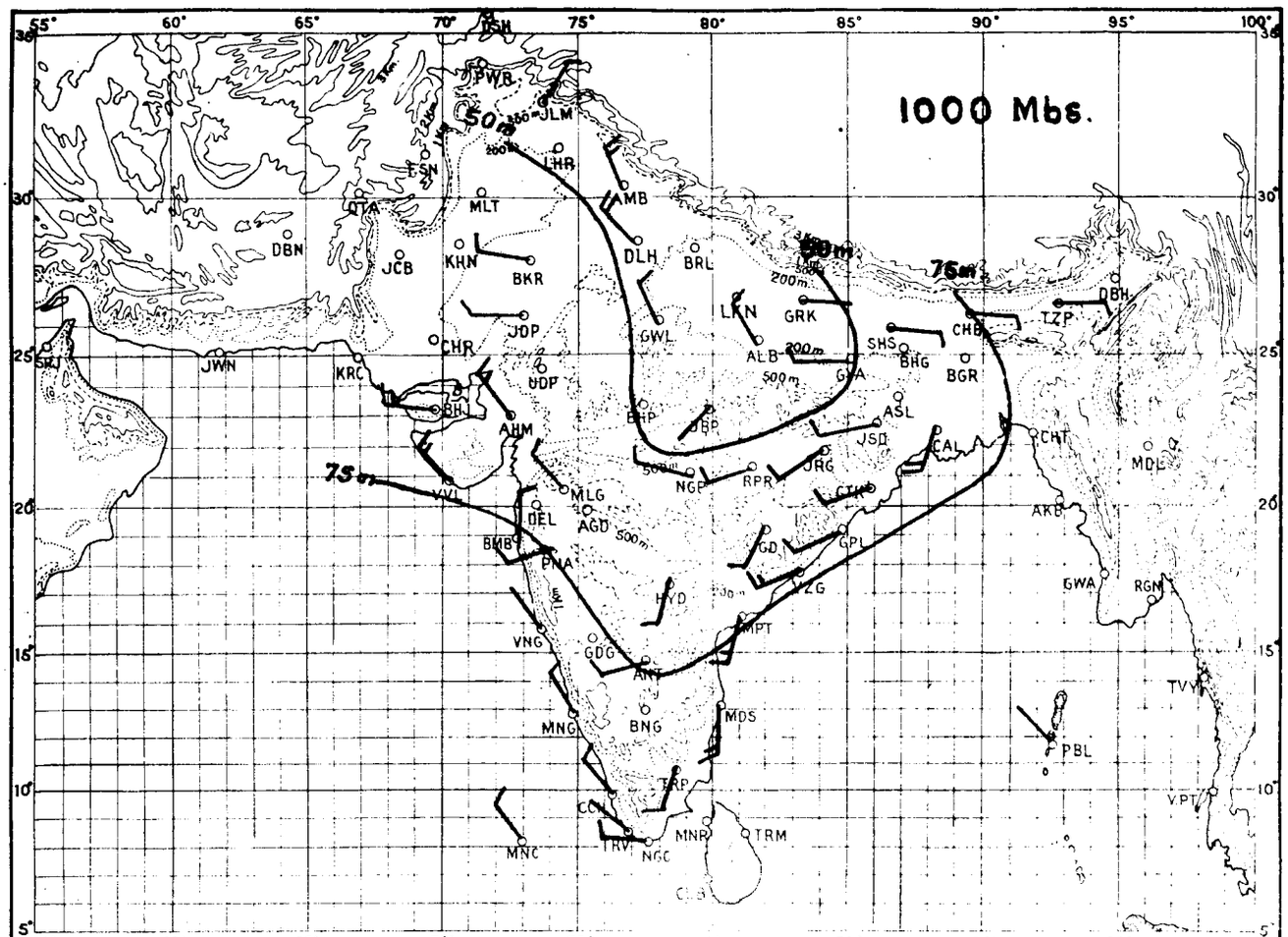
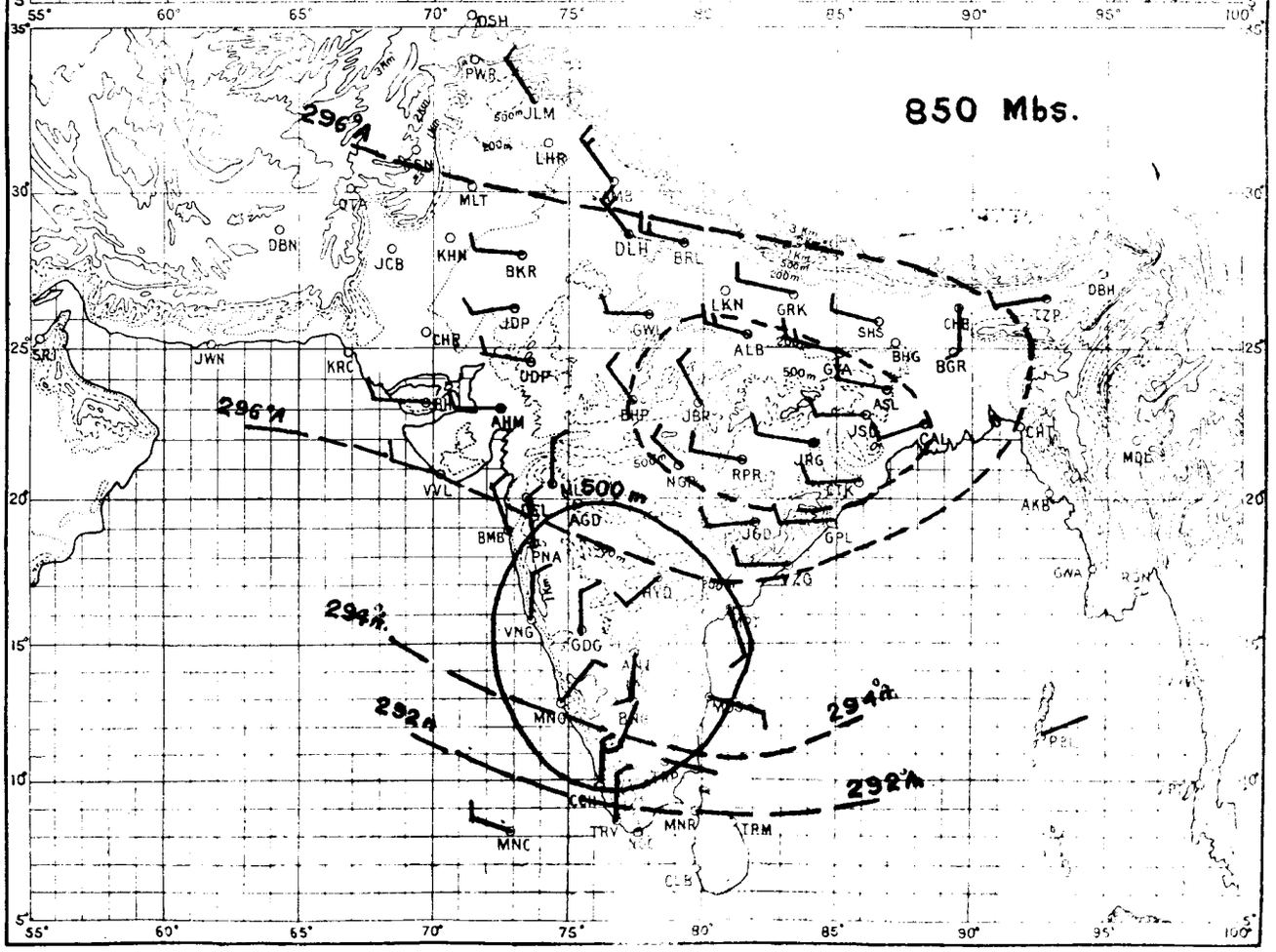
MONTHLY MEAN CONSTANT PRESSURE CHARTS

APRIL 1948



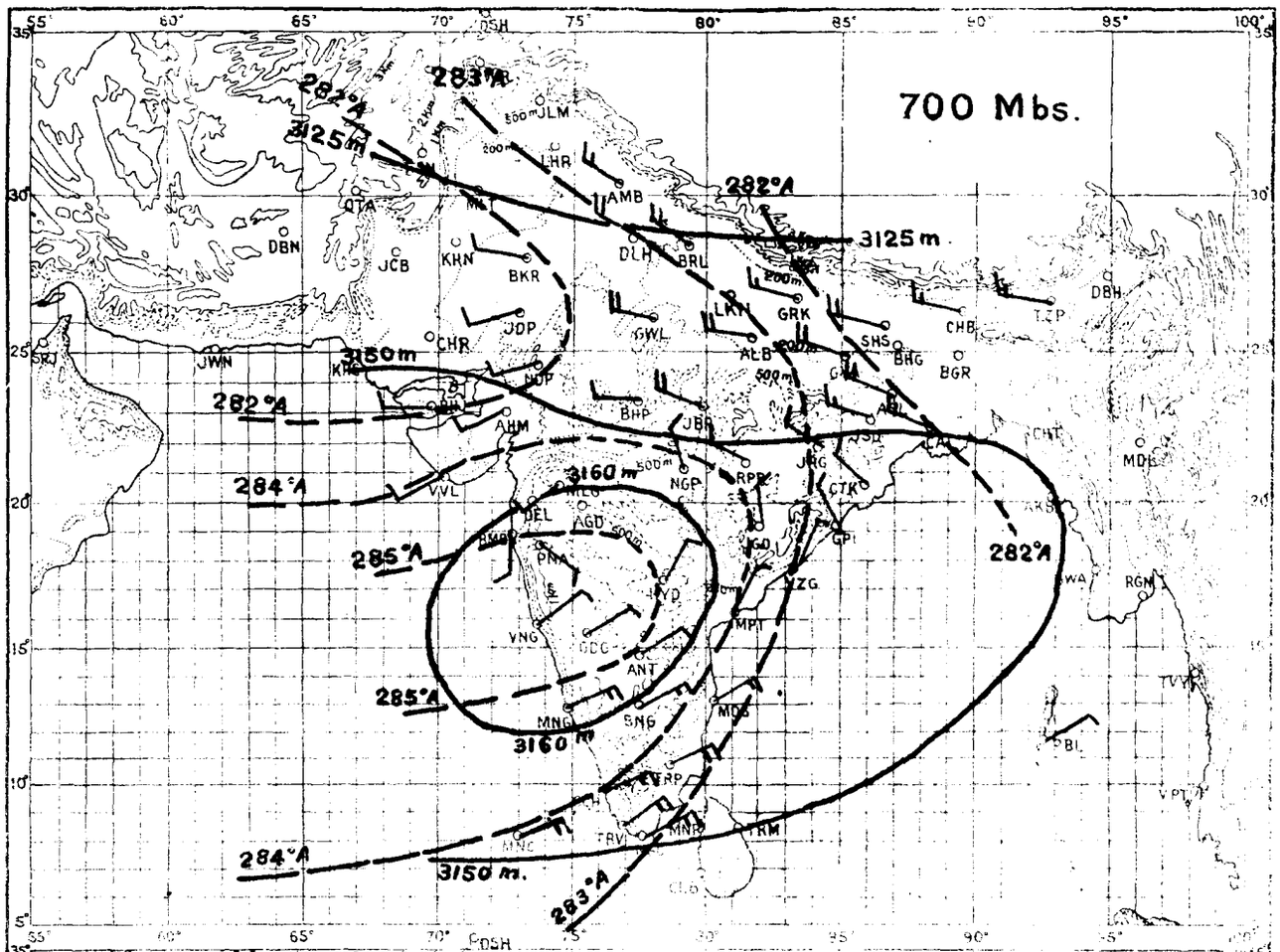


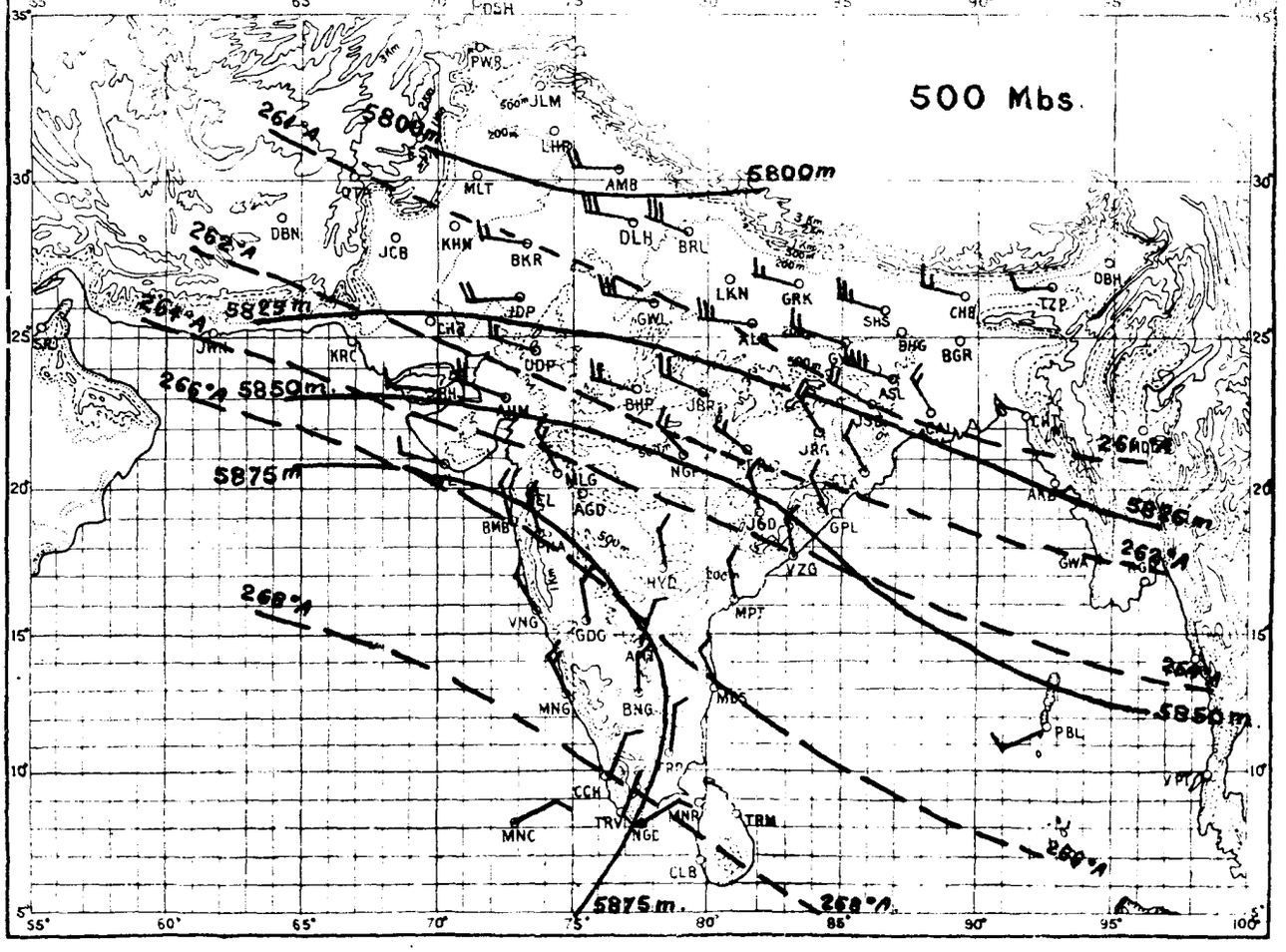
RESULTANT WIND ——— = 5 Knots, ——— = 10 Knots, ——— = 50 Knots.

— — — *Isotherms in degrees Absolute.* ——— *Contours in Metres*

MONTHLY MEAN CONSTANT PRESSURE CHARTS

APRIL 1948.





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

— — — Isotherms in degrees Absolute ——— Contours in metres.

Registered No. B—3097.

INDIA WEATHER REVIEW, 1948

MONTHLY WEATHER REPORT

MAY

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Published by Authority of the Government of India.

Chief features :—(*i*) Marked thunderstorm activity in Assam throughout the month and in Malabar and Mysore during the first fortnight ; (*ii*) a depression in the east Bay of Bengal.

During the first fortnight of the month there was widespread thunderstorm-rain on most days in Assam, sub-Himalayan West Bengal, Mysore and Malabar with particularly heavy falls in Assam and Mysore. The other parts of northeast India also had their usual share of thunderstorms during this period, while northwest India and the central parts of the country were more or less dry. A severe thunderstorm on the 10th at Bangalore is reported to have uprooted a number of trees causing road blocks and breaking down the electric system.

A depression formed in the Andaman sea on the 15th evening with its centre about 150 miles north of Port Blair. Following a northerly course, it crossed the Burma coast north of Akyab by the 19th causing locally heavy rain along the Chittagong coasts. Under the influence of this depression, moist air from the Bay of Bengal also penetrated into Assam and West Bengal and Eastern Pakistan, where widespread thundershowers with locally heavy falls occurred between the 19th and 23rd.

Of the three western disturbances of the month, the first two moved across the extreme north of Western Pakistan and caused scattered showers in the North-West Frontier Province and the West Punjab hills, between the 7th and 14th. The third disturbance moved across the West and East Punjab and the United Provinces between the 21st and 23rd and caused widespread thunderstorms in the United Provinces on the 22nd. A secondary ' low ' which formed over east Central India and the neighbourhood on the 23rd and moved eastnortheastwards across Chota Nagpur, Bihar and sub-Himalayan West Bengal. It was responsible for well-distributed thundershowers in many parts of northeast India and Eastern Pakistan between the 23rd and 26th.

Day temperatures were appreciably above normal over most parts of the country throughout the month. A number of deaths due to sunstroke were reported from Bezwada in the Kistna District in the Madras Presidency where the temperature is said to have reached 120°F.

The rainall for May was in large excess in Assam and in slight to moderate excess in the Bay Islands, West Bengal, Chota Nagpur, the east United Provinces and Mysore. It was normal in southeast Madras, in slight defect in Bihar and the Madras Deccan and in moderate defect in Orissa, the west United Provinces, the east Central Provinces, the Bombay Deccan, Malabar and the north Madras coast. Elsewhere the rainfall was in large defect except in west Rajputana where no rain fell. Averaged over the plains of India, the rainfall for the month was 5% in excess.

Maximum temperature was normal in the Bay Islands, Orissa, Bihar, Gujarat, and the Peninsula and below normal in Assam and West Bengal. It was above normal elsewhere. Minimum temperature was above normal in east Rajputana, central parts of the country, the Konkan and the north Madras coast and normal elsewhere. Relative humidity was in excess in West Bengal, Chota Nagpur, Bihar, Gujarat and Berar and normal elsewhere. Cloud amount was normal in Bihar, Gujarat, the east Central Provinces, the Konkan, the Bombay Deccan, Hyderabad, Malabar and the north Madras coast and in excess in the Bay Islands, northeast India outside Bihar, in Mysore, southeast Madras and the Madras Deccan. Elsewhere it was in defect.

Price : Re. 1.

Data from Kashmir are absent.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amounts for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N.B :—The Indian Standard Time used in this publication is 5 hrs. 30 mins. in advance of Greenwich Mean Time.

POONA 5,
Dated : the 3rd November, 1948.

S. BASU,
for Director General of Observatories.

	Rainfall				Departure from normal of				
							8 hrs. I. S. T.		
	Actual	Normal	Departure from normal	Percentage departure from normal.	Maximum temperature	Minimum temperature	Vapour pressure	Relative humidity	Cloud
1	2	3	4	5	6	7	8	9	10
DIVISION	"		"	"		°	mb.	%	
1. Assam ..	22·36	11·06	+11·30	+102	—2·3	—0·4	—0·3	+3	+1·5
2. West Bengal ..	8·30	6·83	+1·47	+22	—2·5	+0·1	+1·7	+6	+1·6
3. Orissa ..	2·02	3·35	—1·33	—40	+0·8	+1·2	+1·9	+3	+1·0
4. Bihar ..	1·98	2·03	—0·05	—2	+1·1	+0·8	+3·2	+6	+1·2
5. United Provinces	0·74	0·70	+0·04	+6	+3·2	+1·4	+1·1	0	—0·9
6. East Punjab ..	0·19	0·58	—0·39	—67	+4·9	+1·0	—1·5	—5	—1·1
7. Rajputana ..	0·02	0·47	—0·45	—96	+3·8	+2·6	+0·3	—2	—0·9
8. Bombay ..	0·51	1·02	—0·51	—50	+0·9	+1·3	+2·1	+4	+0·2
SUB-DIVISION									
1. Bay Islands ..	19·35	15·13	+4·22	+28	—0·5	+1·0	+1·4	+3	+1·5
2. Assam ..	22·36	11·06	+11·30	+102	—2·3	—0·4	—0·3	+3	+1·5
3. West Bengal ..	8·30	6·83	+1·47	+22	—2·5	+0·1	+1·7	+6	+1·6
4. Orissa ..	2·02	3·35	—1·33	—40	+0·8	+1·2	+1·9	+3	+1·0
5. Chota Nagpur	2·72	2·10	+0·62	+30	+2·3	+0·5	+3·0	+6	+1·9
6. Bihar ..	1·61	1·99	—0·38	—19	+0·1	+1·1	+3·4	+7	+0·6
7. United Provinces, East ..	1·04	0·75	+0·29	+39	+2·6	+1·3	+2·6	+4	—0·6
8. Do. do. West	0·44	0·64	—0·20	—31	+3·8	+1·5	—0·6	—4	—1·3
9. East Punjab	0·19	0·58	—0·39	—67	+4·9	+1·0	—1·5	—5	—1·1
10. Kashmir ..	Data incomplete.								
11. Rajputana, West	0	0·39	—0·39	—100	+4·0	+1·7	+1·4	+1	—0·8
12. Do. East	0·04	0·55	—0·51	—93	+3·5	+3·2	—0·5	—5	—1·1
13. Gujarat ..	0·06	0·33	—0·27	—82	+0·8	+1·8	+3·5	+7	0

	Rainfall				Departure from normal of				
							8 hrs. I.S.T.		
	Actual	Normal	Departure from normal	Percentage departure from normal.	Maximum temperature	Minimum temperature	Vapour pressure	Relative humidity	Cloud
1	2	3	4	5	6	7	8	9	10
DIVISION—*contd.*	"	"	"		°	°	mb.	%	
9. Central India ..	0·01	0·50	—0·49	—98	+3·5	+2·8	+2·0	+3	—0·7
10. Central Provinces and Berar	0·28	0·81	—0·53	—66	+3·3	+2·9	+0·7	—1	—0·6
11. Hyderabad ..	0·34	0.95	—0·61	—64	+1·5	+1·5	+0·5	+1	—0·1
12. Mysore ..	5·81	4·29	+1·52	+35	—1·9	+0·1	+0·2	+4	+1·1
13. Madras ..	2·43	3·13	—0·70	—23	+0·2	+1·2	+0·7	+1	+0·9
Mean of India ..	2·07	1·97	+0·10	+5	+1·8	+1·6	+1·0	+1	0
SUB-DIVISION—*contd.*									
14. Central India, West	0·01	0·55	—0·54	—98	+2·9	+3·0	+1·2	+3	—0·7
15. Do. East. ..	0·01	0·42	—0·41	—98	+4·3	+2·5	+3·2	+3	—0·7
16. Berar ..	0·05	0·47	—0·42	—89	+2·9	+3·1	+3·7	+7	—1·2
17. Central Provinces, West ..	0·08	0·56	—0·48	—86	+3·5	+3·0	+0·2	—2	—0·7
18. Do. do. East	0·62	1·24	—0·62	—50	+3·2	+2·8	+0·1	—2	—0·2
19. Konkan ..	0·93	2·09	—1·16	—56	+1·2	+2·0	+0·3	—5	—0·2
20. Bombay Deccan	0·82	1·30	—0·48	—37	+1·1	+0·7	+1·2	+3	+0·5
21. Hyderabad, North	0·33	0·77	—0·44	—57	+1·9	+1·9	—0·7	—3	—0·3
22. Do. South	0·35	1·13	—0·78	—69	+1·3	+1·2	1·4	+3	0
23. Mysore ..	5·81	4·29	+1·52	+35	—1·9	+0·1	+0·2	+4	+1·1
24. Malabar ..	6·41	8·98	—2·57	—29	+0·6	+0·1	+0·7	+2	+0·6
25. Madras, South-East	2·11	2·16	—0·05	—2	+0·3	+1·5	0	—2	+1·0
26. Do. Deccan	1·40	1·81	—0·41	—23	—0·4	+0·4	+2·2	+5	+1·7
27. Do. Coast, North	0·92	1·70	—0·78	—46	+0·2	+2·1	+0·8	—1	+0·1

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.)

STATION	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature, °F				Dry bulb temperature °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean	Departure from normal	Highest	Date	Mean.	Departure from normal	Lowest	Date	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
BAY ISLANDS—																						
Port Blair ..	259	1000·1	+0·4	997·8	86·2	—0·5	90	1	76·0	+1·0	70	17	82·4	80·3	78·7	77·3	31·9	+1·4	30·7	84	+3	8
ASSAM—																						
Dibrugarh ..	348	994·7	—1·2	990·9	80·8	—3·7	95	18	70·0	—0·7	66	2, 3, 4	74·0	77·9	71·9	73·8	25·8	—0·7	26·7	91	+5	8
Sibsagar ..	317	995·7	—1·0	992·0	82·7	—2·5	93	18	72·2	+0·5	68	2, 3	76·0	79·3	73·7	74·9	27·3	—0·1	27·5	90	+3	8
Tezpur ..	258	997·7	—1·2	993·1	84·5	—2·3	94	18, 19	72·1	—0·2	68	2, 3	75·7	81·1	73·0	75·3	26·6	—0·1	27·2	88	+4	7
Gauhati ..	182	999·7	—0·9	995·2	85·4	—2·3	93	18, 19	72·5	+0·1	69	1	75·9	81·8	73·1	76·0	26·5	—0·4	27·9	88	+6	7
Dhubri ..	115	1001·7	—1·0	998·1	..	..	..	..	71·4	—1·6	65	29	74·9	80·7	73·6	76·8	27·6	+0·3	29·7	94	+9	8
Silchar ..	96	1003·4	—1·2	999·9	85·4	—3·3	97	18	71·9	—0·7	68	1, 2, 30	76·4	81·4	74·2	76·2	28·0	—0·1	28·6	90	+ 7	7
WEST BENGAL—																						
Dum Dum	33	1002·1	..	998·7	93·2	..	97	20, 21	79·5	..	71	23	85·8	88·0	80·2	80·8	32·7	..	33·9	77	..	7
Calcutta ..	21	1002·6	—1·6	999·0	93·4	—2·2	98	19	79·0	+1·5	71	23	87·5	88·6	80·8	81·0	33·6	+2·2	32·7	80	+3	7
Saugor Island ..	10	1003·2	—1·4	999·8	89·2	—1·8	91	7 days	80·1	—0·5	70	2	85·9	86·3	81·3	81·5	34·4	+1·1	34·4	81	+3	8
Sandheads (R)	28																					
Midnapore ..	149	997·7	—1·8	993·8	96·4	—3·5	110	30	78·1	—0·6	72	12, 14	84·4	89·9	79·6	80·2	32·2	+2·1	30·9	80	+8	6
Burdwan ..	106	999·2	—1·8	995·0	96·2	—1·9	105	30	77·7	+0·2	70	23, 24	84·6	90·7	79·3	80·5	31·7	+1·3	31·0	78	+1	6
Krishnagar ..	48	1001·4	—1·8	997·7	95·0	—1·7	100	20, 30	76·7	+0·1	70	22	82·3	90·1	79·4	82·0	32·9	+2·3	33·7	87	+9	7
Asansol ..	414	988·4	—1·5	984·0	99·5	—2·7	112	30	77·6	—0·6	70	4	84·7	92·5	79·8	80·7	32·4	+4·6	30·3	79	+13	6
Berhampore	62	1001·1	—1·9	997·0	94·9	—2·2	101	30, 31	76·6	—0·1	69	2	83·3	87·3	79·0	80·1	31·8	+2·0	31·9	81	+5	6
Malda ..	103	1000·1	—1·5	995·6	93·6	—1·8	101	30	76·4	+1·1	70	8, 9	82·2	90·0	77·0	79·2	29·4	+0·9	28·9	79	+5	6
Jalpaiguri ..	271	996·0	—1·1	991·6	84·6	—4·9	94	19	72·6	0	69	26	75·7	83·7	72·7	76·5	26·1	—1·0	28·0	86	+4	7
ORISSA—																						
Balasore	65	1001·0	—1·3	996·8	98·1	+1·0	115	30	80·2	+1·4	73	23	86·8	91·8	81·0	81·8	33·6	+2·7	32·5	77	+4	6
Chandbali ..	20	1003·0	—0·8	999·0	97·7	+0·3	109	30	80·2	+1·0	71	23	86·4	91·2	80·8	81·8	33·4	+1·6	32·7	77	+1	6
Puri ..	20	1003·3	—1·0	999·6	88·8	—0·8	92	17, 19	81·9	+0·8	72	12	85·2	86·3	81·8	83·1	35·5	+1·5	34·3	86	+2	6
Gopalpur ..	56	1001·8	—1·2	997·9	89·3	—1·0	93	19	81·1	+1·0	68	5	84·3	85·7	81·9	83·2	36·1	+2·6	37·7	89	+7	6
Cuttack ..	87	1000·1	—2·0	996·3	100·1	—1·3	112	31	81·4	+1·5	72	24	85·7	94·1	80·1	80·9	32·6	+1·5	30·1	77	+4	6
Angul ..	455	987·4	—1·5	982·5	105·1	+1·6	114	31	79·9	+0·9	69	24	85·5	101·3	78·3	76·8	29·9	+1·4	20·3	72	+3	5
Sambalpur ..	486	985·8	—2·0	980·6	110·7	+4·2	117	21, 22	83·0	+1·8	70	25	91·5	108·6	78·2	77·4	26·8	+2·8	17·9	55	+4	5
CHOTA NAGPUR—																						
Jamshedpur ..	423	988·0	—1·2	983·1	103·7	+0·8	115	22	79·3	+0·1	70	24	86·2	95·7	77·6	77·1	28·4	+2·1	23·3	68	+7	4
Chaibasa ..	742	977·4	—1·4	972·2	106·0	+2·0	116	22	80·2	+1·0	71	24	85·7	98·7	79·0	80·4	30·9	+4·9	26·9	73	+11	..
Ranchi ..	2,150	931·0	—1·6	927·1	101·3	+2·7	110	21, 22	75·0	—0·3	68	12, 14	85·0	94·4	74·4	72·2	24·3	+5·1	17·3	61	+11	3
Hazaribagh ..	2,006	935·4	—1·4	931·6	102·2	+2·8	110	21	75·8	+0·3	69	24	85·9	96·3	72·6	70·1	21·3	+2·9	13·9	55	+7	5
Daltonganj	725	976·6	—2·4	972·1	109·3	+3·1	115	21	80·0	+1·3	74	3	93·1	104·5	73·1	71·6	18·7	—0·2	11·4	36	—7	1
Dhanbad ..	839	973·9	..	..	102·1	..	113	21,30,31	77·6	..	70	4	84·6	..	76·9	..	28·2	..	..	70	..	.
BIHAR—																						
Purnea ..	124	999·3	—1·7	994·8	92·7	—2·1	103	19	74·7	+0·3	69	8, 26	81·3	90·1	75·6	79·2	27·7	+0·6	29·1	76	+1	6
Darbhanga ..	161	997·4	—1·7	993·3	94·7	—1·5	105	30	75·8	+0·3	63	23	83·2	93·2	76·6	80·0	28·3	+2·9	28·8	73	+6	6
Motihari ..	218	995·1	—1·8	990·6	95·5	—1·6	102	19,30,31	75·8	+1·1	68	23,26	84·7	90·7	76·8	80·1	27·8	+1·6	31·6	69	+3	6
Patna ..	173	995·8	—2·2	991·5	102·1	+1·8	111	30, 31	79·8	+1·7	71	23	85·9	99·0	76·9	78·2	27·5	+2·4	23·3	65	+4	3
Debri ..	352	988·6	..	984·6	109·4	..	107	21	82·0	..	76	23	88·4	105·3	75·6	77·2	24·3	..	19·1	54	..	5
Gaya ..	365	988·4	—2·4	984·0	108·6	+4·0	116	30, 31	82·7	+2·9	75	23	91·0	104·8	77·9	77·3	26·7	+7·1	19·4	54	+15	5
Naya Dumka ..	489	985·5	—2·3	981·5	98·1	—0·9	113	30	76·6	—0·7	71	26	83·4	91·9	77·7	77·2	29·9	+3·6	25·3	76	+11	6
Sabour ..	122	998·4	—1·5	993·7	97·9	—0·4	109	30	78·1	+2·4	69	8	85·0	94·4	78·0	80·4	29·6	+3·9	29·0	72	+5	6

R—Register not received.

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													BAY ISLANDS—
8·5	+1·5	8·8	19·35	+4·22	3·89	14	19	+2·7	8·5	—0·1	0	0	2	1	3	12	12	0	1	0	0	0	2	1	10	12	3	3	Port Blair.
																													ASSAM—
9·1	+2·3	8·1	27·83	+15·74	4·65	7	22	+6·4	1·7	+0·5	3	5	8	1	1	0	2	0	11	2	10	4	0	0	0	1	0	14	Dibrugarh.
8·9	+1·0	8·5	22·87	+10·81	3·05	11	19	+3·4	5·9	+1·5	6	13	4	1	3	1	0	0	3	8	13	3	0	3	0	0	1	3	Sibsagar.
8·0	+1·5	6·5	15·79	+5·14	2·45	19	21	+5·7	3·1	+0·3	0	2	20	5	1	0	0	0	3	0	5	8	6	0	0	0	0	12	Tezpur.
8·5	+2·3	6·0	22·25	+12·96	5·80	10	24	+10·5	2·9	+1·0	5	13	6	2	1	1	1	2	0	0	9	11	3	2	2	1	0	3	Gauhati.
6·8	+0·6	3·7	33·30	+17·51	4·22	9	21	+5·5	6·6	+0·9	4	17	5	0	0	0	0	0	5	4	11	5	2	0	0	0	0	9	Dhurbri.
9·2	+3·0	7·4	38·02	+21·60	6·70	9	20	+3·6	1·7	—0·3	1	7	7	6	0	0	0	0	10	3	3	8	1	2	3	1	0	10	Silchar.
																													WEST BENGAL—
7·1	..	5·5	6·32	..	2·55	23	9	..	..	..	0	1	0	6	14	8	0	1	1	0	0	2	3	19	5	0	2	0	Dum Dum.
6·8	+1·6	5·2	3·78	—1·71	0·78	23	8	+1·1	5·6	+0·6	1	0	0	3	12	12	1	0	2	0	1	1	3	14	9	0	0	3	Calcutta.
6·4	+0·1	5·8	3·97	—0·55	1·17	27	8	+2·5	21·9	+8·4	0	0	0	3	13	15	0	0	0	0	0	0	5	17	9	0	0	0	Saugor Island.
																													Sandheads (R)
4·8	+1·2	5·3	6·60	+1·86	1·51	6	9	+2·1	7·5	+3·2	0	1	0	0	21	9	0	0	0	1	0	1	3	21	2	0	1	2	Midnapore.
4·8	—0·4	3·5	6·94	+0·98	1·48	23	8	+0·8	8·7	+5·5	0	0	3	2	14	10	0	0	2	0	2	6	7	11	4	0	1	0	Burdwan.
7·8	+2·8	4·5	6·77	+0·06	1·66	22	11	+3·1	7·7	+2·1	0	0	3	15	18	2	0	0	3	0	0	3	19	7	0	0	1	1	Krishnagar.
4·2	+0·3	5·3	5·81	+2·88	1·56	23	12	+7·6	5·7	0	1	0	4	11	10	1	0	0	4	0	1	6	14	4	1	1	3	1	Asansol.
8·0	+2·5	5·8	6·76	+1·43	1·12	10	12	+4·7	4·8	+1·0	0	1	7	5	12	3	0	0	3	0	0	8	3	14	2	1	1	2	Berhampore.
7·9	+3·6	5·3	(g) 0·61	..	..	..	(g) 3	..	5·8	+0·2	1	2	13	8	5	0	0	0	1	0	3	12	9	4	1	0	0	2	Malda.
7·5	+2·7	5·4	16·39	+4·57	4·09	8	18	+4·9	5·5	+3·0	3	11	13	0	2	0	0	0	2	1	6	16	5	1	0	0	1	1	Jalpaiguri
																													ORISSA—
7·2	+2·8	4·1	2·99	—1·64	0·81	12	6	+0·1	10·6	+4·9	0	0	0	1	14	14	2	0	0	0	0	0	9	16	5	1	0	0	Balasore.
5·5	—0·4	2·2	1·94	—3·64	1·02	23	4	—1·4	12·3	+2·2	0	0	0	1	24	3	2	1	0	0	0	0	8	23	0	0	0	0	Chandbali.
6·9	+2·1	5·9	2·71	—0·15	0·93	12	3	—0·2	18·2	+4·9	0	0	0	0	6	24	0	1	0	0	0	0	2	12	17	0	0	0	Puri.
5·0	+2·0	5·0	3·44	+1·31	1·75	12	4	+0·9	(a) 20·0	+7·2	1	0	0	2	15	12	0	0	1	0	0	0	1	16	14	0	0	0	Gopalpur.
6·1	+1·2	4·4	1·51	—2·06	0·53	12	5	—0·2	6·2	+2·4	0	0	0	1	12	12	0	0	6	0	0	0	1	16	14	0	0	0	Cuttack.
4·8	+0·4	5·7	2·44	+0·09	0·88	12	5	+0·3	7·2	+1·6	1	6	8	7	4	0	1	1	3	4	3	4	7	5	2	3	3	0	Angul.
2·9	—0·1	4·0	0·55	—0·53	0·31	25	2	—0·3	5·2	+1·9	0	1	5	6	10	7	1	1	0	5	2	1	1	3	8	5	5	1	Sambalpur.
																													CHOTA NAGPUR—
3·3	—0·2	5·1	5·03	+1·90	1·22	24	7	+1·9	5·9	+1·7	0	1	4	1	0	4	11	2	8	2	1	11	8	0	3	2	4	0	Jamdshedpur.
..	..	0·3	3·29	+0·55	1·26	24	7	+1·8	3·1	+0·5	0	1	1	2	1	13	1	0	7	5	3	0	3	3	6	2	3	6	Chaibasa.
1·3	—1·4	3·6	3·28	+1·16	0·80	7	7	+2·9	5·1	+0·2	0	0	0	0	18	8	1	1	3	7	0	1	1	6	2	0	0	14	Ranchi.
7·7	+4·7	6·9	1·36	—0·60	0·61	24	6	+2·6	7·2	+0·1	0	0	2	1	10	13	4	1	0	5	2	3	1	3	2	0	15	0	Hazaribagh.
2·1	+0·4	4·2	0·62	+0·05	0·53	26	1	—0·3	4·7	+0·3	1	3	5	3	1	1	4	0	13	4	2	1	3	0	0	1	20	0	Daltonganj.
..	..	..	2·35	..	0·64	6	6	..	6·4	..	0	1	4	10	2	6	0	0	8	..	..	..	..	..	..	..	..	..	Dhanbad.
																													BIHAR—
7·1	+2·9	2·8	3·48	—0·70	1·08	25	7	+1·5	5·7	+2·3	0	4	21	5	0	0	0	0	1	0	6	18	5	0	0	0	0	2	Purnea.
4·0	+1·0	1·7	2·18	—0·33	0·81	8, 23	3	—0·5	7·4	+3·0	0	8	22	1	0	0	0	0	0	0	9	18	2	0	0	0	1	1	Darbhanga.
3·0	+0·8	1·7	3·26	+0·72	1·87	8	5	+1·2	4·2	—0·8	0	1	23	1	0	0	0	0	6	0	0	6	1	0	0	0	0	24	Motihari.
1·8	—0·4	1·0	0·48	—0·92	0·40	8	1	—1·3	6·8	+1·7	0	14	16	1	0	0	0	0	0	2	12	11	0	0	0	1	4	1	Patna.
1·5	..	1·6	0·02	—0·61	0·02	23	0	—1·2	4·9	..	0	4	9	8	1	4	0	1	4	5	8	1	2	0	0	1	13	1	Dehri.
1·0	—1·0	2·3	0·06	—0·87	0·03	11, 23	0	—1·7	7·9	+1·9	0	6	7	4	6	3	1	1	3	9	6	1	1	1	0	2	10	1	Gaya.
4·1	+0·7	4·8	2·65	—0·96	1·56	14	4	—1·1	4·1	+1·1	0	4	1	18	0	5	0	0	3	0	10	2	16	0	2	0	0	1	Naya Dumka
5·3	+0·6	3·7	1·88	—0·27	0·69	8	4	+0·4	4·7	—2·2	0	2	20	5	2	0	0	0	2	3	5	19	2	1	0	0	1	0	Sabour.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature °F		Vapour pressure, millibars			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I.S.T	Mean.	Departure from normal.	Highest	Date	Mean	Departure from normal.	Lowest.	Date	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T	Mean 8 hrs. I.S.T	Departure from normal	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
U. P., EAST—																						
Gonda ..	360	989·2	..	984·9	105·1	+2·4	114	20	79·3	+1·5	68	23	86·0	102·7	75·2	74·9	25·1	+5·0	17·3	60	+10	25
Gorakhpur ..	254	993·0	—2·4	985·6	99·3	—1·8	110	30	77·7	+0·8	68	11	84·3	98·7	76·1	77·6	27·3	+3·0	22·8	66	+5	38
Banaras ..	250	992·1	—2·7	988·2	109·5	+4·1	115	20, 30	81·7	+2·5	76	11,13	89·8	107·5	76·6	76·4	25·7	+4·1	17·0	55	+7	21
Allahabad (Bamrauli) ..	322	989·7	—2·9	985·6	110·8	+3·7	116	20, 21, 22	82·1	+2·2	75	3,17	90·7	108·4	71·9	72·9	17·9	—0·4	11·6	38	—1	15
Fatehpur ..	375	988·3	..	984·1	110·6	+3·4	116	20, 21	81·1	+0·6	68	31	91·3	107·4	72·2	74·7	18·0	—2·0	14·1	38	—9	18
Kanpur ..	414	986·7	—2·3	983·1	110·7	+4·5	116	20, 21	80·1	—0·3	73	16, 18	90·5	107·5	72·5	77·2	19·2	+1·4	18·1	41	+1	23
Lucknow ..	371	988·3	—2·4	984·9	108·2	+2·8	114	4 days	79·8	+1·5	72	16, 17	89·0	105·5	73·2	74·5	21·6	+1·5	15·1	47	+1	21
Bahraich ..	407	988·1	—1·5	983·9	104·2	+1·9	113	20	78·9	+1·7	66	23	86·1	102·1	78·5	81·7	29·9	+7·9	27·7	71	+17	41
U. P., WEST ..																						
Jhansi ..	824	973·5	—2·5	969·6	111·4	+2·9	115	20	84·7	+2·1	78	16,17	90·7	109·3	72·5	76·9	19·2	+3·5	16·7	39	+6	20
Agra	553	982·1	—2·3	978·7	110·4	+4·2	114	22	81·8	+3·6	74	24	90·3	107·7	68·7	72·9	14·3	+0·4	11·4	31	+1	15
Mainpuri ..	516	984·2	—1·2	980·1	110·8	+3·4	116	20, 21	79·5	+1·3	71	24	90·0	107·0	70·1	75·0	16·0	—1·6	15·1	34	—6	21
Aligarh ..	615	979·7	..	976·5	109·3	+4·0	114	21, 22, 23	79·7	+0·3	74	3	88·8	106·8	68·6	70·6	15·1	+0·4	9·5	33	—1	12
Bareilly ..	568	981·4	—2·5	977·3	107·9	+4·8	114	29	77·9	+0·8	71	17	89·2	105·9	70·2	72·4	16·5	—4·0	12·7	37	—12	17
Roorkee ..	899	969·9	—3·0	966·3	105·5	+3·3	112	22	74·7	+0·7	66	2, 3	83·8	103·9	66·1	69·6	14·2	—1·8	9·3	35	—7	14
Dehra Dun ..	2,239	927·0	—2·1	924·6	100·0	+4·0	108	22	71·9	+1·8	65	12	83·6	97·4	65·2	67·1	13·6	—1·4	10·1	36	—11	19
EAST PUNJAB—																						
New Delhi ..	714	976·0	—3·0	972·7	107·5	+2·7	113	22	80·6	+1·8	75	24	88·9	105·1	67·1	70·3	13·0	—3·5	9·5	29	—10	14
Hissar ..	725	975·9	—2·8	972·8	111·3	+6·0	116	21	76·2	+0·2	58	16	84·7	108·5	68·5	74·1	16·7	—0·1	13·0	40	+1	16
Ambala ..	892	970·2	—2·5	966·7	109·6	+5·7	115	22, 23	78·0	+2·2	70	3	86·4	105·0	67·1	71·4	14·4	—0·9	10·7	33	—1	15
Ludhiana ..	812	972·5	—2·8	970·2	109·3	+5·2	115	22, 23	75·5	—0·2	67	4 days	86·7	106·7	67·0	72·1	13·8	—1·5	12·1	31	—10	13
KASHMIR—																						
Srinagar ..	5,205	839·8	—0·5	837·0	77·1	+0·1	87	22, 23	51·7	+0·8	47	28	60·2	74·9	54·7	60·7	12·5	+1·3	13·3	71	—10	46
Gulmarg ..	8,709							(Closed during winter months)														
Dras (R) ..	10,059																					
Leh	11,529	669·3	+1·9	666·2	62·1	—1·6	66	4,5	36·2	—0·9	31	1	44·9	59·1	34·3	39·7	3·5	—0·9	2·3	34	—7	16
Skardu (R) ..	7,505																					
Gilgit (R) ..	4,890																					
Misgar (R) ..	10,190																					
RAJPUTANA, WEST—																						
Sri Ganganagar	580	980·5	..	976·9	110·7	+3·0	115	20, 21	75·6	+0·6	65	16	89·1	108·8	69·1	74·6	15·2	+1·1	14·3	33	—1	16
Bikaner ..	734	975·6	—2·3	972·7	111·9	..	116	20	82·8	..	73	18	88·4	111·0	66·8	78·5	12·9	..	18·5	28	..	21
Phalodi ..	783	974·6	..	973·0	111·3	..	117	19	81·5	..	76	11, 17	83·2	110·3	..	..	..	..	..	..	..	..
Jodhpur ..	736	977·7	—0·4	974·1	109·7	+4·3	115	18, 19	81·8	+2·4	75	16	86·3	108·4	72·8	76·5	21·4	+4·2	16·6	52	+7	19
Barmer ..	638	981·0	—1·1	977·5	111·2	+4·8	118	19	82·0	+2·0	76	10	86·9	110·1	75·5	76·7	24·9	—0·9	15·9	60	—4	19
RAJPUTANA, EAST—																						
Sikar ..	1,406	954·2	..	951·0	108·9	..	113	20	79·7	..	68	17	87·2	106·7	67·7	70·8	14·2	..	9·2	33	..	12
Jaipur ..	1,431	954·1	—2·4	950·7	109·2	+3·6	113	20	80·1	+3·2	73	17,18	90·1	107·1	68·1	68·6	13·6	—1·4	6·5	29	—8	8
Ajmer ..	1,593	949·5	—1·9	946·1	106·3	+3·5	110	19, 20	83·1	+2·9	71	16	88·4	104·5	71·3	72·0	19·4	+1·4	13·5	42	0	18
Kotah ..	843	973·7	—2·1	969·8	111·7	+4·1	115	20,21	88·2	+3·7	..	..	93·4	106·8	70·8	71·4	15·8	+0·9	10·3	30	—2	10
Jhalawar ..	1,053	966·8	—1·8	962·3	110·0	+3·0	113	19	83·5	+3·1	75	18	88·6	108·3	70·7	70·6	17·4	—3·1	8·7	37	—9	11
Udaipur ..	1,910	940·5	..	939·9	..	..	108	19	80·2	..	73	16	86·1	100·5	70·2	70·5	18.9	..	14·6	45	..	21

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month.	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST—
1·4	—0·5	1·1	0·46	—0·57	0·38	23	1	—0·9	5·0	—0·1	0	0	29	0	0	0	0	0	2	2	0	7	0	0	0	1	14	7	Gonda.
1·3	—0·2	0·4	5·45	+4·07	1·78	5	5	+2·5	4·7	+1·8	0	10	18	3	0	0	0	0	0	1	4	10	0	0	0	4	1	11	Gorakhpur.
1·4	—0·4	0·8	0·43	—0·10	0·43	11	1	—0·1	6·3	+2·4	0	10	9	1	2	5	1	0	3	8	3	2	0	0	0	5	13	0	Banaras.
0·8	—1·0	1·8	0	—0·63	0	..	0	—1·2	5·3	+0·6	1	8	4	2	2	1	9	0	4	4	4	1	1	0	0	6	15	0	Allahabad (Bamorauli)
0·7	—0·9	1·2	0·67	+0·53	0·67	31	1	+0·4	4·4	+0·4	0	6	5	3	1	3	9	1	4	1	4	1	1	0	0	6	15	3	Fatehpur.
0·6	—0·3	1·4	0·16	—0·16	0·12	23	1	0	7·7	—0·2	2	3	6	5	1	6	5	3	1	3	2	1	0	0	1	8	16	0	Kanpur.
0·8	—0·7	0·8	0·02	—0·75	0·02	22	0	—1·3	2·5	0	0	3	10	5	3	0	0	3	7	1	1	2	2	1	0	11	8	5	Lucknow.
1·3	—0·5	0·4	1·16	—0·05	0·90	23	2	—0·1	2·9	—0·6	1	0	16	12	0	0	1	0	1	0	0	3	6	0	3	7	7	6	Bahraich.
																													U. P., WEST—
0·8	—1·2	2·3	0·18	—0·19	0·18	24	1	0	6·2	+1·9	0	1	1	0	0	5	12	1	11	1	0	0	0	0	2	22	2	4	Jhansi.
0	—1·4	1·2	0·33	—0·05	0·28	24	1	—0·1	3·3	—1·2	0	1	0	3	5	4	11	0	7	5	0	1	0	1	2	6	12	4	Agra.
0·2	—1·6	1·2	1·07	+0·56	0·87	24	2	+0·8	3·5	+0·8	0	0	3	5	2	5	9	4	3	2	0	2	1	1	2	11	11	1	Mainpuri.
0	—0·9	1·5	0·98	+0·57	0·98	24	1	—0·2	5·1	—0·1	0	1	2	2	2	5	7	3	9	2	0	2	1	0	1	9	15	1	Aligarh.
0·5	—1·3	1·1	0	—0·66	0	..	0	—1·5	4·0	+1·1	6	1	9	10	1	0	0	2	2	3	1	0	2	2	2	10	10	1	Bareilly.
0·5	—1·1	0·9	0·24	—0·52	0·20	8	1	—0·7	4·5	+1·3	1	0	0	19	0	0	0	1	11	0	0	0	5	0	3	0	21	2	Roorkee.
0·9	—1·5	2·0	0·69	—0·76	0·38	6	3	0	2·3	0	1	1	0	1	2	2	1	4	19	2	2	0	1	4	7	7	2	6	Dehra Dun.
																													EAST PUNJAB—
0·6	—1·1	1·8	0·22	—0·30	0·17	24	1	—0·6	7·4	..	1	0	3	5	0	2	11	5	4	10	3	1	1	1	2	2	10	1	New Delhi.
0·6	—0·7	0·5	0·38	—0·16	0·38	27	1	—0·4	5·8	+0·8	2	2	3	3	4	12	13	2	0	4	2	1	0	1	8	5	10	0	Hissar.
0·4	—1·2	0·8	0·15	—0·58	0·11	8	1	—0·5	..	..	0	0	0	0	0	0	0	27	4	0	0	0	1	0	0	0	26	4	Ambala.
0·3	—1·3	0·7	0	—0·53	0	..	0	—1·5	3·3	+1·1	1	1	0	4	4	0	6	9	6	1	1	0	2	0	1	2	15	9	Ludhiana.
																													KASHMIR—
2·8	—1·1	4·6	2·83	+0·45	1·02	9	5	—0·4	2·5	—0·2	3	0	3	10	3	0	1	2	9	2	1	3	3	2	0	5	4	11	Srinagar.
																													Gulmarg.
																													Dras. (R)
4·3	—0·1	6·1	0	—0·22	0	..	0	—0·7	3·9	+1·1	0	3	0	0	17	0	1	0	10	0	5	0	0	0	21	5	0	0	Leh.
																													Skardu (R)
																													Gilgit (R).
																													Misgar. (R)
																													RAJPUTANA, WEST—
0·1	—0·4	0·1	0	—0·23	0	..	0	—0·8	4·0	—2·7	1	3	3	5	1	6	4	0	8	1	1	2	0	0	1	2	11	12	Sri Ganganagar.
0·2	—0·9	0·2	0	—0·59	0	..	0	—1·2	6·3	0	0	0	0	0	0	22	2	1	6	1	0	0	0	1	16	3	10	0	Bikaner.
0·4	..	1·0	0	—0·35	0	..	0	—0·8	13·2	..	0	0	0	0	1	27	2	0	1	0	0	0	1	2	16	8	3	1	Phalodi.
0·1	—1·1	0·1	0	—0·41	0	..	0	—1·1	5·1	—3·6	0	0	0	0	0	20	4	0	7	1	0	0	0	0	18	9	1	2	Jodhpur.
0·1	—0·8	0·1	0	—0·35	0	..	0	—0·7	7·3	+0·4	0	0	0	0	8	10	4	1	8	0	0	0	0	3	11	10	6	1	Barmer.
																													RAJPUTANA, EAST—
0	..	1·1	0·05	..	0·05	28	0	..	5·5	..	0	0	0	0	0	14	10	0	7	1	0	1	0	0	2	21	6	0	Sikar.
0	—1·3	1·7	0·01	—0·56	0·01	26	0	—1·6	6·2	+0·8	1	2	2	0	1	0	4	15	6	4	1	0	0	0	0	12	14	0	Jaipur.
0·2	—1·0	0·5	0·15	—0·49	0·14	26	1	—0·5	10·1	+3·6	0	0	0	0	1	15	12	0	3	2	0	0	0	1	12	13	3	0	Ajmer.
0	—1·1	0·8	0	—0·47	0	..	0	—1·0	7·7	+3·8	0	0	0	1	0	13	11	4	1	0	1	0	0	0	4	9	15	0	Kotah.
0·1	—0·9	1·3	0·02	—0·33	0·02	26	0	—0·9	8·0	+2·8	1	1	0	0	0	6	18	0	5	1	0	1	0	0	1	22	5	1	Jhalawar.
0·1	..	1·4	0	—0·72	0	..	0	—1·5	6·0	..	1	2	1	1	4	10	7	1	4	0	0	0	1	0	13	13	4	0	Udaipur

STATION	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature, °F				Dry bulb temperature °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean	Departure from normal	Highest	Date	Mean.	Departure from normal	Lowest	Date	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
GUJARAT—																						
Deesa* ..	466	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bhuj	343	993·0	—1·3	990·5	102·3	+1·4	109	16, 17, 19	79·3	+2·5	76	2	82·8	99·3	76·9	77·7	29·0	+2·5	22·6	75	+8	36
Dwarka ..	37	1004·6	—1·2	1002·8	89·1	+1·1	90	10 days	82·0	+1·4	80	1	83·1	86·9	80·3	82·5	34·0	+2·9	35·9	88	+2	82
Jamnagar ..	60	1004·4	—0·2	..	98·3	+0·8	103	24	..	..	..	..	83·6	..	81·0 (e)	..	34·9	+6·0	..	89 (e)	+15	..
Rajkot ..	432	991·1	—1·0	987·3	107·7	+2·8	113	14	77·9	+2·7	74	3, 13	81·3	103·0	77·4	78·7	30·3	+3·9	22·4	83	+11	34
Veraval ..	26	1005·7	—1·4	1003·5	88·9	..	91	7, 15, 17	80·9	..	75	13	83·4	86·5	79·7	81·6	33·0	..	34·7	84	—1	80
Surat ..	39	1005·3	—1·1	1002·8	93·8	—3·5	100	7, 15	81·3	+2·4	77	4	84·7	91·4	80·4	84·9	33·5	+5·5	38·0	82	+13	75
Bhavnagar ..	55	1004·7	—0·8	1000·2	107·3	+2·1	113	26	78·8	+0·7	75	4 days	82·6	101·1	75·7	80·5	27·2	+1·9	26·1	71	+7	38
Ahmedabad ..	163	1000·6	—0·9	995·3	106·7	—0·1	110	5 days	80·4	+1·2	76	2	83·6	105·5	76·0	75·3	27·2	+2·0	16·2	69	+5	22
Dohad ..	1,093	968·6	..	964·9	104·3	+1·3	109	19	78·9	+0·2	76	1, 14	82·5	100·9	74·9	73·4	26·1	+2·2	15·6	69	+6	21
Baroda ..	115	1002·5	..	997·8	105·5	+0·9	112	14	80·7	+3·0	77	3, 4	84·7	103·6	78·3	77·8	30·1	+4·6	20·8	74	+7	30
CENTRAL INDIA, WEST—																						
Neemuch ..	1,626	949·7	—1·3	946·5	106·6	+3·2	110	4 days	79·9	+2·5	77	2	83·7	105·2	73·6	72·7	24·2	+3·8	14·0	62	+12	20
Indore ..	1,823	943·8	—1·3	940·2	105·1	+2·2	109	15	79·1	+2·8	74	1	83·2	103·8	71·0	68·9	20·9	+1·4	10·0	54	+5	13
Bhopal ..	1,643	948·5	—1·2	944·7	107·9	+3·5	111	5 days	82·0	+3·0	77	3	87·3	105·7	68·7	69·2	16·4	+1·8	9·5	38	+4	12
Guna ..	1,571	950·3	—1·2	946·7	109·2	+2·9	112	4 days	81·1	+3·6	72	17, 18, 19	89·8	107·5	66·2	69·5	12·4	—2·2	9·1	25	—7	11
Gwalior ..	681	977·8	..	974·2	112·0	..	116	20	82·1	..	72	16	96·0	107·8	71·8	75·1	15·7	..	14·9	28	..	19
Madhosagar ..	757	975·2	..	971·6	110·5	..	114	20, 21	84·2	..	70	14	93·9	107·8	70·7	71·7	15·1	..	9·3	28	..	13
CENTRAL INDIA, EAST																						
Nowgong ..	750	976·2	—2·1	971·9	111·3	+3·8	115	20	80·6	+1·2	71	17	93·0	109·6	78·5	83·9	26·7	+10·1	26·8	51	+15	33
Sutna ..	1,041	965·9	—2·4	962·3	111·4	+5·6	115	21, 28	82·0	+2·2	75	17, 18, 19	92·0	107·5	70·0	73·4	15·1	—0·2	12·5	29	—4	16
Umaria ..	1,506	951·8	..	947·4	109·0	+3·5	112	20	83·2	+4·2	72	17	91·5	106·6	68·2	72·0	14·0	—0·4	12·7	28	—1	16
BERAR—																						
Akola ..	925	972·9	—1·5	968·2	110·9	+7·8	114	5 days	84·5	+3·2	81	4 days	88·2	108·6	72·1	70·7	19·6	+2·3	8·3	43	+4	11
Amraoti ..	1,213	962·9	—1·6	958·2	110·7	+3·1	115	16, 17	83·8	+3·1	79	2	88·5	108·3	74·2	80·1	22·4	+5·1	22·3	49	+11	27
C. P., WEST—																						
Khandwa ..	1,044	969·3	—1·3	964·5	109·4	+2·5	115	15	83·0	+1·9	78	20, 21	87·2	107·5	74·0	74·0	22·7	+4·5	13·5	51	+8	16
Hoshangabad ..	992	970·0	—1·8	964·8	110·0	+3·1	114	15, 16	82·7	+1·7	77	17	88·8	108·5	68·2	70·3	14·2	—1·4	8·0	31	—4	10
Saugor ..	1,88	942·6	—1·5	938·8	107·6	+3·0	110	4 days	83·3	+4·0	80	16, 25	89·7	105·5	67·1	68·1	13·4	0	8·2	29	—2	10
Jubbulpore ..	1,289	959·3	—1·6	954·8	110·2	+4·8	113	20, 21	81·4	+4·1	70	17	92·3	108·0	67·8	70·3	12·1	—2·3	8·3	23	—9	10
Seoni ..	2,027	936·0	—1·4	932·2	107·9	+4·3	111	22	79·5	+3·2	76	2, 18, 24	91·5	104·9	68·4	70·3	14·4	+0·3	9·7	29	—3	16
Nagpur ..	1,010	968·3	—2·1	964·2	113·1	+4·4	116	16, 17	85·3	+4·4	77	13	94·3	110·3	68·8	69·9	12·5	—4·4	7·4	23	—9	9
C. P., EAST—																						
Gondia ..	1,026	968·4	..	963·9	110·5	..	114	20, 22	84·0	..	77	17	92·0	108·7	74·4	79·3	21·1	..	20·8	41	..	25
Pendra ..	2,040	934·5	—1·9	931·0	106·1	+5·8	110	20	81·8	4·5	70	26	91·3	102·5	67·5	68·8	13·3	—2·1	10·4	27	—9	15
Champa ..	805	975·5	..	969·9	111·9	..	117	22	84·7	..	77	18	91·5	109·6	72·4	73·7	18·9	..	12·0	37	..	14
Raipur ..	970	969·6	—1·8	965·2	111·1	+3·8	115	20, 21, 22	85·7	+4·1	79	1	93·0	108·9	72·6	73·9	18·1	+0·9	12·7	35	—1	19
Titilagarh ..	691	979·1	..	974·2	109·3	..	115	21, 22	84·8	..	77	6	89·3	107·3	74·3	74·2	9·3	..	13·9	49	..	18
Kanker ..	1,318	959·4	—0·5	955·2	106·6	+2·2	111	21	82·2	+2·9	72	4, 19	91·8	104·7	73·9	76·4	20·5	+1·0	18·2	41	—2	23
Chanda ..	634	982·2	—1·4	977·1	111·3	+1·9	115	5 days.	83·7	+1·6	79	4 days	88·5	111·2	72·3	74·9	19·8	+1·5	13·0	39	+3	18
Jagdalpur ..	1,815	943·6	—1·0	939·5	103·6	+2·2	110	20, 21, 31	75·5	+0·8	67	18	85·1	98·6	72·7	72·7	22·4	—0·8	17·8	55	—3	21

* Data not reliable.

(e) Mean of 26 days.

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days (0·10″ or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													GUJARAT—
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Dessa.*
0·5	—0·8	0·6	0	—0·26	0	..	0	—0·3	11·8	+0·9	0	0	0	0	0	19	7	0	5	0	0	0	0	0	10	20	1	0	Bhuj.
3·0	+0·1	2·8	0	—0·02	0	..	0	—0·1	16·1	+4·7	0	0	0	0	0	15	14	2	0	0	0	0	0	0	12	19	0	0	Dwarka.
2·0	0	..	0	—0·30	0	..	0	—0·3	12·7	—2·1	0	0	0	0	0	15	16	0	0	..	..	..	..	..	..	..	..	..	Jamnagar
2·3	—0·4	0·4	0	—0·50	0	..	0	—0·6	16·2	+4·9	0	0	0	0	1	14	14	2	0	0	0	0	0	1	4	16	10	0	Rajkot.
4·3	+1·3	2·8	0	—0·28	0	..	0	—0·3	15·2	..	1	0	0	0	0	5	14	11	0	0	0	0	0	0	7	21	3	0	Veraval.
1·7	+1·0	1·5	0	—0·24	0	..	0	—0·3	8·4	+1·8	0	0	0	0	6	24	1	0	0	0	0	0	0	6	24	1	0	0	Surat.
1·1	—1·2	1·5	0·57	+0·16	0·30	30	2	+1·3	6·5	—0·7	0	0	0	0	6	11	12	2	0	0	0	0	4	20	3	3	1	0	Bhavnagar.
1·9	—0·1	0·9	0·04	—0·35	0·04	31	0	—0·7	4·5	—0·4	1	0	0	0	2	15	10	2	1	0	0	0	0	4	10	12	5	0	Ahmedabad.
1·7	0	0	0	—0·66	0	..	0	—0·5	21·4	+12·9	0	0	0	0	0	19	12	0	0	0	0	0	0	0	17	13	1	0	Dohad.
2·0	+0·2	0·5	0	—0·20	0	..	0	—0·5	6·5	+0·7	0	0	0	0	0	19	12	0	0	0	0	0	0	0	15	13	2	1	Baroda.
																													CENTRAL INDIA WEST—
0·5	—0·5	2·3	0	—0·59	0	..	0	—1·2	11·5	+3·2	0	0	0	0	0	8	22	1	0	2	0	0	0	0	9	15	5	0	Neemuch.
0·8	—0·5	1·6	0·04	—0·47	0·04	15	0	—1·3	6·9	+1·3	1	0	0	0	0	5	20	5	0	1	0	0	0	0	2	18	10	0	Indore.
0·1	—1·0	1·7	0	—0·57	0	..	0	—1·2	7·9	+2·4	0	0	0	0	0	3	19	9	0	0	1	0	0	0	3	17	10	0	Bhopal
0·4	—0·6	7	0	—0·54	0	..	0	—1·2	8·0	+2·4	0	0	0	2	0	9	14	4	2	0	0	0	0	0	6	14	10	1	Guna.
0·5	..	2·2	0·06	..	0·06	24	0	..	4·8	..	1	0	0	1	3	5	13	4	4	5	2	1	0	0	1	8	10	4	Gwalior.
1·4	..	1·8	0·11	..	0·09	25	0	..	7·5	..	0	0	1	2	2	12	10	1	3	3	1	1	1	0	0	12	12	1	Madhosagar.
																													CENTRAL INDIA, EAST—
1·1	—1·3	3·2	0·03	—0·34	0·03	24	0	—1·0	4·5	+1·7	1	2	2	0	0	25	0	0	1	0	1	0	0	0	7	13	10	0	Nowgong.
2·0	0	2·4	0	—0·47	0	..	0	—1·3	6·0	+1·5	1	2	1	0	1	10	11	2	3	4	0	0	0	0	4	5	18	0	Sutna.
1·6	—0·9	3·5	0	—0·43	0	..	0	—0·7	4·5	+1·0	1	1	0	2	0	4	10	6	7	2	1	0	0	0	2	5	20	1	Umaria.
																													BERAR—
0·7	—1·5	2·1	0	—0·41	0	..	0	—1·0	10·5	+3·2	0	0	0	0	0	0	15	16	0	1	3	0	0	0	0	10	17	0	Akola.
1·1	—0·9	4·1	0·10	—0·42	0·10	26	1	—0·3	8·8	+3·0	0	1	0	0	0	11	19	0	0	0	3	0	2	0	2	6	18	0	Amraoti.
																													C. P., WEST—
0·3	—1·1	2·2	0	—0·31	0	..	0	—0·7	11·8	+3·8	0	0	0	0	0	1	16	14	0	0	0	0	0	0	2	9	20	0	Khandwa.
1·3	—0·2	6·0	0·16	—0·33	0·13	26	1	—0·2	5·4	+2·2	1	0	0	0	4	13	11	1	1	3	1	0	0	1	7	13	5	1	Hoshangabad
0·7	—1·0	2·8	0·07	—0·35	0·07	25	0	—1·1	13·0	+1·5	1	2	1	0	1	7	17	1	1	2	0	0	0	0	2	14	13	0	Saugor.
1·0	—0·5	2·8	0	—0·62	0	..	0	—1·4	5·7	+2·7	0	0	1	1	2	8	17	0	2	6	0	0	0	0	4	14	7	0	Jubbulpore.
1·6	—0·4	3·5	0·21	—0·55	0·21	23	1	—0·7	4·0	+0·2	6	2	0	3	4	1	4	6	5	9	2	1	0	3	2	4	10	0	Seoni.
1·9	—1·0	4·2	0·02	—0·74	0·02	26	0	—2·0	8·0	..	3	1	1	1	2	6	3	14	0	5	3	0	0	1	6	4	12	0	Nagpur.
																													C. P., EAST—
0·8	..	1·5	0·13	..	0·08	7	0	..	4·0	..	7	2	1	0	4	8	2	5	2	6	1	1	0	0	9	8	4	2	Gondia.
1·4	—1·0	3·5	1·02	+0·18	0·85	25	2	—0·1	6·3	+1·5	2	1	0	1	10	1	4	11	1	10	0	0	0	1	3	5	12	0	Pendra.
2·9	..	4·5	0	..	0	..	0	..	5·8	..	1	3	6	2	3	4	6	3	3	7	4	0	0	0	0	12	8	0	Champa.
2·3	—0·3	3·6	0·37	—0·52	0·37	8	1	—1·1	5·6	+0·5	0	0	0	0	0	18	0	5	8	0	6	0	0	0	10	0	12	3	Raipur.
2·6	..	3·1	0·30	..	0·30	6	1	..	4·9	..	1	0	0	7	12	6	0	1	4	3	2	1	3	5	5	6	5	1	Titilagarh.
3·9	0	4·7	0·13	—1·36	0·08	6	0	—2·7	6·4	+0·9	1	0	0	1	4	8	5	1	13	6	0	0	1	0	1	3	17	3	Kankar.
2·8	+0·3	3·8	0	—0·61	0	..	0	—1·4	5·0	+1·0	0	0	0	9	0	5	0	13	4	0	3	0	4	0	5	0	19	6	Chanda.
3·2	—0·2	4·8	1·56	—0·30	1·62	6	3	—1·8	6·2	+2·5	0	0	0	0	0	24	0	1	6	0	0	0	0	0	15	2	14	0	Jagdalpur.

TABLE 11—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.

STATION	Height of bar, cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure millibars			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean.	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
KONKON—																						
Dahanu ..	15	1007·1	..	1004·6	92·0	..	96	20	81·3	..	77	2	81·8	90·4	77·0	84·1	29·5	..	37·1	81	..	77
Bombay ..	35	1006·6	—0·9	1004·2	92·5	+1·4	94	4 days	81·7	+2·1	79	1, 5	85·3	90·0	78·0	79·9	29·4	0	30·2	71	—6	63
Alibag ..	23	1008·1	+0·5	..	89·8	+0·9	91	7 days	81·0	+1·9	77	5	84·2	..	77·9	..	29·8	+0·7	..	74	—1	..
Harnai ..	66	1005·7	..	1003·7	89·0	..	94	16	82·1	..	79	26, 29	83·4	85·8	78·1	80·0	30·4	..	32·4	78	..	75
Devgad ..	110	1004·5	..	1001·9	92·4	..	95	19, 23, 29	82·6	..	80	7	84·9	88·8	79·0	80·3	31·1	..	31·5	75	..	68
Marmagao ..	202	1002·1	+0·2	998·9	89·5	+1·2	90	17 days	..	..	..	..	85·4	86·6	78·3	78·6	29·8	+0·3	29·8	71	—7	69
Honavar ..	85	1006·4	..	1003·7	90·8	..	93	1, 20, 25	79·1	..	72	9	83·8	(a) 87·8	77·9	(a) 79·8	30·2	..	(a) 31·1	78	..	(a) 70
BOMBAY DECCAN—																						
Jalgaon ..	660	981·3	..	977·8	111·0	..	116	15, 16	81·0	..	77	2, 16	84·8	108·2	77·5	77·6	29·0	..	18·5	71	..	22
Malegaon ..	1,422	957·6	—1·3	953·2	107·6	+2·6	111	14, 15	75·3	+0·2	71	3, 4	85·7	103·4	71·7	71·5	20·2	+0·1	11·9	48	—2	16
Ahmednagar ..	2,154	934·4	—1·2	930·3	104·8	+2·9	108	14, 15, 19	72·8	+0·7	62	24	81·4	101·9	67·7	68·7	17·6	—0·3	10·5	48	+4	15
Poona ..	1,834	945·9	—0·7	942·7	99·5	+0·7	105	14	73·9	+1·5	71	1, 11, 12	79·0	95·9	70·5	73·7	22·0	+1·5	19·4	64	+3	34
Sholapur ..	1,570	954·0	—0·5	949·1	107·6	+2·9	113	18	78·8	+1·8	75	4 days	83·5	104·7	72·3	74·5	22·4	+3·6	17·4	58	+7	23
Miraj ..	1,817	946·6	—0·3	942·1	99·9	+0·7	105	5, 6	(a) 73·2	+0·7	67	7	77·1	96·1	72·3	74·9	25·1	+1·1	20·9	79	+4	37
Kolhapur ..	1,885	944·7	..	941·0	95·7	..	104	7	73·3	..	67	7	76·6	90·9	71·4	74·5	24·1	..	22·5	77	..	46
Bijapur ..	1,950	941·7	—0·7	937·1	102·9	+1·3	108	18	74·3	—0·2	69	1	78·6	97·6	71·4	71·7	23·3	+2·2	15·9	69	+7	22
Belgaum ..	2,562	923·1	—0·2	920·2	91·7	—1·5	98	5, 7	69·5	+1·1	66	22	74·1	84·5	70·0	73·0	23·4	+1·6	23·1	81	+3	57
Gadag ..	2,131	936·6	—0·1	932·6	97·2	—1·1	104	7	72·7	+0·1	66	27	76·1	94·5	71·1	73·9	24·0	0	20·2	77	0	36
HYDERABAD, NORTH—																						
Aurangabad ..	1,905	942·6	—1·2	938·5	106·1	+2·6	110	15	76·9	+1·1	72	1	82·8	103·4	68·7	74·2	18·2	+1·0	16·9	48	+1	23
Parbhani ..	1,350	958·5	..	953·6	110·0	..	114	18	81·5	..	75	2	87·9	107·0	72·9	76·7	20·8	..	17·6	47	..	23
Bidar ..	2,178	932·7	..	928·8	101·7	+0·4	109	16	79·8	+2·3	73	25, 27	83·4	101·3	71·0	72·7	20·9	+0·3	15·8	54	0	24
Nizamabad ..	1,250	962·2	—1·7	957·8	109·4	+2·8	115	16, 18	83·7	+2·3	80	12	89·0	107·0	69·7	71·6	16·1	—3·3	10·4	35	—9	13
Ramakundam ..	527	986·1	..	981·0	111·0	..	117	19	86·7	..	72	25	91·5	105·3	75·8	78·6	23·3	..	21·2	48	..	25
HYDERABAD, SOUTH—																						
Gulbarga ..	1,503	955·4	—0·9	950·9	106·0	+1·1	111	4 days	79·3	+0·7	74	6, 8	83·2	102·6	72·7	72·9	23·2	+2·7	15·2	59	+5	23
Raichur ..	1,311	962·5	—0·4	957·3	101·0	—2·7	110	17, 18	79·1	0	74	27	82·1	102·8	74·9	78·1	26·3	+3·0	21·6	70	+11	31
Hyderabad (Begumpet) ..	1,778	945·6	—0·9	941·6	105·7	+2·6	111	16, 17 18	81·2	+1·5	72	25	85·9	101·9	72·7	75·5	22·1	+0·1	19·3	53	0	29
Hanamkonda ..	881	974·3	—1·6	969·1	108·5	+4·0	115	17, 18, 19	84·2	+2·5	71	25	89·5	106·3	73·7	72·1	21·3	—0·2	11·4	47	—3	15
Khammameth	367	991·9	..	986·9	107·5	..	116	18	83·5	..	70	25	88·9	104·8	82·4	87·3	34·9	..	36·2	75	..	45
MYSORE—																						
Chitaldrug ..	2,405	927·0	—1·1	923·9	92·0	—3·1	98	7	71·2	—0·1	67	8, 9	74·3	91·1	69·4	73·1	22·5	—0·3	20·5	78	+4	42
Hassan ..	3,149	904·4	..	901·8	86·6	—3·0	90	23, 24	68·1	+0·5	64	1	72·0	81·1	68·3	71·8	22·2	+0·2	22·8	82	+4	63
Bangalore ..	3,021	908·0	—0·5	905·1	90·2	—1·0	96	24	69·2	+0·3	65	5, 11, 13	72·8	85·2	68·9	70·3	22·5	+0·2	19·2	82	+6	49
Mysore ..	2,518	924·5	—0·5	921·4	90·4	—1·5	95	24	69·6	—0·3	65	11	73·7	87·8	70·0	73·0	23·6	+0·5	21·7	83	+5	50
MALABAR—																						
Mangalore ..	72	1006·4	—0·5	1003·8	90·5	—0·3	92	4	79·3	+0·5	75	1, 10, 30	82·0	87·7	77·6	79·3	29·9	+0·6	30·4	78	+1	68
Calicut ..	27	1007·7	—0·5	1005·2	91·6	+1·5	94	4	78·0	—1·2	73	1	81·5	88·1	77·8	82·6	30·8	+0·5	35·3	84	+1	77
Palghat ..	319	997·6	..	994·5	93·2	..	96	3	77·1	..	71	11	80·7	88·9	77·1	78·4	30·2	..	28·4	84	..	61
Cochin ..	10	1006·7	—0·5	1006·2	88·1	+0·8	91	7	78·1	—0·1	74	1·27	82·1	85·9	78·4	80·2	31·5	+1·1	32·7	84	+1	77
Alleppey ..	12	1008·5	..	1006·1	90·7	..	93	7 days	78·7	..	74	12	83·0	87·4	79·5	80·9	32·8	..	3·1	85	..	75
Trivandrum ..	211	1001·9	—0·1	999·3	88·5	..	91	4 days	76·8	..	73	29	80·0	84·7	77·3	78·8	30·8	+0·4	1·0	88	+4	76
Nagercoil ..	195	1001·6	..	999·1	92·7	..	96	10, 23	79·1	..	76	1, 3	83·3	87·1	76·9	78·1	30·4	..	29·2	77	..	61

a—Mean of 30 days

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days (0·10 or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													KONKAN—
4·1	..	4·2	0	..	0	..	0	..	11·0	..	0	0	5	5	1	10	10	0	0	0	0	0	0	0	14	17	0	0	Dahanu.
4·4	+0·3	3·6	0	—0·65	0	..	0	—0·8	5·9	—0·8	1	0	0	1	1	9	8	4	7	0	0	0	0	0	2	19	10	0	Bombay.
4·0	—0·4	..	0	—1·04	0	..	0	—0·8	7·5	—0·8	1	0	0	4	1	12	4	1	8	..	..	..	..	..	..	..	..	..	Alibag.
1·3	..	2·8	0	..	0	..	0	..	9·1	..	0	8	6	3	0	5	5	4	0	0	0	0	0	0	9	16	6	0	Harnai.
6·5	..	6·2	0	..	0	..	0	..	10·5	..	2	3	2	1	1	1	3	18	0	0	0	0	0	0	0	7	24	0	Devgad.
4·8	—0·6	4·5	0·81	—2·43	0·81	27	1	—1·0	8·9	+1·7	5	4	1	0	0	0	12	9	0	1	0	0	0	0	1	17	11	0	Marmagao.
7·0	..	(a) 6·2	2·93	—0·49	1·64	9	4	+0·1	3·8	..	0	3	7	2	0	0	6	6	7	0	1	0	1	1	0	16	12	0	Honavar.
																													BOMBAY DECCAN—
1·1	..	1·5	0·40	—0·01	0·26	6	2	+1·1	14·7	..	0	0	0	0	0	0	24	7	0	4	0	0	0	0	1	20	6	0	Jalgaon.
0·5	—1·2	1·2	0	—0·73	0	..	0	—1·2	8·5	—0·2	0	0	0	0	0	2	16	2	11	0	0	0	0	0	2	13	16	0	Malegaon.
2·2	+0·4	3·7	0·18	—0·81	0·13	25	1	—0·6	7·1	—0·7	4	0	0	1	0	1	5	19	1	12	2	0	0	0	0	7	10	0	Ahmednagar.
2·8	+0·3	2·0	0	—1·06	0	..	0	—1·7	5·2	—3·9	1	0	0	0	0	0	25	2	3	0	0	0	0	0	0	21	10	0	Poona.
4·1	+1·3	6·3	0·02	—0·87	0·02	1	0	—1·9	8·7	+0·5	2	0	0	0	0	4	3	22	0	1	3	0	0	0	5	2	17	3	Sholapur.
3·9	+0·5	4·8	2·41	+0·52	2·06	7	2	—0·9	10·3	+2·2	0	0	0	0	0	2	24	4	1	3	0	0	0	0	5	17	3	3	Miraj.
4·0	..	2·8	1·81	..	1·71	6	1	..	12·2	..	0	0	0	0	0	1	28	2	0	0	0	0	0	0	3	26	2	0	Kolhapur.
2·0	+1·0	5·1	0·38	—0·74	0·33	1	1	—1·2	8·5	+1·8	0	0	0	0	0	12	14	5	0	5	2	0	5	0	4	10	5	0	Bijapur.
3·8	—0·2	3·3	0·49	—1·81	0·31	26	1	—3·3	5·6	+0·9	2	0	0	0	0	5	17	7	0	0	0	0	0	0	8	22	1	0	Belgaum.
5·7	+1·9	5·0	3·51	+1·42	1·51	27	3	—1·1	10·1	+1·6	1	0	0	0	0	10	15	4	1	1	1	1	0	0	8	12	7	1	Gadag.
																													HYDERABAD, NORTH—
0·7	—1·4	1·6	0·02	—0·70	0·02	6	0	1·3	12·2	+2·3	1	0	0	0	0	5	23	2	0	3	2	1	0	0	0	13	12	0	Aurangabad.
2·5	..	3·7	0·04	—0·72	0·03	25	0	—1·4	..	..	0	0	0	1	0	0	21	8	1	0	3	0	0	0	2	16	9	1	Parbhani.
3·6	+0·6	7·3	1·25	+0·33	0·68	25	2	—0·4	8·6	+0·7	0	0	0	1	0	9	15	6	0	5	6	3	0	0	3	6	8	0	Bidar.
2·6	—0·1	2·9	0	—0·68	0	..	0	—1·4	3·1	—1·2	1	0	1	1	0	17	4	1	6	4	4	0	0	0	7	5	5	6	Nizamabad.
3·7	..	4·3	0·89	..	0·84	25	1	..	5·7	..	0	0	1	8	4	5	8	2	3	8	2	1	4	3	3	4	5	1	Ramakundam.
																													HYDERABAD, SOUTH—
2·4	—0·2	3·0	0·27	—0·85	0·15	7	2	—0·4	10·7	+2·4	1	0	0	0	2	7	15	6	0	4	3	3	2	1	3	7	8	0	Gulbarga.
4·8	+1·9	5·1	0·78	—0·29	0·53	25	2	—0·3	11·5	+3·3	0	0	0	0	1	11	14	5	0	1	2	2	4	0	2	9	11	0	Raichur.
3·2	—0·6	4·8	0·17	—0·92	0·13	29	1	—1·3	8·7	+2·3	0	0	0	1	1	3	14	8	4	2	4	2	0	0	4	4	12	3	Hyderabad
2·7	—1·1	3·3	0·19	—1·03	0·19	25	1	—1·0	8·2	+1·9	4	0	0	7	8	3	4	4	1	9	2	1	4	2	1	4	8	0	Hanamkonda. (Begumpet)
3·5	..	4·3	4·02	..	1·83	25	4	..	6·6	..	1	0	2	10	4	6	6	1	1	4	2	1	5	1	6	3	8	1	Khammameth.
																													MYSORE—
7·1	+1·9	5·4	7·69	+4·75	3·08	25	7	+2·6	8·2	+3·1	0	0	0	0	1	11	13	3	3	1	1	0	0	1	5	7	13	3	Chitaldrug.
5·9	+1·1	5·8	4·26	—0·36	0·96	9	9	+1·8	8·3	+3·0	0	2	0	0	0	4	23	1	0	0	1	0	0	1	7	21	1	0	Hassan.
5·7	+0·8	7·2	6·27	+2·11	1·63	11	6	—0·6	8·2	+2·7	0	0	0	0	0	7	15	9	0	3	1	1	1	3	2	11	8	1	Bangalore.
6·5	+0·8	7·1	8·20	+2·61	3·13	11	7	—0·9	6·8	+0·7	1	0	1	0	1	8	18	1	1	1	0	1	0	0	8	18	8	0	Mysore.
																													MALABAR—
7·3	+1·2	6·5	2·55	—3·63	0·80	30	6	—0·7	5·8	+0·3	3	4	10	2	1	0	5	3	3	5	0	1	0	0	3	5	16	1	Mangalore.
6·4	+0·2	6·7	5·41	—3·87	2·11	30	8	—0·7	7·9	+0·9	7	9	7	0	2	0	0	4	2	1	1	0	0	0	3	15	11	0	Calicut.
4·1	..	5·2	8·59	..	2·55	13	8	..	6·9	..	0	0	0	0	0	3	26	1	1	0	0	0	0	0	6	23	2	0	Palghat.
7·5	+1·3	7·6	10·75	—0·93	3·29	27	12	—0·3	7·0	+1·7	2	6	12	3	0	0	2	1	5	1	0	0	0	0	3	12	13	2	Cochin.
7·8	..	8·0	8·83	..	2·55	12	14	..	7·3	..	1	4	8	6	0	1	4	5	2	0	0	1	0	0	3	13	15	0	Alleppey.
8·3	—0·4	7·9	6·94	—1·84	1·72	1	10	—0·1	5·4	+0·3	8	8	0	0	1	0	1	9	4	1	2	0	0	0	6	8	14	0	Trivandrum.
7·1	..	7·9	1·75	..	1·28	3	7	..	10·2	..	0	0	0	0	0	2	21	8	0	0	0	0	0	0	4	26	1	0	Nagercoil.

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.)

STATION	Height of bar cistern above mean sea level in feet	Pressure at station level in millibars			Maximum temperature °F				Minimum temperature, °F				Dry bulb temperature °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MADRAS, SOUTH EAST—																						
Pamban ..	37	1006·5	0	1003·7	89·8	—1·9	93	4	82·3	+1·2	81	7 days	86·1	85·3	79·4	79·4	31·3	—1·3	31·7	73	—8	76
Madura ..	437	992·1	—0·8	988·1	101·8	+3·0	106	18, 22, 23	80·6	+2·6	74	11	86·3	96·2	76·3	77·5	26·4	+0·4	23·7	62	—4	42
Negapatam ..	31	1005·8	—0·6	1002·3	97·3	0	105	22	82·0	+1·3	75	12	86·3	90·3	79·3	81·0	31·0	+1·0	31·9	73	+1	66
Trichinopoly	255	998·5	—0·5	994·3	100·7	—0·7	106	23	80·0	+0·8	71	24	84·6	98·3	77·0	79·0	28·3	+1·5	25·0	69	+3	41
Coimbatore ..	1,341	962·0	—0·9	958·7	94·7	+0·3	99	5	74·6	+1·0	69	5	79·1	89·5	73·9	75·3	26·2	—1·1	23·5	77	—4	50
Salem ..	913	976·2	—0·8	971·8	98·4	—0·9	103	25	77·8	+0·8	71	13	81·3	95·4	74·6	76·3	26·2	—1·5	22·3	72	—2	40
Cuddalore ..	39	1005·1	—0·7	1000·9	98·5	+0·7	108	18	82·2	+1·8	76	13	85·7	92·0	77·5	81·1	28·5	—1·7	30·9	68	—3	63
Vellore ..	703	982·6	+0·1	978·1	103·1	+1·3	108	17	81·2	+2·2	75	14, 30	85·7	99·2	77·7	80·9	28·8	+2·0	27·6	69	+3	45
Madras ..	51	1003·8	—1·0	1000·2	102·0	+0·7	110	18	83·7	+2·0	77	6	88·5	93·4	78·3	80·4	28·4	+0·3	29·5	62	—1	57
Arogyavaram ..	2,299	930·5	..	926·9	95·4	..	98	5, 17, 24	74·7	..	66	3	80·3	90·9	71·1	72·3	22·3	..	19·5	63	..	41
MADRAS, DECCAN—																						
Cuddapah ..	428	992·0	—0·6	986·7	105·0	—0·6	109	17, 18	83·6	+0·4	71	5	88·0	101·2	80·5	88·2	32·1	+6·1	39·6	72	+15	60
Bellary ..	1,473	958·7	+0·8	952·8	100·0	—2·1	104	5, 7, 8	77·6	—0·1	69	8	81·3	98·5	72·1	73·6	22·7	+0·1	16·9	63	+5	26
Kurnool ..	923	975·4	—0·4	969·5	104·5	0	110	17, 18	80·9	—0·1	75	11	85·3	103·9	74·5	75·3	24·8	+1·1	18·3	58	0	24
Rentichintala ..	348	992·9	..	988·4	108·1	+1·2	117	18	85·5	+1·3	70	26	89·9	108·6	78·0	79·4	27·4	+1·6	22·3	58	+2	31
Anantapur ..	1,147	968·0	..	962·9	101·7	..	107	17	78·2	..	69	25	82·1	104·4	73·8	74·9	24·7	..	17·7	66	..	27
MADRAS COAST, NORTH—																						
Nellore ..	66	1002·5	—1·2	998·7	106·2	+2·0	111	17, 18, 23	84·7	+2·9	75	5	91·3	99·2	78·7	81·5	27·7	—0·7	28·6	56	—7	47
Ongole ..	38	1003·3	..	998·8	104·5	..	115	17	84·0	..	69	5	90·3	98·3	77·5	79·8	26·4	..	26·3	56	..	47
Masulipatam ..	10	1004·3	—1·3	999·9	100·2	+0·7	114	19, 20, 22	84·0	+2·3	78	25	89·4	95·2	81·2	81·7	32·7	—0·9	30·8	71	—4	57
Cocanada ..	26	1004·1	—1·1	999·8	99·4	+0·2	113	21, 23	83·3	+1·6	71	9	88·2	94·4	81·7	82·2	34·0	+1·6	32·0	75	+1	59
Vizagapatam ..	126	1000·4	—0·9	996·6	91·8	—0·2	98	6	83·1	+1·7	73	13	87·4	88·3	80·7	82·0	32·8	+1·9	34·6	74	+2	76
Calingapatam ..	19	1003·6	—1·1	1000·5	92·6	—1·7	97	31	82·7	+2·0	76	25	86·5	88·5	81·5	83·2	34·5	+1·9	36·4	80	+5	80
HILL STATIONS EXCLUDING KASHMIR—																						
Shillong ..	4,921	846·8	—0·9	843·9	73·4	—0·6	77	17, 18, 31	59·2	+0·1	52	28	67·4	69·1	62·8	63·7	17·6	+0·9	17·8	77	+6	74
Cherrapunji ..	4,309	866·2	—0·5	863·5	70·7	—1·4	79	18, 19	59·9	—1·1	55	1	65·7	66·7	63·9	65·2	19·3	+0·4	20·6	91	+9	93
Aijal ..	3,599	888·3	..	885·6	76·4	..	83	18	62·4	..	55	2	69·3	71·4	66·8	68·3	21·5	..	22·5	88	..	86
Darjiling ..	7,432	772·5	—1·5	770·4	64·8	+1·9	70	19, 31	53·5	+1·1	50	1	57·7	59·9	56·1	57·8	14·7	+0·5	15·5	91	+2	89
Kalimpong ..	3,965	876·4	—0·3	873·6	73·9	—0·7	83	18, 19	63·5	+0·8	59	1	66·6	70·8	64·7	67·3	20·1	+0·9	22·1	91	+9	84
Katmandu ..	3,388	862·8	..	859·7	84·2	—1·1	89	11, 31	61·9	+1·5	55	12	71·2	78·5	65·3	68·3	19·0	+1·3	19·7	73	+3	60
Muktesar ..	7,592	769·6	—1·9	768·2	76·4	+3·3	81	4 days	58·5	+2·7	49	8, 26	63·7	71·5	50·2	56·0	7·5	—1·2	9·8	40	—8	40
Mussoorie ..	6,699	793·9	..	793·2	77·8	+1·3	84	22	63·2	+4·6	54	12	71·0	73·5	53·7	55·0	7·9	—1·9	8·2	31	—17	31
Simla ..	7,224	779·7	—0·7	779·0	77·9	+4·7	83	22, 23	61·5	+3·8	53	8	69·5	74·9	51·1	53·8	6·1	+2·1	6·7	27	—11	22
Abu ..	3,945	878·2	6	877·5	92·5	+4·6	98	16	74·0	+2·9	67	21	79·6	89·1	60·0	62·2	9·8	+1·9	8·1	31	—8	19
Pachmarhi ..	3,528	890·3	—1·1	887·0	99·4	+3·6	103	15	77·7	+2·6	68	17	84·8	97·5	64·4	66·1	11·8	—1·7	9·2	32	—6	15
Mahabaleshwar	4,534	861·7	—0·1	860·0	85·5	+1·7	94	7	64·5	—0·3	62	7 days	67·7	80·3	60·1	70·0	14·7	+0·9	21·2	65	+9	58
Mercara ..	3,781	884·7	—0·1	882·3	75·6	—4·5	81	25	64·8	+0·3	62	15	68·0	75·7	66·5	70·3	21·6	+1·0	23·1	92	+5	75
Ootacamund ..	7,364	780·2	+0·5	778·6	73·5	+3·1	77	5 days	52·1	—0·4	47	31	57·6	66·2	54·5	60·2	13·4	+0·9	15·6	82	+15	72
Coonoor ..	5,730	825·9	..	..	73·3	..	79	16	58·1	..	55	8, 31	69·1	..	60·4	..	14·8	..	..	62	..	..
Kodaikanal ..	7,688	771·3	+0·6	769·7	70·1	+1·7	74	17, 19, 23	55·5	+0·8	51	5, 11	61·6	62·6	54·7	59·2	12·2	+0·3	16·0	66	0	83
CEYLON—																						
Colombo ..	24	1008·6	—0·3	1006·5	87·7	0	89	6 days	78·8	+1·2	73	28	81·1	84·4	78·1	79·9	31·5	+0·7	32·6	87	—1	81
Trincomalee ..	24	1006·8	+0·2	1003·8	93·3	+0·1	98	23	79·4	+1·1	75	12	82·8	88·6	77·3	79·6	29·5	+0·1	30·5	77	—5	66
Hambantota ..	61	1006·1	—0·7	1003·6	87·3	+0·5	92	13	78·4	+1·1	74	13	80·8	83·7	78·1	79·2	31·7	+1·6	32·1	88	—1	81
Mannar ..	12	1004·7	..	1004·8	89·8	..	92	1	81·0	..	76	6	83·9	86·4	79·4	80·4	32·3	..	32·7	81	..	76

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days (0·10″ ormore)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I.S.T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													MADRAS, SOUTH-EAST—
5·8	+2·4	4·2	0	—0·97	0	..	0	—1·7	12·1	+2·0	0	1	1	1	16	11	1	0	0	0	1	0	4	15	11	0	0	0	Pamban.
5·5	+0·1	6·9	3·46	+0·72	3·24	11	2	—2·7	4·1	—0·2	1	0	2	0	1	0	6	9	12	2	1	2	5	4	0	4	9	4	Madura.
6·7	+1·9	5·7	1·78	+0·21	0·94	1	3	+1·2	7·8	+1·4	0	0	0	0	1	20	8	0	2	0	0	0	7	13	10	0	0	1	Negapatam.
3·8	—0·4	5·3	5·39	+2·08	3·00	9	3	—1·1	7·3 (k)	+2·7	1	1	0	1	2	5	17	3	1	1	1	1	0	5	1	11	7	4	Trichinopoly.
4·2	0	5·2	3·02	+0·55	0·89	11	6	+1·5	7·6	+3·8	0	1	0	0	13	13	1	0	3	0	0	1	0	10	15	5	0	0	Coimbatore.
4·4	+0·1	5·1	4·32	—0·28	3·14	13	5	—2·1	5·3	+1·7	0	0	1	0	1	18	9	0	2	0	0	3	1	2	3	11	4	7	Salem.
5·5	+1·4	5·3	0·19	—0·81	0·19	13	1	—0·3	8·7	+3·4	0	0	0	0	8	20	3	0	0	0	0	1	25	3	0	2	0	0	Cuddalore.
6·3	+3·0	7·3	2·65	+0·36	1·69	30	4	+0·2	4·9	+1·1	0	1	0	0	2	14	2	2	10	0	3	6	2	4	9	2	2	3	Vellore.
5·2	+0·9	4·7	0·32	—0·71	0·22	6	2	+0·9	14·0	+2·2	0	0	0	6	8	13	3	1	0	0	0	1	28	1	0	1	0	0	Madras.
6·2	..	7·4	4·01	..	1·62	3	6	..	6·0	..	2	1	0	1	3	0	5	12	7	5	0	1	0	1	4	5	12	3	Arogyavaram.
																													MADRAS, DECCAN—
4·4	+0·4	5·2	1·71	+0·20	1·00	5	2	—0·6	6·1	0	0	0	0	0	0	0	20	2	9	3	1	1	4	0	0	10	7	5	Cuddapah.
7·0	+2·8	6·3	2·46	+0·57	1·42	8	4	+0·7	7·1	+1·1	4	1	1	0	0	0	3	10	12	2	0	3	0	0	1	7	17	1	Bellary.
5·9	+2·0	4·5	0·32	—0·76	0·32	11	1	—1·5	11·0	+4·2	0	0	0	1	1	4	16	8	1	1	1	4	1	0	2	7	15	0	Kurnool.
7·0	+1·7	7·0	0·95	—1·57	0·11	25	3	+0·2	[illegible]	—0·4	1	0	0	3	2	10	13	1	1	4	2	1	4	1	3	10	6	0	Rentichintala.
5·1	..	4·2	1·58	—0·46	0·55	1	5	+1·3	10·0	.	0	0	1	0	0	4	19	5	2	3	0	1	1	2	1	11	8	4	Anantapur.
																													MADRAS COAST, NORTH—
5·4	+0·6	4·6	0	—1·09	0	..	0	—1·4	6·0	+0·4	0	0	0	2	5	1	9	5	9	0	0	6	12	2	0	5	2	4	Nellore.
6·0	..	5·8	2·76	..	2·35	5	2	..	7·3	..	1	0	0	6	1	1	13	2	7	0	1	1	19	0	0	8	1	1	Ongole.
4·4	—0·2	3·9	0·98	—0·34	0·77	2	2	0	9·6	+3·0	0	0	1	5	8	5	9	3	0	0	0	0	14	11	0	1	3	2	Masulipatam.
4·3	—1·2	2·3	1·65	+0·14	1·65	9	1	—1·5	7·9	+2·2	0	0	0	6	2	19	0	2	2	1	0	0	14	7	9	0	0	0	Cocanada.
4·8	—1·1	4·4	1·69	—0·31	1·41	13	2	—0·7	7·0	+1·4	0	0	0	0	5	16	10	0	0	0	0	0	0	20	9	0	0	2	Vizagapatam.
6·7	+2·3	5·4	0·27	—2·29	0·14	13	2	—1·2	11·8	+3·1	1	0	0	1	4	15	9	1	0	0	0	0	2	13	15	1	0	0	Calingapatam.
																													HILL STATIONS EXCLUDING KASHMIR
8·6	+2·4	7·8	14·89	+3·60	2·52	22	22	+4·7	7·0	+3·3	1	0	1	1	2	13	1	3	9	1	0	1	1	3	17	1	1	6	Shillong.
8·7	+1·4	8·0	129·06	+78·62	13·08	11	27	+5·0	8·7	+3·2	1	5	0	2	7	12	3	1	0	1	2	1	3	4	14	3	2	1	Cherrapunji.
7·2	..	6·9	13·38	..	2·35	19	15	..	8·0	..	0	0	11	4	3	12	1	0	0	0	0	4	1	1	17	5	3	0	Aijal.
8·2	+1·2	7·6	6·69	—2·94	0·83	16, 22	17	+2·6	6·5	+1·7	0	0	11	0	0	5	12	0	3	0	0	2	1	0	2	23	0	3	Darjiling.
6·9	+1·7	6·6	8·24	+1·97	2·99	21	15	+3·2	6·0	—0·8	0	0	0	3	0	0	0	19	9	1	0	0	25	3	0	0	1	1	Kalimpong.
4·1	—1·5	6·1	8·60	+3·50	1·85	24	15	+4·5	0·5	—0·9	0	0	1	0	0	0	0	0	30	5	0	0	0	0	0	0	3	23	Katmandu.
0·7	—1·8	2·7	1·31	—0·99	0·65	12	4	—1·1	9·3	+2·3	0	0	1	0	1	6	13	6	4	1	0	1	0	0	10	17	2	0	Muktesar.
1·2	—1·6	3·5	0·82	—0·85	0·59	8	3	—1·3	3·9	—2·1	4	8	1	5	4	1	0	0	8	4	3	1	7	9	5	1	1	0	Mussooree.
0·3	—2·3	1·9	0·25	—2·28	0·12	8	1	—4·2	1·7	—2·1	4	6	3	2	3	2	1	0	10	3	3	2	2	6	7	3	4	1	Simla.
0	—1·0	0	0	—0·93	0	..	0	—1·3	7·1	—0·2	0	2	0	3	0	11	6	2	7	0	3	0	1	0	17	0	2	8	Abu.
0·5	—1·1	3·6	0	—0·62	0	..	0	—1·6	3·8	—1·5	1	0	1	0	0	1	9	5	14	2	2	0	0	0	4	14	6	3	Pachmarhi.
4·2	+0·6	2·5	0·25	—1·35	0·25	7	1	—1·4	1·9	—6·6	5	2	0	0	0	3	5	7	9	2	0	0	0	0	4	6	13	6	Mahabaleshwar.
5·5	—0·9	5·5	3·10	—2·11	1·65	3	6	—2·5	6·4	+2·6	0	0	0	0	0	1	14	13	3	0	0	0	0	0	1	15	15	0	Mercara.
3·4	—1·5	5·0	6·10	—0·19	0·85	9	11	—1·0	2·5	—0·2	2	2	2	0	0	0	0	0	25	8	4	4	1	1	1	2	0	10	Ootacamund.
6·4	..	..	6·93	..	2·52	8	7	..	4·0	..	5	1	1	0	2	0	0	0	22	..	..	..	..	..	..	..	..	..	Coonoor.
4·8	+0·3	7·8	5·61	—0·76	1·51	5	10	—0·6	7·2	+0·2	8	4	2	4	1	0	1	10	4	6	4	3	4	3	0	1	8	2	Kodaikanal.
																													CEYLON—
7·5	+0·1	8·0	8·58	—4·66	2·18	3	14	—0·1	..	..	0	0	4	9	1	10	6	0	1	0	0	0	0	3	17	10	0	1	Colombo.
5·3	+1·0	5·7	0·57	—2·11	0·15	6	3	—0·4	..	..	0	0	0	0	4	25	1	0	1	0	0	5	6	2	16	2	0	0	Trincomalee.
7·1	+2·2	7·9	4·85	+0·20	2·90	27	4	—2·8	..	..	0	0	0	0	1	25	5	0	0	0	0	0	0	2	26	3	0	0	Hambantota.
6·2	..	6·1	1·60	..	0·96	1	3	..	..	..	1	1	0	0	16	13	0	0	0	0	0	0	0	12	19	0	0	0	Mannar.

(k) Mean of 20 days.

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.) AT 4TH CLASS STATIONS MAY 1948

STATION	Maximum temperature °F				Minimum temperature °F				Mean Dry bulb temperature 8 hrs. I.S.T. °F.	Mean Wet bulb temperature 8 hrs. I.S.T. °F.	Vapour pressure millibars		Relative humidity %		Mean Cloud amount 8 hrs. I. S. T.	Rainfall, inches				Number of rainy days (0·10" more)		Wind	
	Mean	Departure from normal	Highest	Date	Mean	Departure from normal	Lowest	Date			Mean 8 hrs. I. S. T.	Departure from normal	Mean 8 hrs. I. S. T.	Departure from normal		Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Resultant direction 8 hrs. I. S. T.	Velocity in miles per hour.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Assam—																							
Lumding	88·9	—0·9	95	5,19	..	..	..	..	79·7	73·6	25·6	—0·6	74	—7	..	12·11	+5·64	2·38	22	16	+5·3	..	..
Kashmir—																							
Jammu	105·9	+6·0	112	22	81·5	+3·3	75	9	88·3	65·9	11·9	—2·1	26	—11	2·0	0·26	—0·67	0·20	24	1	—1·2	..	..
Kargil (R) ..																							
Mysore—																							
Balehonnur ..	83·7	—0·9	89	7	67·1	0	63	24	71·2	69·3	23·7	+0·5	91	+2	..	2·61	—1·54	1·47	27	5	—1·0	..	..
Tibet—																							
Yatung (Chumbi) ..	61·1	+0·3	66	11, 31	41·9	—0·4	34	5	52·9	51·3	12·3	+1·6	92	+6	8·2	5·63	+0·57	0·69	21	17	+6·0	..	..

R—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.) AT 5TH CLASS STATIONS—MAY 1948

DIVISION	STATION	Rainfall, inches				Number of rainy days (0·10" or more.)	
		Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal
1	2	3	4	5	6	7	8
Assam	Mawaynram ..	95·78	..	12·45	29	25	..
West Bengal ..	Bankura ..	6·00	+1·93	2·00	11	8	+2·4
	Cooch Behar ..	19·98	+3·21	2·71	23	21	+5·5
Bihar	Muzaffarpur ..	4·70	+2·72	2·50	8	3	—0·1
	Chapra ..	0·61	—0·69	0·38	23	2	+0·2
	Arrah	0	—1·23	0	..	0	—1·8
United Provinces, West.	Meerut ..	0	—0·60	0	..	0	—1·5
East Punjab ..	Dharampore ..	0·35	—1·59	0·30	8	1	—2·4
	Kyelang ..	1·56	—0·75	0·60	23	5	—0·6
	Dalhousie ..	1·20	—1·79	0·85	24	3	—2·7

DIVISION	STATION	Rainfall, inches				Number of rainy days (0·10" or more)	
		Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal
1	2	3	4	5	6	7	8
Kashmir	Sonamarg ..	4·66	—0·80	1·40	9	11	+1·[illegible]
	Gurez (R) ..						
Bombay Deccan ..	Khandala (R) ..						
Madras, South-east ..	Palamcottah ..	0	—1·63	0	—	0	—2·[illegible]
Sikkim	Lachung ..	2·83	—3·42	0·72	28	13	—3·[illegible]

R—Register not received.

MONTHLY MEAN OF UPPER WINDS

NOTE.—Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In Tables A & B.

n—represents the number of observations,

V—represents the mean wind speed in m/second irrespective of direction,

v—represents the resultant mean velocity in m/second,

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

For the coordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report, January 1948 and subsequent issues.

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 Km. above sea level

MAY 1948

Station	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0100				0700				1600				0100				0700				1600			
Ht. in Km ..	n	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	2·7	233	31	2·2	1·8	227	31	4·0	3·4	248	31	1·8	0·8	72	31	2·1	0·5	59	31	4·8	3·3	315
0·15 a.g. ..	31	7·9	7·4	250	31	5·7	5·0	234	30	7·6	6·9	256	31	7·4	2·6	89	31	7·4	0·5	202	31	7·2	5·3	315
0·6 a.s.l. ..	31	10·0	9·6	266	31	8·5	7·4	271	29	7·1	6·4	253	31	7·6	2·4	51	31	7·4	2·1	261	31	7·0	5·5	311
1·0 „ ..	31	9·5	8·9	272	30	10·1	9·3	283	29	7·5	6·9	256	31	7·2	3·9	329	31	7·2	3·8	293	30	6·3	5·0	301
1·5 „ ..	31	7·9	7·1	273	27	9·1	8·5	277	29	8·3	7·6	262	30	9·3	7·8	313	31	9·0	7·2	305	26	6·0	5·2	298
2·0 „ ..	29	6·6	4·7	271	25	7·5	6·6	271	29	8·9	8·2	265	20	10·1	9·3	307	29	10·1	8·8	305	26	7·7	7·4	294
2·5 „ ..	20	6·3	3·4	261	25	7·3	5·8	268	28	8·6	7·6	266	11	11·1	9·6	306	25	11·3	10·3	304	26	10·0	9·6	293
3·0 „ ..	17	6·1	3·8	257	24	8·0	5·4	272	28	8·5	7·1	279	5	10·9	9·8	324	21	13·3	12·5	306	24	10·9	10·4	295
4·0 „ ..					20	9·7	6·2	285	26	8·7	6·1	288					10	14·2	12·4	311	16	13·3	12·7	302
5·0 „ ..					16	7·0	2·8	315	24	8·9	4·4	316					3	11·3	7·5	273	11	12·2	11·7	312
6·0 „ ..					12	6·6	4·1	3	23	7·8	3·6	317					3	11·0	9·0	278	8	12·6	11·2	313
7·5 „ ..					7	7·9	3·2	297	15	9·7	4·1	333					2	16·7	11·7	294	6	11·7	9·0	318
9·0 „ ..					4	4·6	0·3	288	6	9·4	7·2	299					2	16·5	12·7	291	4	16·7	15·4	279

Station	AMBALA												ANANTAPUR								ASANSOL			
Time in I.S.T.	0100				0700				1600				0700				1600				0100			
Ht. in Km.	n	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	0·4	357	31	2·2	0·3	52	31	3·6	2·4	294	31	3·5	3·1	263	31	2·8	2·2	301	31	2·7	2·1	149
0·15 a.g. ..	31	7·6	3·2	355	31	7·6	2·4	68	31	7·3	4·6	289	31	7·0	6·4	260	31	4·5	3·4	306	31	6·9	5·9	162
0·6 a.s.l. ..	31	8·2	3·9	344	31	8·3	1·7	40	31	7·3	4·9	299	31	8·6	8·0	263	31	4·8	3·9	299	30	8·9	7·6	186
1·0 „ ..	31	8·3	5·7	329	31	8·4	2·7	336	31	6·9	4·8	303	31	9·1	8·4	274	31	5·3	4·2	296	27	6·7	5·4	200
1·5 „ ..	30	7·9	6·4	327	31	8·0	5·0	322	30	6·5	4·6	299	31	7·4	6·6	303	31	5·3	4·4	308	22	5·1	3·1	241
2·0 „ ..	30	7·9	6·8	316	31	8·6	7·1	316	30	7·0	5·8	301	31	5·2	4·1	327	31	5·3	4·4	329	18	6·9	5·6	280
2·5 „ ..	21	8·6	7·9	308	31	9·3	8·1	310	30	8·8	7·7	305	31	4·9	3·4	12	31	5·6	4·5	359	8	6·8	6·3	312
3·0 „ ..	16	9·8	9·0	300	31	10·0	9·1	308	30	9·9	8·7	305	29	6·3	5·5	47	31	5·7	4·8	31	4	8·9	8·5	306
4·0 „ ..	2	9·3	9·3	310	25	10·9	10·4	311	29	12·7	11·4	305	27	8·0	7·5	61	31	6·4	5·7	58				
5·0 „ ..					22	12·3	11·6	312	29	14·3	12·8	306	24	6·7	5·8	71	30	6·2	4·4	52				
6·0 „ ..					15	11·7	10·4	299	27	16·3	15·0	304	22	4·1	3·2	94	28	5·7	3·0	31				
7·5 „ ..					8	15·8	13·8	276	22	19·9	18·4	298	16	4·6	0·3	46	20	3·9	1·1	44				
9·0 „ ..					2	20·4	18·6	278	16	22·7	21·6	295	9	4·5	2·6	68	6	4·5	3·0	100				

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 Km. above sea level

MAY 1948

Station	ASANSOL												BANGALORE											
Time in I. S.T.	0700				1100				1600				0100				0700				1600			
Ht. in Km.	n	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	1·6	154	31	2·1	1·3	163	31	2·8	2·0	128	27	4·3	2·9	252	31	3·6	3·2	265	31	4·3	3·3	280
0·15 a.g. ..	31	4·9	3·7	171	31	4·4	2·7	164	28	5·3	3·3	119	24	8·0	7·1	250	31	6·8	6·1	264	29	6·4	5·2	285
0·6 a.s.l. ..	31	7·6	5·8	222	31	4·6	3·1	185	28	5·7	2·9	140												
1·0 „ ..	26	7·8	6·4	239	31	5·6	3·7	234	28	5·7	2·5	177	24	7·0	6·4	248	31	5·6	5·1	263	29	5·8	4·7	285
1·5 „ ..	23	7·0	5·9	263	26	7·2	5·5	274	25	5·8	3·2	241	23	7·5	5·1	261	27	7·7	6·4	288	29	5·9	4·8	300
2·0 „ ..	17	7·3	6·5	285	14	8·9	8·1	286	19	7·3	6·2	287	18	5·7	3·0	318	25	5·6	3·4	338	29	5·5	4·2	315
2·5 „ ..	10	7·5	6·3	299	6	8·9	7·8	308	15	9·0	8·5	288	12	4·5	4·1	30	24	6·1	4·6	29	27	5·3	4·1	10
3·0 „ ..	8	9·6	8·7	303	1	9·5	9·5	280	14	10·4	10·3	296	5	5·3	5·0	42	24	7·2	6·5	52	24	5·9	4·7	37
4·0 „ ..	1	14·0	14·0	15	1	12·5	12·5	295	12	14·0	13·7	297					19	8·7	6·7	68	17	7·0	6·3	58
5·0 „ ..									7	15·1	14·8	296					12	6·7	5·4	84	11	6·7	5·9	58
6·0 „ ..									5	15·7	14·8	293					8	3·9	2·6	88	8	6·8	5·5	46
7·5 „ ..									2	16·5	15·6	288					5	4·8	3·8	112	5	5·9	4·7	53
9·0 „ ..																	4	6·0	5·0	155	2	6·0	6·0	85

Station	BAREILLY								BHOPAL												BHUJ			
Time in I. S.T.	0700				1600				0100				0700				1600				0100			
Ht. in. Km.	n	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	1·7	1·4	83	31	1·9	1·1	315	31	5·0	4·5	279	31	4·8	4·5	271	31	4·5	4·2	281	31	4·2	4·1	236
0·15 a.g. ..	31	6·5	2·2	81	31	5·3	3·5	301	31	13·3	11·9	284	31	9·7	9·2	283	31	5·8	4·7	283	31	10·7	10·1	255
0·6 a.s.l. ..	31	7·0	0·4	178	31	5·2	3·3	289	31	11·8	10·5	282	31	8·6	8·2	282	31	5·2	4·3	281	31	14·2	13·1	266
1·0 „ ..	31	7·6	3·1	278	31	5·6	4·1	284	31	15·5	14·0	291	31	11·7	11·1	303	31	6·7	6·3	289	29	10·4	9·6	280
1·5 „ ..	31	8·8	6·1	289	31	6·4	5·6	282	25	13·8	12·4	295	29	9·1	8·7	311	31	7·7	7·1	292	24	8·7	7·7	285
2·0 „ ..	30	10·6	9·7	290	31	8·0	7·7	289	20	7·9	6·4	313	26	6·2	5·2	310	31	7·7	7·0	296	17	6·3	4·9	299
2·5 „ ..	23	10·6	8·8	289	31	10·2	9·8	291	14	6·9	5·3	313	21	5·4	4·2	320	29	7·2	6·5	291	10	5·7	3·6	337
3·0 „ ..	21	13·6	10·8	294	31	11·7	11·3	292	11	6·7	5·5	321	21	5·6	3·8	315	28	6·6	5·8	294	9	5·5	3·6	346
4·0 „ ..	10	13·1	12·7	300	29	14·2	13·8	304	3	6·5	5·1	298	18	5·6	3·9	313	25	7·2	5·5	307	3	6·0	6·0	358
5·0 „ ..	2	14·5	14·1	322	25	15·1	14·6	308	1	6·5	6·5	280	18	8·1	5·9	329	24	7·8	6·4	304				
6·0 „ ..	2	16·5	14·9	330	20	17·3	16·2	298	1	7·0	7·0	280	13	8·9	6·9	322	22	9·1	6·8	308				
7.5 „ ..					9	19·1	17·6	295					6	6·2	5·4	335	18	11·9	8·8	297				
9·0 „ ..					3	17·5	15·5	278					6	6·6	6·0	257	8	12·8	10·3	280				

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 Km. above sea level

MAY 1948

Station	BHUJ								BIKANER								BOMBAY							
Time in I. S.T.	0700				1600				0700				1600				0100				0700			
Ht. in Km.	n	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	3·7	234	31	6·5	6·0	249	31	3·3	2·6	228	31	4·4	3·6	254	31	2·4	2·0	258	31	2·4	1·8	233
0·15 a.g. ..	31	9·8	9·2	241	31	10·1	9·7	254	31	8·4	5·7	228	31	7·5	6·2	255	31	3·9	3·5	263	31	3·7	3·0	231
0·6 a.s.l. ..	31	15·3	14·3	275	31	10·4	9·9	261	31	9·9	7·2	260	31	7·9	6·8	258	30	3·8	3·3	271	30	3·9	3·5	240
1·0 „ ..	31	12·9	12·2	284	31	10·5	9·9	268	31	8·4	7·3	273	31	8·1	7·2	258	25	4·6	3·5	298	27	5·1	3·4	280
1·5 „ ..	30	10·9	10·1	281	31	9·9	9·1	283	30	8·4	7·4	277	26	7·8	7·1	260	11	6·4	5·4	332	24	7·2	6·5	325
2·0 „ ..	27	9·8	8·5	274	31	8·1	7·3	291	30	9·1	8·1	280	23	8·0	7·2	269	7	7·7	6·3	337	22	6·8	5·9	328
2·5 „ ..	19	7·6	5·5	264	31	7·3	6·4	297	27	9·1	7·5	285	23	9·4	8·5	268	5	5·9	5·3	308	17	5·4	4·2	326
3·0 „ ..	16	7·2	3·5	292	31	7·0	5·4	304	20	8·5	6·2	294	19	8·0	6·9	270	2	3·7	3·7	298	15	4·8	2·2	291
4·0 „ ..	7	8·9	8·5	25	30	6·7	3·5	325	15	9·4	6·1	298	16	8·4	6·9	284					10	6·3	3·2	247
5·0 „ ..	7	5·6	4·3	41	28	7·1	3·3	319	10	9·6	6·6	314	14	10·6	9·0	298					9	6·1	2·6	287
6·0 „ ..	7	7·1	5·3	60	27	8·5	3·9	309	7	10·9	8·2	293	12	10·4	8·6	302					6	6·1	4·1	348
7·5 „ ..	6	8·2	3·5	114	16	9·4	5·1	300	2	4·3	3·9	332	8	13·0	11·6	294					3	2·2	2·2	303
9·0 „ ..	6	7·5	2·7	212	8	11·4	6·1	287	1	7·5	7·5	345	2	16·3	14·5	299					1	1·5	1·5	25

Station	BOMBAY				CALCUTTA																COCHIN			
Time in I.S.T.	1600				0100				0700				1100				1600				0100			
Ht. in Km.	n	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	5·5	265	31	4·4	3·7	182	31	4·5	3·8	183	31	6·1	5·4	192	31	6·5	5·6	189	31	2·2	1·1	8
0·15 a.g. ..	31	5·2	5·0	264	31	8·5	7·5	175	31	7·4	6·4	184	31	7·4	6·8	192	30	8·4	7·4	184	25	3·5	2·0	314
0·6 a.s.l. ..	31	5·7	5·1	274	31	12·3	11·8	199	30	11·5	11·4	207	30	9·3	8·5	199	29	8·6	7·8	195	25	5·0	4·2	302
1·0 „ ..	29	5·7	4·6	311	26	11·8	11·2	203	28	11·2	10·8	214	28	9·8	8·6	209	29	7·5	7·1	212	22	5·5	4·8	301
1·5 „ ..	23	7·0	6·2	333	22	10·7	8·6	219	18	9·1	7·4	234	19	8·6	7·2	231	21	7·1	5·1	252	18	4·8	3·6	302
2·0 „ ..	19	6·5	5·4	342	17	8·6	5·5	236	15	8·0	5·4	254	12	7·9	6·9	253	18	7·1	5·8	276	13	4·1	2·3	315
2·5 „ ..	19	5·2	4·4	339	8	7·0	4·9	295	10	7·4	4·6	284	6	6·6	5·4	283	15	9·6	8·4	287	9	4·0	1·3	21
3·0 „ ..	19	3·9	2·5	344	6	5·9	5·1	307	8	7·1	5·3	300	5	6·5	6·2	300	14	12·1	9·8	302	8	4·3	1·6	78
4·0 „ ..	16	4·7	0·7	84					3	6·0	4·8	319					6	12·1	11·5	311				
5·0 „ ..	12	4·5	0·6	76					1	6·0	6·0	280					3	16·3	16·3	279				
6·0 „ ..	8	4·7	1·6	245																				
7·5 „ ..	5	6·2	4·0	239																				
9·0 „ ..	2	8·7	6·3	277																				

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 Km. above sea level

MAY 1948

Station	COCHIN								COOCH BEHAR												CUTTACK			
Time in I. S.T.	0700				1600				0700				1100				1600				0100			
Ht. in Km.	n	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	0·2	90	31	5·0	4·2	293	31	2·1	1·8	89	22	2·0	1·9	95	31	1·6	1·2	97	31	3·5	3·0	196
0·15 a.g. ..	30	3·6	0·9	106	30	5·2	4·8	285	25	4·9	4·3	85	19	4·1	3·7	93	31	3·4	2·7	106	30	7·5	6·7	191
0·6 a.s.l. ..	30	4·8	3·7	295	30	6·7	6·1	294	21	5·6	4·6	112	18	5·3	4·5	105	31	3·8	2·9	140	21	11·1	10·3	213
1·0 „ ..	28	5·3	4·6	293	30	5·9	5·3	296	19	5·6	3·6	138	15	5·6	4·2	126	26	4·2	2·4	172	15	9·1	8·2	218
1·5 „ ..	26	4·7	2·8	292	29	4·9	3·4	302	16	6·4	2·2	181	12	5·0	2·0	139	23	4·7	2·2	216	13	7·6	7·0	249
2·0 „ ..	23	4·6	1·3	329	27	4·0	1·5	339	13	5·8	1·8	129	9	5·8	1·2	235	21	6·3	3·9	253	6	7·5	7·3	263
2·5 „ ..	23	5·0	2·0	42	22	4·6	2·8	61	13	6·3	1·5	184	6	7·0	3·4	263	17	6·9	4·3	260	1	5·0	5·0	355
3·0 „ ..	22	5·5	3·7	77	20	5·3	4·2	76	10	6·7	1·4	222	4	8·4	4·7	269	15	7·4	5·7	266	1	11·0	11·0	355
4·0 „ ..	22	6·4	5·3	89	20	6·5	5·0	82	4	8·1	2·7	282					14	8·3	6·5	277				
5·0 „ ..	20	4·7	2·4	99	17	4·9	2·7	103	1	3·5	3·5	265					9	7·5	6·0	272				
6·0 „ ..	18	5·0	1·4	94	17	4·5	0·7	149	1	2·5	2·5	270					7	9·5	7·7	280				
7·5 „ ..	12	4·6	1·2	150	11	5·4	1·4	223	1	12·0	12·0	260					3	9·3	4·4	300				
9·0 „ ..	4	3·3	2·1	69	6	5·7	2·9	114	1	12·0	12·0	260					2	10·5	9·3	291				

Station	CUTTACK												DEOLALI				GADAG							
Time in I.S.T.	0700				1100				1600				0830				0700				1600			
Ht. in K.m.	n	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	2·4	206	31	2·8	2·6	201	31	4·0	3·7	193	14	3·2	3·0	235	31	5·6	5·3	250	31	4·0	3·5	285
0·15 a.g. ..	31	6·9	6·4	202	31	7·1	6·9	203	31	7·5	7·0	190	14	6·3	6·0	239	31	8·6	8·3	251	31	5·1	4·4	287
0·6 a.s.l. ..	23	9·0	8·1	223	31	6·9	6·5	216	31	5·8	5·1	202	14	4·4	4·3	242								
1·0 „ ..	17	9·1	7·3	240	28	7·9	6·6	242	30	4·8	3·3	254	14	7·7	7·1	292	31	9·9	9·1	278	31	5·3	4·5	292
1·5 „ ..	16	8·2	6·7	277	20	9·4	7·6	288	28	5·7	4·8	299	14	7·3	7·1	319	31	7·2	5·9	321	31	5·1	4·2	303
2·0 „ ..	14	8·1	6·8	297	8	8·4	5·6	310	27	7·3	6·4	311	14	5·3	4·6	330	31	6·1	5·0	341	31	5·0	3·9	315
2·5 „ ..	12	8·4	7·0	314	2	10·3	8·3	275	26	8·0	7·2	317	14	4·6	3·1	340	30	5·4	3·8	10	31	5·1	4·0	349
3·0 „ ..	12	9·2	8·2	320					24	8·5	7·8	322	14	4·6	1·6	335	30	5·2	3·6	46	31	4·9	3·6	19
4·0 „ ..	5	9·8	9·4	333					21	8·5	7·9	320	13	4·8	1·5	265	29	7·7	6·8	80	29	5·8	4·6	66
5·0 „ ..	3	8·5	8·3	285					21	9·4	8·9	310	13	3·9	4·1	289	24	7·4	5·7	78	27	6·0	4·8	83
6·0 „ ..	1	9·5	9·5	295					20	10·3	9·0	299	9	5·5	1·4	346	17	5·8	3·3	52	22	6·7	4·9	40
7·5 „ ..									13	10·3	9·4	272	5	5·6	5·0	248	13	2·9	1·3	75	14	3·7	1·8	53
9·0 „ ..									5	7·1	6·9	268	3	4·2	1·4	178	10	2·5	1·2	56	11	3·6	2·5	101

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 Km. above sea level

MAY 1948

Station	GAYA																GOPALPUR							
Time in I.S.T.	0100				0700				1100				1600				0700				1600			
Ht. in 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	3·1	2·4	98	31	2·7	1·9	95	31	3·4	0·7	354	31	3·9	2·5	326	31	7·2	7·0	203	31	9·0	8·7	18
0·15 a.g. ..	31	6·0	4·6	125	31	5·5	3·1	120	31	5·2	1·5	332	31	6·4	4·3	328	31	11·8	11·6	206	31	14·1	13·9	19
0·6 a.s.l. ..	31	5·9	4·3	151	31	6·1	3·2	196	31	5·1	1·5	355	31	6·5	4·4	325	31	9·3	8·8	221	31	7·1	6·2	21
1·0 „ ..	31	4·7	1·0	260	31	5·7	3·3	246	31	6·0	2·8	297	31	6·2	4·7	320	30	8·2	6·9	238	31	4·7	2·6	25
1·5 „ ..	31	6·8	4·5	295	31	7·2	5·2	287	27	6·5	4·5	279	31	6·7	5·4	312	29	7·4	5·8	275	31	5·5	4·3	30
2·0 „ ..	27	8·9	7·3	287	31	8·9	7·5	297	25	8·0	7·0	288	31	8·0	7·0	303	27	6·5	5·3	299	31	5·9	5·2	32
2·5 „ ..	7	11·0	10·5	305	28	10·3	9·1	299	14	10·9	9·2	288	31	9·6	8·7	298	24	6·7	5·6	318	31	6·1	5·5	33
3·0 „ ..	3	10·5	10·1	806	23	11·3	10·8	304	11	10·9	9·9	288	29	10·6	10·2	294	21	7·2	6·3	332	31	6·2	5·5	33
4·0 „ ..					7	7·9	7·5	298					23	14·4	13·6	295	9	9·3	8·7	340	27	7·6	6·7	34
5·0 „ ..					5	7·9	7·6	311					14	16·0	15·4	287	5	6·8	5·1	318	23	7·8	6·8	33
6·0 „ ..					5	6·7	6·6	330					6	12·9	11·6	289	2	5·7	4·3	235	18	9·4	7·7	30
7·5 „ ..					2	4·5	4·3	330					3	15·2	11·0	295	2	3·5	1·3	350	5	8·9	8·3	24
9·0 „ ..					1	10·5	10·5	340									2	2·0	1·9	14	3	6·7	6·5	20

Station	GORAKHPUR								HYDERABAD (Dn)												JAGDALPUR			
Time in I. S. T.	0700				1600				0100				0700				1600				0700			
Ht. in 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	3·1	2·7	71	31	2·1	0·5	81	31	5·2	3·6	240	31	3·6	2·7	274	31	3·4	1·7	302	31	2·4	1·9	2
0·15 a.g. ..	31	7·6	7·3	85	31	3·7	0·9	100	31	8·4	6·2	234	31	8·0	6·5	275	31	5·0	2·7	330	31	5·3	4·8	2
0·6 a.s l. ..	31	8·8	7·9	123	31	4·0	1·0	93	31	7·0	5·0	232	31	5·1	4·1	271	31	4·6	2·3	327	31	3·8	3·3	2
1·0 „ ..	30	7·4	4·2	144	31	4·6	0·7	274	31	9·8	6·8	245	31	10·5	9·0	308	31	5·4	3·4	332	31	8·3	6·8	2
1·5 „ ..	27	6·6	3·5	270	26	6·2	5·2	282	31	7·7	4·9	265	31	10·0	8·7	323	31	4·6	3·1	337	31	9·1	7·1	2
2·0 „ ..	27	9·2	7·5	290	26	9·6	9·4	286	30	5·6	2·6	310	31	7·6	6·3	322	31	4·9	3·9	340	31	7·9	6·8	2
2·5 „ ..	24	10·4	9·0	293	22	12·3	12·0	291	28	6·0	3·8	349	30	5·5	4·4	333	31	5·8	5·0	344	29	7·4	6·4	3
3·0 „ ..	22	12·7	10·5	300	20	13·9	13·6	295	21	7·6	6·7	349	30	4·7	4·0	5	30	6·1	5·0	347	29	6·7	5·8	3
4·0 „ ..	9	13·3	10·3	311	11	15·5	15·2	301	2	5·0	5·0	37	29	6·0	4·3	40	24	6·1	4·1	349	27	6·5	5·5	3
5·0 „ ..	4	10·6	10·0	325	6	14·2	13·9	304					28	6·8	3·9	30	16	6·5	3·7	7	19	6·2	3·7	3
6·0 „ ..	2	8·0	6·6	340	2	10·5	10·5	303					27	6·8	3·5	27	14	7·6	5·6	4	13	6·0	1·7	
7·5 „ ..													15	4·5	1·1	20	13	7·7	4·7	347	7	7·8	3·9	3
9·0 „ ..													5	4·3	1·7	249	7	7·4	3·2	294	7	6·1	2·6	3

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 Km. above sea level

MAY 1948

Station	JAGDALPUR				JAMSHEDPUR												JHARSUGUDA							
Time in I. S. T.	1600				0700				1100				1600				0100				0700			
Ht. in K m.	n	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	258	31	1·8	0·6	255	31	2·5	1·7	231	31	4·1	1·0	99	31	2·6	1·6	149	31	1·7	1·3	156
0·15 a.g. ..	30	4·8	3·1	274	31	3·2	1·5	237	31	3·7	2·6	222	31	5·9	1·6	121	31	7·1	4·1	169	31	5·2	3·5	177
0·6 a.s.l. ..	30	4·1	2·8	273	31	6·5	5·6	229	31	4·0	2·8	233	31	5·7	0·5	225	31	8·5	5·1	204	31	6·9	5·3	232
1·0 „ ..	30	4·9	3·8	283	31	9·8	8·2	242	31	6·3	4·8	254	31	5·7	1·4	272	31	9·1	4·8	233	31	8·8	6·7	254
1·5 „ ..	30	5·3	4·3	294	30	9·6	7·7	260	31	7·9	6·2	283	31	5·7	3·7	285	31	8·9	4·9	258	31	9·1	6·8	281
2·0 „ ..	30	5·4	4·5	307	28	8·8	7·1	288	21	9·6	7·5	297	31	7·3	6·3	288	27	8·5	7·1	290	31	9·0	7·5	303
2·5 „ ..	30	5·9	5·1	319	24	8·5	7·2	304	9	8·7	7·6	297	27	8·8	8·0	293	16	8·3	7·3	294	31	9·2	8·3	308
3·0 „ ..	30	6·2	5·5	338	18	9·2	8·6	308	6	8·5	7·3	307	24	10·6	9·8	294	11	9·1	8·6	305	27	9·9	9·3	312
4·0 „ ..	28	6·4	5·7	349	10	10·0	9·7	314					17	12·3	11·2	315					19	10·3	9·4	311
5·0 „ ..	21	7·0	6·2	340	1	2·0	2·0	340					13	13·9	13·2	306					12	10·5	9·2	312
6·0 „ ..	18	7·6	5·1	327									10	12·9	12·0	297					7	9·1	7·2	287
7·5 „ ..	12	6·3	3·8	279									3	16·0	12·0	285					2	9·7	9·7	275
9·0 „ ..	7	4·3	3·3	263																	2	6·7	6·7	256

Station	JHARSUGUDA				JODHPUR												JUBBULPORE							
Time in I. S. T.	1600				0100				0700				1600				0700				1600			
Ht. in Km.	n	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	1·3	289	31	2·8	2·5	232	31	2·7	2·6	229	31	4·5	4·1	239	31	1·9	1·4	260	31	3·0	2·3	291
0·15 a.g. ..	31	5·5	3·4	292	31	11·1	8·7	244	31	9·9	8·8	232	31	7·8	7·1	241	31	6·9	5·4	266	31	7·1	5·4	294
0·6 a. s. l. ..	31	5·9	4·0	288	31	12·5	2·8	245	31	11·8	10·6	249	31	8·3	7·6	243	31	7·5	5·6	276	31	7·2	5·5	299
1·0 „ ..	31	5·8	4·5	285	27	11·9	10·8	250	31	11·8	10·4	255	31	8·2	7·5	246	31	9·9	7·1	304	31	6·6	5·7	303
1·5 „ ..	31	5·6	4·7	289	24	10·0	8·1	262	31	11·5	9·0	262	30	8·2	7·5	250	31	9·1	7·6	314	31	6·9	6·0	304
2·0 „ ..	31	6·6	5·7	293	19	10·1	7·7	268	23	10·2	8·1	266	28	7·4	6·3	255	31	8·6	7·8	315	31	7·6	6·8	301
2·5 „ ..	31	7·3	6·4	293	10	8·1	5·0	252	20	9·7	7·0	272	28	8·2	6·7	258	30	8·3	7·3	306	31	8·4	7·6	303
3·0 „ ..	30	7·7	6·9	301	2	5·7	2·8	214	16	9·7	6·3	262	28	9·1	7·2	262	28	8·8	8·1	308	30	9·1	8·2	308
4·0 „ ..	28	9·6	8·8	306					7	9·1	1·6	11	21	7·7	4·7	277	24	10·5	9·5	307	27	8·8	8·1	305
5·0 „ ..	23	11·2	10·3	313					6	7·7	4·2	332	17	8·1	4·8	312	19	12·3	10·7	310	23	10·4	9·5	307
6·0 „ ..	17	13·6	11·8	304					5	6·8	4·7	349	16	11·8	8·1	307	12	14·9	12·5	311	19	13·0	11·6	308
7·5 „ ..	8	10·4	9·1	287					3	8·8	4·2	356	10	14·7	10·9	316	10	17·0	15·4	316	14	17·4	16·2	304
9·0 „ ..	6	9·1	9·0	270					2	10·5	9·4	275	4	21·0	14·6	326	4	25·2	23·8	312	11	19·8	18·5	299

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 Km. above sea level

MAY 1948

Station	MADHOSAGAR								MADRAS												MALEGAON			
Time in I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	2·6	248	31	5·0	3·8	292	31	4·9	4·4	197	31	4·2	3·4	222	31	6·3	4·2	160	31	5·5	5·4	270
0·15 a. g. ..	31	7·4	5·2	262	31	7·8	6·4	297	31	8·3	7·5	209	31	7·6	6·4	232	31	7·7	4·6	157	31	10·2	9·7	280
0·6 a.s.l. ..	31	10·0	7·5	276	31	8·7	7·0	300	31	11·5	10·2	224	31	11·0	9·3	252	31	5·0	1·4	216	31	10·2	9·7	280
1·0 „ ..	30	10·9	8·1	287	31	8·5	6·8	301	31	9·7	8·1	232	31	9·6	7·7	260	31	4·5	2·9	277	31	11·2	10·5	306
1·5 „ ..	22	8·3	7·8	299	29	8·8	6·5	298	31	6·1	4·3	257	31	6·3	3·7	276	31	5·1	3·7	293	31	9·3	8·3	327
2·0 „ ..	19	9·9	9·4	305	26	9·4	8·1	293	30	5·1	3·1	322	30	4·6	2·4	334	31	5·5	4·0	308	29	6·4	5·3	336
2·5 „ ..	16	10·5	10·1	311	22	9·9	9·1	298	20	6·0	5·1	9	29	5·2	4·4	27	30	4·8	3·5	350	26	4·9	2·9	309
3·0 „ ..	14	12·3	12·0	313	19	10·9	10·1	297	11	6·8	6·3	29	27	6·9	5·9	45	29	6·1	5·1	26	23	4·5	2·2	304
4·0 „ ..	7	13·3	12·8	312	13	12·2	11·3	306	2	10·0	10·0	54	23	7·7	6·5	50	28	7·4	6·5	39	9	6·3	3·4	320
5·0 „ ..	1	18·5	18·5	295	8	16·3	15·5	299					19	6·0	4·3	63	26	6·3	4·8	47				
6·0 „ ..					6	15·4	15·3	313					17	5·1	1·6	56	21	5·2	2·3	18				
7·5 „ ..					4	16·3	15·5	320					11	4·8	1·8	104	10	6·3	4·0	5				
9·0 „ ..					2	18·3	18·3	308					1	5·0	5·0	40	3	4·7	2·6	128				

Station	MALEGAON								MANGALORE												MASULIPATAM			
Time in I S. T.	0700				1600				0100				0700				1600				0100			
Ht. in K m.	n	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	4·3	267	31	5·4	4·5	301	30	2·4	1·1	12	31	2·8	0·9	36	31	3·8	2·8	307	31	3·3	3·1	186
0·15 .a. g. ..	31	8·0	7·9	283	31	7·7	6·6	306	30	4·3	2·5	332	31	3·7	1·6	2	31	6·0	5·3	297	31	7·7	7·2	197
0·6 a. s. l. ..	31	8·0	7·9	283	31	7·7	6·6	306	28	4·7	3·8	309	31	4·4	3·6	309	30	6·6	5·5	304	31	9·9	8·1	211
1·0 „ ..	31	9·5	9·2	304	31	7·9	7·3	306	25	4·9	3·7	294	27	4·6	3·9	311	30	5·0	4·2	307	28	6·5	4·6	233
1·5 „ ..	31	8·3	7·3	322	31	7·1	6·6	310	19	3·7	0·7	302	24	4·1	2·5	301	28	3·7	2·1	332	26	4·8	2·9	283
2·0 „ ..	31	5·5	4·5	325	31	6·3	5·9	305	10	4·5	0·7	66	22	4·5	1·8	11	26	4·1	2·4	4	22	4·6	3·3	342
2·5 „ ..	31	4·9	3·4	307	30	5·8	4·9	302	6	3·7	1·8	70	20	6·1	4·2	52	24	5·3	3·3	28	18	4·8	4·2	8
3·0 „ ..	31	4·9	2·3	299	30	5·4	3·7	302	3	7·5	4·3	80	18	7·7	5·1	57	24	5·4	3·3	62	15	5·9	5·0	21
4·0 „ ..	28	5·4	1·7	275	28	6·0	2·8	294					16	7·8	7·1	76	21	6·9	4·9	92	4	6·5	6·2	50
5·0 „ ..	27	5·3	2·3	345	28	6·0	1·5	347					13	6·1	5·1	78	19	6·6	4·4	79				
6·0 „ ..	27	6·4	3·2	349	27	6·8	2·4	359					11	4·6	2·2	77	17	4·9	3·1	76				
7·5 „ ..	26	7·2	3·0	305	24	7·8	2·7	305					3	4·5	2·1	158	8	2·6	2·1	46				
9·0 „ ..	16	5·3	3·3	281	22	6·9	4·1	269					3	3·7	1·9	157	1	8·0	8·0	80				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 Km. above sea level

MAY 1948

Station	MASULIPATAM								MINICOY								NAGERCOIL							
Time in I. S. T.	0700				1600				0700				1400				0100				0700			
Ht. in K m.	n	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	200	31	3·8	2·8	169	31	3·1	2·7	307	31	3·3	2·9	303	31	5·1	5·0	283	31	3·8	3·5	280
0·15 a.g. ..	31	6·8	5·2	220	31	6·0	4·1	176	30	5·7	4·9	297	29	6·3	5·7	295	31	9·2	9·1	295	31	7·5	7·4	296
0·6 a.s.l. ..	30	11·2	7·8	246	31	4·7	2·3	249	30	6·5	5·6	301	29	6·5	5·9	294	31	13·0	12·7	295	31	12·0	11·7	298
1·0 „ ..	30	9·4	6·7	225	30	5·1	3·6	293	29	6·2	5·4	297	27	6·4	5·7	298	31	10·5	10·1	293	31	11·0	10·7	294
1·5 „ ..	29	5·4	3·5	271	30	5·2	4·4	314	28	4·9	3·8	295	24	4·8	3·5	300	31	7·6	7·0	288	31	6·9	6·2	283
2·0 „ ..	28	3·6	1·7	328	30	49	4·3	333	26	4·0	1·4	306	23	4·3	2·2	326	30	5·5	2·6	295	31	5·0	2·9	285
2·5 „ ..	28	4·2	3·1	13	3·0	5·3	4·1	354	23	4·0	1·2	56	21	4·9	2·7	32	30	3·9	1·4	23	29	3·6	1·2	2
3·0 „ ..	28	5·5	4·8	15	29	5·9	4·6	11	21	4·7	2·7	80	19	5·2	3·8	57	28	4·3	2·1	65	29	4·2	2·7	65
4·0 „ ..	24	7·5	7·0	22	27	6·6	5·3	26	16	5·5	3·8	109	13	4·9	3·5	92	15	5·8	3·1	69	28	6·5	4·0	75
5·0 „ ..	18	7·3	5·5	36	25	6·5	4·2	6	12	4·3	1·1	124	10	4·3	0·5	278	7	4·7	1·4	334	28	5·4	0·6	41
6·0 „ ..	15	5·4	1·5	39	22	6·0	3·1	323	10	3·9	0·4	47	8	4·2	3·1	260	4	6·1	5·8	285	28	5·7	1·4	306
7·5 „ ..	10	5·3	1·5	229	18	4·6	2·2	341	8	3·6	0·4	110	5	3·1	1·5	198	2	2·0	0·5	180	21	4·5	1·3	186
9·0 „ ..	8	4·0	1·7	137	10	4·3	0·9	37	4	5·3	0·9	248	3	4·5	1·0	248	2	3·5	2·7	97	16	5·7	2·5	114

Station	NAGERCOIL				NAGPUR												NEW DELHI							
Time in I. S. T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	7·7	265	31	2·6	1·6	281	31	3·5	2·5	301	31	3·4	2·3	292	31	2·5	0·8	347	31	2·6	1·4	272
0·15 a. g. ..	31	11·6	11·1	271	31	8·6	5·9	297	31	8·8	6·7	305	31	5·1	3·6	295	31	9·5	3·3	2	31	6·9	2·4	262
0·6 a. s. l. ..	31	11·5	11·2	288	31	9·6	7·0	302	31	10·9	8·3	315	31	5·3	3·9	296	31	10·2	3·7	358	31	8·6	4·5	291
1·0 „ ..	31	10·2	9·8	297	31	9·5	7·9	316	31	11·0	8·1	323	31	5·5	4·2	291	30	9·7	3·5	342	31	9·0	6·2	291
1·5 „ ..	31	7·7	7·2	300	30	7·8	7·0	323	31	7·9	5·8	331	31	5·8	4·3	294	28	9·1	7·1	304	29	7·8	6·5	296
2·0 „ ..	31	6·0	4·7	300	26	7·1	6·1	331	30	6·0	4·3	334	31	5·4	4·4	300	21	10·2	4·8	301	28	8·7	7·9	300
2·5 „ ..	30	5·0	2·1	330	11	6·7	5·5	332	30	5·5	2·7	326	30	6·1	5·0	296	5	11·0	10·4	292	24	10·1	9·3	297
3·0 „ ..	29	5·2	2·0	31	4	5·0	3·5	5	28	5·4	2·7	319	28	7·5	6·3	304	1	8·5	8·5	295	16	9·7	9·2	306
4·0 „ ..	27	7·0	5·3	55					24	5·7	3·2	313	25	7·2	5·4	322					6	10·3	9·4	312
5·0 „ ..	26	5·8	2·6	53					19	5·9	3·6	320	19	7·0	5·7	340					2	8·0	7·9	297
6·0 „ ..	23	5·7	1·2	354					19	8·5	4·5	314	16	7·5	6·3	339								
7·5 „ ..	18	2·8	0·1	80					13	7·5	5·8	294	10	7·7	6·6	323								
9·0 „ ..	15	6·4	3·9	89					9	6·4	5·0	268	6	7·7	6·3	299								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 Km. above sea level

MAY 1948

Station	NEW DELHI				POONA												PORT BLAIR							
Time in I.S.T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	3·3	338	31	2·9	2·8	267	31	2·3	2·3	269	31	3·3	2·9	285	31	3·5	3·0	230	31	3·2	2·9	235
0·15 a.g. ..	31	6·0	3·9	331	31	6·3	6·1	261	31	5·6	5·5	261	31	6·8	6·3	281	27	6·4	5·9	222	29	6·4	5·7	227
0·6 a.s.l. ..	31	6·8	4·3	320	31	4·8	4·4	260	31	3·5	3·5	262	31	4·7	4·4	282	27	8·3	7·3	223	28	8·8	7·6	228
1·0 „ ..	31	6·5	5·0	313	31	7·7	7·3	282	31	8·4	7·9	288	31	7·4	6·9	285	26	7·5	6·4	224	25	7·1	6·0	227
1·5 „ ..	30	7·3	6·7	306	31	9·0	8·0	323	31	9·1	7·9	326	31	6·2	6·0	294	22	6·3	5·2	219	20	6·0	5·0	219
2·0 „ ..	30	8·6	8·1	303	31	5·4	4·7	334	31	6·3	5·2	340	31	4·9	4·1	311	19	5·6	4·5	214	19	5·4	4·4	214
2·5 „ ..	29	10·1	9·7	297	30	4·1	1·4	10	31	4·0	2·0	327	31	4·1	2·6	323	14	4·2	3·3	197	18	5·6	4·1	217
3·0 „ ..	27	10·4	9·8	295	28	4·2	0·4	90	31	3·9	0·7	273	31	4·3	1·6	328	11	4·3	3·0	210	16	4·7	2·9	226
4·0 „ ..	26	12·6	11·5	293	11	3·5	0·9	232	31	4·5	0·6	179	31	4·7	1·3	43	4	3·0	1·5	352	13	4·0	1·6	233
5·0 „ ..	21	15·4	14·7	296					30	5·5	2·0	48	30	5·6	2·4	55					8	3·1	0·7	285
6·0 „ ..	18	18·6	17·7	297					28	6·1	2·5	15	28	6·3	1·2	73					8	3·1	0·9	246
7·5 „ ..	9	18·6	17·9	291					21	5·8	1·2	264	18	5·3	1·3	247					5	4·0	2·6	242
9·0 „ ..	6	23·3	21·4	286					15	3·8	0·9	241	14	5·0	2·0	250					3	6·2	5·3	236

Station	PORT BLAIR				RAIPUR												SAHARSA							
Time in I.S.T.	1600				0100				0700				1600				0700				1100			
Ht. in Km.	n	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	3·4	240	31	2·6	2·0	231	31	2·0	1·2	246	31	3·3	2·5	289	31	2·5	2·4	78	31	3·4	3·2	84
0·15 a.g. ..	26	5·8	5·0	231	31	8·7	6·5	254	31	8·0	5·6	249	31	6·1	4·3	289	31	8·2	7·9	85	31	7·4	7·2	84
0·6 a.s. l. ..	25	7·7	6·7	233	31	9·2	6·5	261	31	10·5	7·4	266	31	6·5	4·8	291	29	8·2	7·4	105	30	6·8	6·7	90
1·0 „ ..	22	7·1	6·2	234	31	7·8	5·5	289	31	9·6	7·2	284	31	6·5	5·1	288	23	7·0	5·1	128	25	5·6	4·7	105
1·5 „ ..	20	6·9	5·3	235	29	7·1	5·5	303	31	8·1	6·4	311	31	6·2	5·5	291	16	7·4	2·5	164	16	7·2	4·8	244
2·0 „ ..	16	4·9	3·3	240	26	6·4	5·2	314	31	7·5	6·5	319	30	6·8	5·7	299	15	7·6	2·3	242	13	9·1	6·2	258
2·5 „ ..	11	5·6	4·1	242	6	6·4	4·8	312	31	7·5	6·7	320	30	6·8	6·7	303	13	8·4	3·8	290	9	11·9	11·6	277
3·0 „ ..	8	5·4	4·5	239	2	10·3	10·0	340	31	7·2	6·5	321	27	7·0	6·2	303	11	8·8	5·2	293	9	13·6	13·3	280
4·0 „ ..	7	4·2	3·0	229					26	7·8	6·5	316	20	8·1	7·4	306	7	6·9	4·6	306				
5·0 „ ..	3	2·8	2·3	160					19	6·9	4·3	322	17	9·3	8·2	309	4	5·0	3·4	33				
6·0 „ ..	3	2·7	2·5	138					14	7·2	5·5	321	15	11·2	9·2	306	4	3·4	2·8	313				
7·5 „ ..	2	4·0	3·9	94					7	7·4	5·7	295	9	10·6	8·7	292	1	3·5	3·5	345				
9·0 „ ..	1	7·0	7·0	120					4	9·8	9·3	315	7	10·7	7·3	293	1	9·5	9·5	345				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 Km. above sea level

MAY 1948

Station	SAHARSA				TEZPUR																TRICHINOPOLY			
Time in I. S. T.	1600				0100				0700				1100				1600				0100			
Ht. in Km.	n	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	2·7	80	31	2·0	1·4	76	31	1·8	1·4	75	31	1·7	1·1	92	31	1·8	0·9	116	31	3·4	3·1	268
0·15 a.g. ..	31	5·2	4·9	86	28	4·6	6·0	82	29	5·5	4·3	82	31	4·4	3·3	88	30	5·0	2·6	93	31	8·3	7·1	266
0·6 a. s. l. ..	31	4·5	3·7	100	28	4·8	2·1	124	27	5·9	3·9	102	27	4·5	2·4	114	30	4·4	1·2	140	31	10·7	9·5	266
1·0 „ ..	30	4·9	1·7	150	26	4·6	2·1	208	25	6·0	1·1	137	21	6·1	2·8	161	30	4·7	3·1	224	31	8·7	7·7	273
1·5 „ ..	29	7·4	5·8	276	17	4·7	3·7	235	18	6·2	3·0	243	19	6·3	3·6	233	28	6·5	5·7	235	31	5·8	3·8	280
2·0 „ ..	27	9·7	9·3	282	11	6·5	4·7	239	16	6·6	4·9	242	14	17·7	5·9	243	23	7·8	6·8	247	31	4·3	2·2	339
2·5 „ ..	26	11·7	11·3	285	9	7·5	4·5	247	14	6·5	4·9	228	7	4·6	1·7	202	19	9·7	8·0	249	27	4·5	3·0	42
3·0 „ ..	23	13·0	12·5	285	9	7·5	4·1	255	12	7·0	5·1	248	7	5·3	2·9	200	18	10·1	8·8	250	25	5·2	4·3	59
4·0 „ ..	20	13·4	12·8	289	2	3·5	3·3	203	8	6·2	3·7	250					12	8·2	6·8	248	8	6·1	5·5	84
5·0 „ ..	14	13·3	12·9	289					3	5·3	3·4	154					9	10·9	10·1	252	3	4·5	3·0	113
6·0 „ ..	6	8·1	7·5	296					3	4·8	2·6	239					5	9·1	7·8	266	2	4·7	4·6	140
7·5 „ ..	1	7·5	7·5	350					1	5·5	5·5	255					4	12·0	10·9	277				
9·0 „ ..									1	16·0	16·0	270					2	17·5	17·5	287				

Station	TRICHINOPOLY								TRIVANDRUM				UDAIPUR											
Time in I.S.T.	0700				1600				0700				0100				0700				1600			
Ht. in Km.	n	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	2·0	257	31	2·6	1·9	269	30	2·1	2·0	357	31	2·4	2·0	251	31	1·5	1·3	245	31	3·9	3·1	256
0·15 a.g. ..	31	7·0	6·5	263	31	4·6	3·1	264	30	5·4	4·9	341	31	6·4	6·1	256	31	5·2	4·5	265	31	7·9	6·5	263
0·6 a. s. l. ..	31	10·7	10·2	268	31	5·8	4·2	261	30	7·2	6·8	310												
1·0 „ ..	31	8·1	7·4	271	31	5·7	4·1	263	30	7·2	6·8	305	31	8·0	7·6	263	31	8·4	7·9	277	31	8·1	7·1	262
1·5 „ ..	31	4·5	2·7	276	31	4·7	3·3	266	27	6·4	5·4	303	29	9·1	8·2	268	30	9·9	8·8	276	31	7·3	6·2	267
2·0 „ ..	31	3·9	2·1	11	31	3·4	1·5	311	26	5·2	3·1	316	23	7·5	6·3	273	29	8·3	6·9	277	31	6·7	5·8	273
2·5 „ ..	31	4·9	3·9	37	31	3·7	2·3	18	22	4·7	1·1	4	18	6·4	3·7	288	22	6·7	4·1	275	31	6·7	5·8	276
3·0 „ ..	31	6·1	5·5	55	31	5·1	4·1	38	21	4·5	2·9	79	9	5·7	1·6	297	21	6·0	3·3	285	31	6·8	5·6	282
4·0 „ ..	31	7·1	6·2	61	29	7·3	6·5	56	17	5·6	3·4	86					15	6·7	2·4	308	31	6·4	4·6	290
5·0 „ ..	28	5·5	3·4	59	29	6·5	5·5	56	12	3·8	1·7	126					10	8·7	6·2	352	29	8·2	6·1	308
6·0 „ ..	27	4·4	0·6	27	27	4·9	2·5	38	9	5·4	2·1	146					7	9·7	8·4	5	25	10·0	7·1	312
7·5 „ ..	22	3·7	0·9	84	20	4·5	0·9	105	6	4·9	3·9	101					3	6·7	4·6	35	14	11·1	7·2	325
9·0 „ ..	16	4·9	1·9	93	15	5·6	2·5	10	3	3·0	2·1	60					1	4·5	4·5	150	3	9·0	3·9	27

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 Km. above sea level

MAY 1948

Station	VENGURLA												VERAVAL											
Time in I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	322	31	0·5	0·4	318	31	4·3	4·1	269	31	7·2	6·8	270	31	5·6	5·0	279	31	7·1	6·8	266
0·15 a.g. ..	30	4·4	3·8	309	31	3·5	2·7	237	31	6·5	6·3	281	31	8·1	7·8	270	31	7·3	6·8	269	31	8·1	7·6	258
0·6 a.s. l. ..	30	5·1	4·4	307	31	5·3	4·7	305	30	6·0	5·7	297	29	9·5	9·0	281	31	9·1	8·3	278	31	9·5	8·7	279
1·0 „ ..	29	5·6	4·5	313	29	5·7	5·0	301	31	5·0	4·3	322	23	9·5	8·7	290	27	8·8	8·0	282	29	9·4	8·6	293
1·5 „ ..	28	6·6	5·6	329	23	6·1	5·0	325	30	5·9	4·7	351	13	7·3	6·3	290	22	7·5	6·6	287	27	7·7	6·8	293
2·0 „ ..	25	5·0	2·8	341	21	6·4	5·0	345	29	6·2	4·6	356	7	6·7	5·0	310	16	7·1	5·6	282	21	6·6	5·7	298
2·5 „ ..	20	4·7	2·0	58	16	5·7	3·1	22	29	5·7	3·0	1					13	7·3	6·1	271	19	5·9	4·3	294
3·0 „ ..	16	5·5	3·5	74	12	5·2	3·6	57	28	5·2	1·7	38					10	5·5	4·0	260	18	6·2	4·3	297
4·0 „ ..	4	7·9	6·1	97	10	5·6	4·7	105	23	5·7	3·9	106					7	4·5	2·6	295	16	7·3	3·4	339
5·0 „ ..	1	2·0	2·0	135	7	6·1	4·7	79	20	6·1	5·0	80					6	4·2	1·2	316	16	6·7	2·7	360
6·0 „ ..					6	5·6	3·7	40	15	6·2	4·8	72					6	6·7	3·3	341	16	8·1	2·9	353
7·5 „ ..					4	3·6	1·3	29	9	3·9	2·7	81					3	6·7	2·4	248	13	8·7	1·1	222
9·0 „ ..					3	1·8	0·9	196	5	3·5	3·3	121					1	3·5	3·5	300	10	9·1	5·3	230

Station	VIZAGAPATAM																							
Time in I. S. T.	0100				0700				1600															
Ht. in Km.	n	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	1·7	237	31	2·2	2·1	236	31	3·3	3·0	196												
0·15 a.g. ..	31	6·8	6·0	230	31	6·8	6·3	238	31	6·5	6·0	207												
0·6 a.s. l. ..	31	8·5	8·1	229	30	10·8	10·5	241	30	6·4	5·7	235												
1·0 „ ..	29	7·1	6·6	247	30	9·9	9·3	242	29	6·1	4·7	263												
1·5 „ ..	26	5·3	4·5	280	27	6·1	4·2	272	29	5·9	4·5	316												
2·0 „ ..	25	5·1	4·2	302	25	4·8	3·0	323	29	5·5	4·7	332												
2·5 „ ..	21	5·5	4·0	327	25	4·9	3·9	342	29	5·3	4·3	350												
3·0 „ ..	16	5·4	3·6	357	25	6·1	5·3	355	29	5·8	4·9	1												
4·0 „ ..	2	5·5	3·9	61	24	8·4	7·8	5	29	7·2	5·8	10												
5·0 „ ..					17	8·0	7·6	19	28	6·9	5·2	349												
6·0 „ ..					14	5·9	2·1	354	27	6·1	4·1	307												
7·5 „ ..					8	4·0	0·9	245	16	5·0	2·8	298												
9·0 „ ..					6	4·3	0·8	279	7	2·9	2·3	271												

Table B—Monthly mean directions and velocities of upper winds

Winds at and above 10·0 Km. above sea level

MAY 1948

Ht. in Km.	n	V	v	D
	AHMEDABAD			
10·0	5	7·7	5·1	287
	ALLAHABAD			
10·0	3	17·5	15·9	270
	AMBALA			
10·0	8	26·6	25·5	285
11·0	4	32·5	32·0	279
	ANANTAPUR			
10·0	9	4·4	1·8	82
	BANGALORE			
10·0	4	5·8	5·0	142
	BAREILLY			
10·0	1	25·5	25·5	325
	BHOPAL			
10·0	8	8·7	8·4	273
11·0	5	8·4	6·7	269
12·0	3	8·8	2·9	265
13·0	2	7·0	2·2	157
14·0	2	7·5	2·3	287
15·0	1	20·5	20·5	20
	BHUJ			
10·0	7	7·5	4·4	240
11·0	1	12·5	12·5	250
12·0	1	12·5	12·5	255
13·0	1	16·5	16·5	255
14·0	1	27·5	27·5	250
	BIKANER			
10·0	1	10·5	10·5	295
	BOMBAY			
10·0	2	7·0	6·2	230
	CA CUTTA			
10·0	6	8·2	6·9	80
11·0	2	14·5	14·1	121
12·0	2	13·7	13·2	116
13·0	2	15·7	14·8	119
14·0	1	23·5	23·5	105
15·0	1	31·0	31·0	110
16·0	1	30·5	30·5	110
17·0	1	30·0	30·0	130
18·0	1	16·5	16·5	110

Ht. in Km.	n	V	v	D
	COOCH BEHAR			
10·0	1	15·0	15·0	295
	CUTTACK			
10·0	1	9·5	9·5	265
11·0	1	12·5	12·5	275
	DEOLALI			
10·0	3	6·7	3·5	240
11·0	3	6·5	2·5	141
12·0	2	8·3	6·9	131
13·0	1	13·0	13·0	90
14·0	1	15·5	15·5	105
15·0	1	12·5	12·5	80
	GADAG			
10·0	16	4·6	3·1	91
11·0	1	8·0	8·0	120
	GOPALPUR			
10·0	4	5·5	5·0	256
	HYDERABAD (Dn)			
10·0	10	5·5	2·6	259
11·0	3	3·7	2·0	139
12·0	2	3·5	3·5	175
13·0	1	8·0	8·0	140
14·0	1	10·5	10·5	120
15·0	1	12·0	12·0	130
	JAGDALPUR			
10·0	8	5·0	0·8	184
11·0	3	3·3	1·3	138
12·0	1	5·0	5·0	35
	JHARSUGUDA			
10·0	6	10·3	10·1	270
11·0	2	10·3	9·9	245
12·0	1	19·0	19·0	245
	JODHPUR			
10 0	3	14·0	13·6	274
11·0	2	15·0	14·8	280
12·0	2	15·3	14·5	272
13·0	1	11·5	11·5	230
14·0	1	12·0	12·0	230

Ht. in Km.	n	V	v	D
	JUBBULPORE			
10·0	10	23·4	21·8	302
11·0	6	24·8	24·3	292
12·0	4	27·4	27·3	288
13·0	3	27·8	27·7	291
	MADRAS			
10·0	2	6·0	5·1	92
	MALEGAON			
10·0	34	6·4	3·7	260
11·0	17	9·2	4·0	269
12·0	11	8·6	2·5	283
13·0	8	9·1	4·3	290
14·0	4	9·1	7·2	263
15·0	3	9·2	5·4	230
16·0	1	7·0	7·0	230
17·0	1	8·5	8·5	225
	MANGALORE			
10·0	2	3·5	2·5	83
	MASULIPATAM			
10·0	17	5·2	2·2	
11·0	3	6·0	4·4	
12·0	1	4·0	4·0	45
	MINICOY			
10·0	7	3·3	1·6	75
11·0	2	4·0	2·3	119
	NAGERCOIL			
10·0	30	6·1	3·7	73
11·0	10	7·3	4·8	65
12·0	7	9·1	7·8	81
13·0	6	9·5	6·6	89
14·0	3	15·0	14·6	106
15·0	1	13·0	13·0	90
16·0	1	10·5	10·5	75
17·0	1	13·0	13·0	85
	NAGPUR			
10·0	9	7·4	4·4	277
11·0	1	2·0	2·0	250
12·0	1	7·0	7·0	220
13·0	1	11·0	11·0	210

Ht. in Km.	n	V	v	D
	POONA			
10·0	21	4·3	1·9	230
11·0	8	5·5	2·7	236
12·0	7	6·6	3·6	194
13·0	7	6·9	4·5	173
14·0	5	7·4	5·8	176
15·0	1	7·5	7·5	195
	PORT BLAIR			
10·0	3	9·2	9·0	246
	RAIPUR			
10·0	10	8·5	6·1	298
11·0	3	10·0	8·2	337
12·0	1	4·0	4·0	95
13·0	1	1·0	1·0	105
	TEZPUR			
10·0	3	19·0	19·0	283
11·0	2	18·3	18·3	287
12·0	2	20·5	20·5	281
13·0	1	26·0	26·0	295
14·0	1	31·0	31·0	290
15·0	1	21·0	21·0	285
	TRICHINOPOLY			
10·0	24	6·9	2·3	80
11·0	3	6·8	4·3	146
	TRIVANDRUM			
10·0	1	2·0	2·0	145
11·0	1	5·0	5·0	90
	UDAIPUR			
10·0	1	7·0	7·0	330
	VENGURLA			
10·0	7	3·9	3·4	105
11·0	3	6·1	5·7	89
12·0	1	10·5	10·5	125
13·0	1	16·5	16·5	165
14·0	1	19·5	19·5	145
	VERAVAL			
10·0	6	7·3	6·3	246
11·0	2	5·5	5·4	260
	VIZAGAPATAM			
10·0	12	4·3	1·1	305
11·0	3	4·2	1·5	323
12·0	1	2·5	2·5	234

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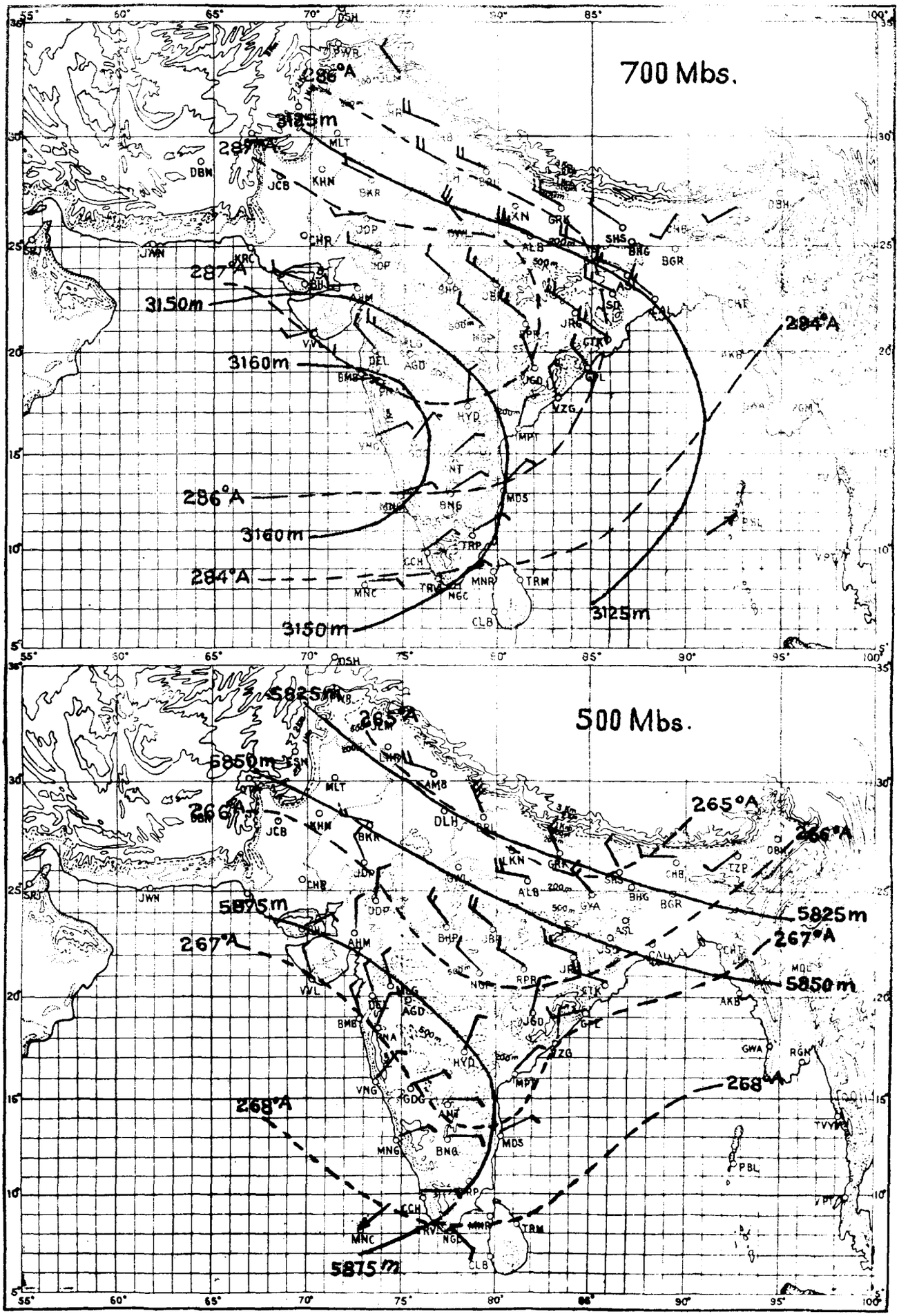
MONTHLY MEAN CONSTANT PRESSURE CHARTS
MAY 1948

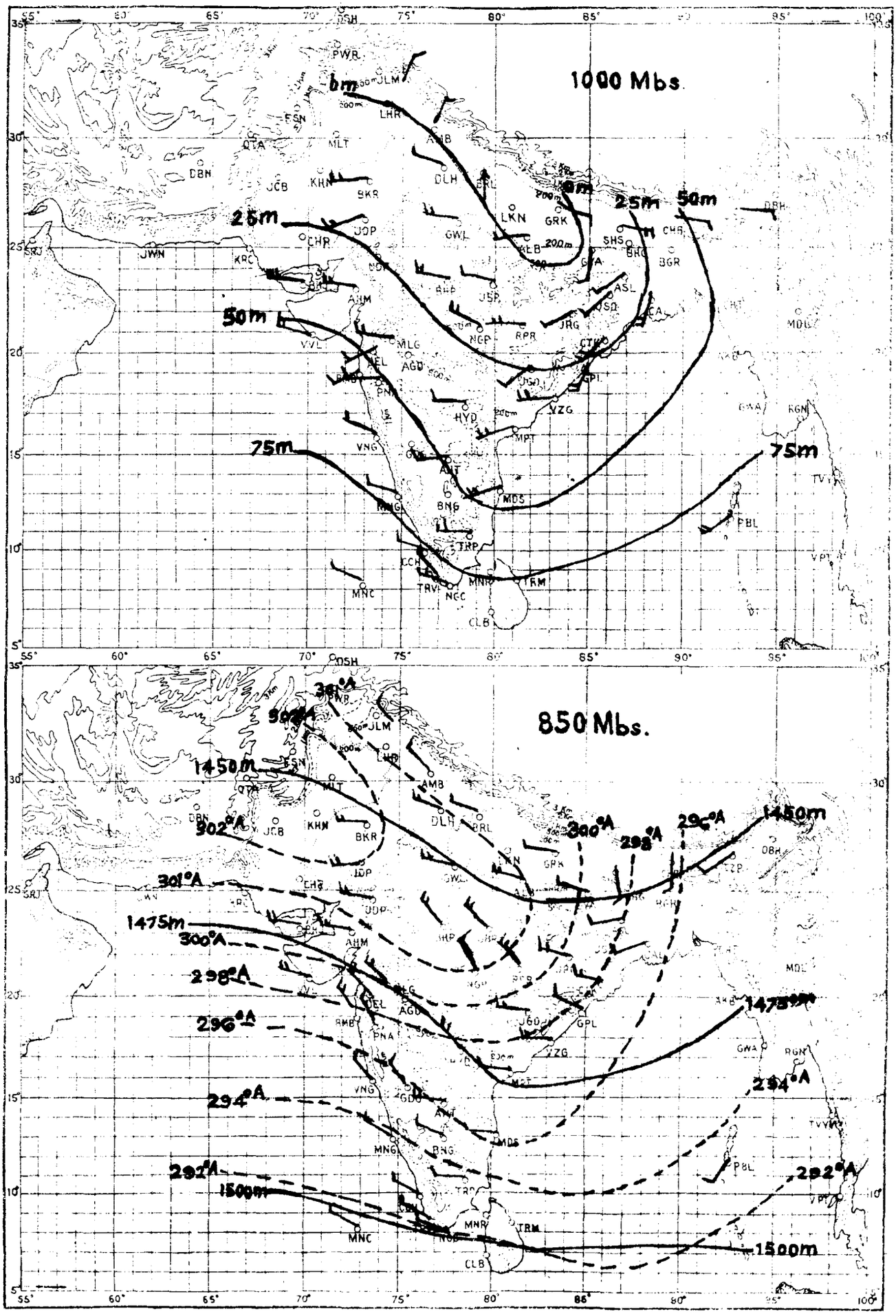


RESULTANT WIND — = 5 Knots, — = 10 Knots, — = 50 Knots.

------ *Isotherms in degrees Absolute* —— *Contours in metres.*

MONTHLY MEAN CONSTANT PRESSURE CHARTS

MAY 1948



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

------ Isotherms in degrees Absolute —— Contours in metres.

Registered No. B-3097.

INDIA WEATHER REVIEW, 1948

Monthly Weather Report

JUNE

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NOV 30 1948
WEATHER BUREAU

Published by authority of the Government of India.

Chief features :—(*i*) A cyclonic storm in the west Arabian Sea ; (*ii*) late arrival of the monsoon and its very limited activity generally.

A depression formed in the west Arabian Sea on the 5th with its centre near lat. 18°N and long. 63°E. Moving northwards, it intensified into a storm on the same day. It crossed the coast between Pasni and Karachi by the 8th by which time it had weakened considerably and eventually the depression became unimportant by the 10th. In association with this storm, there was local rain in Baluchistan on the 8th and in Sind on the 9th. During the first ten days of June, weather was generally dry elsewhere over the country except for scattered thunder-showers in the western half of the Peninsula and in Assam.

The monsoon burst in Malabar on the 10th giving widespread heavy rain there. With its advance northwards, a depression formed in the East Arabian Sea on the 12th with its centre near lat. 14½°N and long. 71½° E. It moved northeastwards, crossed the coast near Harnai by the next evening and became unimportant by the 14th. It caused an advance of the monsoon into the Konkan and the Bombay Deccan by the 13th and 14th and into Berar, the west Central Provinces and west Central India by the 15th. The first advance of the monsoon on the Konkan was attended with severe squalls which were reported to have sunk a few barges and grounded some small ships along the Konkan coast. After the 16th, the monsoon became weak in the interior and its activity was generally confined to the west coast of the Peninsula till the end of the month. But, in association with a trough of low pressure which developed off the Konkan and moved inland as a low pressure wave, the monsoon temporarily strenghthened in the Bombay Deccan, west Hyderabad, the west Central Provinces, west Central India and Berar and extended into east Gujarat between the 23rd and 26th.

The Bay branch of the monsoon advanced into Eastern Pakistan by the 14th and into Assam on the 15th when locally heavy rain occurred over these regions. For the next ten days, it lingered over these areas without advancing further into the country. A depression developed in the north Bay of Bengal with its centre near Lat. 21° N long. 89° E on the morning of the 24th and moving northwestwards upto the southeast United Provinces weakened into an extended ' low ' stretching from the east United Provinces to southwest Bengal by the 27th and persisted there till the 30th. This depression carried the monsoon into West Bengal, Chota Nagpur, Bihar, the east United Provinces and the central parts of the country and caused widespread and locally heavy rain over these regions during the last three days of the month.

Two western disturbances which moved eastwards through Western Pakistan and northwest India caused local showers in the west United Povinces and the East Punjab towards the end of the first week of June. Local thundershowers also occurred in the North-West Frontier Province on the 12th in association with another western disturbance.

The total rainfall during the month was in slight excess in north Hyderabad and Malabar, normal in Assam, Chota Nagpur, Central India, Berar, the west Central Provinces, the Bombay Deccan and Mysore and in slight to moderate defect in the Bay Islands, West Bengal, Orissa, Bihar, the east United Provinces, the east Central Provinces, the Konkan, southeast Madras and the north Madras coast. Elsewhere it was in large defect. Averaged over the plains of India the rainfall for the month was 15°/₀ in defect.

Maximum temperature was above normal in Orissa, Chota Nagpur, Bihar, the United Provinces, the East Punjab, west Rajputana, the east Central Provinces and the north Madras coast and below normal in north Hyderabad ; it was normal elsewhere.

Minimum temperature was above normal in the United Provinces and normal elsewhere.

Relative humidity was in excess in Berar and north Hyderabad and in defect in the United Provinces and East Punjab.

Price : Re. 1

Cloud amount was in excess in east Rajputana, west Central India, the west Central Provinces, and southeast Madras and in defect in East Punjab and west Rajputana.

Data from Kashmir are absent.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amounts for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N. B.—**The Indian Standard Time used in this publication is 5 hrs. 30 mins. in advance of Greenwich Mean Time.**

POONA 5 :
Dated, the 3rd November 1948.

S. BASU
for Director General of Observatories.

TABLE I—DIVISIONAL AND SUB-DIVISIONAL MEANS—JUNE 1948.

	Rainfall.				Departure from normal of				
							8 hrs. I. S. T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
Assam	15·95	15·57	+0·38	+2	—0·2	—0·4	0	0	+0·1
West Bengal ..	12·55	14·38	—1·83	—13	+1·3	+0·8	+1·4	+2	+0·3
Orissa	7·82	8·99	—1·17	—13	+2·1	+1·2	+0·5	+1	+0·4
Bihar	5·38	7·40	—2·02	—27	+4·2	+1·3	+0·4	—2	+0·7
United Provinces	2·24	4·88	—2·64	—54	+4·8	+2·8	—1·3	—11	+0·1
East Punjab ..	0·53	2·40	—1·87	—78	+4·2	+0·7	—3·6	—7	—0·8
Rajputana ..	0·90	2·24	—1·34	—60	+2·3	+1·4	+0·1	—1	+0·3
Bombay ..	7·79	9·76	—1·97	—20	+1·2	+1·1	+0·9	0	—0·4
Sub-Division									
Bay Islands ..	18·94	21·75	—2·81	—13	0	+0·8	—0·3	+2	+0·8
Assam	15·95	15·57	+0·38	+2	—0·2	—0·4	0	0	+0·1
West Bengal ..	12·55	14·38	—1·83	—13	+1·3	+0·8	+1·4	+2	+0·3
Orissa	7·82	8·99	—1·17	—13	+2·1	+1·2	+0·5	+1	+0·4
Chota Nagpur ..	7·88	7·65	+0·23	+3	+3·9	+1·6	+0·2	—3	+1·2
Bihar	4·12	7·28	—3·16	—43	+4·4	+1·1	+0·6	—2	+0·3
United Provinces, East.	3·71	5·22	—1·51	—29	+4·4	+3·2	—1·7	—11	+0·1
United Provinces, West.	0·76	4·54	—3·78	—83	+5·2	+2·3	—0·8	—11	0
East Punjab ..	0·53	2·40	—1·87	—78	+4·2	+0·7	—3·6	—7	—0·8
Kashmir ..	Data incomplete.								
Rajputana, West	0·34	1·53	—1·19	—78	+2·8	+1·2	+0·3	+2	—0·9
Rajputana, East	1·45	2·96	—1·51	—51	+1·9	+1·7	—0·1	—3	+1·5
Gujarat ..	1·31	4·08	—2·77	—68	+1·5	+1·7	+0·9	—1	—0·6
Central India, West.	5·82	5·72	+0·10	+2	+1·2	+0·9	—2·1	—5	+1·5

	Rainfall.				Departure from normal of				
							8 hrs., I. S. T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division—*contd.*	"	"	"		°	°	mb.	%	
9. Central India ..	5·80	5·85	—0·05	—1	+1·5	+1·2	—0·4	—3	+0·9
10. Central Provinces and Berar.	6·97	7·64	—0·67	—9	+1·1	+1·0	+1·0	+2	+0·4
11. Hyderabad ..	4·18	4·86	—0·68	—14	0	+1·5	+1·1	+2	+0·1
12. Mysore ..	6·16	5·71	+0·45	+8	—0·3	+0·6	+0·5	+2	+0·1
13. Madras ..	6·85	6·66	+0·19	+3	+1·0	+1·5	+1·0	0	+0·4
Mean of India ..	5·75	6·74	—0·99	—15	+1·9	+1·3	+0·2	—1	+0·2
Sub-Division—*contd.*									
15. Central India, East.	5·77	6·03	—0·26	—4	+1·9	+1·6	+1·8	+1	+0·1
16. Berar	6·19	6·04	+0·15	+2	—1·3	+0·1	+2·5	+7	—0·1
17. Central Provinces, West.	7·24	7·01	+0·23	+3	+0·1	+0·7	+1·5	+4	+1·1
18. Central Provinces, East.	6·95	9·02	—2·07	—23	+3·0	+1·7	—0·1	—2	—0·1
19. Konkan ..	23·30	28·85	—5·55	—19	+1·2	+1·5	+0·8	—1	—0·1
20. Bombay Deccan	8·08	7·58	+0·50	+7	+0·9	+0·3	+1·1	+2	—0·3
21. Hyderabad, North	6·44	5·19	+1·25	+19	—2·2	+1·3	+2·5	+7	+0·1
22. Hyderabad, South	2·48	4·62	—2·14	—86	+1·1	+1·6	+0·3	0	+0·2
23. Mysore ..	6·16	5·71	+0·45	+8	—0·3	+0·6	+0·5	+2	+0·1
24. Malabar ..	35·01	27·95	+7·06	+25	+0·5	+0·1	+1·0	+2	—0·9
25. Madras, South-east.	1·15	1·57	—0·42	—27	+0·7	+1·7	+0·7	0	+1·3
26. Madras, Deccan	0·69	2·67	—1·98	—74	+0·9	+1·8	+1·6	+1	+0·7
27. Madras Coast, North.	1·90	3·80	—1·90	—50	+2·0	+1·8	+0·9	—1	—0·2

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %	
		Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
BAY ISLANDS—																					
Port Blair ..	259	998·5	+0·1	996·4	84·3	0	87	16, 17	75·8	+0·8	71	21	80·7	80·0	77·7	77·1	31·1	—0·3	30·5	87	+2
ASSAM—																					
Dibrugarh ..	348	990·4	—1·0	986·7	86·9	—0·1	96	30	74·4	+0·3	70	1, 2, 3	79·1	84·4	76·8	79·0	30·3	+0·2	31·3	90	0
Sibsagar ..	317	991·5	—0·7	987·6	87·5	—1·1	94	11, 30	77·1	+1·0	73	1, 2, 3	81·2	84·4	78·4	79·3	31·8	+0·4	31·9	88	0
Tezpur ..	258	993·7	—0·6	989·9	87·6	—1·0	94	29, 30	76·2	—0·3	73	4 days	80·1	84·7	77·6	80·1	31·2	+0·3	33·0	89	+2
Gauhati ..	182	995·6	—0·5	992·1	87·0	—1·9	93	30	76·9	+0·4	73	5	80·3	84·4	77·5	78·8	30·9	+0·3	31·1	88	+3
Dhubri ..	115	997·7	—0·4	994·7	..	..	..	..	74·0	—2·1	64	21	77·8	81·7	76·3	78·7	30·3	—4·0	32·1	94	+5
Silchar ..	96	999·9	—0·2	996·1	88·8	—0·4	95	27	76·5	+0·3	72	20	80·8	83·5	77·8	79·0	31·2	—0·2	31·8	88	+1
WEST BENGAL—																					
Dum Dum ..	33	998·4	..	995·4	93·7	..	99	4, 8, 14	80·2	..	73	6	85·6	87·8	80·5	80·6	33·3	..	32·4	80	..
Calcutta ..	21	998·9	—0·9	995·8	94·0	+1·6	100	3, 13, 14	80·8	+2·2	75	4 days	85·5	88·5	81·5	81·9	34·3	+1·4	34·8	84	+2
Saugor Island ..	10	999·5	—0·6	996·9	89·2	—0·4	93	14	82·1	+1·2	76	14, 20	86·1	86·6	81·9	82·1	35·4	+1·2	35·4	83	+2
Sandheads ..	28	998·8	—1·1	996·4	..	..	..	..	..	..	..	..	84·5	85·8	..	..	..	..	..	..	..
Midnapore ..	149	994·2	—1·0	991·1	96·9	+2·7	104	5	80·5	+1·3	75	6, 19	85·4	89·6	80·8	80·7	33·8	+1·9	31·7	81	0
Burdwan ..	106	995·6	—1·1	992·1	96·1	+2·6	108	3	79·4	+0·6	73	29, 30	85·4	89·9	80·9	80·9	34·0	+1·6	31·9	82	—1
Krishnagar ..	48	997·8	—1·4	994·6	95·8	+2·5	102	3	78·9	+0·4	73	5, 6	84·0	88·9	81·1	82·3	34·9	+1·8	34·7	88	+6
Asansol ..	414	985·0	—0·9	981·5	99·4	+1·5	102	3, 4	80·4	+1·3	75	19	85·6	91·4	80·9	80·6	34·0	+2·8	30·6	81	+4
Berhampore ..	62	997·4	—1·1	994·0	95·0	+2·3	104	3	79·4	+0·9	72	5	84·6	87·2	81·1	80·5	34·6	+1·9	32·6	85	+1
Malda ..	103	996·2	—1·3	992·7	93·4	+1·9	109	3	78·1	—0·1	73	22	83·9	87·7	79·9	80·5	83·1	+0·6	32·3	84	0
Jalpaiguri ..	271	992·1	—0·7	988·6	85·7	—2·9	91	24, 25, 26	75·4	—0·3	72	3, 19	78·1	84·0	75·9	78·6	29·7	—1·0	30·9	90	+1
ORISSA—																					
Balasore ..	65	997·4	—0·6	994·2	93·2	0	102	7	81·1	+2·0	75	20	85·5	87·7	83·6	81·9	33·4	+1·4	34·4	81	+1
Chandbali ..	20	999·3	—0·8	996·2	95·7	+1·8	112	5	80·0	+0·3	73	6	85·1	89·4	85·7	81·6	33·7	+0·4	33·2	83	+1
Puri ..	20	999·6	—0·7	996·5	89·5	+0·5	93	8, 9, 10	82·1	+1·2	75	29	84·9	86·6	81·4	82·5	35·0	+1·3	36·1	86	+2
Gopalpur ..	56	998·4	—0·7	995·3	90·2	+0·4	99	13	81·7	+1·4	75	29	85·1	86·3	81·8	82·8	35·5	+2·4	36·7	87	+3
Cuttack ..	87	996·6	—1·4	993·4	99·0	+3·5	117	6	80·7	+1·1	74	29	84·8	93·7	79·9	79·1	32·6	+1·1	28·7	81	+3
Angul ..	455	984·3	—0·7	980·7	99·1	+3·2	114	10	80·1	+1·2	74	29, 30	84·6	93·8	77·5	77·3	29·1	—0·4	24·5	74	—1
Sambalpur ..	486	983·4	—0·7	979·3	101·3	+3·8	115	1	81·7	+1·2	72	29	85·9	96·7	77·1	78·3	27·2	—0·8	24·6	67	—2
CHOTA NAGPUR—																					
Jamshedpur ..	423	984·7	—1·0	980·8	100·4	+3·4	112	3	81·3	+1·3	76	6, 20	86·2	93·6	79·1	78·2	30·7	+0·9	25·8	73	0
Chaibasa ..	742	973·9	—0·8	970·1	101·7	+4·8	113	3	81·9	+2·7	74	20	86·1	94·9	79·1	79·6	30·7	+2·1	27·4	74	+2
Ranchi ..	2,150	927·9	—0·6	924·8	97·2	+5·2	108	1, 4	75·8	+0·5	70	15, 18	83·8	89·3	74·1	74·7	24·4	—0·4	22·8	67	—4
Hazaribagh ..	2,006	932·6	—0·9	929·3	97·2	+4·1	107	3, 4	77·8	+1·7	73	6 days	84·5	89·8	73·7	73·9	23·4	—0·6	21·4	64	—4
Daltonganj ..	725	974·1	—0·8	970·2	112·5	+2·2	113	5	82·6	+1·7	73	19	91·2	95·6	76·9	77·3	25·0	—1·0	23·9	54	—9
Dhanbad ..	839	970·9	..	..	100·4	..	112	3	80·0	..	74	13	85·6	..	78·7	..	30·3	..	..	74	..
BIHAR—																					
Purnea ..	124	995·6	—1·1	997·8	93·3	+1·9	103	3	78·0	+0·6	71	11	83·0	89·6	79·1	81·4	32·1	+0·6	32·9	84	—1
Darbhanga ..	161	993·9	—1·0	989·8	97·1	+4·2	109	8	79·3	+0·8	74	20, 22	85·2	94·7	79·6	81·5	32·0	+0·9	30·7	78	—2
Motihari ..	218	992·1	—1·1	987·6	98·5	+5·0	105	4, 5, 8	78·6	+0·8	72	22	87·3	92·6	79·8	81·8	31·3	+0·3	31·8	71	—9
Patna ..	173	992·5	—1·4	988·5	102·6	+6·4	112	4	82·2	+2·3	77	20, 22	87·1	98·5	79·3	80·4	30·5	—0·4	27·2	70	—5
Dehri ..	352	986·1	..	982·4	105·1	..	115	4	85·9	..	77	20	91·0	99·2	77·8	78·8	26·6	..	24·2	57	..
Gaya ..	365	985·6	—1·3	981·6	104·8	+5·3	115	4, 5	85·1	+3·8	78	20, 21, 26	92·3	98·7	..	..	..	..	..	..	..
Naya Dumka ..	489	982·1	—1·5	978·9	98·5	+4·4	113	3	76·5	—2·0	72	19, 20	84·5	89·5	79·7	78·1	32·3	+1·8	27·6	79	+1
Sabour ..	122	994·8	—1·5	990·9	98·8	+4·3	111	3	80·0	+0·8	74	10	85·7	92·3	79·9	81·2	32·1	+0·3	31·2	78	—2

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from:—																			STATION.
											8 hrs. I. S. T									17 hrs. I. S. T.										
Mean, 8 hrs. I.S.T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													BAY ISLANDS—
·2	+08	9·3	18·94	—2·81	4·62	3	24	+2·5	13·4	—0·3	0	1	0	0	0	19	10	0	0	0	0	0	0	0	14	16	0	0	Port Blair.
																													ASSAM—
·0	+1·3	6·7	17·59	—2·08	2·78	15	18	—1·6	1·4	+0·2	10	3	4	0	0	1	3	2	7	2	4	1	1	2	0	2	2	16	Dibrugarh.
·3	+0·6	7·7	11·61	—3·52	2·24	16	14	—3·1	3·3	+1·1	8	5	5	1	2	6	0	1	2	7	4	1	2	4	1	2	3	6	Sibsagar.
·9	+0·2	6·0	10·85	—1·29	2·15	5	19	+3·0	2·2	+0·3	0	4	12	5	2	0	1	0	6	0	1	14	6	0	0	0	0	9	Tezpur.
·9	+0·1	6·3	8·57	—3·73	2·08	30	12	—2·7	2·4	+1·0	4	4	4	6	5	3	3	1	0	3	7	5	2	3	3	2	4	1	Gauhati.
·2	—1·4	4·5	34·73	+10·62	5·22	16	23	+4·9	5·4	—2·2	1	14	7	1	1	0	2	2	2	3	11	6	1	1	2	0	1	5	Dhubri.
·6	+1·0	7·5	19·70	—3·47	2·97	18	16	—5·3	1·6	—0·1	3	3	6	5	2	0	5	0	6	2	1	1	2	2	5	3	2	12	Silchar.
																													WEST BENGAL—
·3	..	6·9	11·54	..	3·21	20	13	..	..	..	0	2	3	7	13	5	0	0	0	0	1	2	2	19	5	0	0	1	Dum Dum.
·6	—1·0	7·0	12·76	+1·07	2·51	18	10	—3·2	4·1	—0·2	0	1	2	3	14	7	0	0	3	0	2	0	3	13	8	0	0	4	Calcutta.
·0	—1·1	6·9	9·25	—2·38	2·18	14	12	—0·1	17·0	+3·8	0	1	0	3	7	18	1	0	0	0	1	0	4	14	10	1	0	0	Saugor Island.
·1	—1·0	4·4	7·78	—0·09	5·00	14	9	—0·4	..	..	0	0	0	0	10	17	0	1	2	0	0	1	1	11	17	0	0	0	Sandheads.
·4	+1·2	7·0	5·22	—4·99	1·06	26	9	—3·4	5·7	+2·3	0	2	1	1	13	10	1	0	2	1	1	0	2	20	6	0	0	0	Midnapore.
·7	—2·7	4·9	5·46	—5·06	1·53	26	10	—2·4	7·7	+4·6	0	1	5	4	6	13	1	0	0	2	2	5	6	8	5	0	1	1	Burdwan.
·6	+0·5	7·4	7·67	—2·66	1·57	20	15	+2·3	6·3	+1·3	1	2	2	16	5	2	0	0	2	0	2	5	14	5	0	0	2	2	Krishnagar.
·0	+0·4	7·5	5·74	—3·77	1·08	28	14	+2·3	5·2	—0·1	0	1	3	7	11	3	1	1	3	2	1	4	10	4	3	1	1	4	Asansol.
·9	+0·3	8·1	6·50	—3·17	1·45	20	14	+1·7	4·4	+0·7	1	1	8	3	11	5	1	0	0	0	1	11	5	11	0	0	0	2	Berhampore.
·4	+2·1	8·0	(b) 13·02	..	5·27	27	(b) 13	..	5·7	+0·3	0	2	12	7	6	2	0	0	1	2	1	15	8	4	0	0	0	0	Malda.
·7	+2·7	7·2	26·22	+0·28	7·74	18	18	—1·1	5·1	+3·0	0	4	18	0	1	0	0	3	4	2	3	16	4	4	0	0	1	0	Jalpaiguri.
																													ORISSA—
·0	+1·2	7·6	7·79	—1·38	2·71	12	10	—1·1	6·6	+1·8	0	1	1	1	11	12	1	1	2	0	0	0	7	13	7	0	1	2	Balasore.
·7	—0·6	6·0	7·37	—1·37	4·09	21	5	—6·3	8·4	+0·4	2	0	0	1	13	9	5	0	0	0	0	0	13	14	2	1	0	0	Chandbali.
·6	+1·0	7·8	5·03	—2·43	1·97	21	8	—0·1	14·3	+2·2	2	1	0	1	2	18	5	1	0	0	0	0	3	6	19	2	0	0	Prui.
·7	+1·1	7·7	0·59	—4·87	0·23	29	3	—4·6	13·9	+3·3	0	0	2	0	8	13	2	0	5	0	0	1	1	13	12	2	0	1	Gopalpur.
·8	—0·2	7·5	6·73	—3·22	1·47	14	12	+0·6	3·6	+0·6	1	0	0	0	2	2	1	0	24	1	0	1	0	3	3	5	2	15	Cuttack.
·8	—0·4	7·8	5·97	—2·57	1·90	15	12	+0·4	5·7	+0·5	3	3	1	3	4	2	6	4	4	3	5	5	3	1	3	6	3	1	Angul.
·8	+1·3	7·6	14·05	+3·96	2·45	26	13	+2·3	5·0	+1·0	0	3	1	2	6	10	5	0	3	1	1	4	0	2	7	6	6	3	Sambalpur.
																													CHOTA NAGPUR—
·8	0	7·1	7·38	—0·13	1·73	28	12	+1·3	4·9	+0·3	1	2	3	2	0	5	8	2	7	1	0	3	4	3	3	7	3	6	Jamshedpur.
·8	+3·4	9·7	3·43	—4·36	0·87	20	8	—2·7	2·7	0	0	2	0	0	4	7	2	0	15	4	3	1	1	2	7	2	0	10	Chaibasa.
·9	+0·7	7·8	8·79	+0·20	1·30	13	11	—0·4	..	..	3	0	1	0	10	1	1	4	10	2	0	1	0	5	0	3	4	15	Ranchi.
·4	+1·3	8·7	11·47	+3·14	2·61	26	10	—0·7	6·7	—0·7	1	1	2	1	7	7	2	7	2	2	3	3	4	2	4	2	9	1	Hazaribagh.
·0	+0·6	7·9	8·32	+2·30	3·02	26	7	—1·2	4·2	—0·4	1	1	1	0	1	4	8	7	7	3	1	3	2	2	2	5	11	1	Daltonganj.
..	..	..	7·31	..	1·62	28	11	..	6·1	..	0	1	5	6	1	12	0	0	5	..	..	..	..	..	..	..	..	..	Dhanbad.
																													BIHAR—
·4	+0·7	6·2	6·72	—3·51	1·95	22	9	—2·8	4·8	+1·8	0	5	14	6	0	0	0	0	7	0	5	19	4	0	0	0	0	2	Purnea.
·8	+0·8	2·9	3·90	—3·68	0·88	22	8	—0·8	6·7	+2·4	0	16	13	1	0	0	0	0	0	0	10	9	6	0	0	1	4	0	Darbhanga.
·4	—0·7	3·8	5·86	—2·85	3·20	20	6	—3·4	3·9	—0·9	0	0	25	0	0	1	0	0	4	0	0	12	0	0	0	0	1	17	Motihari.
·1	+0·5	5·4	2·41	—4·73	1·77	27	3	—5·0	6·3	+1·3	0	12	14	0	0	2	0	1	1	0	13	7	0	0	1	2	5	2	Patna.
·8	..	6·0	4·21	—1·16	1·43	26	5	—1·9	5·9	..	0	5	2	3	0	7	4	6	3	1	5	0	5	1	5	4	7	2	Dehri.
·8	+0·2	6·0	3·46	—2·99	1·10	27	8	+0·5	8·3	+2·2	0	4	5	1	2	7	7	4	0	3	2	5	2	3	3	3	8	1	Gaya.
·4	—0·5	5·8	7·21	—2·79	1·34	27	11	—0·9	4·4	+1·6	0	5	0	19	0	6	0	0	0	0	7	0	13	0	7	0	1	2	Naya Dumka.
·5	+0·3	6·5	3·46	—2·72	1·09	10	10	+2·2	3·9	—1·8	1	0	17	6	1	1	1	0	3	2	2	18	2	1	1	1	1	2	Sabour.

(b) Observations for 29 days.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean, 8 hrs. I.S.T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
U. P., EAST—																						
Gonda ..	360	984·8	..	981·8	103·8	+5·0	115	19	83·3	+3·9	76	21	88·8	104·2	77·7	77·8	27·4	—1·8	20·5	61	—11	30
Gorakhpur ..	254	989·6	—1·8	986·3	102·6	+5·7	109	8 days	82·3	+3·1	73	21, 22	87·5	100·4	78·9	77·8	29·9	—0·4	22·9	67	—9	40
Banaras ..	250	989·3	—1·4	985·7	101·9	+1·0	113	3, 11, 19	85·7	+3·7	76	23	92·5	101·1	78·7	80·1	27·3	—0·6	25·4	55	—9	40
Allahabad (Bamrauli).	322	987·2	—0·9	983·4	105·8	+3·1	113	2, 3	85·9	+3·0	73	29, 30	91·5	102·3	75·6	76·6	22·9	—6·0	19·6	50	—23	34
Fatehpur ..	375	985·3	..	983·1	106·8	+3·8	113	3	86·3	+3·4	73	29	91·6	105·3	76·8	79·0	24·5	—3·3	22·0	51	—14	34
Kanpur ..	413	984·4	—0·5	981·1	107·5	+4·8	115	18, 19	85·8	+2·8	74	29, 30	91·0	104·3	75·8	78·4	23·5	—2·7	21·4	49	—12	31
Lucknow ..	371	986·0	—0·6	981·8	107·3	+7·1	115	19	86·1	+4·4	76	27	91·3	103·6	77·3	78·2	25·3	—2·2	20·7	53	—11	33
Bahraich ..	407	985·1	—0·4	980·6	106·7	+8·0	115	19	81·4	+1·4	73	21	88·7	103·6	78·6	85·3	29·1	+0·2	32·8	75	+5	47
U. P., WEST—																						
Jhansi ..	824	971·2	—0·7	967·5	106·7	+2·7	111	3, 18	83·7	—0·8	76	30	90·5	104·1	78·5	79·0	27·8	+3·5	22·4	58	+5	38
Agra ..	553	979·7	—0·5	976·3	108·6	+4·6	115	18	88·6	+5·1	82	6, 27	92·5	107·0	74·7	76·8	21·2	—1·4	17·7	41	—7	23
Mainpuri ..	516	981·3	0	976·9	108·8	+4·1	118	18	86·2	+3·4	82	4 days	92·5	106·4	75·5	78·5	22·4	—3·4	20·6	45	—11	28
Aligarh ..	615	977·1	0	974·0	108·5	+6·3	115	18	86·0	+3·4	77	27	92·1	105·9	76·4	79·7	24·1	—0·1	23·1	45	—14	30
Bareilly ..	568	978·6	—1·5	974·3	108·6	+8·4	115	18, 19	85·1	+5·3	81	7, 22	92·1	105·3	74·1	75·0	28·0	+0·2	21·3	41	—26	22
Roorkee ..	899	967·7	—1·4	963·7	105·0	+4·8	112	18, 19	78·4	—0·4	69	5	85·8	103·6	72·2	73·6	21·5	—2·1	14·6	49	—11	22
Dehra Dun ..	2,239	924·7	—1·1	921·7	99·8	+5·1	108	18	74·5	+0·4	65	5, 24	84·7	95·9	70·2	70·8	19·4	—2·2	14·8	49	—14	28
EAST PUNJAB—																						
New Delhi ..	714	973·7	—1·4	970·3	106·3	+3·9	112	18, 19	84·3	+1·8	71	5	90·5	103·8	72·4	74·2	19·1	—4·9	15·4	40	+16	22
Hissar ..	725	974·2	+0·4	971·1	109·1	+3·5	115	17, 18, 19	81·3	—0·9	76	1	88·9	104·0	73·8	76·8	21·8	—2·0	17·6	48	—3	25
Ambala ..	892	967·2	—1·5	964·3	109·3	+5·7	115	17, 18, 19	82·9	+2·2	70	5	90·1	107·3	73·8	77·3	21·1	—1·8	18·3	49	—1	30
Ludhiana ..	812	970·5	—0·7	967·5	108·5	+3·7	115	18, 19	80·8	—0·1	69	5	89·6	106·8	72·6	77·9	19·5	—2·5	19·4	42	—10	25
KASHMIR—																						
Srinagar ..	5,205	837·7	+1·4	835·7	75·7	—9·7	85	30	55·2	—2·1	51	4, 12, 13	62·3	73·3	57·9	62·2	14·5	—2·4	15·0	78	0	57
Gulmarg (R) ..	8,709																					
Dras (R) ..	10,059																					
Leh ..	11,529	667·4	+1·8	664·4	65·0	—6·3	77	30	40·4	—3·9	33	1, 2, 6	48·3	63·5	39·3	45·3	5·4	—0·7	4·7	47	+2	2
Skardu (R) ..	7,505																					
Gilgit (R) ..	4,890																					
Misgar (R) ..	10,190																					
RAJPUTANA, WEST—																						
Sri Ganganagar	580	978·6	..	975·3	110·0	+3·1	115	18, 19	81·0	—0·3	73	4 days	90·4	107·4	72·6	76·5	19·2	—2·1	16·5	41	+7	2
Bikaner ..	734	973·9	0	970·6	108·4	..	113	11, 17, 27	86·1	..	77	11	90·3	106·1	75·3	80·0	22·8	..	23·1	49	..	3
Phalodi ..	783	971·6	..	970·6	107·6	..	114	1	82·8	..	75	28	85·1	106·5	..	..	..	..	..	..	..	..
Jodhpur ..	736	975·4	+1·4	971·7	105·7	+2·1	111	15	84·5	+2·2	74	24	87·8	104·2	77·8	78·8	27·9	+3·2	21·5	63	0	3
Barmer ..	638	978·7	+0·3	974·8	106·7	+3·3	115	15, 16	81·9	+1·6	79	4 days	85·3	105·6	77·9	79·0	28·8	—0·1	21·6	71	—2	2
RAJPUTANA, EAST—																						
Sikar ..	1,406	952·1	..	948·6	105·6	..	111	24	85·3	..	73	5	81·1	102·7	73·1	74·2	20·6	..	15·9	44	..	2
Jaipur ..	1,431	952·0	—0·4	948·4	105·4	+2·3	111	17	83·2	+2·8	76	6, 20	88·9	101·4	73·4	73·4	21·1	—1·1	15·5	46	—6	2
Ajmer ..	1,593	947·0	—0·5	943·7	102·5	+2·1	108	16	83·7	+1·8	77	24	86·6	100·1	75·1	76·1	25·1	+0·9	20·9	58	—1	3
Kotah ..	843	972·2	+0·5	967·4	106·2	+1·4	112	3	86·5	+1·4	80	6, 20	91·0	101·9	75·9	76·1	23·8	+0·6	19·0	47	—3	3
Jhalawar .	1,053	964·4	—0·7	960·6	103·4	—1·8	109	2	81·8	+0·6	75	15, 27	86·2	98·6	76·5	74·7	26·7	—1·0	17·8	63	—3	3
Udaipur ..	1,910	938·1	..	935·1	98	..	104	23	79·2	..	70	23	82·6	93·2	74·1	74·8	25·3	..	27·7	67	..	4

(R) Register not received.

Cloud amount, (tenths of sky)			Rainfall, inches.				Number of rainy days (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST—
3·7	—1·8	3·4	1·17	—6·14	0·39	29	4	—4·3	5·3	+0·3	0	0	17	1	0	0	0	2	10	1	0	7	1	0	0	1	15	5	Gonda.
3·8	—0·5	3·3	2·27	—4·98	1·30	21	4	—4·3	4·5	+1·7	1	5	18	4	0	0	2	0	0	1	0	9	4	0	1	11	3	1	Gorakhpur.
4·9	—0·1	4·4	6·18	+1·62	1·93	26	6	0	5·7	+1·7	2	4	5	0	1	4	10	2	2	1	2	3	0	0	1	9	12	2	Banaras.
5·2	+1·4	5·4	10·13	+9·03	3·46	29	5	+3·5	6·4	—1·8	0	1	3	1	2	8	10	2	3	2	5	2	0	3	1	10	7	0	Allahabad (Bamrauli).
5·4	+0·9	4·9	3·46	+0·02	2·05	29	3	—4·8	5·7	+1·2	0	2	4	1	0	4	6	9	4	1	3	3	0	1	2	4	13	3	Fatehpur.
4·6	+1·7	4·1	2·13	—1·06	1·38	30	4	—0·5	9·2	+1·0	3	3	4	2	0	5	9	3	1	1	5	2	1	1	1	10	9	0	Kanpur.
3·8	—0·3	3·3	2·44	—2·02	2·04	29	3	—2·5	3·5	+0·9	1	0	10	1	1	2	8	5	2	0	0	4	0	3	4	8	6	5	Lucknow.
3·7	+0·1	2·6	1·82	—4·38	0·64	27	4	—2·1	5·7	+2·3	1	1	7	9	1	1	3	3	4	1	1	2	5	0	4	8	8	1	Bahraich.
																													U. P., WEST—
5·3	+1·9	6·2	0·83	—3·34	0·48	30	2	—3·5	6·0	+1·0	0	0	0	2	2	8	11	2	5	1	0	0	0	0	4	16	1	8	Jhansi.
4·4	+1·2	4·1	0	—2·44	0	..	0	—3·8	3·7	—1·3	4	3	1	0	1	5	10	3	3	2	1	1	0	0	0	14	3	9	Agra.
4·1	+0·2	2·7	0·05	—2·59	0·04	12	0	—3·8	4·2	+1·2	0	1	3	3	1	4	10	5	3	1	0	1	6	0	4	7	11	0	Mainpuri.
2·4	—0·5	3·0	0	—5·39	0	..	0	—4·6	6·6	+1·0	2	1	4	2	2	0	9	8	2	3	0	2	2	1	0	6	12	4	Aligarh.
4·0	—0·1	3·3	0	—5·23	0	..	0	—5·4	5·8	+2·9	0	0	4	6	2	2	7	8	1	3	1	1	0	3	2	6	12	2	Bareilly.
2·4	—1·2	2·1	0·90	—3·60	0·56	4	2	—3·4	5·1	+1·9	0	3	0	12	0	0	0	9	6	0	0	0	4	0	1	0	21	4	Roorkee.
2·5	—1·8	3·0	3·60	—4·95	1·28	24	5	—3·4	2·1	+0·2	2	0	2	1	1	1	4	5	14	0	2	0	0	1	8	9	4	6	Dehra Dun.
																													EAST PUNJAB—
3·2	—0·3	4·2	0·53	—2·50	0·37	27	2	—2·2	10·4	..	5	2	2	3	3	1	5	9	0	6	5	1	1	0	4	1	12	0	New Delhi.
0·5	—1·4	1·1	0·76	—0·50	0·40	7	3	+0·1	5·9	0	1	2	3	1	3	6	5	4	5	3	1	0	2	2	3	9	9	1	Hissar.
1·8	—0·9	2·0	0·30	—2·74	0·20	5	1	—3·4	..	..	0	4	0	6	0	0	0	14	6	0	0	0	6	0	2	0	19	3	Ambala.
1·8	—0·6	0·9	0·55	—1·73	0·23	5	3	—0·5	3·8	+1·4	0	2	5	3	0	0	5	11	4	0	0	0	2	0	1	5	17	5	Ludhiana.
																													KASHMIR—
3·5	+0·7	6·9	4·42	+3·02	1·73	11	7	+3·6	2·5	—0·1	0	3	2	5	1	0	4	5	10	2	4	0	1	3	1	3	8	8	Srinagar.
																													Gulmarg. (R)
																													Dras. (R)
1·1	+1·2	6·7	0·17	—0·01	0·06	20	0	—0·7	3·1	+0·6	0	0	0	0	12	2	2	0	14	0	2	2	0	0	18	5	1	2	Leh.
																													Skardu. (R)
																													Gilgit. (R)
																													Misgar. (R)
																													RAJPUTANA, WEST—
0·4	—0·5	0·5	0·05	—2·99	0·05	11	0	—2·7	4·3	—4·2	0	0	4	3	3	8	6	0	6	5	0	0	0	2	5	7	8	3	Sri Ganganagar.
0·7	—0·9	1·4	0·40	—0·81	0·18	27	2	—0·2	7·0	—0·5	0	0	0	3	0	20	0	7	0	1	0	0	3	0	16	0	9	1	Bikaner.
3·3	..	5·7	0·42	—0·50	0·20	11	2	+0·4	14·4	..	1	1	1	2	1	23	0	1	0	1	1	0	2	0	20	2	4	0	Phalodi.
3·7	—0·8	3·3	0·83	—0·59	0·83	24	1	—1·1	5·8	—6·8	0	0	0	0	0	17	4	0	9	1	0	0	0	0	17	7	1	4	Jodhpur.
2·4	—1·4	1·8	0	—1·10	0	..	0	—1·5	5·9	—2·3	1	0	0	0	5	16	3	0	5	0	0	0	1	2	19	6	1	1	Barmer.
																													RAJPUTANA, EAST—
3·3	..	4·3	0·21	..	0·21	12	1	..	5·8	..	0	0	1	0	2	4	17	2	4	1	1	1	1	0	4	12	9	1	Sikar.
0·6	+2·9	5·7	0·58	—1·66	0·18	21	3	—0·9	6·2	+0·3	2	1	1	0	0	3	10	10	3	5	0	1	1	0	1	6	13	3	Jaipur.
0·8	+1·0	4·0	0·53	—1·90	0·34	23	2	—0·7	8·3	+1·0	0	1	0	0	1	12	11	1	4	1	1	0	1	0	8	15	3	1	Ajmer.
0·5	+1·3	5·1	1·09	—1·55	0·41	23	3	—1·1	6·9	+1·9	0	0	0	0	1	9	16	2	2	0	2	2	0	0	4	10	6	6	Kotah.
0·6	+0·7	5·5	3·08	—1·36	1·13	27	9	+1·9	6·8	+0·5	0	0	0	0	1	6	20	1	2	2	4	3	1	1	4	9	5	1	Jhalawar.
0·4	..	8·4	1·99	—1·05	0·94	23	3	—1·6	5·7	..	2	0	0	1	7	11	6	2	1	3	3	1	0	2	11	7	3	0	Udaipur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
GUJARAT—																						
Deesa* ..	466	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.
Bhuj	343	989·8	+0·2	987·7	98·2	+0·9	105	14	81·3	+1·6	76	11	83·9	95·7	77·9	79·5	29·9	0	27·1	75	+2	4
Dwarka ..	37	1001·0	+0·1	999·0	90·0	+0·7	91	6 days	83·7	+1·3	83	13 days	84·8	87·7	81·1	82·5	34·6	+2·0	35·5	84	—1	7
Jamnagar ..	60	1001·1	+1·4	..	95·8	—0·1	101	4 days	83·0	+2·9	79	11, 24	85·8	..	77·6	..	28·6	—2·8	..	68	—9	..
Rajkot ..	432	987·9	+0·3	984·1	102·9	+3·5	106	20, 21	80·6	+2·4	78	24	83·8	99·3	79·8	83·3	33·0	+3·8	31·6	83	+6	5
Veraval ..	26	1001·8	—0·6	1000·1	90·0	..	94	6	82·9	..	82	7 days	84·9	87·6	81·5	82·5	35·3	..	35·6	84	—1	7
Surat ..	39	1001·9	—0·2	999·5	93·4	+0·6	100	14	82·4	+2·5	77	14	85·3	91·2	80·7	83·1	33·7	+2·9	35·0	81	+4	7
Bhavnagar ..	55	1001·4	+0·3	997·0	102·2	+2·4	106	4 days	81·9	+1·7	77	1	85·0	99·7	78·1	80·9	29·7	+0·7	27·7	72	+2	4
Ahmedabad ..	163	997·5	+0·3	992·4	102·1	+0·3	106	14	82·8	+1·8	78	24	86·5	100·5	78·9	79·1	30·2	+0·9	24·2	70	—3	3
Dohad ..	1,093	965·7	..	961·9	98·5	+1·3	106	14	77·5	—1·0	70	22	80·7	96·5	75·9	77·5	28·4	—0·4	23·5	78	0	4
Baroda ..	115	999·3	..	994·6	101·9	+4·2	107	14	82·2	+2·4	77	24	85·4	98·9	78·8	80·3	30·6	+0·8	26·8	73	—6	4
CENTRAL INDIA, WEST—																						
Neemuch ..	1,626	947·3	+0·1	944·0	100·1	+1·7	105	2	79·2	+1·4	71	26	82·1	96·4	75·1	78·3	26·9	+0·8	25·2	73	+3	4
Indore ..	1,823	941·3	—0·1	937·7	95·2	—0·4	102	3, 14	75·4	—0·3	66	13	79·1	91·7	73·3	74·7	25·7	+0·7	22·4	76	+4	4
Bhopal ..	1,643	946·2	—0·4	942·8	97·9	+0·6	105	2, 3, 8	78·5	+1·0	72	26, 30	82·5	93·5	73·9	75·4	25·0	+1·3	22·7	67	+1	4
Guna ..	1,571	947·9	—0·3	944·3	103·3	+3·0	108	8	80·8	+1·6	74	27	85·4	97·2	..	..	..	..	..	..	..	..
Gwalior ..	681	975·9	..	971·9	109·2	..	113	17, 18	88·7	..	82	30	94·8	101·5	75·3	75·4	22·0	..	19·4	38	..	2
Madhosagar ..	757	973·1	..	969·2	107·1	..	113	18	86·9	..	79	26	93·1	103·6	75·8	76·4	22·6	..	18·6	42	..	2
CENTRAL INDIA, EAST—																						
Nowgong ..	750	973·9	—0·4	969·8	105·0	+2·2	111	2, 18, 23	84·7	+2·0	75	25	90·4	101·6	78·8	80·6	28·9	+3·2	26·1	59	+2	4
Sutna ..	1,041	963·9	—0·5	960·3	102·7	+2·2	111	11	83·9	+2·1	73	30	89·2	97·9	77·1	79·0	26·3	+2·7	25·3	59	+4	4
Umaria ..	1,506	949·1	..	946·0	99·3	+1·4	108	4 days	80·3	+0·7	68	30	85·8	93·6	73·6	74·9	23·3	—0·4	21·9	57	—4	4
BERAR—																						
Akola ..	925	971·0	—0·5	966·5	97·5	—1·5	107	3, 7, 8	78·3	0	73	4 days	81·7	94·7	74·9	75·2	26·5	+1·6	21·0	72	+5	4
Amraoti ..	1,213	960·9	—0·6	956·6	97·2	—1·0	107	2, 3	77·8	—0·1	72	30	81·5	94·1	76·1	81·9	28·3	+3·4	31·8	78	+10	6
C. P., WEST—																						
Khandwa ..	1,044	967·0	—0·1	962·8	98·1	—0·7	107	3	79·0	+0·2	70	16	82·3	94·5	75·4	77·1	26·9	+1·7	23·9	72	+4	4
Hoshangabad ..	992	967·7	—0·6	963·3	99·1	+0·4	108	3, 8	(a) 70·9	+1·2	73	30	83·9	95·3	74·9	76·0	25·5	+0·5	21·9	67	+1	4
Saugor ..	1,808	940·0	—0·1	936·7	98·0	—0·4	106	3, 8	78·6	+0·5	70	30	82·9	93·1	73·2	74·5	24·0	+1·6	21·6	65	+5	4
Jubbulpore ..	1,289	957·1	—0·1	953·4	99·6	+1·5	110	9	79·3	+0·7	71	30	85·2	93·3	74·5	76·3	24·8	+1·8	24·0	62	+4	4
Seoni ..	2,027	933·7	0	930·6	94·8	—0·3	106	2, 3, 4	76·2	+0·9	70	24, 28	81·9	88·3	73·5	74·3	24·8	+2·1	23·3	71	+8	5
Nagpur ..	1,010	967·0	—0·6	963·3	100·8	+1·3	112	2	80·8	+1·2	72	30	85·0	95·6	74·1	75·3	23·8	—0·3	20·7	62	+3	4
C. P., EAST—																						
Gondia ..	1,026	966·4	..	962·6	99·5	..	110	3, 4, 11	80·4	..	71	12	85·5	96·3	77·4	80·0	28·4	..	27·6	70	..	5
Pendra ..	2,040	931·9	—0·6	929·1	96·0	+2·9	107	5	78·0	+2·3	69	29	83·9	88·7	72·7	73·6	22·9	—0·5	22·1	63	—2	5
Champa ..	878	972·8	..	968·9	102·5	..	115	9, 11	82·5	..	72	29	85·7	96·5	75·8	78·2	26·0	..	24·7	66	..	4
Raipur ..	970	(b) 967·4	—0·7	963·8	(b) 102·1	+4·2	115	7	(b) 80·4	+1·3	70	28	(b) 85·5	97·3	(b) 76·4	79·0	26·9	+2·1	25·6	(b) 67	+3	4
Titilagarh ..	691	976·9	..	972·9	101·1	..	113	4 days	81·7	..	71	29	85·3	96·9	75·3	77·1	25·4	..	22·8	65	..	4
Kanker ..	1,318	957·0	—0·3	953·3	97·6	+2·8	107	7 days	80·7	+2·8	71	29	85·9	93·9	74·8	77·2	24·4	—0·3	24·3	60	—6	4
Chanda ..	634	980·7	—0·1	976·1	100·9	+1·2	111	1, 2, 3	80·3	+0·4	74	4 days	86·1	96·8	75·7	76·9	25·4	+0·4	22·6	64	+2	4
Jagdalpur ..	1,815	940·9	—0·8	937·4	95·7	+4·0	109	1	75·9	+1·5	69	10	81·7	91·0	72·7	74·3	23·8	—2·1	22·1	67	—7	4

* Data not available.

(a) Mean of 30 days.

Cloud amount, (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean, 8 hrs. I.S.T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hrs.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													GUJARAT—
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Deesa.*
3·4	—1·7	1·6	0·08	—1·30	0·08	10	0	—1·9	12·7	+1·0	0	0	0	0	1	13	16	0	0	0	0	0	0	0	16	14	0	0	Bhuj.
6·2	+0·8	5·7	0	—2·01	0	..	0	—2·3	17·3	+4·2	0	0	0	0	3	14	8	5	0	0	0	0	0	2	15	12	1	0	Dwarka.
5·1	+0·3	..	0	—2·57	0	..	0	—3·0	11·2	—3·6	0	0	0	0	1	14	13	0	2	..	..	..	..	..	..	..	..	..	Jamnagar.
5·0	—1·3	5·2	1·71	—2·39	1·66	23	1	—3·8	16·2	+4·5	1	0	0	0	1	11	14	2	1	1	1	0	0	1	8	14	5	0	Raikot.
4·3	—1·6	4·6	0·06	—4·60	0·06	8	0	—3·9	14·9	..	0	1	0	0	3	9	12	5	0	0	0	0	0	2	11	12	5	0	Veraval.
7·4	+0·3	5·7	0·90	—7·72	0·58	14	2	—6·0	7·2	—0·2	0	0	0	1	7	14	3	0	5	0	0	0	0	0	29	0	0	1	Surat.
4·9	—1·4	6·4	0·36	—2·54	0·20	1	2	—2·7	6·7	—1·2	1	0	0	1	5	11	8	2	2	1	1	0	2	11	7	6	2	0	Bhavnagar.
5·0	—1·0	4·6	0·74	—2·92	0·54	8	1	—3·7	5·4	—0·1	1	0	0	0	0	13	12	3	1	0	0	0	0	2	13	12	2	1	Ahmedabad.
6·4	—0·4	5·2	8·43	+4·90	5·00	26	7	+2·0	19·4	+9·3	0	0	1	0	1	10	17	1	0	0	0	0	0	1	16	12	1	0	Dohad.
5·8	0	5·9	0·82	—5·59	0·45	13	5	—1·7	5·7	—0·9	0	0	0	2	2	11	10	3	2	1	0	0	1	2	8	15	2	1	Baroda.
																													CENTRAL INDIA, WEST—
6·3	+2·2	7·4	3·74	—0·49	0·70	26	7	+2·2	9·7	+0·3	0	2	0	0	1	6	19	2	0	0	4	2	2	0	6	13	3	0	Neemuch.
6·6	+0·8	7·3	10·31	+4·51	2·46	25	11	+3·7	5·9	—0·2	0	0	0	0	0	7	17	5	1	1	1	0	1	2	6	13	5	1	Indore.
5·5	+0·4	7·1	8·12	+1·29	0·89	14	9	—0·4	7·6	+1·8	0	0	0	1	0	2	16	9	2	0	1	0	0	1	3	14	8	3	Bhopal.
5 8	+2·6	6·6	1·11	—4·92	0·31	30	4	—3·2	8·3	+1·1	0	0	0	0	2	9	13	5	1	1	0	0	2	1	3	12	7	4	Guna.
4·3	..	5·4	0·05	..	0·05	22	0	..	5·2	..	2	0	2	2	0	3	6	11	4	4	1	1	2	1	1	4	9	7	Gwalior.
4·9	..	4·9	1·10	..	0·86	26	2	..	8·6	..	1	2	1	0	1	10	10	3	2	3	3	0	1	2	0	10	6	5	Madhosagar.
																													CENTRAL INDIA, EAST—
5·7	+0·7	6·3	2·65	—2·79	1·84	25	3	—3·1	5·3	+1·7	0	1	1	0	2	14	8	3	1	3	3	1	1	1	10	6	5	0	Nowgong.
5·2	+0·2	5·2	7·12	+1·58	2·15	30	7	+0·7	6·0	+0·3	0	1	0	2	2	8	10	5	2	1	2	2	2	0	9	6	8	0	Sutna.
5·9	—0·5	7·5	7·53	+0·41	2·37	28	8	—2·0	4·6	+0·2	0	0	1	0	0	11	13	5	0	3	1	1	2	0	4	7	12	0	Umaria.
																													BERAR—
5·1	—0·8	5·8	5·17	—0·36	1·85	24	10	+1·9	8·9	+1·2	1	0	0	0	0	4	17	6	2	1	2	1	1	0	5	2	16	2	Akola.
6·2	+0·5	6·9	7·21	+0·66	2·70	17	8	—0·7	9·3	+1·9	1	1	0	0	2	11	10	5	0	0	5	0	0	2	7	7	9	0	Amraoti.
																													C. P., WEST—
6·5	+1·3	7·5	5·78	+0·18	3·02	18	8	+1·0	9·7	+1·5	2	0	0	1	0	2	16	8	1	2	2	0	0	3	7	9	7	0	Khandwa.
8·2	+2·7	8·9	7·82	+1·95	2·80	15	7	—1·2	3·2	—0·7	0	0	0	0	1	12	11	0	6	1	1	0	0	1	5	10	5	7	Hoshangabad.
6·0	+1·0	8·1	6·06	—0·13	1·52	30	8	—0·1	12·9	+0·9	0	0	1	0	1	7	18	3	0	1	2	2	2	1	5	11	5	1	Saugor.
6·3	+1·4	7·4	9·16	+2·13	1·73	26	12	+3·2	5·8	+2·2	0	0	0	1	5	10	12	1	1	2	2	2	2	4	3	8	7	0	Jubbulpore.
4·7	—0·7	5·2	12·28	+3·72	1·99	22	16	+4·9	3·7	—0·7	4	0	0	1	4	6	5	6	4	4	1	0	2	5	4	4	7	3	Seoni.
6·6	+0·6	7·5	2·36	—6·46	0·49	28	7	—3·2	7·7	..	0	2	0	0	1	9	4	12	2	3	4	1	0	1	5	8	7	1	Nagpur.
																													C. P., EAST—
4·9	..	4·5	8·67	..	2·15	27	12	..	4·3	..	4	1	0	0	1	8	4	9	1	4	2	1	0	2	10	6	5	0	Gondia.
5·7	+0·3	7·9	7·32	—0·61	2·01	21	15	+3·3	6·1	+1·2	7	1	1	0	8	2	2	7	2	7	2	0	2	6	4	2	5	2	Pendra.
6·8	..	7·5	8·69	..	1·98	28	13	..	6·4	..	2	2	2	1	1	6	13	3	0	7	2	1	1	2	2	9	5	0	Champa.
(b) 5·3	+0·1	7·4	9·68	+0·62	2·93	29	9	—0·7	(c) 6·1	—0·2	0	2	0	0	0	17	1	9	0	3	5	0	1	0	11	1	9	0	Raipur.
6·5	..	6·4	7·92	..	1·61	21	14	..	4·0	..	2	0	0	1	11	10	1	1	4	6	1	0	1	6	7	3	5	1	Titilagarh.
6·9	—0·6	7·7	5·60	—4·80	1·27	29	8	—2·3	6·7	+1·4	0	0	1	1	2	16	4	0	6	2	1	1	1	1	3	10	10	1	Kanker.
5·2	—0·7	6·3	4·04	—4·01	1·84	22	5	—3·8	6·9	+1·6	0	1	0	2	0	10	0	14	3	0	1	0	2	0	9	0	16	2	Chanda.
5·7	+0·5	7·6	8·10	—1·57	2·15	30	13	+1·7	6·7	+2·8	0	0	0	0	0	18	0	10	2	0	1	0	0	0	19	0	9	1	Jagdalpur.

(b) Mean of 29 days.

(c)—Mean of 28 days.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean, 8 hrs., I.S.T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean, 8 hrs., I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
KONKAN—																						
Dahanu ..	15	1003·7	..	1001·1	91·2	..	95	8, 26	80·3	..	59	16	84·6	88·5	81·2	84·1	34·9	..	38·3	87	..	83
Bombay ..	35	1002·9	—0·8	1000·7	90·4	+1·9	95	7 days	80·6	+2·0	75	12, 14 26	83·4	86·6	78·9	80·4	31·7	+0·8	32·7	81	—1	77
Alibag ..	23	1004·1	—0·5	..	87·9	+0·8	93	7	79·4	+0·9	71	25	82·6	..	78·6	..	31·8	+0·7	..	83	0	..
Harnai ..	66	1002·0	..	1000·7	88·0	..	92	12 days	77·4	..	68	24	81·7	83·4	78·7	79·6	32·2	..	32·8	87	..	85
Devgad ..	110	1001·3	..	999·4	87·1	..	99	3	78·9	..	73	16	81·2	84·0	78·3	79·7	31·8	..	32·7	87	..	83
Marmagao ..	202	999·5	—0·1	996·9	85·5	+0·9	92	7	..	..	..	..	81·3	82·1	77·5	77·7	30·5	+0·9	30·4	84	—3	81
Honavar ..	85	1004·6	..	1002·5	85·8	..	93	5, 6	76·0	..	71	26	79·6	82·8	77·2	78·7	30·9	..	31·7	91	..	85
BOMBAY DECCAN—																						
Jalgaon ..	660	980·0	..	976·2	98·7	..	108	3,7, 18	77·8	..	71	23	81·9	96·1	77·1	78·2	29·7	..	24·8	80	..	40
Malegaon ..	1,432	955·2	—0·1	951·1	95·8	—0·5	105	11	73·9	—1·2	68	26	81·0	90·7	74·8	75·0	26·6	+1·7	23·7	74	+3	49
Ahmednagar ..	2,154	931·6	—1·0	928·6	92·1	—0·2	102	3	72·7	+0·7	68	26	75·7	87·7	71·5	72·8	24·3	+0·9	21·5	79	+5	51
Poona ..	1,834	942·9	—0·3	940·0	90·8	+1·4	101	7	73·8	+0·3	70	26	77·6	84·5	72·4	73·6	25·0	+1·1	23·8	77	+1	62
Sholapur ..	1,570	951·8	—0·2	947·9	96·3	+1·1	107	1	74·6	+0·8	70	26	78·5	92·1	72·5	74·1	24·9	+1·5	21·4	75	+4	49
Miraj ..	1,817	943·9	—1·0	940·9	91·0	+2·8	103	1	72·7	+0·8	67	26	75·5	85·5	72·5	74·7	26·1	+1·2	25·0	87	+4	62
Kolhapur ..	1,885	941·8	..	939·4	86·5	..	97	4 days	72·2	..	68	26	75·0	81·0	71·6	73·1	25·0	..	24·6	85	..	70
Bijapur ..	1,950	939·5	—0·4	937·0	93·7	+1·6	104	3	73·0	+0·9	70	19	77·1	89·4	71·8	74·5	25·6	+1·9	23·0	76	0	56
Belgaum ..	2,562	920·7	—0·1	918·5	82·3	+0·7	93	1, 4	68·8	+0·5	66	27	71·9	77·7	69·6	71·6	23·7	+0·3	24·0	89	0	70
Gadag ..	2,131	934·6	—0·5	931·6	88·4	+0·5	100	3, 6	71·1	—0·1	67	6	74·3	84·4	70·6	71·5	24·0	—0·2	21·1	82	—2	56
HYDERABAD, NORTH—																						
Aurangabad ..	1,905	940·4	—0·3	936·7	92·6	—1·6	104	3	73·6	+0·6	69	15	77·1	88·3	74·0	76·5	27·5	+3·6	26·3	86	+11	63
Parbhani ..	1,350	956·6	..	952·5	96·6	..	108	2	76·3	..	70	27	79·9	91·6	73·9	76·5	25·9	..	24·4	75	..	53
Bidar ..	2,178	930·9	..	927·2	90·1	—2·8	102	1	74·2	+1·9	69	27	76·9	89·3	72·6	75·6	25·6	+1·3	25·3	81	+4	53
Nizamabad ..	1,250	960·9	—0·7	956·7	97·8	+0·8	109	3	77·7	+0·3	70	27	81·7	94·5	73·1	75·0	23·9	—0·7	20·8	66	—3	4
Ramakundam ..	527	984·7	..	980·3	100·6	..	113	2	82·1	..	73	24, 27	86·1	97·2	77·5	81·3	28·3	..	29·2	68	..	56
HYDERABAD, SOUTH—																						
Gulbarga ..	1,503	953·6	—0·6	949·8	95·2	—0·6	107	3	75·4	+1·2	70	26	78·3	92·2	73·5	76·5	26·3	+2·4	24·7	78	+4	5
Raichur ..	1,311	960·6	—0·4	956·7	95·9	+0·6	105	1, 3, 5	76·3	+1·4	70	28	79·3	93·2	73·0	74·4	24·9	+0·2	20·6	72	0	4
Hyderabad (Begumpet).	1,778	943·9	—0·4	940·4	95·9	+1·3	105	4 days	76·7	+1·5	70	10	79·3	91·6	72·4	76·0	24·4	—0·8	24·3	72	—2	5
Hanamkonda ..	881	972·7	—0·8	968·7	100·2	+2·9	111	1, 2, 3	81·7	+2·2	72	24	85·9	96·4	74·4	95·6	23·8	—0·4	20·8	59	—3	3
Khammameth	368	990·2	..	985·9	101·6	..	112	5	82·8	..	75	24	87·7	99·7	79·7	84·7	31·3	..	33·9	70	..	5
MYSORE—																						
Chitaldrug ..	2,405	925·9	—0·1	923·0	86·3	—0·8	96	6	70·6	+0·4	67	28	73·8	83·3	69·7	71·5	22·9	+0·3	21·0	81	+1	5
Hassan ..	3,149	903·0	..	901·1	80·3	—0·7	91	1, 6	66·9	+0·5	65	4 days	70·0	74·6	67·6	69·2	22·1	+0·5	22·2	89	+4	7
Bangalore ..	3,021	906·8	—0·2	904·0	84·7	+0·3	93	1	67·8	+1·1	64	4	70·8	81·0	67·9	69·6	22·2	+0·6	20·0	86	+3	5
Mysore ..	2,518	923·4	—0·2	921·2	84·4	—0·5	95	6	68·5	+0·4	63	21	72·2	80·6	69·0	70·8	23·0	+0·9	21·7	85	+4	6
MALABAR—																						
Mangalore ..	72	1005·2	—0·5	1003·2	85·7	+1·1	92	6	75·2	+0·3	70	23	78·5	82·5	76·4	78·3	30·1	+0·7	31·1	90	0	8
Calicut ..	27	1007·5	—0·3	1005·5	85·3	+0·6	93	3, 4, 6	75·3	+0·2	72	14	78·1	82·1	76·5	79·3	30·4	+1·1	32·9	92	0	8
Palghat ..	319	997·6	..	995·1	85·2	..	96	6	74·1	..	71	13,21,26	76·5	81·4	74·8	76·0	22·7	..	28·2	92	..	7
Cochin ..	10	1008·8	—0·6	1006·6	84·0	—0·2	89	6	75·0	—0·1	72	16	78·0	80·7	76·3	77·3	30·2	+1·1	30·5	92	+3	8
Alleppey ..	12	1008·7	..	1006·6	86·3	..	94	6	75·4	..	72	16, 20	78·7	82·3	77·0	78·1	30·9	..	30·9	93	..	8
Trivandrum ..	11	1002·0	—0·1	999·9	84·5	..	92	6	74·7	..	72	13,16,26	77·3	81·3	75·8	77·0	29·8	+1·2	29·8	93	+4	8
Nagercoil ..	195	1001·9	..	999·7	87·1	..	98	6	75·9	..	72	13	78·9	82·5	75·8	76·8	29·1	..	29·1	86	..	7

Cloud amount (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10″ or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													KONKAN—
8·1	..	7·3	12·29	..	8·20	14	5	..	12·0	..	1	0	7	7	2	6	6	1	0	0	0	0	1	2	12	14	1	0	Dahanu.
7·4	+0·2	7·4	8·78	—10·28	2·97	14	11	—3·6	9·1	—0·3	1	1	0	7	3	5	10	3	0	1	0	0	1	7	6	8	7	0	Bombay.
7·7	—0·3	..	9·38	—14·21	1·73	14	11	—5·7	9·8	—2·7	0	1	0	7	2	6	4	4	6	..	..	..	..	..	..	..	..	..	Alibag.
..	..	..	18·25	..	5·40	26	17	..	9·0	..	0	2	3	11	0	8	2	4	0	0	0	1	4	3	10	8	4	0	Harnai.
8·5	..	8·7	23·36	..	3·95	10	20	..	12·7	..	0	2	5	3	0	1	8	11	0	0	1	0	0	1	9	8	11	0	Devgad.
7·7	—0·1	7·5	36·40	+4·31	4·70	20	21	—2·0	11·5	+3·4	3	2	1	3	4	5	9	3	0	0	0	1	2	3	5	13	6	0	Marmagao.
8·3	..	7·7	38·65	—2·03	5·21	16	23	—0·9	4·0	..	0	1	7	2	2	1	8	7	2	0	0	2	1	1	5	18	3	0	Honavar.
																													BOMBAY DECCAN—
5·4	..	5·3	7·51	+2·41	2·80	27	11	+3·7	10·5	..	0	0	0	0	2	2	19	6	1	2	2	0	1	4	1	13	7	0	Jalgaon.
4·2	—1·4	6·9	11·72	+7·37	2·87	26	12	+5·3	7·0	—2·4	1	0	1	0	0	2	13	1	12	2	0	1	1	0	0	14	8	4	Malegaon.
6·4	+0·8	7·4	4·34	—0·89	0·78	10	12	+4·5	5·3	—3·0	1	0	0	3	0	5	5	13	3	3	2	0	1	3	3	8	10	0	Ahmednagar.
7·3	+0·6	7·9	7·37	+2·88	1·94	25	10	+2·7	4·2	—5·6	0	0	1	0	0	0	17	2	10	0	0	4	0	0	0	22	3	1	Poona.
7·4	+1·2	8·1	2·45	—1·09	0·62	8	5	—1·5	8·7	—1·0	0	0	0	0	0	18	0	11	1	0	0	0	1	1	11	0	12	0	Sholapur.
7·1	—0·8	8·3	2·21	—0·50	0·62	7	7	+1·1	9·6	—0·2	1	0	1	0	2	6	15	1	4	2	0	1	0	1	6	18	2	0	Miraj.
6·9	..	7·1	6·63	..	1·48	13	9	..	11·0	..	0	0	2	0	0	6	20	0	2	0	0	0	0	0	3	24	2	1	Kolhapur.
4·0	—2·3	6·2	0·71	—2·31	0·44	8	3	—2·4	9·5	+0·9	1	0	0	0	1	9	14	5	0	4	1	0	0	1	9	12	3	0	Bijapur.
6·8	—1·2	7·0	11·05	+2·95	2·94	14	15	+2·1	6·0	+0·1	0	0	0	0	1	8	16	5	0	0	0	0	0	2	2	6	20	0	Belgaum.
7·7	+1·0	8·8	3·28	+0·61	2·06	6	6	+0·4	11·5	+0·7	0	0	0	0	1	11	14	4	0	0	0	0	0	1	9	15	5	0	Gadag.
																													HYDERABAD, NORTH—
6·3	—0·6	6·6	11·59	+ 0·15	2·67	17	16	+8·3	10·4	—0·8	1	0	0	1	0	1	27	0	0	3	0	0	2	0	3	20	1	1	Aurangabad.
6·5	..	7·3	5·42	—0·09	1·79	8	9	+1·2	..	..	0	0	0	0	2	8	16	2	2	0	0	1	2	3	7	15	0	2	Parbhani.
6·4	+0·7	7·9	2·30	—2·31	0·83	11	5	—2·1	12·1	—0·5	0	1	0	0	0	11	11	7	0	0	0	0	1	2	11	9	6	1	Bidar.
3·7	—2·0	3·6	2·58	—3·23	0·90	8	7	—1·7	5·3	—0·5	2	3	1	0	0	13	5	4	2	2	8	0	1	0	7	5	5	2	Nizamabad.
7·2	..	7·0	2·53	..	0·51	11, 24	7	..	4·9	..	0	0	0	0	1	3	16	6	4	2	1	1	0	3	4	12	6	1	Ramakundam.
																													HYDERABAD, SOUTH—
4·5	—1·5	4·9	5·11	+0·67	1·37	8	7	+0·1	11·8	+1·7	0	0	0	0	1	12	9	8	0	1	1	0	0	4	8	10	6	0	Gulbarga.
6·9	+1·9	7·6	1·18	—2·44	0·39	5	5	—1·0	13·9	+3·8	0	0	0	0	1	12	9	8	0	0	0	0	0	1	9	11	9	0	Raichur.
7·4	+0·7	7·5	2·04	— 2·37	0·71	10	4	—2·5	12·0	+2·3	0	0	0	0	1	7	14	7	1	2	0	1	0	0	7	14	4	2	Hyderabad (Begumpet).
6·1	—0·3	6·3	1·59	—4·42	0·53	28	4	—4·2	9·7	+2·6	2	0	0	0	0	3	14	9	2	2	2	0	0	1	4	14	7	0	Hanamkonda.
6·6	..	6·0	0·49	..	0·19	23	2	..	7·8	..	3	0	0	1	0	2	18	6	0	2	1	1	1	2	3	11	9	0	Khammameth.
																													MYSORE—
7·7	0	8·1	2·33	—0·26	0·62	7	7	+1·8	8·9	+1·2	0	0	0	0	1	14	13	2	0	0	0	0	0	1	15	9	4	1	Chitaldrug.
7·7	0	8·4	3·87	+0·27	0·94	6	14	+4·7	9·5	+2·5	0	0	0	0	0	10	19	1	0	0	0	0	0	0	10	17	3	0	Hassan.
8·6	+0·7	8·9	5·20	+2·34	2·03	4	10	+4·1	7·0	+2·8	0	0	0	0	0	10	17	3	0	1	1	0	0	0	5	13	10	0	Bangalore.
7·6	—0·1	8·9	3·71	+1·25	1·23	9	8	+2·2	8·0	—0·8	0	0	0	0	1	9	19	1	0	0	0	0	0	0	4	25	1	0	Mysore.
																													MALABAR—
5·5	—3·0	5·6	30·65	—6·43	6·50	21	26	+1·6	6·1	+0·7	1	5	11	1	3	4	4	1	0	1	0	1	1	1	7	11	7	1	Mangalore
8·1	0·4	9·0	45·13	+12·05	4·84	11	24	—0·1	7·2	+1·7	4	8	6	2	1	4	3	2	0	3	1	0	0	2	6	10	8	0	Calicut
7·6	..	8·3	19·18	..	2·01	28	21	..	7·2	..	0	0	0	0	0	2	26	2	0	0	0	0	0	0	5	23	2	0	Palghat.
8·7	—0·2	8·7	43·30	+14·82	6·10	16	25	+0·7	6·3	+1·6	3	4	8	4	0	3	2	0	6	2	2	0	1	1	2	13	5	4	Cochin.
8·9	..	8·2	44·20	..	8·95	16	26	..	7·7	..	0	6	6	1	0	2	5	4	6	3	0	1	0	0	2	14	10	0	Alleppey.
8·2	—0·1	7·7	20·96	+7·78	6·00	16	22	+4·9	5·9	+0·6	6	2	0	1	0	2	2	17	0	1	0	0	0	0	2	8	19	0	Trivandrum.
8·9	..	8·5	12·11	..	1·58	16	21	..	11·5	..	0	0	0	0	0	0	25	5	0	0	0	0	0	0	0	27	3	0	Nagercoil.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Mean, 8 hrs. I. S. T.	Departure from normal.	Mean, 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MADRAS, SOUTH-EAST—																						
Pamban ..	37	1006·4	+0·6	1003·7	86·9	—3·3	90	19,22	81·3	+0·9	79	26, 29, 30	84·2	83·7	78·3	79·0	30·4	—0·5	33·3	78	0	80
Madura ..	437	991·7	—0·4	988·6	98·8	+1·7	105	1	80·7	+2·7	78	24	85·6	92·7	74·4	75·4	24·0	+0·9	22·2	57	—3	43
Negapatam ..	31	1005·3	—0·2	1001·8	98·7	+1·0	103	2	81·5	+1·7	75	9	86·3	91·8	77·9	79·9	29·2	+2·3	29·5	67	+1	60
Trichinopoly ..	255	998·1	+0·1	994·4	98·8	+0·1	104	3, 6	80·5	+1·6	79	5 days	83·9	94·5	75·3	76·5	26·5	+2·0	23·8	65	+3	42
Coimbatore ..	1,341	961·3	—0·6	959·1	88·2	—0·6	98	6	72·6	+0·7	70	20, 21	76·3	83·1	72·1	73·3	25·0	—0·5	23·6	81	0	62
Salem ..	913	975·6	—0·4	971·8	96·0	+0·7	103	6	76·9	+2·0	74	29, 30	79·5	90·1	74·6	77·0	27·0	+0·7	25·7	79	+2	55
Cuddalore ..	39	1004·2	—0·5	1000·3	100·6	+2·0	107	3	81·9	+1·6	76	8	85·3	94·0	75·8	79·3	26·1	—1·7	27·5	63	—4	52
Vellore ..	703	981·6	—0·3	977·6	99·0	+1·8	105	1,5,6	80·5	+1·8	76	10	84·4	95·0	76·2	78·0	27·4	+2·3	25·0	67	+1	46
Madras ..	51	1003·0	—0·5	999·1	102·1	+2·5	110	3	83·4	+2·3	77	6	87·3	94·4	76·1	78·6	25·7	+1·0	26·2	58	—1	49
Arogyavaram ..	2,299	929·2	..	925·9	91·2	..	98	6	73·8	..	71	22, 26, 30	77·6	86·9	70·3	72·8	28·0	..	21·2	69	..	49
MADRAS, DECCAN—																						
Cuddapah ..	428	990·7	—0·4	985·9	101·1	+1·2	108	5	82·9	+2·4	75	29	87·0	96·8	(e) 80·1	(f) 85·5	(e) 32·0	+6·2	(f) 36·6	(e) 73	+11	(f) 63
Bellary ..	1,473	955·6	—0·5	951·9	93·8	—0·8	101	1, 5, 6	77·2	+1·2	74	8	80·9	90·5	72·2	73·8	23·0	+0·8	20·9	67	+3	44
Kurnool ..	923	973·6	—0·5	968·9	98·0	+0·9	106	4 days	78·3	+0·8	73	28, 29	82·7	95·0	74·9	76·2	26·0	+1·3	22·3	68	—11	41
Rentichintala ..	348	991·2	..	987·1	102·0	+3·4	113	2	84·9	+2·9	77	11, 13	87·5	99·8	74·9	75·9	23·9	—3·2	19·7	54	—12	31
Anantapur ..	1,147	966·5	..	962·2	97·4	..	104	5, 6	78·2	..	75	26, 27	81·7	93·5	74·0	75·3	25·2	..	22·7	68	..	42
MADRAS COAST, NORTH—																						
Nellore ..	66	1001·3	—1·0	997·3	103·4	+2·0	113	5	84·1	+1·8	77	12	89·7	98·0	77·8	79·3	27·1	+1·3	25·7	58	—1	44
Ongole ..	38	1001·8	..	997·4	103·4	..	113	5	85·6	..	79	23	90·7	98·4	76·0	77·5	24·0	..	23·2	49	..	38
Masulipatam ..	10	1002·1	—1·1	998·2	102·1	+3·9	113	4 days	84·1	+3·4	79	23	89·0	97·1	78·8	81·6	29·0	—1·5	29·8	64	—10	53
Cocanada ..	26	1001·0	—1·0	997·5	99·7	+2·9	114	1, 3, 5	81·8	+0·9	72	22	86·5	93·5	79·2	80·5	30·7	+0·3	29·6	72	—3	57
Vizagapatam ..	126	996·9	—0·8	993·9	91·7	+0·1	102	8	82·2	+1·5	73	29	85·5	88·2	80·7	82·4	33·6	+3·4	35·1	81	+6	78
Calingapatam ..	19	999·9	—0·9	997·1	93·8	+0·9	105	10	81·9	+1·5	75	29, 30	84·9	88·8	80·2	82·3	33·1	+0·8	33·8	81	+3	75
HILL STATIONS EXCLUDING KASHMIR—																						
Shillong ..	4,921	844·3	—0·5	841·8	74·6	+0·1	79	4, 27,30	64·0	+1·0	60	19	69·4	71·2	65·7	66·6	20·2	+0·6	20·5	82	+1	78
Cherrapunji ..	4,309	863·6	+0·1	861·0	72·5	+0·5	78	27	63·4	—0·9	59	3	67·1	69·9	66·7	67·9	22·2	+1·0	22·5	98	+7	90
Aijal ..	3,599	885·3	..	883·1	78·2	..	82	14,26,29	64·7	..	59	16	71·3	71·6	69·0	70·5	23·2	..	25·1	89	..	93
Darjiling ..	7,432	771·9	—0·7	769·8	66·5	+1·6	70	25	57·1	+0·6	50	5	60·3	61·7	59·6	60·4	17·1	+0·1	17·2	96	0	94
Kalimpong ..	3,965	873·0	—0·2	871·1	76·2	+1·0	79	4 days	67·6	+1·3	65	2	69·6	72·7	68·2	70·4	22·9	0	24·2	93	+2	90
Katmandu ..	4,388	860·2	..	856·8	86·9	+2·1	93	8	66·2	—0·5	60	1, 4	73·2	82·0	68·7	72·3	22·2	+0·8	23·3	80	+4	64
Muktesar ..	7,592	768·0	—0·8	766·4	78·7	+5·5	84	9, 10	60·8	+2·8	50	5	64·5	74·1	54·2	59·2	10·7	—2·7	11·9	54	—17	44
Mussoorie ..	6,699	792·2	..	791·7	78·0	+2·9	86	19	64·6	+3·6	57	6	70·2	74·1	57·3	59·2	11·4	—3·0	11·7	49	—22	44
Simla ..	7,224	778·1	0	777·1	77·9	+2·8	84	18	61·5	+1·4	54	24	70·3	75·1	55·6	57·6	9·8	—2·9	10·0	40	—18	35
Abu ..	3,945	878·1	+4·1	878·1	87·5	+3·9	93	16,17	69·3	+0·7	62	5,23	75·9	80·5	65·3	68·1	16·5	—2·7	18·4	68	—6	52
Pachmarhi ..	3,528	887·2	—0·2	884·3	87·9	+0·1	97	3	72·0	0	66	23, 30	76·3	85·2	69·7	71·4	21·9	+1·2	20·3	73	+2	54
Mahabaleshwar	4,534	858·1	—1·3	856·8	73·3	+2·8	85	3	63·5	+1·0	61	2,16, 30	65·0	68·6	64·6	66·7	20·6	+0·5	21·6	97	0	90
Mercara ..	3,781	883·1	—0·3	881·4	69·3	—2·9	78	3	64·3	+1·1	62	14, 16, 21	66·3	69·0	65·6	67·1	21·3	+0·9	21·9	96	0	91
Ootacamund ..	7,364	778·4	+0·4	777·0	64·5	+0·4	76	5	52·6	+0·2	49	2, 7	56·2	58·9	54·9	56·5	14·3	+1·1	14·7	92	+5	86
Coonoor ..	5,730	825·4	..	..	72·4	—0·2	78	2, 10	61·9	+2·8	58	13	68·1	..	61·2	..	16·0	+1·2	..	69	+2	..
Kodaikanal ..	7,688	769·8	+0·8	768·3	64·9	+0·3	72	6	54·3	+1·1	52	13, 21	57·5	58·4	54·7	56·3	13·6	+1·3	14·7	83	+8	89
CEYLON—																						
Colombo ..	24	1009·0	+0·1	1006·8	86·1	+0·1	88	8 days	77·4	+0·1	73	17,20,21	80·7	82·8	77·2	78·1	30·3	+0·5	30·0	85	—2	80
Trincomalee ..	24	1006·4	+0·5	1003·6	94·2	+1·8	98	5 days	79·7	+1·2	77	12, 13	82·6	89·4	76·0	77·9	28·6	+0·6	21·4	75	—5	57
Hambantota ..	61	1006·3	—0·3	1003·6	85·5	—1·2	91	15	76·8	—0·1	74	30	78·8	82·4	76·5	78·1	30·1	+0·9	30·9	90	+1	82
Mannar ..	12	1007·3	..	1004·8	88·2	..	90	1	81·0	..	79	13	83·0	84·6	78·5	79·1	31·3	..	31·5	81	..	77

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

Cloud amount, (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
8 hrs. I.S.T.	Departure from normal.	Mean, 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													MADRAS, SOUTH EAST—
·5	+2·9	4·9	0·19	+0·04	0·19	29	1	+0·7	14·2	+2·3	0	0	0	0	9	13	8	0	0	0	0	0	1	14	15	0	0	0	Pamban.
·7	+0·2	8·2	0·11	—1·46	0·08	18	0	—2·5	6·1	+1·2	0	0	0	0	0	1	19	8	2	0	0	1	0	1	2	20	3	3	Madura.
·9	+2·7	8·0	2·44	+1·21	1·68	29	3	+0·8	7·7	+1·2	0	0	0	0	1	18	11	0	0	0	0	0	1	11	16	2	0	0	Negapatam.
·2	+0·8	7·3	0·94	—0·69	0·60	1	3	+0·6	7·9	+0·7	0	0	0	0	0	7	21	1	1	1	0	0	0	0	5	16	7	1	Trichinopoly.
·9	+1·3	7·7	2·03	+0·51	0·61	24	6	+1·8	10·3	+4·1	0	0	0	0	12	15	3	0	0	0	0	0	0	10	15	5	0	0	Coimbatore.
·2	—0·1	8·6	2·36	—0·77	0·73	19	5	—0·4	6·2	+1·8	0	0	0	0	0	26	3	0	1	1	0	2	1	1	9	10	3	3	Salem.
·2	+0·8	7·3	1·03	—0·36	0·63	8	2	+0·4	9·0	+3·7	0	0	0	0	1	25	4	0	0	0	0	0	11	1	15	3	0	0	Cuddalore.
·2	+2·2	8·4	1·10	—1·67	0·91	10	1	—3·9	6·3	1·0	0	0	0	0	1	16	10	3	0	0	0	1	0	4	18	7	0	0	Vellore.
·5	+0·5	8·0	0·71	—1·15	0·16	28	3	—0·7	13·1	+1·2	0	0	0	1	1	10	17	1	0	0	0	0	22	0	0	6	2	0	Madras.
·6	..	7·4	1·64	..	1·15	11	2	..	8·4	..	1	0	0	0	0	1	18	10	0	2	0	0	0	0	3	16	7	2	Arogyavaram.
																													MADRAS, DECCAN—
·2	—0·2	6·7	1·44	—1·51	0·94	6	2	—2·8	7·6	+1·0	0	0	0	0	0	0	24	1	5	1	0	1	0	1	0	19	5	3	Cuddapah.
·9	+1·3	7·6	0·33	—1·37	0·13	25, 30	2	—1·3	9·1	+1·2	2	0	0	0	0	1	16	10	1	1	0	0	0	1	1	17	10	0	Bellary.
·1	+1·5	7·8	0·82	—2·11	0·35	29	3	—2·5	(c) 13·7	+3·6	0	0	0	0	0	8	15	7	0	0	0	0	0	1	5	14	10	0	Kurnool.
·3	+0·1	8·5	0·75	—2·88	0·50	11	3	—3·6	9·7	—0·8	0	0	0	0	0	4	23	2	1	1	0	0	0	1	9	10	8	1	Rentichintala.
·6	..	6·7	0·11	—2·01	0·05	8	0	—3·3	13·2	..	0	0	0	0	0	10	18	2	0	2	0	0	0	0	4	18	6	0	Anantapur.
																													MADRAS COAST, NORTH—
·0	0	7·7	2·76	+1·49	1·83	12	4	+1·1	6·2	+0·4	0	0	0	0	0	4	14	5	7	0	0	0	3	1	2	13	4	7	Nellore.
·2	..	8·2	0·30	..	0·27	22	1	..	8·8	..	0	0	0	1	1	5	22	0	1	0	0	2	5	0	7	13	1	2	Ongole.
·8	+0·2	8·6	0·36	—3·86	0·21	24	2	—4·0	9·8	—2·3	1	0	0	1	1	7	12	7	1	0	0	0	4	10	0	3	12	1	Masulipatam.
·3	—1·7	5·6	2·82	—1·86	0·95	23	7	—0·1	8·8	+2·7	0	0	0	3	0	25	1	1	0	0	0	0	3	2	23	0	2	0	Cocanada.
·4	—0·4	7·4	2·57	—1·57	0·76	9	6	—0·5	6·3	+0·9	0	1	0	0	2	11	6	2	8	1	0	0	0	13	9	5	2	0	Vizagapatam.
·3	+1·0	7·7	0·99	—3·70	0·22	25	5	—1·3	11·1	+3·1	0	0	0	0	4	15	10	1	0	0	0	0	1	10	16	2	1	0	Calingapatam.
																													HILL STATIONS EXCLUDING KASHMIR—
·1	+0·9	8·3	26·12	+7·96	5·98	18	17	—3·0	5·0	+2·2	1	0	0	1	3	11	0	0	14	0	0	0	2	3	12	0	0	13	Shillong.
·6	+0·6	7·8	121·34	+15·29	17·26	16	29	+4·0	7·1	+1·2	0	4	3	4	5	10	3	0	1	0	2	6	2	2	15	3	0	0	Cherrapunji.
·2	..	8·5	20·25	..	2·77	29	22	..	6·5	..	0	0	13	2	2	9	3	0	1	0	0	1	3	1	10	7	7	1	Aijal.
·5	+0·9	9·5	12·84	—11·34	2·00	27	17	—4·0	6·6	+2·7	0	0	14	4	2	0	10	0	0	0	0	8	0	1	2	14	1	4	Darjiling.
·3	+0·5	7·8	13·65	—0·90	1·94	25	17	+0·6	5·3	—0·5	0	0	0	4	0	0	0	8	18	0	0	1	22	2	0	0	2	3	Kalimpong.
·7	—1·0	5·9	10·10	+0·42	2·10	30	15	—0·8	0·5	—0·8	0	0	0	0	1	0	0	0	29	11	0	0	2	1	0	1	2	13	Katmandu.
·4	—1·7	3·4	1·48	—5·86	0·54	20	4	—6·1	10·0	+3·8	0	1	1	0	0	5	18	5	0	1	0	0	0	0	10	16	3	0	Muktesar.
·6	—1·9	4·7	2·44	—6·34	1·11	27	5	—5·2	3·3	—2·2	5	6	3	3	4	1	0	0	8	3	3	2	5	12	4	0	1	0	Mussooree.
·7	—1·7	3·4	1·37	—4·67	0·59	5	4	—5·8	1·5	—1·6	4	7	3	2	2	0	1	0	11	3	1	1	1	5	9	4	1	3	Simla.
·3	—3·3	2·6	0·80	—3·85	0·39	23	2	—3·8	7·8	—0·2	0	1	0	2	1	4	4	5	13	0	4	1	1	0	7	1	3	13	Abu.
·0	—0·1	7·8	8·91	—0·13	1·47	10	12	+1·7	3·3	—2·9	0	1	0	0	2	4	9	4	10	0	2	0	1	3	3	15	4	2	Pachmarhi.
·7	—0·2	9·0	29·60	—13.09	6·75	14	22	—0·2	4·9	—5·3	1	1	0	1	0	20	3	2	2	1	1	0	0	1	18	3	4	2	Mahabaleshwar
·1	—0·6	8·7	24·54	—0·96	2·25	25	21	—2·2	8·7	+3·0	0	0	0	0	0	9	15	6	0	0	0	0	1	0	9	15	5	0	Mercara.
·1	—0·6	8·8	6·22	—0·35	0·95	25	18	+3·9	6·6	+1·3	0	1	1	0	2	9	11	0	6	3	1	1	0	1	8	13	1	2	Ootacamund
·1	—2·0	..	1·75	—1·06	0·25	6	7	+1·0	5·9	+1·5	5	0	0	3	2	2	2	4	12	..	..	..	..	..	..	..	..	..	Coonoor.
·7	+0·2	9·4	5·37	+1·13	1·34	1	18	+8·1	10·1	+0·7	1	0	1	1	2	4	15	5	1	0	3	1	2	1	2	14	6	1	Kodaikanal.
																													CEYLON—
·5	+0·5	8·3	10·70	+2·33	2·27	21	13	—1·0	..	..	0	1	0	1	2	16	9	0	1	0	0	0	1	2	20	7	0	0	Colombo.
·0	+1·8	6·5	0·05	—0·89	0·03	25	0	—1·6	..	..	0	0	0	0	1	29	0	0	0	0	0	2	1	0	26	1	0	0	Trincomalee.
·4	+4·0	9·3	0·75	—1·34	0·20	17	3	—2·8	..	..	0	0	0	0	0	29	1	0	0	0	0	0	0	0	30	0	0	0	Hambantota.
·8	..	6·3	0	..	0	..	0	..	..	..	0	0	0	0	11	19	0	0	0	0	0	0	0	12	18	0	0	0	Mannar.

(c) Mean of 28 days.

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.) AT 4TH CLASS STATIONS—JUNE 1948

STATION.	Maximum temperature °F				Minimum temperature °F				Mean dry bulb temperature 8 hrs. I.S.T. °F.	Mean wet bulb temperature 8 hrs. I.S.T. °F.	Vapour pressure in mb.		Relative Humidity %		Mean cloud amount 8 hrs. I.S.T.	Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind.	
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean, 8 hrs. I.S.T.	Departure from normal.	Mean, 8 hrs. I.S.T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction, 8 hrs. I.S.T.	Velocity in miles per hour.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ASSAM—																							
Lumding ..	91·9	+2·1	97	30	..	..	..	..	84·0	77·7	29·5	—0·4	73	—11	..	7·99	—1·66	2·10	19	11	2·7	..	..
KASHMIR—																							
Jammu ..	104·7	+2·2	113	19,20	77·6	—4·9	60	24	86·0	68·9	16·3	—4·0	40	—7	2·7	7·23	+4·43	3·60	5	2	—1·8	..	..
Kargil (R)																							
MYSORE—																							
Balehonnur ..	77·3	+0·4	86	3	66·3	+0·5	64	21,22	70·1	68·2	22·8	+0·3	91	—4	.	15·67	—1·37	1·70	15	19	—2·1	..	..
TIBET—																							
Yatung (C mbl) ..	65·1	+1·1	70	25, 26	47·9	—0·1	44	5	57·4	56·3	15·0	+1·7	91	+2	7·2	3·03	—2·69	0·40	17	9	—4·9	..	..

R—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M. T.) AT 5TH CLASS STATIONS—JUNE 1948

Division.	Station.	Rainfall, inches				Number of rainy days, (0·10" or more)		Division.	Station.	Rainfall, inches.				Number of rainy days, (0·10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Assam ..	Mawsynram ..	81·84	..	15·64	14	26	..	Kashmir ..	Sonamarg ..	6·46	+3·57	1·90	11	10	—2·8
West Bengal ..	Bankura ..	10·10	—0·43	2·55	17	11	—0·1		Gurez (R) ..						
	Cooch Behar ..	36·60	+2·81	8·00	16	21	+	Bombay, Deccan	Khandala ..	29·62	—3·51	9·22	13	20	—0·3
Bihar ..	Muzaffarpur ..	3·89	—3·81	1·20	22	7	—1·1	Madras, Southeast	Palamcottah ..	0·61	+0·20	0·35	3	2	+0·9
	Chapra ..	2·41	—3·52	0·88	27	5	—2·2	Sikkim ..	Lachung ..	12·86	+2·80	1·90	18	21	1·6
	Arrah ..	3·57	—2·63	0·90	16	7	—0·5								
United Provinces, West.	Meerut ..	0·71	—3·69	0·60	27	1	—3·1								
East Punjab ..	Dharampore ..	1·87	—3·13	0·55	24	7	+0·5								
	Kyelang ..	4·31	—3·33	1·60	11	6	+3·6								
	Dalhousie ..	4·30	—0·81	2·12	5	5	—1·9								

R—Register not received.

MONTHLY MEANS OF UPPER WINDS

NOTE.—Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0 Km. under Table B.

In Tables A & B :—

n represents the number of observations,

V represents the mean wind speed in m/seconds irrespective of direction,

v represents the resultant mean velocity in m/second,

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

For the coordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report January 1948, and subsequent issues.

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JUNE 1948

Station	AHMEDABAD												ALLAHABAD											
Time in I.S.T.	0100				0700				1600				0100				0700				1600			
Ht. in Km. ..	n	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	3·1	242	30	2·4	1·8	241	30	3·7	3·0	244	30	2·6	1·5	269	29	2·9	1·6	279	30	4·0	2·7	317
0·15 a.g. ..	30	8·6	7·3	248	30	5·8	4·6	234	30	6·7	5·7	250	28	8·7	4·6	260	29	7·4	4·4	295	30	6·5	4·0	320
0·6 a.s.l. ..	30	9·7	8·4	253	30	8·1	6·4	254	30	6·0	5·3	245	28	10·2	5·1	264	29	9·0	6·0	310	30	6·5	4·0	323
1·0 „ ..	30	9·2	8·0	258	28	8·2	6·5	261	30	6·3	5·4	250	28	9·4	5·3	283	27	9·0	7·4	307	30	7·2	4·5	321
1·5 „ ..	29	7·0	5·9	263	24	6·6	3·7	248	29	6·2	5·0	253	27	8·2	5·1	292	24	7·0	6·6	300	28	7·4	4·9	321
2·0 „ ..	24	6·0	3·1	267	22	6·5	2·4	235	29	6·5	4·5	261	20	6·1	3·3	296	24	6·6	5·8	303	25	6·8	4·9	318
2·5 „ ..	18	5·9	1·8	244	22	7·0	1·9	215	28	6·4	3·1	280	7	5·3	3·0	8	24	7·0	6·2	302	21	8·0	6·6	314
3·0 „ ..	15	6·0	1·8	260	21	6·7	0·8	236	25	6·7	2·2	291	4	5·9	3·6	333	24	7·2	6·2	303	20	8·0	6·7	313
4·0 „ ..	3	5·8	2·3	301	16	6·4	0·9	129	21	6·8	2·3	18					21	7·3	5·3	294	14	7·2	6·3	301
5·0 „ ..					11	7·0	1·4	234	13	7·7	3·7	16					15	7·3	5·7	280	10	8·6	7·2	314
6·0 „ ..					7	3·6	2·4	194	12	6·4	2·5	323					13	7·5	5·5	265	5	6·5	5·0	332
7·5 „ ..					4	6·6	5·1	173	9	6·7	1·7	298					10	10·0	7·9	282	1	6·0	6·0	310
9·0 „ ..					4	8·5	4·8	180	4	11·4	7·8	279					8	12·9	11·3	282	1	4·0	4·0	315

Station	AMBALA												ANANTAPUR								ASANSOL			
Time in I.S.T.	0100				0700				1600				0700				1600				0100			
Ht. in Km. ..	n	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	0·5	357	30	2·4	0·4	340	30	3·3	2·3	249	30	4·6	4·3	253	30	6·1	5·6	268	30	2·2	1·7	173
0·15 a.g. ..	29	8·7	5·2	336	30	8·6	2·3	1	30	7·2	5·1	289	30	7·6	7·2	249	30	8·8	8·2	267	28	6·7	5·4	181
0·6 a. s. l. ..	29	8·8	5·4	336	30	10·0	2·7	350	30	7·4	6·0	300	30	90	8·5	252	30	9·1	8·5	268	28	7·5	5·9	195
1·0 „ ..	29	7·9	5·2	325	30	8·9	2·8	324	30	7·2	5·5	300	30	12·8	12·2	269	30	10·0	9·2	268	27	7·1	4·1	217
1·5 „ ..	27	6·5	5·5	316	30	7·7	3·8	302	30	9·3	5·5	298	29	13·3	12·7	275	30	11·0	10·0	268	23	7·3	4·3	263
2·0 „ ..	27	6·9	6·1	314	29	6·8	5·2	303	29	6·9	5·4	293	29	11·1	9·9	280	30	10·8	9·8	270	12	7·4	4·9	302
2·5 „ ..	21	7·2	6·3	304	28	7·7	6·6	306	29	7·1	6·0	303	26	8·6	7·4	282	27	9·4	7·2	275	4	8·5	8·2	311
3·0 „ ..	14	8·2	7·3	293	27	8·8	7·9	310	28	7·7	6·8	307	24	7·1	5·2	280	25	8·2	6·0	275	2	7·5	7·4	317
4·0 „ ..					22	9·7	8·0	301	26	8·2	7·1	308	16	5·2	3·1	194	15	5·5	1·3	240				
5·0 „ ..					16	10·7	7·7	295	23	9·3	8·0	307	11	5·4	3·2	130	12	4·1	1·5	47				
6·0 „ ..					13	9·6	7·5	257	22	10·5	9·0	293	9	6·1	4·2	112	9	5·8	4·9	39				
7·5 „ ..					4	18·4	13·0	246	14	15·6	13·9	259	6	9·8	9·8	85	5	6·1	4·6	69				
9·0 „ .					3	23·8	23·7	245	8	29·0	25·7	268	4	10·3	10·1	74	1	8·0	8·0	90				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JUNE 1948

Station	ASANSOL												BANGALORE											
Time I.S.T. ..	0700				1100				1600				0100				0700				1600			
Ht. in Km. ..	n	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	1·6	164	15	1·5	1·1	190	30	2·1	0·9	142	29	5·1	4·9	250	30	5·5	4·7	247	30	5·4	4·9	261
0·15 a.g. ..	30	4·8	2·9	176	15	4·1	2·6	200	26	5·3	1·5	142	25	8·1	7·9	247	29	8·8	8·4	253	30	9·4	8·4	258
0·6 a.s.l. ..	28	6·7	3·4	237	15	4·0	2·9	233	26	5·4	1·0	144												
1·0 „ ..	23	7·5	5·3	263	15	5·3	4·5	267	25	5·5	0·9	286	25	7·3	7·3	244	30	7·0	6·7	252	30	8·0	7·2	257
1·5 „ ..	20	7·7	6·4	282	14	6·3	6·0	294	21	6·3	3·4	289	22	11·9	11·8	266	18	10·9	10·6	286	30	9·7	9·1	263
2·0 „ ..	14	7·9	7·1	310	6	8·9	8·5	313	12	7·0	5·7	312	13	8·5	7·9	292	11	8·8	7·4	285	27	9·9	9·2	270
2·5 „ ..	7	8·6	7·6	313	1	5·0	5·0	315	8	6·9	6·0	307	7	3·4	2·7	24	10	6·7	4·1	295	16	7·7	6·2	280
3·0 „ ..	4	8·0	7·4	307					8	8·3	7·2	310	1	1·7	0·3	225	8	4·3	2·1	347	12	6·0	4·1	275
4·0 „ ..	1	4·5	4·5	310					2	6·7	6·5	337					6	8·9	1·5	78	6	2·9	1·1	65
5·0 „ ..																	3	3·0	3·0	100	6	4·8	3·8	68
6·0 „ ..																	2	6·5	5·4	73	5	5·6	4·7	34
7·5 „ ..																	1	5·5	5·5	105	4	5·6	3·9	56
9·0 „ ..																	1	4·0	4·0	85	2	8·5	8·4	84

Station	BAREILLY								BHOPAL												BHUJ			
Time in I.S.T.	0700				1600				0100				0700				1600				0100			
Ht. in Km. ..	n	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	0·4	26	30	2·9	2·1	300	30	4·9	4·3	265	30	5·1	4·3	266	30	3·9	3·0	269	30	4·9	4·6	227
0·15 a. g. ..	30	8·0	1·5	333	30	7·1	5·1	294	26	10·1	8·7	270	30	8·1	7·1	263	30	5·4	3·9	276	30	9·9	9·4	232
0·6 a.s. l. ..	30	10·4	3·6	313	30	8·1	6·4	297	26	9·1	7·6	267	30	7·3	6·4	260	30	5·2	3·7	270	30	12·4	11·5	237
1·0 „ ..	30	10·5	6·5	309	30	8·6	7·2	298	25	11·1	10·2	280	30	9·6	9·2	293	30	5·6	5·3	287	28	9·3	7·7	243
1·5 „ ..	28	9·2	6·9	307	30	9·3	8·2	298	22	8·5	7·1	290	29	9·5	7·8	309	30	5·6	4·9	298	18	7·5	5·3	246
2·0 „ ..	25	8·5	6·5	305	28	9·3	8·4	295	17	5·7	2·5	305	27	5·5	3·1	338	28	5·2	3·2	310	9	4·9	3·1	245
2·5 „ ..	23	9·9	7·2	302	26	9·2	8·8	297	12	4·8	1·5	327	24	5·4	1·8	40	27	5·5	2·6	325	2	2·3	1·8	204
3·0 „ ..	20	9·3	7·7	306	23	9·1	7·8	300	8	5·8	1·8	95	23	6·0	2·5	70	27	6·4	2·3	348	1	2·0	2·0	140
4·0 „ ..	14	8·6	5·9	307	21	11·0	9·1	300	2	4·5	0·4	158	17	5·4	0·4	219	22	6·0	1·4	351				
5·0 „ ..	10	8·9	4·1	306	16	9·0	6·0	303					12	4·6	3·1	260	17	6·1	2·7	284				
6·0 „ ..	3	8·2	6·4	256	15	10·5	8·3	289					9	4·7	2·3	243	12	7·6	4·6	283				
7·5 „ ..	2	9·5	6·9	270	12	11·2	6·7	276					6	6·5	3·3	245	3	7·2	3·8	258				
9·0 „ ..	1	8·5	8·5	235	7	12·7	7·5	255					3	6·3	0·9	122	1	2·0	2·0	235				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JUNE 1948

Station	BHUJ								BIKANER								BOMBAY							
Time in I. S. T.	0700				1600				0700				1600				0100				0700			
Height in Km.	n	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	3·5	229	30	6·3	6·0	229	30	3·2	2·3	240	30	3·6	2·9	249	30	3·4	2·2	243	30	2·7	0·5	199
0·15 a.g. ..	30	8·0	7·4	233	30	10·4	9·9	234	30	8·7	5·7	243	30	5·8	4·8	253	27	5·4	3·8	219	29	5·4	2·0	221
0·6 a. s. l. ..	30	12·8	11·6	242	30	10·9	10·1	239	29	10·4	7·3	260	30	5·8	4·8	248	26	6·0	4·5	235	28	6·3	4·0	246
1·0 „ ..	27	11·3	9·5	242	30	9·6	8·5	244	29	8·9	6·6	259	30	5·6	4·3	248	22	6·0	4·4	254	21	5·7	3·8	251
1·5 „ ..	20	9·6	6·9	254	26	7·8	5·7	256	29	7·7	5·4	259	30	6·1	4·8	256	17	5·3	2·6	251	14	6·1	3·0	271
2·0 „ ..	14	8·1	3·7	251	19	5·6	2·7	255	28	6·8	4·6	264	28	6·3	5·2	257	12	5·3	1·4	231	12	6·5	1·6	277
2·5 „ ..	7	6·7	1·3	330	15	5·2	1·2	252	26	6·4	4·1	257	24	5·5	4·7	259	7	5·4	1·0	136	8	5·1	0·1	204
3·0 „ ..	6	6·8	2·1	340	14	5·8	0·6	254	23	5·9	3·5	275	24	5·2	4·4	267	5	5·4	0·5	139	5	5·2	4·0	114
4·0 „ ..	3	7·3	3·6	2	10	6·1	2·8	39	20	6·9	4·9	290	23	5·2	4·1	285	1	3·5	3·5	145	4	5·1	3·7	113
5·0 „ ..	3	4·8	3·5	24	9	7·2	3·5	56	9	6·7	3·8	254	20	7·1	5·3	281					2	5·3	5·2	93
6·0 ..	2	6·7	6·1	234	6	7·0	2·0	293	9	8·7	6·1	227	16	9·6	7·0	273					2	4·2	4·2	129
7·5 „ ..	1	8·0	8·0	220	3	7·0	5·4	300	5	11·6	10·9	245	10	12·9	9·5	271								
9·0 „ ..					3	10·8	5·4	326	4	14·0	11·5	246	6	17·0	13·1	259								

Station	BOMBAY				CALCUTTA																COCHIN			
Time in I. S. T.	1600				0100				0700				1100				1600				0100			
Height in Km.	n	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	252	30	3·9	3·3	176	30	3·6	2·6	170	15	5·2	4·9	190	30	4·3	3·6	184	30	2·1	0·6	256
0·15 a.g. ..	27	6·2	5·2	248	29	10·7	9·6	176	30	5·9	4·6	184	15	5·9	5·5	187	29	6·7	5·2	184	18	4·0	2·3	256
0·6 a.s.l. ..	26	6·5	5·4	255	29	12·0	10·9	197	30	9·7	7·8	207	15	7·5	7·0	202	29	7·2	5·6	191	18	7·4	6·5	27[illegible]
1·0 „ ..	22	5·9	4·5	258	28	10·8	8·8	199	28	9·4	7·7	216	15	8·3	7·4	230	29	6·3	3·2	204	16	7·9	7·2	28[illegible]
1·5 „ ..	20	4·9	2·7	243	23	7·5	5·3	222	23	6·7	4·8	235	12	7·9	7·0	254	26	5·1	2·5	243	11	6·2	5·7	28[illegible]
2·0 „ ..	18	5·2	1·9	209	18	7·0	3·8	262	23	6·4	4·3	247	9	7·5	6·3	265	20	5·6	3·6	278	5	5·1	4·8	30[illegible]
2·5 „ ..	17	5·7	2·2	194	11	8·0	5·3	293	19	5·8	4·0	267	2	8·0	7·9	288	16	6·4	4·3	300	4	5·5	3·7	30[illegible]
3·0 „ ..	16	5·4	1·1	185	8	8·9	6·9	308	15	7·1	4·9	259	1	9·5	9·5	290	14	7·6	4·4	305	4	5·9	3·1	27[illegible]
4·0 „ ..	13	5·7	2·3	134					5	2·4	1·2	146					9	10·6	8·8	314	1	1·0	1·0	19[illegible]
5·0 „ ..	12	5·6	2·4	129					3	3·2	2·9	124					6	8·3	5·7	336	1	8·0	8·0	25[illegible]
6·0 „ ..	11	6·7	3·3	131					1	4·0	4·0	185					5	7·0	4·1	325				
7·5 „ ..	6	6·8	5·1	117													1	5·0	5·0	30				
9·0 „ ..	1	8·0	8·0	100																				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JUNE 1948

Station	COCHIN								DEOLALI				DIBRUGARH								GADAG			
Time in I.S.T.	0700				1600				0700				0700				1600				0700			
Height in Km.	n	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	0·2	334	30	3·5	2·6	291	9	3·5	3·2	260	30	1·3	0·8	27	30	1·4	0·9	20	30	6·0	5·6	247
0·15 a.g. ..	22	3·3	1·0	190	21	5·4	4·9	268	9	6·4	6·4	254	20	3·6	2·3	43	26	2·7	1·1	17	30	9·0	8·5	248
0·6 a. s. l. ..	21	8·0	7·4	273	21	9·2	8·7	279	9	4·7	4·7	256	20	3·8	1·9	77	25	2·9	1·0	162				
1·0 „ ..	17	9·6	9·0	273	19	10·4	9·9	287	9	7·7	7·5	261	18	3·4	1·2	91	25	3·3	2·0	211	30	12·2	11·0	263
1·5 „ ..	12	9·5	9·1	276	16	8·8	8·4	289	9	7·1	6·7	16	16	3·3	1·5	198	23	4·1	3·4	222	22	13·0	12·0	276
2·0 „ ..	11	7·7	7·1	276	14	8·6	7·9	281	8	5·2	2·5	261	15	2·7	1·8	222	22	4·9	4·3	215	21	9·9	9·1	278
2·5 „ ..	7	3·4	1·6	270	7	6·1	4·4	275	8	4·7	0·8	270	14	3·2	2·6	211	19	4·4	3·9	208	20	7·7	6·3	276
3·0 „ ..	6	4·5	1·3	205	7	7·1	4·1	268	6	4·4	2·3	280	13	3·2	2·9	228	19	4·1	3·8	214	19	6·1	4·4	282
4·0 „ ..	5	6·3	2·9	152	4	5·5	2·9	163	5	3·6	2·4	268	9	4·6	4·3	229	17	4·5	4·2	230	13	4·6	1·5	162
5·0 „ ..	4	4·7	2·6	81	3	5·0	3·9	88	5	3·2	1·7	265	6	4·8	4·7	246	16	5·4	5·0	234	10	5·0	1·8	103
6·0 „ ..	3	5·0	4·9	83	3	5·8	2·5	55	3	5·0	4·4	218	3	4·7	3·1	273	12	5·0	4·7	255	10	4·9	3·5	87
7·5 „ ..	2	6·0	5·3	80	2	3·7	2·9	295	3	3·5	1·0	255					9	5·7	4·1	252	8	7·1	6·2	105
9·0 „ ..	2	4·5	2·5	25	2	3·7	3·7	4·7	3	5·7	1·7	27					6	8·7	6·1	277	5	7·9	6·6	90

Station	GADAG				GAYA																GOPALPUR			
Time in I. S. T.	1600				0100				0700				1100				1600				0700			
Height in Km.	n	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	6·0	251	30	2·7	0·9	103	30	2·5	0·7	189	15	4·8	4·5	301	30	4·4	1·5	314	30	5·2	4·5	209
0·15 a.g. ..	30	9·3	8·5	257	29	5·9	1·6	172	29	5·5	1·8	210	15	7·2	6·5	296	30	6·6	2·8	313	29	7·1	6·3	215
0·6 a. s. l ..					29	7·1	2·5	219	29	7·3	3·2	265	15	8·6	8·3	298	30	8·7	3·6	321	29	6·6	5·2	260
1·0 „ ..	30	9·7	8·9	260	29	7·6	3·5	251	29	8·1	4·3	286	12	7·2	7·0	300	29	7·2	2·4	331	29	7·6	6·5	281
1·5 „ ..	28	9·5	8·7	266	28	7·4	3·5	274	26	7·8	5·5	302	11	9·6	9·4	300	28	7·9	2·9	334	29	8·5	7·7	292
2·0 „ ..	23	7·8	6·7	274	13	5·6	1·2	308	24	8·3	6·8	306	7	8·6	8·5	300	25	8·5	3·7	333	28	6·7	6·0	291
2·5 „ ..	21	6·9	5·4	275	2	5·3	5·3	87	15	6·8	4·9	309	5	10·0	10·0	300	23	9·2	5·2	321	24	4·7	3·5	291
4·0 „ ..	16	5·3	3·6	275	2	5·0	4·9	89	12	6·0	4·4	331	1	12·0	12·0	300	13	11·0	10·7	303	22	4·5	5·2	300
3·0 „ ..	10	4·3	2·2	193					4	5·9	3·5	320					8	12·9	12·3	295	13	4·7	2·4	34
5·0 „ ..	8	3·4	0·5	265													3	17·3	16·6	311	12	5·0	1·8	55
6·0 „ ..	2	2·3	2·1	13																	11	6·5	3·9	48
7·5 „ ..	1	1·0	1·0	165																	5	6·2	3·8	97
9·0 „ ..	1	4·0	4·0	120																	4	6·9	5·5	87

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

JUNE 1948

Station	GOPALPUR				GORAKHPUR								HYDERABAD (Dn.)											
Time in I.S.T.	1600				0700				1600				0100				0700				1600			
Height in Km.	n	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	7·3	6·6	198	30	2·7	2·5	77	30	2·3	0·7	346	30	5·2	4·7	257	30	4·8	4·4	276	30	4·9	3·8	253
0·15 a.g. ..	30	11·2	10·1	203	30	7·3	6·1	80	29	4·9	1·4	355	30	9·6	8·8	262	30	8·9	7·9	280	30	7·3	5·8	265
0·6 a. s l. ..	30	5·7	3·5	227	30	7·9	4·0	109	29	4·7	1·3	355	30	7·7	7·2	257	30	6·8	6·0	275	30	6·6	5·2	261
1·0 „ ..	30	4·9	3·3	287	28	8·1	0·4	201	29	5·4	1·1	333	30	12·1	11·1	270	30	13·2	11·7	293	30	7·3	5·9	272
1·5 „ ..	27	5·4	3·8	310	26	9·3	2·1	306	25	6·9	2·0	319	30	11·6	10·4	276	29	12·6	11·2	292	30	8·0	6·5	277
2·0 „ ..	26	5·7	3·9	318	20	11·2	2·0	340	20	7·8	4·3	295	30	9·0	7·5	275	29	10·1	8·1	292	28	7·6	6·1	287
2·5 „ ..	24	6·8	3·8	322	14	10·9	4·9	306	17	10·5	7·7	294	19	5·6	3·3	260	27	7·5	5·1	286	23	7·5	5·3	280
3·0 „ ..	24	6·5	3·9	313	11	10·3	5·9	318	16	12·5	9·3	297	12	5·8	3·1	232	27	6·5	3·5	272	23	7·6	5·1	278
4·0 „ ..	21	7·7	5·0	313	7	7·8	5·2	327	12	11·1	9·6	295	2	5·5	5·4	92	26	5·9	2·3	238	10	6·1	1·6	260
5·0 „ ..	17	6·4	4·1	312	2	5·8	3·5	248	3	3·5	1·5	324					19	6·7	1·9	184	5	6·2	2·2	34
6·0 „ ..	13	5·9	3·3	354	1	5·5	5·5	170	2	4·5	3·4	255					16	6·6	1·2	156	5	6·5	5·1	44
7·5 „ ..	8	7·9	5·5	56					2	9·5	7·0	250					8	7·2	5·5	112	2	9·7	9·6	86
9·0 „ ..	5	5·4	3·7	67					1	2·0	2·0	140					1	7·0	7·0	95	2	10·0	10·0	82

Station	JAGDALPUR								JAMNAGAR								JAMSHEDPUR							
Time in I. S. T.	0700				1600				0700				1600				0700				1100			
Height in Km.	n	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	1·5	228	30	3·3	2·6	260	5	7·5	7·4	230	6	12·7	12·3	265	30	1·9	0·6	270	15	1·9	1.2	266
0·15 a.g. ..	27	6·1	4·4	249	30	6·2	5·0	261	5	7·4	7·1	240	6	9·2	8·5	267	30	3·3	1·2	248	15	3·1	2·6	267
0·6 a.s.l. ..	27	4·2	3·1	246	30	5·0	4·0	258	5	10·4	10·0	249	6	9·7	9·2	252	28	5·1	4·1	243	15	4·4	3·5	275
1·0 „ ..	26	8·9	6·9	282	29	6·5	5·2	263	5	9·5	7·3	241	5	8·4	8·3	254	27	7·5	5·9	264	15	5·0	3·8	282
1·5 „ ..	23	9·4	7·8	292	27	5·9	4·5	273	3	9·8	3·2	305	2	4·5	4·5	288	23	7·4	5·7	288	15	6·7	5·8	301
2·0 „ ..	22	8·1	6·2	298	25	6·5	4·7	290	3	6·3	1·8	309	1	3·5	3·5	310	23	6·4	5·4	310	12	6·9	6·4	310
2·5 „ ..	21	6·4	3·4	312	21	5·6	3·5	294	1	5·0	5·0	140	1	5·0	5·0	335	19	7·5	6·2	313	7	6·2	5·8	333
3·0 „ ..	19	4·8	1·6	349	18	4·8	2·3	292	1	3·0	3·0	110	1	5·5	5·5	5	18	7·3	5·5	317	7	7·5	7·1	334
4·0 „ ..	11	4·3	1·7	167	12	6·0	1·3	320	1	10·5	10·5	75	1	11·0	11·0	45	12	5·7	3·8	333				
5·0 „ ..	11	4·1	1·5	154	10	4·5	0·8	12	1	10·0	10·0	60	1	10·0	10·0	55	7	4·9	2·3	38				
6·0 „ ..	9	5·4	3·3	340	4	5·4	2·8	53	1	11·0	11·0	90	1	5·0	5·0	110	5	5·2	4·5	143				
7·5 „ ..	6	6·1	4·1	5	1	12·5	12·5	95	1	10·0	10·0	85												
9·0 „ ..	4	5·7	4·6	51																				

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

JUNE 1948

Station	JAMSHEDPUR				JHARSUGUDA												JODHPUR							
Time in I. S. T.	1600				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	0·7	216	30	1·7	0·6	219	30	1·5	0·8	213	30	2·0	1·0	274	30	2·8	2·6	229	30	2·5	2·4	226
0·15 a.g. ..	29	4·3	1·1	239	25	6·7	2·7	245	28	4·2	1·9	238	29	4·8	2·8	264	30	10·8	9·9	233	30	8·4	7·7	239
0·6 a. s. l. ..	29	4·9	1·7	239	23	7·7	4·0	268	27	5·6	3·7	275	29	5·6	3·9	270	30	13·1	12·3	239	30	10·5	9·5	240
1·0 „ ..	28	5·4	2·1	250	22	8·3	4·9	266	24	6·5	4·4	293	27	5·8	4·1	282	29	13·2	12·5	246	30	11·5	10·4	244
1·5 „ ..	28	5·5	2·5	295	21	7·2	4·5	271	23	7·3	4·9	302	24	5·8	3·7	293	20	9·7	8·1	255	28	11·6	10·3	244
2·0 „ ..	25	5·8	3·4	310	17	6·9	4·8	285	23	7·6	5·4	307	24	6·4	4·2	302	11	7·3	4·8	245	21	10·2	8·4	252
2·5 „ ..	23	6·1	3·4	308	12	5·9	4·3	297	22	7·0	5·3	305	24	6·1	3·5	293	2	3·3	1·9	262	16	7·7	6·0	267
3·0 „ ..	22	6·0	3·6	319	12	6·2	3·8	290	21	5·8	4·2	314	23	5·6	2·9	300	1	1·5	1·5	110	12	7·2	5·1	280
4·0 „ ..	18	8·2	4·9	303	1	8·0	8·0	9·5	19	6·3	4·5	293	19	7·0	4·8	302					4	6·1	4·9	295
5·0 „ ..	14	6·9	2·8	279					10	6·9	3·6	281	18	7·7	6·0	292					2	7·7	7·7	231
6·0 „ ..	6	8·2	6·2	297					8	6·7	3·3	4	11	6·6	4·9	317					2	13·5	13·5	225
7·5 „ ..	3	4·8	4·2	234					3	4·2	4·0	79	4	7·0	3·7	257								
9·0 „ ..									3	4·7	4·2	77	2	7·3	5·7	263								

Station	JODHPUR				JUBBULPORE												MADHOSAGAR							
Time in I. S. T.	1600				0100				0700				1600				0700				1600			
Height in Km.	n	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	3·5	234	30	1·6	1·1	233	30	1·9	1·3	228	30	2·2	1·1	276	30	4·0	2·8	266	30	3·6	1·4	276
·15 a.g. ..	30	6·9	6·4	237	27	6·7	4·5	243	28	6·0	4·4	249	29	5·3	3·0	282	30	6·7	4·7	276	30	4·9	2·5	304
·6 a.s.l. ..	30	4·6	7·4	240	27	7·2	4·8	245	28	6·7	4·8	254	28	5·5	3·1	281	29	9·1	7·4	281	30	4·8	2·7	303
·0 „ ..	29	7·5	6·9	236	27	8·5	5·3	260	27	9·6	7·6	287	28	6·4	5·0	293	28	9·3	7·7	299	29	5·6	3·6	299
·5 „ ..	28	7·6	6·6	241	26	7·3	4·4	277	27	8·6	6·8	309	28	6·8	5·3	309	25	7·0	5·6	321	27	6·3	4·2	303
·0 „ ..	22	7·2	5·8	244	25	6·4	3·2	291	24	6·2	4·3	315	26	6·0	4·5	309	23	6·5	5·2	328	23	7·8	5·5	310
·5 „ ..	20	7·2	5·3	254	17	5·9	3·2	321	23	5·3	3·2	331	24	5·7	3·4	318	20	6·1	5·1	338	16	6·9	4·4	326
·0 „ ..	19	7·7	3·1	248	8	5·9	1·9	345	23	5·4	2·9	336	21	6·0	2·7	326	14	5·5	4·4	4	15	7·0	5·3	318
·0 „ ..	15	4·2	2·5	272					20	6·8	2·7	338	18	7·3	3·5	352	8	6·3	5·4	15	13	8·6	6·2	297
·0 „ ..	10	6·5	3·5	311					12	6·3	2·5	354	10	6·3	2·3	321	5	6·7	3·0	337	8	6·7	5·8	264
·0 „ ..	5	7·1	5·1	269					8	5·6	3·4	309	6	5·3	2·3	322					4	7·8	6·7	264
·5 „ ..	3	12·0	11·9	256					6	8·1	4·3	294	5	9·0	2·8	256					3	14·7	13·4	263
·0 „ ..	1	8·0	8·0	270					4	8·3	1·5	72	3	7·5	4·1	167					3	16·5	12·6	283

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

JUNE 1948

Station	MADRAS												MALEGAON											
Time in I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	4·2	234	30	4·7	4·4	254	30	6·4	3·0	248	30	5·0	4·6	271	30	3·2	2·9	272	30	5·1	4·0	274
0·15 a. g. ..	30	9·0	8·5	240	30	9·5	9·1	253	30	8·9	5·2	245	28	9·1	8·5	271	29	6·3	5·9	279	28	6·9	5·3	280
0·6 a. s. l. ..	30	12·1	11·4	252	30	11·0	10·7	272	30	6·8	4·8	261	28	9·1	8·5	271	29	6·3	5·9	279	28	6·9	5·3	280
1·0 „ ..	30	11·9	11·3	263	30	11·3	10·8	274	28	6·6	5·5	266	28	10·0	9·0	277	29	7·9	6·7	288	28	6·1	4·2	281
1·5 „ ..	29	10·5	10·0	272	30	9·5	8·9	279	27	7·5	7·0	271	27	7·6	6·3	302	28	7·5	5·2	301	28	5·4	3·4	297
2·0 „ ..	25	8·5	7·7	280	30	8·0	7·0	273	27	8·4	7·3	274	23	5·4	2·7	359	28	5·7	2·5	338	26	5·3	3·0	306
2·5 „ ..	14	5·6	4·1	310	29	8·2	6·5	269	21	8·1	7·5	278	19	4·6	1·2	59	25	5·3	1·5	53	23	5·5	2·6	344
3·0 „ ..	9	5·5	3·3	345	29	8·6	6·4	264	17	6·6	5·2	280	16	4·3	0·8	127	24	5·8	1·6	87	22	5·5	1·9	18
4·0 „ ..	2	3·7	1·7	85	28	8·0	5·6	254	13	4·4	2·4	265	6	4·2	0·9	112	22	5·7	1·5	76	17	6·5	2·2	91
5·0 „ ..					28	7·4	4·0	258	9	4·8	0·7	214					19	4·9	0·2	57	12	6·8	3·0	203
6·0 „ ..					26	6·3	1·8	204	5	5·9	4·9	24					15	5·3	1·2	239	9	8·3	3·0	234
7·5 „ ..					19	7·7	2·1	114	3	8·2	6·7	48					12	5·8	1·8	275	6	7·3	2·9	254
9·0 „ ..					15	8·0	6·6	78									10	7·4	2·1	264	4	7·0	4·0	87

Station	MANGALORE												MASULIPATAM											
Time in I.S.T.	0100				0700				1600				0100				0700				1600			
Ht. in Km.	n	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	1·7	253	30	3·0	0·4	213	30	3·4	2·5	274	30	3·2	2·9	217	30	2·1	1·8	255	30	3·8	1·9	233
0·15 a. g. ..	23	5·9	3·5	270	30	6·1	1·9	257	28	6·1	5·8	274	28	9·2	8·6	228	30	7·3	6·8	263	29	7·2	4·2	256
0·6 a. s. l. ..	20	7·1	6·1	274	24	8·2	6·6	264	27	8·9	8·4	279	28	11·1	10·1	250	30	12·6	12·0	281	29	8·4	7·0	275
1·0 „ ..	14	7·4	6·5	283	15	9·0	8·1	283	18	8·9	8·4	290	28	10·9	10·3	264	30	12·5	11·8	287	28	8·3	7·5	278
1·5 „ ..	6	5·7	4·7	277	10	6·5	6·1	283	12	7·0	6·3	295	26	9·2	8·7	274	30	10·4	9·7	284	28	8·4	7·8	279
2·0 „ ..	3	4·0	3·9	288	9	4·4	4·1	284	9	5·5	4·7	301	24	7·7	7·2	282	29	7·9	6·9	280	28	8·2	7·4	282
2·5 „ ..	3	2·3	1·7	82	9	3·8	1·7	265	9	5·3	2·5	284	13	4·6	3·5	307	28	7·1	5·3	277	24	7·7	6·9	283
3·0 „ ..	2	3·3	2·9	100	8	3·0	1·8	148	7	3·7	1·2	135	12	4·0	2·5	322	26	7·2	4·6	265	19	5·8	5·0	282
4·0 „ ..					6	3·9	2·9	118	7	3·6	2·9	120	1	5·5	5·5	5	22	6·6	2·6	256	16	5·3	3·2	298
5·0 „ ..					4	5·0	3·4	117	7	3·6	1·8	110					17	6·5	2·0	191	13	5·1	2·4	313
6·0 „ ..					4	3·5	2·9	109	6	2·4	0·4	111					8	6·3	2·3	10	11	6·9	2·0	21
7·5 „ ..					2	4·7	4·5	100	3	4·5	1·7	104					6	6·4	4·5	71	6	7·1	1·2	52
9·0 „ ..					1	13·0	13·0	90	1	4·0	4·0	105					4	8·4	8·1	74	1	11·0	11·0	100

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

JUNE 1948

Station	MINICOY								NAGERCOIL												NAGPUR			
Time in I.S.T.	0700				1400				0100				0700				1600				0100			
Ht. in Km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Suface ..	30	4·9	4·7	271	30	5·4	5·1	273	30	5·2	5·1	275	30	4·3	4·1	278	30	7·2	6·9	268	30	3·1	2·3	273
0·15 a.g. ..	29	9·9	9·4	264	29	10·9	10·4	267	30	11·2	10·9	287	30	9·5	9·1	285	29	12·5	12·1	274	26	7·4	5·3	277
0·6 a. s. l. ..	29	13·2	12·9	263	28	14·1	13·6	272	30	16·0	15·6	285	29	16·6	15·9	285	28	14·9	14·5	286	26	8·5	6·3	279
1·0 „ ..	29	14·4	14·0	277	28	14·6	14·3	280	29	16·1	15·0	283	28	16·5	16·0	282	28	17·3	16·9	287	26	8·7	6·3	283
1·5 „ ..	27	14·4	13·9	284	25	13·1	12·3	286	27	15·5	14·8	281	27	13·7	13·4	280	27	16·8	16·3	289	22	8·5	5·9	279
2·0 „ ..	23	12·3	11·8	284	21	10·5	9·4	287	22	14·0	13·3	272	27	14·0	13·4	276	23	15·8	15·2	286	18	7·6	5·1	263
2·5 „ ..	19	10·4	9·8	284	19	88	7·3	287	15	8·7	6·9	257	22	12·5	1·7	272	19	12·6	10·9	278	13	6·6	3·2	255
3·0 „ ..	13	8·1	7·4	283	13	7·3	5·0	282	13	7·4	3·9	252	19	9·3	6·5	256	18	13·1	10·0	275	6	4·7	1·3	38
4·0 „ ..	7	4·7	3·6	256	9	5·2	1·6	293	7	4·1	0·2	253	13	5·7	1·2	281	15	9·1	5·9	282	1	2·0	2·0	15
5·0 „ ..	7	4·9	1·9	243	4	4·3	2·0	344	1	5·0	5·0	215	11	4·0	1·8	265	13	7·6	5·5	285				
6·0 „ ..	6	3·9	0·5	30	3	4·7	1·4	245	1	3·5	3·5	185	10	3·7	2·0	330	10	3·9	1·9	282				
7·5 „ ..	3	6·0	5·8	93	2	2·5	2·5	162					8	4·9	1·3	68	10	5·7	1·7	89				
9·0 „ ..	1	7·5	7·5	50	2	2·0	1·9	125					8	5·7	3·7	92	9	5·9	6·4	68				

Station	NAGPUR								NEW DELHI												POONA			
Time in I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	2·5	291	30	3·9	2·0	278	30	3·9	1·9	305	30	3·7	2·0	306	30	5·5	4·2	319	30	2·0	1·8	270
0·15 a.g. ..	29	6·8	5·4	294	30	5·9	3·5	274	29	10·0	4·9	291	30	8·1	3·7	297	30	5·9	3·9	311	29	5·9	5·2	263
0·6 a. s. l. ..	29	8·3	6·9	296	30	6·3	4·3	268	28	11·4	5·8	297	29	9·4	5·3	300	30	6·4	4·5	307	29	4·1	3·6	263
1·0 „ ..	28	8·5	7·1	299	30	6·3	5·1	273	28	10·3	6·4	299	27	9·0	6·5	295	30	6·5	4·9	297	29	7·0	6·5	266
1·5 „ ..	28	7·9	5·9	305	28	5·7	4·7	288	26	8·8	6·2	288	24	7·8	5·7	298	29	6·8	5·6	298	28	8·0	6·3	271
2·0 „ ..	24	5·1	2·5	286	24	5·3	3·4	292	14	6·6	5·0	293	19	6·0	5·1	299	25	7·0	6·1	296	26	6·1	2·7	271
2·5 „ ..	23	4·7	1·7	273	22	4·5	1·7	295	5	7·8	6·8	261	14	6·5	5·7	303	23	8·5	7·6	306	23	5·1	0·9	109
3·0 „ ..	21	5·0	0·4	247	19	4·7	1·3	322	2	10·0	7·8	256	10	7·2	5·2	314	22	9·1	8·4	307	21	4·8	2·2	127
4·0 „ ..	17	5·4	0·7	241	16	4·9	1·7	331	2	8·3	7·3	259	9	9·0	6·7	307	17	9·3	7·3	298	13	4·0	2·5	119
5·0 „ ..	15	5·2	2·1	300	9	5·2	2·4	337					6	9·6	7·4	283	12	11·0	8·0	284				
6·0 „ ..	13	6·1	3·6	306	6	6·7	2·8	352					5	9·7	8·3	248	9	12·3	9·6	280				
7·5 „ ..	12	8·2	3·7	312	2	10·5	5·7	323					1	14·5	14·5	274	6	13·2	12·7	249				
9·0 „ ..	11	9·0	2·6	336									1	11·5	11·5	274	5	18·6	17·9	253				

Table A--Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level

JUNE 1948

Station	POONA								PORT BLAIR												RAIPUR			
Time in I.S.T.	0700				1600				0100				0700				1600				0100			
Ht. in Km.	n	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	1·6	1·4	269	30	3·5	3·1	271	30	6·4	5·8	243	30	5·3	4·9	238	30	7·3	7·0	241	30	2·3	1·4	247
0·15 a. g. ..	29	4·7	3·9	264	30	7·1	5·9	259	16	7·2	6·3	235	28	8·1	7·7	235	25	9·8	9·7	238	23	8·0	6·3	267
0·6 a. s. l. ..	29	2·8	2·3	264	30	5·0	4·2	260	14	10·2	9·6	236	28	12·2	11·7	239	22	11·8	11·4	241	23	8·6	6·9	275
1·0 „ ..	29	6·5	5·4	265	30	7·8	6·9	263	11	9·8	8·7	247	25	12·7	12·1	244	16	11·5	10·8	245	20	8·7	7·0	288
1·5 „ ..	27	7·0	5·7	277	29	7·7	6·7	267	8	8·6	7·6	248	15	10·1	9·0	245	4	7·3	5·1	239	18	7·2	5·0	290
2·0 „ ..	26	5·9	3·0	278	25	6·8	4·2	267	7	8·3	6·3	245	7	8·6	6·8	234	3	7·2	5·8	229	10	6·5	4·6	281
2·5 „ ..	25	5·0	1·1	315	21	6·4	2·3	275	3	6·8	3·3	246	6	8·7	6·5	250	1	8·5	8·5	255	5	4·9	2·4	283
3·0 „ ..	24	4·4	0·8	64	17	5·0	0·9	258	1	8·5	8·5	335	6	8·4	4·3	249	1	8·0	8·0	265	5	5·5	2·0	295
4·0 „ ..	22	5·7	1·8	88	10	4·5	1·7	139	1	6·0	6·0	10	5	7·8	1·9	212					1	3·5	3·5	190
5·0 „ ..	17	4·7	1·1	131	7	3·8	1·5	250					4	6·3	1·5	99					1	9·5	9·5	305
6·0 „ ..	16	4·1	1·5	99	5	4·2	1·8	249					1	5·5	5·5	120								
7·5 „ ..	12	4·1	3·0	120	4	3·8	2·6	259																
9·0 „ ..	10	6·3	3·5	119	1	6·0	6·0	285																

Station.	RAIPUR								SAHARSA												TEZPUR			
Time in I. S. T.	0700				1600				0700				1100				1600				0100			
Ht. in Km.	n	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	1·8	1·6	254	30	3·0	1·7	254	30	2·0	1·8	82	15	2·3	2·2	81	30	3·3	3·0	74	30	1·3	0·9	58
0·15 a. g. ..	30	7·4	6·2	265	28	7·1	4·4	266	29	6·6	6·2	88	15	5·4	5·3	86	30	6·9	5·9	80	28	4·2	2·4	76
0·6 a. s. l. ..	30	9·3	7·8	277	29	6·5	4·4	262	27	6·4	4·3	104	15	5·1	5·0	95	30	6·8	5·3	90	27	3·7	1·9	151
1·0 „ ..	29	10·7	8·5	289	28	6·0	4·2	267	21	6·5	1·5	131	13	4·7	1·4	129	30	6·3	3·4	98	26	3·4	2·0	193
1·5 „ ..	27	9·1	6·5	295	25	6·0	4·6	281	16	6·8	2·9	277	10	5·1	4·2	278	27	6·9	1·6	242	20	3·5	2·8	230
2·0 „	25	7·6	4·4	298	24	6·6	4·7	278	10	8·3	5·7	291	6	7·3	7·0	277	24	10·0	5·2	268	13	5·4	5·0	243
2·5 „ ..	24	6·1	2·2	298	23	6·2	4·3	273	8	7·9	5·0	313	5	9·8	9·5	291	21	11·5	8·4	284	9	4·7	4·2	239
3·0 „ ..	23	5·1	1·6	315	20	6·4	4·5	270	5	7·1	6·3	306	5	10·6	10·4	294	18	11·6	8·6	287	9	5·5	4·8	229
4·0 „ ..	20	4·8	1·5	36	14	6·4	2·5	301	3	6·5	5·3	286					14	13·5	13·3	290	4	7·9	6·9	197
5·0 „ ..	17	4·9	0·3	123	9	7·2	3·1	273	1	3·5	3·5	175					10	11·0	10·6	298				
6·0 „ ..	15	6·9	2·4	339	9	6·8	2·5	290	1	1·0	1·0	180					7	9·5	8·6	292				
7·5 „ ..	10	7·4	0·9	335	5	6·9	2·3	312	1	5·5	5·5	250					2	10·0	9·1	317				
9·0 „ ..	7	6·1	0·9	292	2	7·0	4·5	165	1	1·5	1·5	250					1	5·5	5·5	325				

Table A—Monthly mean directions and velocities of upper winds.

Winds upto 9·0 km. above sea level.

JUNE 1948

Station	TEZPUR												TRICHINOPOLY											
Time in I. S. T.	0700				1100				1600				0100				0700				1600			
Ht. in K m.	n	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	0·9	77	15	1·6	0·8	68	30	0·8	0·3	120	30	4·2	4·0	267	30	2·9	2·8	266	30	5·9	5·5	275
0·15 a. g. ..	28	4·0	3·1	76	14	4·1	2·8	64	30	2·9	1·0	117	30	8·9	8·7	266	30	8·1	7·9	265	30	9·6	9·1	266
0·6 a. s. l. ..	28	4·4	2·0	111	12	3·2	0·1	353	30	2·9	1·5	199	30	13·7	13·5	269	30	14·0	13·9	267	30	10·5	10·3	264
1·0 „ ..	25	4·1	1·8	206	12	3·8	2·4	235	30	4·0	2·6	224	30	13·7	13·5	269	30	14·2	14·0	269	30	10·7	10·5	262
1·5 „ ..	21	4·5	2·3	242	11	5·5	4·4	237	28	5·8	4·7	241	30	12·0	11·6	268	30	12·1	11·8	265	30	11·2	10·9	261
2·0 „ ..	18	5·1	3·1	245	9	6·6	6·1	240	27	6·8	5·8	240	28	8·7	7·7	267	30	11·3	10·2	265	30	11·4	10·9	263
2·5 „ ..	14	5·8	4·2	243	8	5·9	5·7	239	26	7·7	6·6	244	18	8·2	5·9	278	30	10·4	8·9	267	29	11·4	10·4	263
3·0 „ ..	11	5·9	3·9	234	8	5·9	5·6	243	24	7·9	6·7	246	17	6·8	3·6	277	30	9·2	7·5	267	27	10·9	9·4	262
4·0 „ ..	5	5·8	3·9	241					17	5·8	4·3	246					21	6·5	3·2	256	18	8·7	6·1	264
5·0 „ ..	4	5·5	3·4	228					16	5·8	4·6	244					16	5·1	0·4	299	12	4·8	2·3	292
6·0 „ ..	2	5·3	1·5	210					15	6·0	4·1	246					13	4·9	1·9	53	11	4·8	1·1	310
7·5 „ ..	1	7·0	7·0	235					11	5·5	3·8	241					12	5·6	3·4	76	6	5·1	2·5	331
9·0 „ ..	1	8·5	8·5	260					4	6·5	3·5	237					8	7·6	5·5	59	5	3·7	2·9	83

Station.	TRIVANDRUM				UDAIPUR												VENGURLA							
Time in I. S. T.	0700				0100				0700				1600				0100				0700			
Ht. in Km.	n	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	1·8	322	30	2·5	1·8	242	30	2·2	1·7	238	30	3·2	2·3	231	30	1·7	0·9	206	30	1·7	0·3	261
0·15 a. g. ..	27	6·9	5·6	306	29	6·7	5·4	250	30	5·8	4·9	250	30	5·9	4·7	247	20	4·5	2·6	259	24	4·9	2·1	276
0·6 a. s. l. ..	27	11·1	10·2	290													18	6·9	5·1	272	18	8·4	6·1	277
1·0 „ ..	25	12·9	12·3	286	29	7·7	6·4	258	30	6·9	5·8	267	30	5·1	4·1	257	11	6·7	4·9	282	14	8·4	7·7	283
1·5 „ ..	24	12·2	11·8	287	29	7·7	6·4	273	30	7·1	5·2	281	30	4·9	3·9	263	6	6·1	3·9	267	8	7·2	6·8	296
2·0 „ ..	19	10·2	9·2	288	28	5·8	3·8	281	27	6·3	2·9	301	30	4·8	3·1	280	3	3·2	2·9	264	8	6·4	5·8	286
2·5 „ ..	15	8·9	6·9	278	23	4·7	0·9	271	25	5·6	1·6	324	29	4·8	2·7	303	3	3·0	2·9	213	6	4·4	2·5	271
3·0 „ ..	14	7·3	4·8	269	15	4·9	0·4	13	22	5·9	1·6	320	28	5·3	2·2	317	2	2·5	1·8	175	6	4·2	2·6	203
4·0 „ ..	11	6·5	3·8	266	1	11·5	11·5	175	17	6·5	0·9	9	23	5·9	1·8	352	1	4·0	4·0	85	6	4·2	3·4	175
5·0 „ ..	8	4·5	1·8	253					11	5·1	1·7	23	17	7·4	2·1	305					6	4·6	3·5	156
6·0 „ ..	5	4·2	1·1	308					4	6·0	4·0	261	15	6·8	4·3	270					5	6·0	4·3	105
7·5 „ ..	5	3·7	3·0	67					1	8·5	8·5	270	10	9·9	7·2	284					5	4·8	4·5	123
9·0 „ ..	4	9·4	9·3	85									2	8·5	8·5	334					4	8·1	7·9	104

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

JUNE 1948

Station	VENGURLA				VERAVAL												VIZAGAPATAM						
Time in I. S. T.	1600				0100				0700				1600				0100				0700		
Ht. in 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 ..	30	2·9	2·1	243	30	7·1	5·9	250	30	5·3	4·4	252	30	6·5	5·6	251	30	2·5	2·3	256	30	1·7	1·5
0·15 a. g. ..	24	7·4	5·8	261	30	7·9	6·9	249	30	6·6	5·7	248	30	7·6	6·8	250	29	7·7	7·4	245	30	6·2	5·7
0·6 a. s. l. ..	21	8·1	6·2	268	30	8·3	7·4	249	29	7·7	6·3	252	30	8·4	7·5	249	29	10·5	10·0	242	30	10·4	9·6
1·0 „ ..	15	8·0	5·9	282	30	8·3	6·8	245	29	7·3	5·5	246	30	7·8	6·8	249	28	10·1	9·4	253	30	10·4	9·4
1·5 „ ..	10	6·7	3·4	288	21	6·9	4·9	240	28	6·5	3·9	245	26	7·0	4·2	248	26	8·7	7·7	269	30	9·7	8·3
2·0 „ ..	7	3·9	2·8	311	11	5·0	1·6	270	28	6·1	2·6	248	22	6·5	3·2	244	24	6·5	5·5	281	27	7·4	6·3
2·5 „ ..	7	4·1	1·1	261	7	5·1	1·3	354	22	6·1	0·8	269	18	7·5	2·2	230	15	4·4	3·3	288	23	5·8	4·4
3·0 „ ..	7	4·3	2·4	203	5	4·2	2·7	96	19	6·0	0·2	264	15	7·5	1·2	190	12	4·3	2·5	311	24	5·2	3·4
4·0 „ ..	7	4·5	2·2	188					16	5·1	0·8	328	11	7·0	1·6	130	1	8·0	8·0	30	16	5·5	1·4
5·0 „ ..	5	2·8	1·1	183					13	6·2	1·3	239	9	6·0	1·5	194					13	5·5	2·5
6·0 „ ..	5	3·1	2·3	95					12	8·0	1·2	240	6	8·0	5·6	210					11	5·9	3·5
7·5 „ ..	2	7·0	6·9	117					11	9·5	2·2	196	5	8·5	3·3	229					6	8·5	8·3
9·0 „ ..	2	9·7	9·7	105					9	10·6	3·8	194	1	14·5	14·5	261					3	10·3	9·9

Station.	VIZAGAPATAM				COOCH BEHAR								CUTTACK										
Time in I. S. T.	1600				0700				1600				0100				0700						
Ht. in 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 ..	30	3·0	2·3	216	30	1·3	1·2	90	30	1·9	1·5	114	30	1·7	1·4	206	30	1·3	1·0	222			
0·15 a. g. ..	30	6·0	5·0	222	24	3·7	3·1	89	30	3·9	3·2	117	28	5·5	4·5	213	28	4·6	3·4	227			
0·6 a. s. l. ..	29	5·9	5·3	248	15	5·1	2·8	117	27	4·7	3·9	128	25	9·6	8·7	223	27	7·4	6·1	258			
1·0 „ ..	29	6·4	5·8	267	14	5·7	2·1	128	25	4·5	2·9	143	24	8·1	7·0	226	21	7·4	6·4	277			
1·5 „ ..	27	7·1	5·9	280	12	5·9	2·0	160	23	5·7	2·8	141	23	6·2	4·4	242	21	6·8	5·4	285			
2·0 „ ..	29	7·9	6·5	283	5	7·5	4·4	110	15	6·9	2·9	135	18	5·4	4·1	260	19	6·4	5·1	289			
2·5 „ ..	27	7·3	5·4	288	4	5·2	0·5	265	14	8·1	3·4	140	8	5·6	3·9	308	17	6·2	3·7	297			
3·0 „ ..	26	7·2	5·1	288	3	9·0	4·4	284	11	8·8	2·4	177	6	6·5	3·4	321	15	6·9	3·4	300			
4·0 „ ..	20	6·0	2·2	292					9	6·9	3·3	233					11	7·1	3·5	279			
5·0 „ ..	17	5·7	2·4	311					6	5·9	2·7	246					8	6·5	1·8	236			
6·0 „ ..	15	6·1	2·4	357					3	4·7	4·1	104					5	5·6	1·3	231			
7·5 „ ..	9	6·3	4·4	73																			
9·0 „ ..	3	9·0	6·8	83																			

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level

JUNE 1948

Station	CUTTACK							
Time in I. S. T.	1100				1600			
Ht. in Km.	n	V	v	D	n	V	v	D
Surface ..	15	1·1	0·6	276	30	2·3	1·0	213
0·15 a. g. ..	14	3·3	2·2	250	26	6·0	3·5	224
0·6 a. s. l. ..	14	4·3	2·6	268	25	6·1	3·8	241
1·0 „ ..	14	6·7	5·2	309	25	5·7	3·8	276
1·5 „ ..	13	7·2	5·8	317	22	6·1	4·7	301
2·0 „ ..	6	7·1	6·6	325	22	6·9	5·7	302
2·5 „ ..	3	6·0	4·9	319	20	7·5	5·8	311
3·0 „ ..	1	4·0	4·0	25	18	8·3	6·3	308
4·0 „ ..	1	8·0	8·0	340	16	7·5	5·1	306
5·0 „ ..					13	5·6	3·9	316
6·0 „ ..					10	7·0	4·6	333
7·5 „ ..					3	6·0	3·3	70
9·0 „ ..					2	8·0	7·2	95

Table B—Monthly mean directions and velocities of upper winds.

Winds at and above 10·0 km. above sea level.

JUNE 1948

Ht. in Km.	n	V	v	D
	AHMEDABAD			
10·0	6	6·7	1·9	132
11·0	2	6·3	6·1	46
12·0	1	6·5	6·5	30
	ALLAHABAD			
10·0	7	15·6	13·8	283
11·0	5	10·4	10·2	263
12·0	4	13·0	12·6	265
13·0	3	12·0	11·5	257
14·0	2	9·3	5·3	319
15·0	1	6·0	6·0	275
16·0	1	11·0	11·0	285
	AMBALA			
10·0	4	25·1	22·7	257
11·0	4	28·0	25·9	263
12·0	3	33·2	29·9	263
13·0	2	23·0	22·4	250
14·0	2	22·7	22·2	249
	ANANTAPUR			
10·0	3	14·7	14·6	85
	BANGALORE			
10·0	1	10·5	10·5	95
	BAREILLY			
10·0	8	12·5	8·4	250
11·0	3	10·0	9·4	229
12·0	2	11·5	11·2	226
13·0	2	9·7	9·1	248
14·0	1	7·0	7·0	170
15·0	1	11·0	11·0	175
16·0	1	16·5	16·5	190
17·0	1	20·0	20·0	190
18·0	1	25·0	25·0	180
19·0	1	26·0	26·0	175
20·0	1	26·5	26·5	165
21·0	1	19·0	19·0	175
	BHOPAL			
10·0	2	5·5	2·3	190

Ht. in Km.	n	V	v	D
	BHUJ			
10·0	1	11·0	11·0	25
	BIKANER			
10·0	5	11·9	9·4	238
11·0	2	17·5	16·5	223
	COCHIN			
10·0	2	5·7	5·6	70
11·0	1	10·5	10·5	95
	DEOLALI			
10·0	3	9·0	4·3	35
11·0	1	13·5	13·5	75
12·0	1	14·0	14·0	75
	DIBRUGARH			
10·0	2	4·7	1·7	86
11·0	2	6·7	2·0	48
	GADAG			
10·0	6	2·1	0·7	94
	GOPALPUR			
10·0	8	8·8	6·7	93
11·0	4	11·6	9·5	103
12·0	3	14·5	12·3	93
13·0	3	16·8	15·3	91
14·0	3	17·5	17·1	83
15·0	1	5·0	5·0	130
16·0	1	8·5	8·5	130
17·0	1	12·5	12·5	125
18·0	1	16·5	16·5	125
19·0	1	15·0	15·0	130
20·0	1	17·5	17·5	145
21·0	1	20·0	20·0	145
22·0	1	22·5	22·5	140
23·0	1	29·0	29·0	135
24·0	1	27·0	27·0	140
25·0	1	28·0	28·0	140
26·0	1	31·0	31·0	135
27·0	1	39·0	39·0	135

Ht. in Km.	n	V	v	D
	HYDERABAD (DN.)			
10·0	2	9·7	9·5	76
11·0	1	12·5	12·5	45
	JAGDALPUR			
10·0	4	6·1	5·6	76
11·0	2	11·3	9·1	85
	JHARSUGUDA			
10·0	3	7·8	1·5	14
	JUBBULPORE			
10·0	4	4·5	3·8	91
11·0	2	6·5	6·0	99
12·0	1	8·0	8·0	61
	MADHOSAGAR			
10·0	1	10·0	10·0	230
	MADRAS			
10·0	15	12·0	11·5	83
11·0	12	17·1	16·6	84
12·0	12	20·9	20·2	89
13·0	8	22·1	21·7	88
14·0	6	22·2	22·1	87
15·0	4	28·6	28·0	92
16·0	3	28·0	27·4	90
17·0	3	29·5	28·3	92
18·0	2	14·7	12·2	117
19·0	1	4·0	4·0	355
	MALEGAON			
10·0	12	7·8	0·8	50
11·0	1	6·0	6·0	300
12·0	1	11·5	11·5	285
13·0	1	9·0	9·0	260
	MANGALORE			
10·0	1	11·0	11·0	90
	MASULIPATAM			
10·0	3	10·0	9·9	83

Ht. in Km.	n	V	v	D
	MINICOY			
10·0	2	5·0	4·7	76
11·0	1	12·5	12·5	70
12·0	1	16·0	16·0	65
13·0	1	18·5	18·5	65
	NAGERCOIL			
10·0	14	7·4	6·4	78
11·0	7	9·1	7·2	82
12·0	5	10·4	9·0	60
13·0	5	14·1	11·7	67
14·0	2	12·3	8·1	110
15·0	1	10·5	10·5	145
16·0	1	17·5	17·5	125
17·0	1	25·0	25·0	110
	NAGPUR			
10·0	10	8·7	2·2	311
11·0	8	9·3	1·0	269
12·0	6	6·1	2·5	258
13·0	5	9·2	3·6	193
14·0	5	9·7	3·1	179
15·0	4	9·5	6·2	112
16·0	4	12·1	10·7	114
17·0	3	12·3	11·2	104
18·0	3	10·8	10·3	87
19·0	3	8·2	7·8	82
20·0	1	21·5	21·5	104
	NEW DELHI			
10·0	2	19·0	18·1	247
11·0	1	16·0	16·0	245
12·0	1	13·0	13·0	240
	POONA			
10·0	9	6·4	1·8	88
11·0	9	6·4	4·0	107
12·0	9	7·9	5·4	107
13·0	7	10·2	7·3	117
14·0	6	11·5	8·5	108
15·0	5	11·0	9·2	114

Table A—Monthly mean directions and velocities of upper winds.

Winds up to 9·0 km. above sea level.

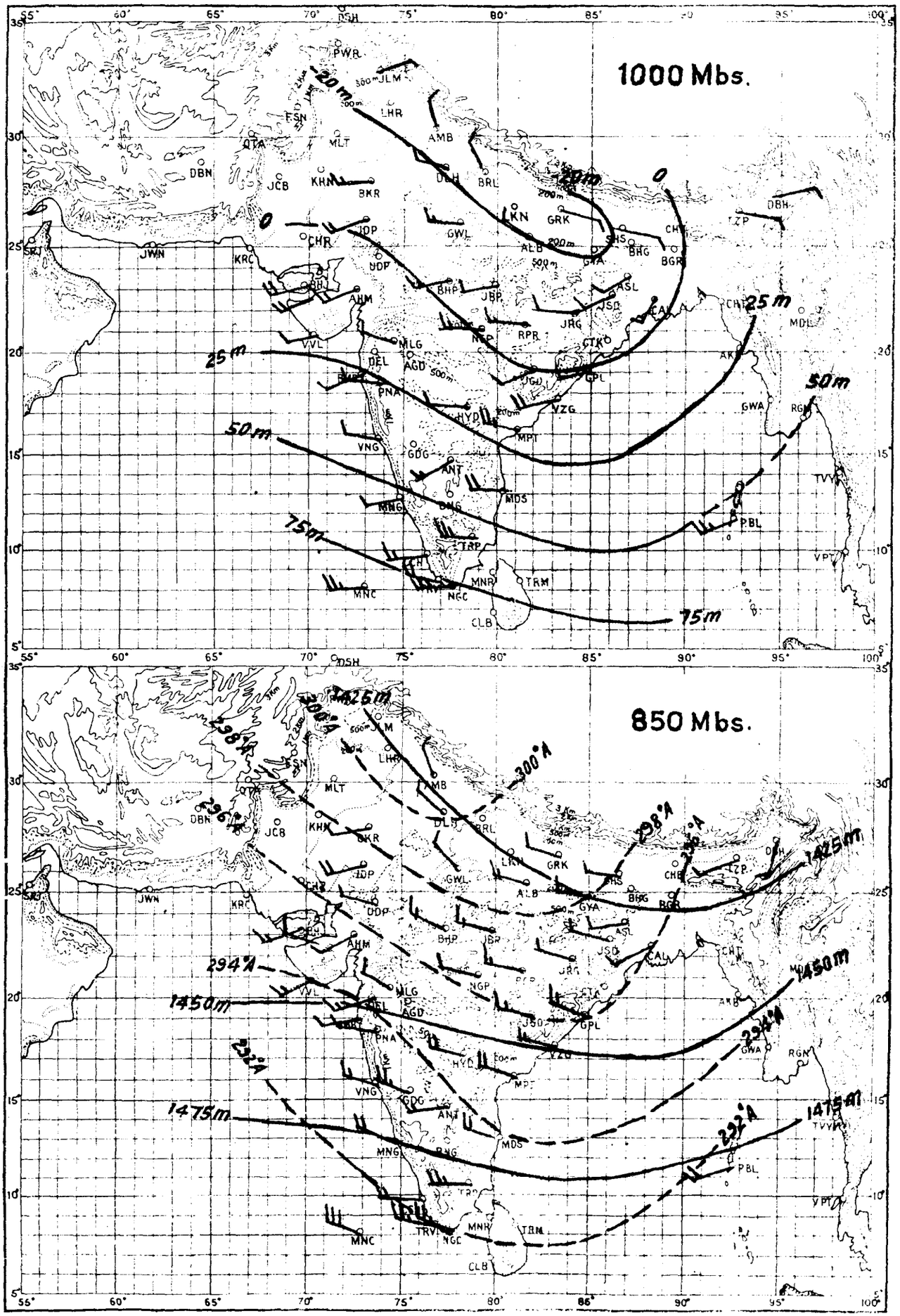
JUNE 1948

Ht. in Km.	n	V	v	D
	POONA—*contd.*			
16·0	4	9·4	9·2	124
17·0	4	10·9	9·3	122
18·0	3	8·8	8·4	83
19·0	2	6·5	6·5	106
20·0	1	10·5	10·5	40
	RAIPUR			
10·0	9	6·7	1·4	151
11·0	3	10·7	6·2	181
12·0	2	6·7	5·8	157
13·0	2	8·7	7·5	160
	SAHARSA			
10·0	1	2·5	2·5	270
	TEZPUR			
10·0	3	6·8	5·3	238
11·0	1	4·5	4·5	270
	TRICHINOPOLY			
10·0	13	7·9	6·6	67
11·0	1	9·5	9·5	55
12·0	1	20·0	20·0	80
	TRIVANDRUM			
10·0	4	11·4	11·2	76
11·0	4	15·3	15·2	82
12·0	3	20·6	20·3	92
13·0	2	28·3	28·3	92
	VENGURLA			
10·0	5	8·5	8·1	117
	VERAVAL			
10·0	4	11·6	2·8	240
11·0	2	14·7	14·7	260
	VIZAGAPATAM			
10·0	4	10·6	10·5	88

150DGOB—350—5-2-53—GIPS

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JUNE 1948

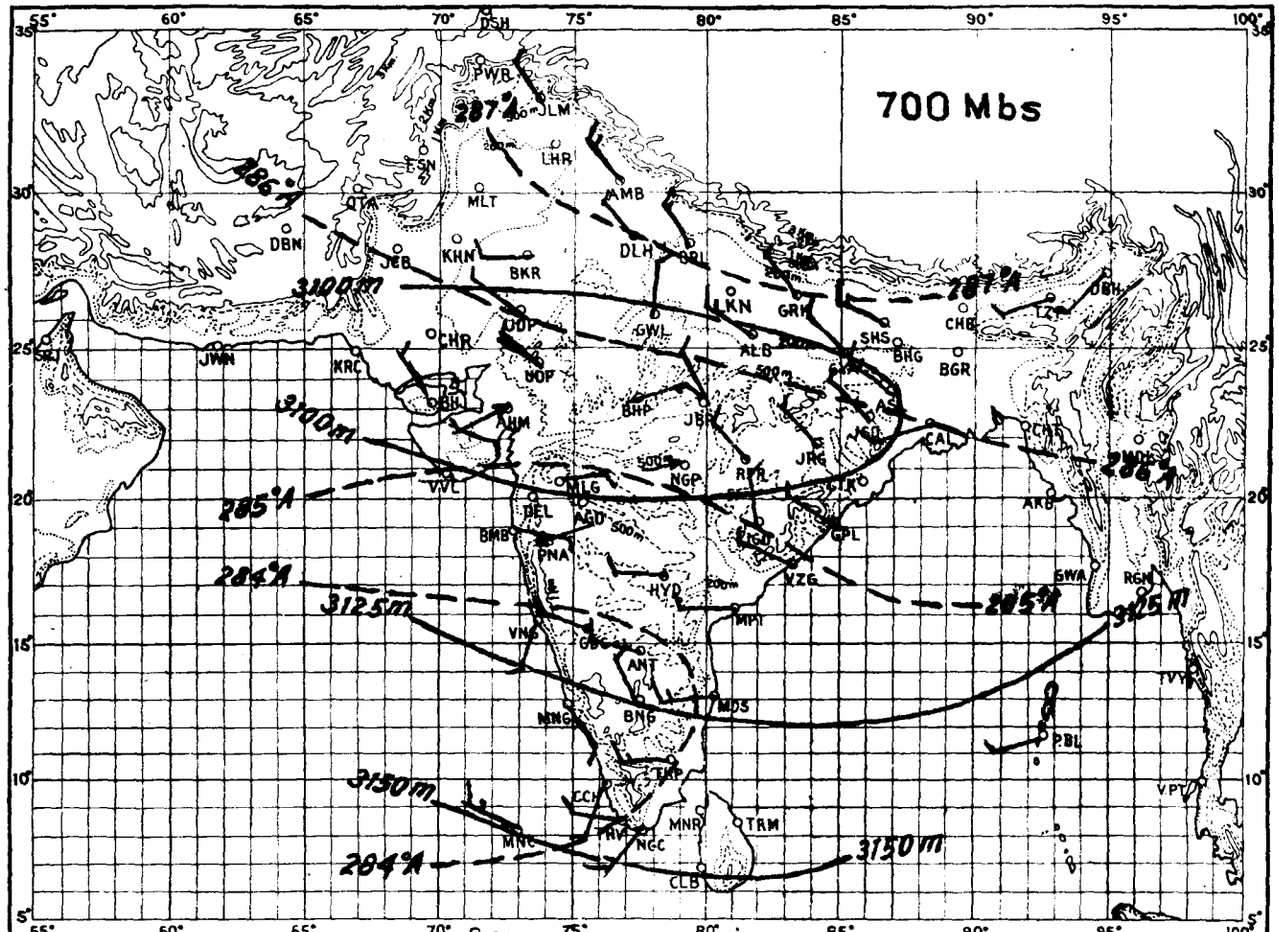


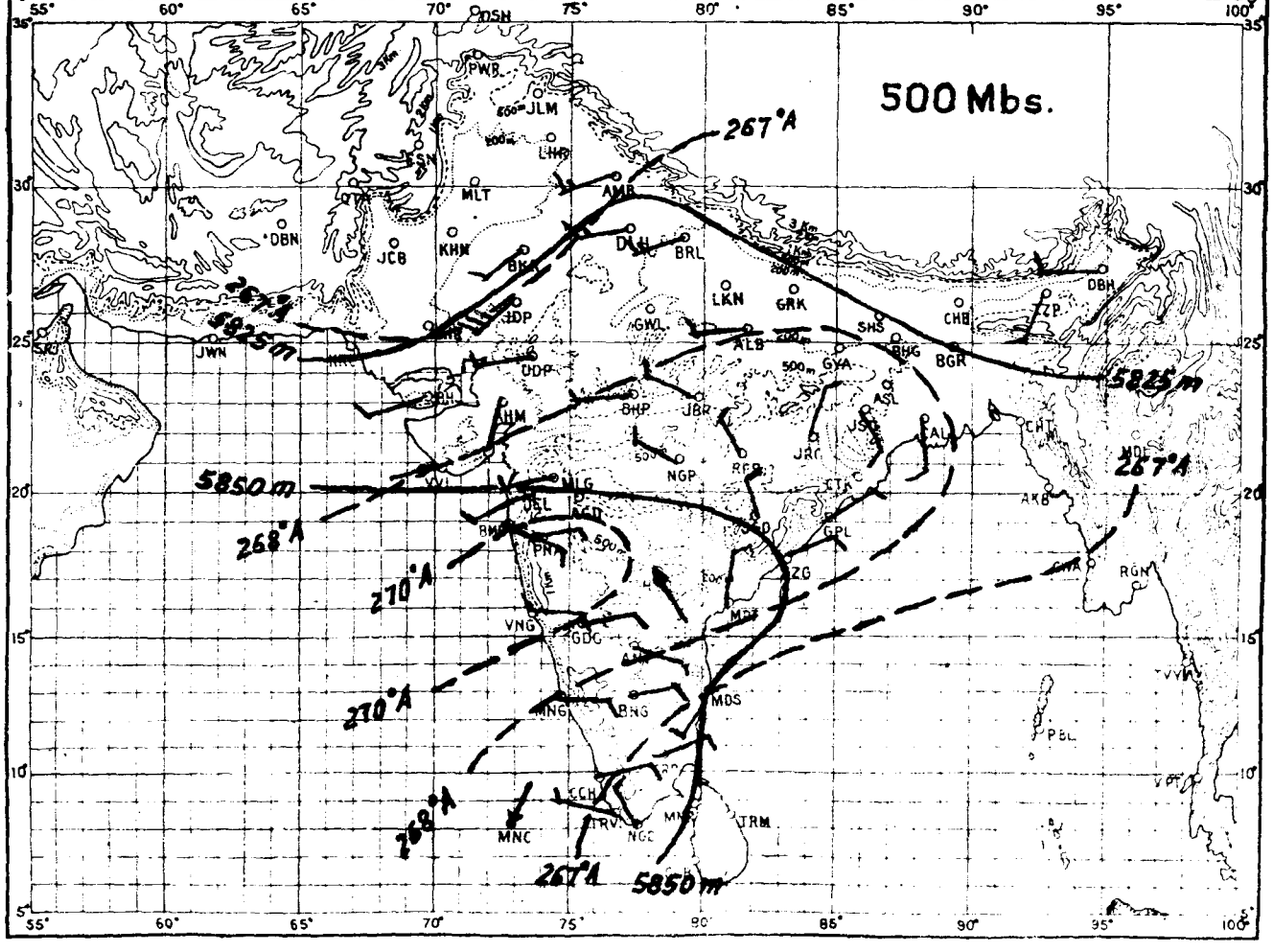
RESULTANT WIND —— = 5 Knots, —— = 10 Knots, —— = 50 Knots.

- - - - *Isotherms in degrees Absolute* ———— *Contours in Metres.*

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JUNE 1948





RESULTANT WIND —\ = 5 Knots, —\ = 10 Knots, —\ = 50 Knots

Isotherms in degrees Absolute — — —

Contours in Metres. ———

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INDIA WEATHER REVIEW, 1948

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Monthly Weather Report

July

Published by authority of the Government of India

Chief Features :—(1) Generally good monsoon activity over most parts of the Country outside Gujarat; (2) Three depressions from the Bay of Bengal.

The monsoon was generally feeble during the first week of the month; during this period there was well distributed rainfall only on the west coast of the Peninsula and over the region extending from the northern districts of the east United Provinces to Assam. A shallow depression formed in the northwest angle of the Bay by the morning of 7th, crossed the coast near Chandbali on the same day and moving in a northwesterly direction, filled up over the west United Provinces by the 12th. It was responsible for widespread and locally heavy rain in Orissa, Chota Nagpur, the central parts of the country and the west United Provinces during the course of its movement. Under its influence, the monsoon also extended into east Rajputana on the 9th and temporarily into the east and northwest Punjab towards the end of the second week. During this week, the monsoon was also strong to vigorous in Assam, Eastern Pakistan, Sub-Himalayan Bengal and Bihar. Heavy rains during this period resulted in serious floods in the Brahmaputra and other rivers in Assam which are reported to have caused havoc to standing crops and distress to thousands of people by rendering them homeless. In Bihar also, nearly 40 villages in the Madhubani sub-division, were reported to have been submerged on account of floods.

The accentuation of the seasonal trough of low pressure over the Gangetic plain maintained the vigour of the monsoon over the Konkan, the central parts of the country, the United Provinces and northeast India during the first half of the third week. A depression formed in the northwest angle of the Bay on the 19th, crossed the Orissa coast and moving northwestwards as a low pressure area filled up over north Rajputana on the 25th. In association with it, the monsoon strengthened in the Deccan and continued strong over the central parts of the country, the United Provinces, Chota Nagpur and west Bengal. It also extended into west Rajputana and the east and the west Punjab by the end of the third week and into the North West Frontier Province by the beginning of the fourth week. Between the 15th and 25th, well distributed moderate to heavy rain occurred over most parts of the country, Gujarat and Sind being the exceptions. According to press reports, the heavy rains during this spell resulted in severe floods in the Indus and its tributaries which caused widespread damage to property and loss of human lives and of innumerable heads of cattle in the west Punjab. A major part of the rice crop in Sind was also reported to have been destroyed. The monsoon also extended into Gujarat on the 23rd but it remained weak over that division till the end of the month.

Another depression which formed over the north Bay on the 27th and moved up to east Central India helped to maintain the activity of the monsoon over the region from the Punjab and Rajputana to Chota Nagpur and the east Central Provinces during the last four days of the month. During this period, locally very heavy rain fell in south and east Rajputana and the central parts of the country. An extension of the monsoon into Sind and north Baluchistan also occurred on the 30th.

The total rainfall for the month was in moderate excess in the east United Provinces, Rajputana, the west Central Provinces and the north Madras coast, in slight excess in the Bay Islands,

west Bengal, Chota Nagpur, Bihar, the west United Provinces, Berar, the Konkan and north Hyderabad and normal in Assam, the east Punjab, west Central India and Mysore. Elsewhere it was in slight defect except in Gujarat where it was in large defect. Averaged over the plains of India, the mean total rainfall was 3 per cent in excess.

Maximum temperature was above normal in west Rajputana and Gujarat, below normal in the east United Provinces, Berar and north Hyderabad and normal elsewhere. Minimum temperature was above normal in Gujarat and normal elsewhere.

Humidity was normal.

Cloud amount was in excess in the east United Provinces and southeast Madras and normal elsewhere.

Data from Kashmir are not available.

Table I contains the divisional and sub-divisional means of rainfall, temperature, humidity and cloud amount for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N. B.—**The Indian Standard Time used in this publication is 5 hours and 30 minutes in advance of G. M. T.**

POONA No. 5:
The 9th November 1948.

C. RAMASWAMY,
for *Director-General of Observatories.*

—	Rainfall.				Departure from normal of				
							8 hrs. I. S. T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1. Assam ...	14·93	15·40	−0·47	− 3	−0·3	+0·2	−0·4	− 2	+0·9
2. West Bengal ...	17·84	16·11	+1·73	+ 11	−0·2	+0·2	+0·5	+ 2	+0·6
3. Orissa ...	10·49	12·53	−2·04	− 16	+0·5	+0·5	+1·1	+ 1	+0·6
4. Bihar ...	15·01	12·84	+2·17	+ 17	−0·4	−0·4	+1·0	+ 2	+0·9
5. United Provinces.	15·23	12·31	+2·95	+ 24	−1·0	−0·2	+0·9	+ 3	+1·4
6. East Punjab ...	7·73	7·25	+0·48	+ 7	+0·6	+1·5	+0·7	− 1	−0·3
7. Rajputana ...	7·82	6·00	+1·82	+ 30	+1·9	+0·8	−0·5	− 1	−0·4
8. Bombay ...	11·96	14·44	−2·48	− 17	+1·5	+1·3	+0·7	0	−0·2
Division—*contd.*									
9. Central India ...	13·20	14·35	−1·15	− 8	+0·3	0	−0·5	0	+0·9
10. Central Provinces and Berar.	16·41	14·48	+1·93	+ 13	−0·7	+0·1	+0·5	+ 4	+0·9
11. Hyderabad ...	6·96	7·00	−0·04	− 1	−0·9	+0·9	+1·2	+ 4	+0·9
12. Mysore ...	9·17	9·97	−0·80	− 8	−0·9	+0·5	+0·8	+ 3	+0·5
13. Madras ...	6·32	6·98	−0·66	− 9	+0·2	+0·7	+1·0	+ 2	+0·7
Mean of India ...	11·45	11·16	+0·29	+ 3	+0·2	+0·5	+0·5	+ 1	+0·5
Sub-division									
1. Bay Islands ...	17·84	15·43	+ 2·41	+ 16	+0·5	+0·7	−0·2	+ 1	+0·6
2. Assam ...	14·93	15·40	− 0·47	− 3	−0·3	+0·2	−0·4	− 2	+0·9
3. West Bengal ...	17·84	16·11	+ 1·73	+ 11	−0·2	+0·2	+0·5	+ 2	+0·6
4. Orissa ...	10·49	12·53	− 2·04	− 16	+0·5	+0·5	+1·1	+ 1	+0·6
5. Chota Nagpur ...	16·68	13·63	+ 3·05	+ 22	+0·4	0	+1·1	+ 1	+0·8
6. Bihar ...	14·18	12·44	+ 1·74	+ 14	−1·0	−0·7	+1·0	+ 3	+1·0
7. United Provinces, East.	16·38	12·52	+ 3·86	+ 31	−2·3	−0·1	+1·0	+ 5	+1·7
8. Do. do. West.	14·13	12·10	+ 2·03	+ 17	+0·6	−0·4	+0·8	+ 2	+0·9
9. East Punjab ...	7·73	7·25	+ 0·48	+ 7	+0·6	+1·5	+0·7	− 1	−0·3
10. Kashmir ...	Data	in	complete.						
11. Rajputana, West.	4·44	3·09	+ 1·35	+ 44	+2·6	+1·1	+1·0	− 1	−0·6
12. Rajputana, East.	11·20	8·90	+ 2·30	+ 26	+1·5	+0·5	−1·7	− 1	−0·3
13. Gujarat ...	2·81	9·86	− 7·05	− 72	+2·8	+2·2	+0·2	− 4	− 0·2
14. Central India, West.	13·69	13·67	+ 0·02	0	+0·5	+0·1	−1·3	− 2	+ 1·1
Sub-division—*contd.*									
15. Central India East.	12·55	15·27	− 2·72	− 18	0	0	+0·5	+ 3	+0·5
16. Berar ...	11·11	9·60	+1·51	+ 16	−2·5	−0·1	−1·2	+ 3	+0·5
17. Central Provinces, West.	20·93	15·36	+ 5·57	+ 36	−0·5	+0·1	+1·2	+ 5	+1·2
18. Do. do. East.	13·10	15·37	− 2·27	− 15	−0·2	0	+0·4	+ 2	+0·7
19. Konkan ...	38·32	31·21	+ 7·11	+ 23	+0·1	+1·3	+1·1	+ 2	−0·1
20. Bombay Deccan...	10·57	12·32	− 1·75	− 14	+0·6	+0·3	+1·1	+ 4	−0·1
21. Hyderabad, North	8·49	7·39	+ 1·10	+ 15	−2·4	+0·9	+1·8	+ 5	+0·7
22. Do. South	5·43	6·61	− 1·18	− 18	0	+0·9	+0·8	+ 4	+1·0
23. Mysore ...	9·17	9·97	− 0·80	− 8	−0·9	+0·5	+0·8	+ 3	+0·5
24. Malabar ...	21·49	25·61	− 4·12	− 16	+0·3	−0·1	+1·0	+ 2	+0·4
25. Madras, Southeast	1·80	2·20	− 0·40	− 18	+0·2	+1·2	+0·7	+ 1	+1·3
26. Do. Deccan...	2·79	3·51	− 0·72	− 21	+0·2	+0·6	+1·6	+ 3	+0·3
27. Do. Coast, North	6·75	5·13	+1·62	+ 32	0	+0·3	+1·1	+ 3	+0·3

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Wet bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Relative humidity % Mean 8 hrs. I. S. T.	Departure from normal.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Bay Islands																						
Port Blair ...	261	998·8	+ 0·4	996·9	84·3	+ 0·5	87	10, 31	75·8	+0·7	72	15, 19	80·7	79·8	77·8	77·2	31·2	−0·2	30·7	88	+ 1	8
Assam																						
Dibrugarh ...	348	990·2	− 0·5	987·0	87·5	+ 0·2	95	27, 29	75·4	0	72	4	79·3	83·7	77·5	79·5	31·3	+0·1	32·6	92	+ 2	8
Sibsagar (*R*) ...	317																					
Tezpur ...	258	993·6	0	989·9	89·2	− 0·2	93	22,27,29	77·6	0	75	20	81·5	85·9	78·9	80·2	32·6	+0·5	32·7	88	− 1	7
Gauhati ...	182	995·6	+ 0·3	992·2	88·4	− 1·3	93	6	78·6	+0·4	77	4 days	82·3	85·9	79·0	80·2	32·3	−0·2	32·7	86	0	7
Dhubri ...	115	998·1	+ 0·6	995·0	85·4	− 0·6	91	1	78·4	+0·2	75	11, 13	81·0	84·0	78·8	80·6	32·7	+0·5	34·1	91	+ 3	8
Silchar ...	96	1000·3	+ 0·8	996·4	88·3	− 1·9	93	6	77·6	+0·4	76	6 days	80·5	83·9	78·4	79·8	31·7	−0·6	32·9	90	+ 2	8
West Bengal																						
Dum Dum ...	23	998·8		996·3	89·5		93	4 days	79·8		76	21,22,29	83·1	85·3	79·4	79·8	33·1		32·2	84		7
Calcutta ...	21	999·3	+ 0·1	996·6	89·8	+ 0·3	95	27	79·7	+1·1	77	5 days	83·1	85·6	80·4	80·8	34·4	+1·2	34·2	88	+ 2	8
Saugor Island ...	10	999·5	+ 0·1	997·3	87·1	− 0·3	91	6	80·7	+0·6	76	23	84·1	84·7	80·4	80·7	33·9	+0·6	34·0	84	− 1	8
Sandheads ...	28	999·1	+ 0·3	997·0									83·7	83·8	82·0	82·3	36·7	+3·0	37·1	93	+ 8	9
Midnapore ...	149	994·0	− 0·7	991·6	90·8	+ 1·1	95	19,27,31	79·1	+0·1	77	4 days	82·6	85·1	79·6	80·1	33·1	+1·1	32·8	87	+ 2	7
Contai ...		998·1		996·0					79·7		76	28, 29	83·8	85·0	81·2	81·9	35·3		35·8	89		8
Burdwan ...	106	996·0	− 0·2	993·2	90·2	+ 0·1	94	26	79·1	+0·1	76	14,21,29	82·8	86·3	79·8	80·7	33·4	+0·7	33·3	87	0	7
Krishnagar ...	48	998·1	− 0·4	995·7	90·7	+ 0·8	96	3	78·7	+0·1	76	14, 22	81·2	85·8	79·8	81·3	34·1	+1·0	34·4	94	+ 8	8
Asansol ...	414	985·3	+ 0·5	982·7	89·8	0	94	5	78·6	+0·8	75	14	82·6	85·2	80·1	81·4	34·0	+1·6	34·8	90	+ 2	8
Berhampore ...	62	998·0	+ 0·1	995·2	90·6	+ 0·9	97	13	79·1	+0·2	76	23	82·4	84·8	80·0	80·5	33·8	+0·5	33·5	89	+ 2	8
Malda ...	103	996·7	+ 0·1	993·8	87·9	− 1·8	91	31	78·9	−0·1	76	12, 13	82·9	84·1	80·0	80·3	33·6	+0·1	33·5	87	+ 2	8
Jalpaiguri ...	271	992·3	+ 0·2	989·2	86·1	− 2·5	91	27	76·0	−1·3	74	5,11,13	78·2	84·0	76·5	79·0	30·5	−1·9	31·6	92	+ 1	7
Orissa																						
Balasore ...	65	997·6	− 0·4	995·1	89·6	+ 0·5	94	4, 5	79·1	+0·6	76	28	83·4	84·5	79·9	80·0	33·3	+1·2	32·9	86	+ 1	8
Chandbali ...	20	999·5	+ 0·4	997·0	89·6	+ 1·4	94	3, 26	78·7	+0·6	76	1, 19	83·2	85·3	79·9	80·8	33·3	+1·0	33·8	86	− 1	8
Puri ...	20	999·7	0	997·4	87·5	+ 0·2	91	17	80·7	+0·9	76	6	84·0	84·9	80·2	80·8	33·4	+0·7	34·1	84	− 1	8
Gopalpur ...	56	998·7	0	996·2	87·5	− 0·2	93	6	79·6	+0·5	75	15	82·8	83·6	80·3	81·6	34·2	+2·3	36·0	89	+ 5	9
Cuttack ...	87	997·0	− 0·6	994·4	89·4	− 0·1	94	3, 13	78·7	+0·4	75	13	82·2	85·3	78·9	79·8	33·3	+2·1	32·2	85	+ 2	7
Angul ...	455	984·6	− 0·3	981·9	89·1	+ 0·9	95	6	77·8	+0·6	75	2, 14	81·0	84·2	77·1	78·2	30·0	0	30·2	84	+ 1	7
Sambalpur ...	486	983·5	− 0·2	980·6	87·9	+ 0·7	94	6	76·9	−0·2	73	21, 22	79·7	84·1	77·2	78·9	30·8	+0·7	31·5	89	+ 2	7
Chota Nagpur																						
Jamshedpur ...	423	985·0	+ 0·2	982·1	90·4	+ 1·1	95	5, 26	78·7	+0·1	75	15	82·1	85·8	78·2	79·7	31·1	+0·1	31·9	84	0	7
Chaibasa ...	742	974·2	+ 0·1	971·5	90·4	+ 1·0	95	5, 19	78·1	+0·6	75	5, 22	81·1	85·8	78·0	80·2	31·4	+1·3	32·7	86	+ 2	7
Ranchi ...	2,150	927·6	− 0·1	925·3	85·1	+ 0·7	88	7 days	72·5	− 0·8	70	14, 21	76·3	79·4	74·3	76·1	27·8	+0·6	28·9	91	+ 3	8
Hazaribagh ...	2,006	932·0	− 0·5	930·0	85·1	− 0·1	88	4	74·4	+0·4	72	15, 21	77·5	79·4	75·2	76·3	28·5	+1·5	29·3	90	+ 2	8
Daltonganj ...	725	974·1	− 0·3	971·3	90·2	− 0·9	95	6	77·7	−0·4	75	14,20,23	83·1	84·0	78·8	79·0	31·6	+1·8	31·6	82	− 1	8
Dhanbad ...	839	964·5			88·6		92	11,19,26	77·0		75	6 days	81·6		78·5		31·9			87		
Bihar																						
Purnea ...	124	996·0	0	992·9	88·4	− 1·2	92	7, 9	78·3	− 0·4	73	12	81·9	85·0	79·4	80·8	33·1	0	34·1	88	0	8
Saharsa ...	156	994·4		991·5									81·5	85·4	78·9	80·4	33·7		33·1	89		8
Darbhanga ...	161	994·3	0	991·2	88·7	− 1·0	95	2	79·0	− 0·4	75	5	82·1	86·9	79·8	81·7	33·6	+1·1	34·7	90	+ 4	8
Motihari (*R*) ...	218																					
Patna ...	173	993·1	− 0·3	990·1	89·3	− 1·4	93	4 days	79·3	−0·6	75	4, 5	82·7	85·9	79·7	81·0	33·3	+0·2	33·9	87	+ 3	8
Dehri ...	352	986·5		983·5	90·3		96	11	79·8		76	16	82·7	85·9	80·0	81·0	33·8		33·9	88		8
Gaya ...	365	986·1	− 0·4	983·2	91·2	− 0·9	97	11	79·1	+0·5	73	24	83·2	86·6	80·4	81·9	34·1	+3·4	35·1	88	+10	8
Naya Dumka ...	489	982·8	− 0·3	980·1	88·8	− 0·6	93	11	74·4	− 3·6	70	7	82·4	84·4	79·1	79·8	32·4	+0·7	32·7	85	0	8
Sabour ...	122	995·4	+ 0·1	992·4	89·3	− 1·0	94	12	79·6	+0·2	75	11	82·9	84·9	80·3	80·9	34·2	+0·7	33·9	89	+ 3	8
U. P., East																						
Gonda ...	360	986·6		983·7	88·9	− 2·4	98	2	78·6	− 0·8	75	5,6,12	81·3	86·7	78·8	80·6	32·2	− 0·5	33·5	89	+ 4	8
Gorakhpur ...	254	989·8	− 0·9	986·9	89·4	− 1·5	96	2, 3	79·3	+ 0·2	75	11	81·9	87·4	78·9	80·4	33·6	+ 0·9	31·8	87	+ 1	8
Banaras ...	250	989·5	− 0·8	986·5	90·4	− 1·8	97	6, 8	79·3	− 0·4	76	12, 14	83·0	87·3	80·5	82·0	34·4	+ 2·3	35·1	90	+ 7	8
Allahabad (Bamrauli)	322	986·7	− 1·1	984·8	90·7	− 1·4	99	6	79·1	− 0·7	76	3, 19	82·6	86·9	79·6	80·6	32·2	0	33·4	88	+ 6	8
Fatehpur ...	375	984·9		982·0	90·7	− 2·4	103	6	79·5	− 0·2	74	16	82·8	86·7	80·2	81·5	34·2	+ 1·1	34·1	89	+ 5	8
Kanpur ...	414	983·0	− 0·7	981·1	88·0	− 4·4	104	6	80·0	+ 0·1	71	27, 28	82·9	87·7	79·7	80·1	33·6	+ 1·7	32·1	86	0	8
Lucknow ...	371	985·7	− 0·4	983·1	90·0	− 2·4	98	3, 6	81·4	+ 1·9	76	11	82·8	86·4	80·0	81·6	33·1	+ 1·0	34·7	89	+ 7	8
Bahraich ...	407	985·3	+ 0·3	982·6	89·5	− 2·4	97	1, 2, 7	78·1	− 1·0	70	15	81·6	87·2	79·3	82·2	33·2	+ 1·3	35·3	91	+ 8	8

(*R*)—Register not received.

d amount hs of sky). Departure from normal.	Mean 17 hrs. I. S. T.	Rainfall, inches. Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Number of rainy days (0·10" or more). Total in the month.	Departure from normal.	Wind velocity, miles per hour. Mean.	Departure from normal.	Wind direction—Number of winds from 8 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	STATION.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Bay Islands
+ 0·6	9·3	17·84	+ 2·41	3·18	14	22	+ 0·5	11·3	− 4·6	0	0	0	0	2	17	10	1	1	0	0	0	0	2	17	11	0	1	Port Blair
																												Assam
+ 1·2	7·3	32·32	+11·20	4·13	31	21	− 0·3	1·8	+ 0·8	6	7	6	0	3	3	1	0	5	2	4	4	0	0	1	0	2	18	Dibrugarh
																												Sibsagar (*R*)
0	6·0	11·11	− 2·58	1·97	27	17	+ 0·1	1·9	+ 0·2	0	0	10	8	3	3	3	0	4	0	1	10	7	2	6	2	0	3	Tezpur
+ 0·6	7·1	9·61	− 2·67	2·99	18	15	− 0·3	2·8	+ 0·9	2	5	3	4	5	4	3	3	2	1	6	2	1	3	8	9	1	0	Gauhati
		17·60	+ 0·41	3·93	13	16	− 0·1	4·8	+ 1·1	2	13	5	0	4	1	0	1	5	1	15	3	0	1	5	0	1	5	Dhubri
+ 2·0	8·2	15·71	− 4·81	1·90	27	22	− 0·7	1·3	− 0·4	4	7	5	1	0	0	4	2	8	2	0	1	0	4	2	7	6	9	Silchar
																												West Bengal
	9·2	11·67		1·77	24	19				0	0	1	6	11	9	1	0	0	0	0	1	7	17	5	0	0	1	Dum Dum
− 0·2	9·0	11·16	− 1·65	2·22	14	16	− 1·5	3·5	− 0·2	0	2	2	4	9	13	0	0	1	0	0	2	7	14	8	0	0	3	Calcutta
− 1·2	7·1	11·92	− 3·52	3·49	23	17	+ 0·5	16·6	+ 4·5	0	2	1	1	5	21	1	0	0	0	0	0	3	12	15	1	0	0	Saugor Island
− 0·5	7·7	11·72	+ 0·77	4·41	28	12	− 0·7			0	0	0	4	13	11	2	0	1	0	0	2	4	8	15	1	0	1	Sandheads
+ 1·0	9·5	7·91	− 4·83	1·89	28	12	− 4·3	4·4	+ 1·9	0	2	1	1	14	7	1	0	5	0	0	1	4	11	11	2	0	2	Midnapore
	7·6	8·32		1·37	20	14		10·2		2	1	1	1	11	11	0	0	1	0	0	1	4	16	6	1	0	0	Contai
− 0·8	6·9	10·04	− 2·76	1·60	31	14	− 2·0	6·0	+ 3·4	0	2	6	4	6	13	1	1	1	0	0	8	4	7	9	0	0	3	Burdwan
+ 1·0	9·0	8·05	− 3·20	1·66	22	18	+ 1·7	4·7	+ 1·1	0	3	4	18	5	1	0	0	0	0	1	4	20	4	0	0	0	2	Krishnagar
+ 0·3	9·3	13·06	− 0·63	2·01	18	19	+ 1·3	4·7	− 0·2	0	1	3	8	6	4	1	0	8	0	1	3	12	3	1	1	0	10	Asansol
+ 0·9	8·2	11·90	+ 1·03	1·93	22	19	+ 2·9	3·9	+ 0·5	0	0	6	6	17	0	0	0	2	0	2	10	4	10	3	0	0	2	Berhampore
+ 1·9	8·5	21·65	+10·17	5·40	11	18	+ 3·2	5·2	− 0·1	0	0	11	9	9	2	0	0	0	1	4	8	7	6	0	0	0	4	Malda
+ 2·9	8·4	50·90	+13·63	10·32	10	25	+ 2·7	4·7	+ 2·7	2	10	10	1	2	0	1	0	5	0	6	15	6	3	0	0	0	1	Jalpaiguri
																												Orissa
+ 1·7	9·2	12·68	+ 0·88	3·89	28	15	+ 0·9	3·3	+ 2·0	2	1	1	0	10	14	1	0	2	1	0	2	4	11	9	0	0	4	Balasore
− 1·0	8·1	9·55		2·23	28	15		6·6	− 0·5	1	0	0	1	14	9	3	2	0	2	2	0	6	16	3	0	1	0	Chandbali
+ 1·1	8·5	10·13	− 0·19	2·59	7	11	− 1·0	14·1	+ 2·8	1	0	0	0	0	22	5	2	1	0	0	0	0	5	24	2	0	0	Puri
+ 1·9	8·5	5·05	− 2·11	2·23	6	7	− 2·7	13·3	+ 4·4	0	0	0	0	8	18	1	0	4	0	0	0	0	13	16	1	0	1	Gopalpur
− 0·1	8·8	11·33	− 1·56	2·60	13	16	+ 0·1	3·7	+ 1·1	1	1	0	0	2	2	1	0	24	0	1	0	0	5	2	0	1	22	Cuttack
− 0·6	7·8	10·03	− 2·44	2·90	6	13	− 2·2	4·5	− 0·5	1	3	1	1	1	4	9	6	5	1	2	1	4	4	3	9	3	4	Angul
+ 1·2	9·2	13·71	− 6·85	2·33	8	19	− 0·6	5·8	+ 1·9	0	0	0	0	5	24	2	0	0	1	1	0	2	7	14	5	0	1	Sambalpur
																												Chota Nagpur
− 0·3	9·5	23·66	+10·50	7·71	28	21	+ 3·6	4·0	− 0·2	0	0	3	1	1	10	10	1	5	0	0	7	5	2	5	2	3	7	Jamshedpur
+ 0·8	9·6	13·19	+ 0·03	3·20	6	13	− 3·2	1·8	− 0·7	0	2	0	2	0	14	3	0	10	0	2	0	6	3	10	2	0	8	Chaibasa
+ 0·9	9·2	17·74	+ 2·22	3·75	15	20	+ 1·5			2	0	1	1	9	3	0	0	15	0	0	2	0	4	0	1	0	24	Ranchi
+ 0·7	9·6	14·72	+ 1·63	3·85	16	20	+ 2·2	5·5	− 0·6	1	2	3	2	5	9	5	2	2	3	2	2	5	8	6	0	2	3	Hazaribagh
+ 2·1	9·2	14·09	+ 0·69	2·43	16	22	+ 6·4	3·0	− 0·6	0	1	7	2	2	2	2	0	8	0	3	9	3	3	0	5	2	6	Daltonganj
		18·06		6·21	20	19		5·1		0	0	10	8	4	3	1	0	5										Dhanbad
																												Bihar
+ 1·8	8·0	20·92	+ 6·60	4·53	4	23	+ 6·4	3·9	+ 1·3	0	2	10	3	0	0	0	0	10	0	1	12	6	0	0	1	0	11	Purnea
	8·5	26·55		11·44	3	24		5·5		0	4	23	1	0	0	0	0	3	0	2	21	2	0	1	0	0	5	Saharsa
+ 1·7	6·9	16·51	+ 4·39	3·91	5	20	+ 6·1	5·9	+ 2·4	0	14	11	4	0	1	0	0	1	0	5	10	12	0	4	0	0	0	Darbhanga
																												Motihari (*R*)
+ 0·8	8·5	10·37	− 1·21	1·22	15	21	+ 7·3	5·0	+ 0·7	0	5	14	1	1	0	1	2	7	1	10	9	0	2	1	0	1	7	Patna
	9·0	6·92	− 4·60	1·34	13	13	− 1·2	4·1		1	2	5	5	6	7	0	1	4	0	6	5	6	3	5	0	6	2	Dehri
+ 2·6	9·5	12·08	− 1·13	1·75	14	18	+ 2·2	6·1	+ 0·4	0	3	8	4	2	11	1	0	2	2	5	5	4	4	3	3	1	4	Gaya
− 1·6	6·3	13·86	+ 0·04	2·06	26	20	+ 2·0	3·9	+ 1·6	0	6	0	12	0	7	0	0	6	0	5	2	14	0	7	0	0	3	Naya Dumka
+ 0·9	8·8	9·43	− 0·53	1·63	11	16	+ 0·9	3·6	− 2·4	0	0	15	12	1	0	1	0	2	0	3	13	9	3	0	2	0	1	Sabour
																												U. P., East
+ 1·5	7·7	21·91	+ 7·24	4·60	14	19	+ 5·0	5·0	+ 1·3	1	1	24	1	0	0	1	0	3	0	1	16	1	2	0	1	1	9	Gonda
+ 2·2	6·5	21·19	+ 7·56	4·88	15	17	+ 2·7	4·1	+ 1·8	2	6	16	0	2	0	0	0	5	1	1	12	5	2	1	0	0	9	Gorakhpur
+ 1·0	8·6	16·75	+ 4·94	4·06	12	16	+ 1·7	4·8	+ 1·3	0	7	7	2	1	9	0	0	5	0	4	7	0	1	5	6	3	5	Banaras
+ 0·4	9·3	17·32	+ 4·76	2·69	19	20	+ 4·8	4·7	− 0·1	0	2	8	2	5	4	4	0	6	2	6	7	1	1	3	4	3	4	Allahabad (Bamrauli)
+ 1·5	7·7	11·79	− 0·74	3·22	14	16	+ 2·1			0	4	7	3	3	0	3	2	9	0	1	9	1	1	1	4	0	14	Fatehpur
+ 2·5	8·1	8·50	+ 2·25	1·53	27	17	+ 4·5	6·7	− 0·6	2	2	13	2	3	4	4	0	1	2	7	8	4	1	4	2	1	2	Kanpur
+ 1·9	7·9	18·51	+ 6·51	2·23	11	18	+ 4·6	3·0	+ 0·8	0	2	17	3	2	2	2	0	3	1	3	13	2	2	1	1	0	8	Lucknow
+ 3·0	8·3	15·05	+ 2·81	3·63	12	12	+ 0·1	6·5	+ 3·7	0	1	13	12	1	0	0	1	3	1	0	16	10	0	1	0	0	3	Bahraich

—Register not received. *a*—Mean of observations for 30 days. *b*—Mean of observations for 29 days. *c*—Mean of observations for 28 days. *h*—Mean of observations for 22 days.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature, °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature, °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature, °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Wet bulb temperature, °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Relative humidity, % Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
U. P., West																						
Jhansi ...	823	969·9	− 1·4	967·2	91·8	− 0·9	107	3, 4	78·5	− 0·2	72	15	81·6	88·5	77·9	80·0	31·0	− 1·5	31·1	88	+ 5	71
Agra ...	553	979·2	− 0·4	976·3	95·3	+ 1·5	111	3	81·3	+ 0·9	76	21	84·4	91·1	78·9	80·7	31·3	+ 0·9	30·8	79	+ 2	66
Mainpuri ...	516	980·4	− 0·6	977·5	94·7	− 0·4	111	3	77·1	− 3·2	74	14, 16	84·0	89·7	79·9	81·5	33·2	+ 1·8	33·0	83	+ 4	73
Aligarh ...	615	977·0		974·0	95·3	+ 1·1	111	3	80·6	+ 0·6	75	26	80·8	92·0	79·3	80·7	33·7	+ 2·4	31·1	82	+ 1	64
Bareilly ...	568	978·9	− 0·7	975·6	93·7	+ 1·6	104	6	79·5	+ 0·6	73	7	83·5	90·4	79·0	80·6	31·9	0	31·2	82	− 3	66
Roorkee ...	899	967·9	− 0·6	964·6	92·0	− 0·1	105	1	77·5	− 0·6	73	19, 26	81·9	89·7	77·7	79·9	30·5	− 0·8	30·4	83	+ 2	68
Dehra Dun ...	2,239	924·8	− 0·2	922·2	87·4	+ 1·2	96	1	72·9	− 0·9	70	14	77·4	85·9	74·4	77·8	27·9	+ 0·9	29·3	88	+ 1	72
East Punjab.																						
New Delhi ...	714	972·9	− 1·5	970·2	96·0	+ 0·7	109	3	80·5	− 0·4	72	28	84·9	92·1	78·3	79·5	30·6	+ 0·1	28·7	75	− 2	59
Hissar ...	725	972·6	− 0·8	970·0	99·4	− 0·2	116	3	81·4	+ 0·2	75	13, 22, 27	85·2	94·0	78·7	80·2	30·9	+ 1·6	29·0	75	+ 5	58
Ambala ...	892	966·7	− 1·6	965·2	97·5	+ 2·0	112	2	80·0	+ 0·9	71	14, 15	83·6	94·4	77·7	78·9	29·8	− 0·4	26·6	75	− 4	53
Ludhiana ...	812	970·0	− 0·7	967·5	97·3	0	114	3	85·5	+ 5·2	76	14	84·8	95·0	78·5	80·9	30·4	+ 1·3	29·5	74	− 1	51
Kashmir																						
Srinagar ...	5,205	834·2	+ 0·2	831·5	82·9	− 4·9	93	4, 18	62·7	− 1·6	56	22	68·6	80·6	64·4	68·5	19·1	− 1·2	19·5	81	− 1	50
Gulmarg (*R*) ...	8,709																					
Dras (*R*) ...	10,059																					
Leh ...	11,529	666·4	+ 2·0	663·3	71·7	− 4·7	81	17, 18	47·9	− 2·4	42	16, 22, 23	56·7	69·2	48·5	53·3	9·0	0	8·9	60	+ 4	40
Skardu (*R*) ...	7,505																					
Gilgit (*R*) ...	4,890																					
Misgar (*R*) ...	10,190																					
Rajputana, West																						
Sri Ganganagar ...	580	976·4		973·6	104·3	+ 2·2	116	2	83·5	+ 1·0	76	27	88·3	99·6	78·7	79·8	29·1	+ 2·0	25·7	61	− 2	4
Bikaner ...	734	971·9	− 1·1	968·7	103·2		113	2	84·1		76	27, 31	87·1	101·0	77·2	84·4	27·3		32·8	64		5
Phalodi ...	783	970·8		968·2	101·0		111	2	81·8		75	31	83·4	99·3	77·7	79·5	29·9		25·4	77		4
Jodhpur ...	786	973·3	+ 0·6	970·1	98·5	+ 1·6	107	9	81·7	+ 1·5	73	31	83·4	95·3	76·9	78·5	28·6	+ 1·0	25·4	74	+ 1	4
Barmer ...	638	976·5	− 0·3	973·2	100·5	+ 4·0	109	1	79·8	+ 0·9	73	21	82·3	98·6	77·0	80·0	29·3	0	26·5	78	− 1	4
Rajputana, East																						
Sikar ...	1,406	950·2		947·4	98·1		111	2	80·4		72	27	83·8	93·0	75·4	76·9	26·1		24·3	69		5
Jaipur ...	1,431	950·1	− 1·4	947·4	95·8	+ 1·6	108	2, 3, 8	79·3	+ 1·1	72	27	82·4	90·4	75·4	76·6	26·9	− 0·9	25·0	73	− 3	5
Ajmer ...	1,598	944·9	− 1·3	942·5	93·6	+ 1·9	105	9	79·1	+ 0·7	72	21	81·2	90·3	75·1	77·0	26·9	− 0·1	25·8	76	− 1	5
Kotah ...	843	969·9	− 0·8	966·9	94·3	+ 0·4	108	8	79·8	− 0·1	73	23, 24	83·1	90·8	76·1	78·1	27·6	− 0·4	27·1	74	+ 1	5
Jhalawar ...	1,053	962·9	− 1·3	959·7	91·9	+ 1·9	105	8	77·2	+ 0·5	72	20	79·7	87·6	79·6	78·8	34·5	− 5·4	28·1	35	+ 1	6
Udaipur ...	1,910	935·6		933·5	90·2		100	8	77·0		72	21	78·0	87·0	74·0	76·2	27·1		26·3	79		6
Gujarat																						
Deesa* ...	466																					
Bhuj ...	343	988·2	− 0·1	986·2	93·7	+ 2·9	97	4 days	80·7	+ 2·6	75	31	83·0	90·9	77·2	77·3	29·3	− 0·7	25·9	76	− 6	5
Dwarka ...	37	999·4	− 0·4	997·9	88·2	+ 1·5	90	7 days	82·2	+ 1·5	77	30	83·3	86·2	79·5	80·3	32·7	+ 1·0	32·7	84	− 2	7
Jamnagar ...	60	999·3	+ 0·8		92·1	+ 1·5	97	5, 6	80·4	+ 1·9	77	14, 30	84·3		78·5		30·6	− 0·3		76	− 6	
Rajkot ...	432	985·9	− 0·3	983·4	96·0	+ 4·8	102	8	79·9	+ 3·4	76	30	82·2	92·6	78·0	78·7	30·8	+ 1·6	27·2	82	− 2	5
Veraval ...	26	1000·4	− 0·9	999·2	86·9		90	18	80·7		78	20, 30, 31	82·7	84·9	79·8	80·9	33·6		34·1	87	− 1	8
Surat ...	39	1000·3	− 0·7	998·6	88·6	+ 1·4	94	4 days	79·9	+ 2·1	77	10, 23, 24	82·3	86·3	79·4	80·8	33·0	+ 2·1	33·4	87	+ 1	7
Bhavnagar ...	55	999·6	− 0·1	996·4	97·5	+ 4·6	104	7	81·5	+ 3·1	78	23, 30	83·6	94·3	76·8	78·2	28·4	− 1·1	25·6	72	− 7	4
Ahmedabad ...	162	995·4	− 0·4	991·7	96·1	+ 3·0	102	8, 9	81·3	+ 2·8	75	30, 31	83·4	93·6	77·5	78·6	29·5	− 0·3	26·6	76	− 7	5
Dohad ...	1,099	963·9		961·5	98·3	+ 1·1	98	8	75·3	− 0·1	71	21	77·8	85·6	75·0	77·2	28·5	− 0·4	28·3	87	− 4	6
Baroda ...	115	997·4		994·2	94·1	+ 4·3	102	8	79·7	+ 2·1	73	26	82·2	90·8	78·1	79·2	31·0	+ 0·3	28·8	83	− 5	6
Central Ind., West																						
Neemuch ...	1,626	945·2	− 0·7	942·9	90·5	+ 2·5	103	8	75·6	+ 1·0	70	23	78·0	86·7	74·8	76·1	28·1	+ 1·2	26·5	87	+ 4	6
Indore ...	1,828	939·2	− 1·0	937·2	84·1	− 1·0	94	8	73·2	+ 0·4	70	4 days	75·3	81·2	72·9	74·7	26·7	− 0·8	26·7	89	+ 2	7
Bhopal ...	1,645	944·4	− 1·2	942·4	85·1	− 0·5	93	6	73·8	− 0·3	71	4 days	76·2	81·6	73·5	75·8	27·1	+ 0·2	28·1	88	0	7
Guna ...	1,571	945·9	− 1·2	943·7	86·8	+ 0·8	102	7, 8	74·4	− 0·8	71	12, 14	78·0	85·5	70·4	74·2	22·1	− 5·8	24·3	72	− 14	6
Gwalior ...	681	974·5		972·0	93·7		111	3	79·8		74	13	84·2	90·3	78·1	79·2	30·1		29·0	77		6
Madhosagar ...	757	972·0		969·0	93·3		109	3	80·4		73	18	83·3	90·1	77·6	79·2	29·8		29·3	78		6
Central India, East																						
Nowgong ...	750	972·6	− 1·2	969·6	90·3	− 0·7	103	7	78·6	− 0·1	75	13, 20	81·6	87·7	77·9	80·2	30·9	+ 1·0	31·8	84	+ 2	7
Sutna ...	1,041	962·8	− 0·9	960·2	89·0	+ 0·2	98	6	76·9	− 0·5	72	16, 29	80·4	86·5	77·0	80·0	30·1	+ 0·8	32·1	88	+ 6	7
Umaria ...	1,506	947·7		945·1	87·1	+ 0·6	94	7	74·7	+ 0·5	70	14	78·2	83·7	75·3	77·4	28·7	− 0·2	29·6	88	+ 2	7
Berar																						
Akola ...	925	969·7	− 1·1	976·1	86·7	− 2·4	95	8, 16	74·7	− 0·1	71	2	77·0	84·2	74·2	76·5	27·6	− 1·3	27·7	84	+ 3	6
Amraoti ...	1,213	959·8	− 1·1	957·2	85·0	− 2·5	96	7	74·0	0	71	30	75·9	82·5	73·7	77·6	27·4	− 1·1	30·1	83	+ 4	8

R—Register not received. ~~*b*—Mean for 29 days.~~ * Data not reliable.

ond amount nths of sky). Departure from normal.	Mean 17 hrs. I. S. T.	Rainfall, inches. Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Number of rainy days (0·10" or more). Total in the month.	Departure from normal.	Wind velocity, miles per hour. Mean.	Departure from normal.	Wind direction—Number of winds from 8 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	STATION.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												U. P., West
+ 1·3	7·9	17·67	+ 5·86	3·22	14	18	+ 4·2	4·5	+ 0·3	1	0	0	0	2	3	3	1	21	0	2	0	0	0	1	9	0	19	Jhansi
+ 0·9	6·7	11·66	+ 3·11	2·13	21	16	+ 5·0	3·3	− 1·1	1	3	5	2	6	3	2	2	7	1	2	2	3	2	0	3	1	16	Agra
+ 1·8	7·1	15·04	+ 7·50	4·38	14	13	+ 2·6	3·4	+ 1·2	2	1	9	4	3	1	4	4	3	2	2	8	8	1	2	1	4	3	Mainpuri
+ 1·1	6·6	6·85	− 1·92	1·27	21	12	+ 1·7	4·5	− 0·1	1	2	15	3	0	0	1	1	8	1	0	15	0	2	0	5	3	5	Aligarh
+ 1·2	8·3	9·97	− 2·99	2·98	10	9	− 3·8	4·5	+ 2·3	0	0	8	11	2	2	0	2	6	1	0	13	1	3	2	3	3	5	Bareilly
− 0·2	4·9	14·95	+ 2·65	2·61	13	15	+ 3·1	4·3	+ 1·8	0	0	1	22	0	0	0	2	6	0	2	0	16	1	1	0	1	10	Roorkee
+ 0·5	6·1	22·24	− 4·06	2·45	11	26	+ 5·7	1·0	− 0·6	1	0	0	0	5	0	0	0	25	1	1	1	2	3	3	9	0	11	East Dehra Dun
																												Punjab, Eastern
+ 0·7	7·6	7·39	+ 0·36	1·77	23	11	+ 2·0	5·9		0	5	10	6	3	2	3	1	1	2	6	10	1	2	3	2	4	1	New Delhi
− 0·3	3·2	6·99	+ 2·71	3·08	22	9	+ 3·0	6·1	+ 0·6	0	3	5	9	4	5	2	1	2	2	6	4	3	2	3	4	4	3	Hissar
− 2·5	4·2	6·29	− 3·32	1·80	19	9	− 1·6			0	9	0	14	0	0	0	5	3	0	4	0	14	0	1	0	6	6	Ambala
+ 1·1	3·4	10·28	− 2·16	3·21	14	8	− 0·4	3·8	+ 1·8	0	1	8	8	1	0	2	2	9	0	5	3	6	0	1	0	4	12	Ludhiana
																												Kashmir
+ 2·1	4·6	4·63	+ 2·30	1·39	22	6	+ 1·1	2·2	− 0·3	0	1	2	9	4	1	0	1	13	1	1	0	7	4	1	4	4	9	Srinagar
																												Gulmarg (*R*)
																												Dras (*R*)
+ 1·3	6·7	2·97	− 2·50	0·80	22	4	+ 2·6	2·4	+ 0·5	0	4	0	0	2	8	0	0	17	2	8	1	1	0	13	0	0	6	Leh
																												Skardu (*R*)
																												Gilgit (*R*)
																												Misgar (*R*)
																												Rajputana, West
0	3·2	5·10	+ 2·9	2·15	23	7	+ 2·7	6·0	− 1·4	2	0	10	4	3	6	4	1	1	3	2	5	5	3	3	2	2	6	Sri Ganganagar
−1·4	3·0	0·98	− 2·36	0·60	27	4	− 0·9	7·5	+ 0·5	0	3	1	2	1	20	1	2	1	0	5	0	2	0	21	0	3	0	Bikaner
	4·5	5·48	+ 2·77	4·14	25	3	− 0·8	15·7		2	0	0	2	2	19	5	1	0	0	0	1	1	6	18	3	2	0	Phalodi
−0·4	6·0	7·29	+ 3·32	2·87	29	5	− 0·5	5·0	− 7·1	0	0	0	1	1	13	9	1	6	0	0	0	0	3	16	1	0	11	Jodhpur
−0·6	3·6	3·34	+ 0·09	2·06	30	5	+ 1·0	6·2	− 1·0	0	0	0	1	4	17	5	0	4	0	0	0	1	2	17	6	2	3	Barmer
																												Rajputana, East
	6·9	7·53		2·36	28	11		4·6		0	0	2	0	1	8	12	0	8	1	1	4	2	1	7	8	3	4	Sikar
0	8·2	8·53	+ 0·79	2·57	24	9	− 1·3	5·4	+ 0·4	2	0	1	1	0	4	9	9	5	2	2	2	2	1	1	10	7	4	Jaipur
+0·4	6·4	6·83	+ 0·42	3·89	24	9	+ 0·1	7·0	+ 1·0	0	0	0	0	0	16	10	0	5	0	0	0	0	2	11	12	3	3	Ajmer
−0·3	7·3	17·94	+ 7·80	6·74	23	16	+ 4·9	5·7	+ 1·7	0	1	1	0	0	9	14	2	4	1	1	2	0	0	7	7	5	8	Kotah
−1·1	7·7	20·38	+ 8·70	6·24	20	17	+ 3·5	6·3	+ 1·4	0	0	0	0	2	4	19	0	6	0	1	0	1	0	5	19	2	3	Jhalawar
	8·5	2·33	− 6·22	0·48	29	7	− 3·4	5·9		1	0	0	1	4	12	11	2	0	0	0	0	1	1	20	9	0	0	Udaipur
																												Gujarat
																												Deesa *
+0·1	6·7	0·30	− 6·03	0·20	31	1	− 5·0	12·7	+ 1·0	0	0	0	0	0	7	22	2	0	0	0	0	0	0	17	14	0	0	Bhuj
+0·8	8·0	0·37	− 6·53	0·17	30	2	− 4·0	18·8	+ 3·4	0	0	0	0	0	11	20	0	0	0	0	0	0	0	16	15	0	0	Dwarka
+1·5		0·40	− 8·53	0·30	30	1	− 6·9	10·5	− 3·5	0	0	0	0	0	15	16	0	0	~~0~~	~~0~~	~~0~~	~~0~~	~~0~~	~~16~~	~~15~~	~~0~~	~~0~~	Jamnagar
−2·2	6·6	0·76	− 9·92	0·64	30	2	− 8·5	18·0	+ 6·0	0	0	0	0	1	15	14	1	0	0	0	0	0	1	10	15	5	0	Rajkot
+0·4	8·0	0·81	− 2·80	0·18	23	3	− 6·2	19·8		0	0	0	0	1	6	20	4	0	0	0	0	0	0	7	21	3	0	Veravai
+0·7	8·5	4·86	−12·56	1·39	23	12	− 4·3	8·0	+ 0·7	0	0	0	1	4	19	5	0	2	0	0	0	0	3	23	0	0	0	Surat
−0·6	8·2	0·59	− 6·42	0·52	23	1	− 8·3	8·3	+ 0·9	0	0	0	0	4	12	12	3	0	0	0	1	0	6	11	12	1	0	Bhavnagar
−0·7	8·5	3·92	− 8·30	1·37	23	7	− 5·6	5·8	+ 0·9	0	0	0	0	1	12	12	5	1	0	0	1	0	3	12	11	3	1	Ahmedabad
−0·7	6·7	9·57	+ 0·55	2·54	11	13	[illegible]0	18·1	+ 9·1	0	0	0	0	1	15	15	0	0	0	0	0	0	2	24	4	1	0	Dohad
−1·5	7·9	6·54	− 5·69	1·60	9	11	− 1·7	5·5	− 0·1	0	0	0	0	2	15	11	1	2	0	0	0	0	6	13	8	2	2	Baroda
																												Central Ind., West
+1·7	8·4	9·88	+ 0·41	2·79	29	8	− 2·6	10·2	+ 1·4	0	0	0	0	0	7	23	1	0	0	3	0	1	0	9	17	0	1	Neemuch
+0·9	9·8	9·46	− 1·66	2·45	21	13	− 0·3	6·7	+ 0·9	0	0	0	0	0	12	16	3	0	0	0	0	0	1	18	10	2	0	Indore
+1·3	9·5	20·13	− 0·40	4·30	29	18	+ 1·6	7·3	+ 1·3	0	0	0	0	0	6	17	7	1	0	1	0	0	0	3	17	9	1	Bhopal
+1·3	9·2	15·51	− 0·96	1·49	30	17	+ 1·5	7·2	+ 0·3	0	0	0	0	0	14	12	2	3	3	0	0	0	0	8	12	5	3	Guna
	8·7	16·06		4·17	22	13		3·2		0	3	3	1	4	3	8	4	5	2	2	0	1	2	2	7	3	12	Gwalior
	8·4	20·98		5·67	23	19		7·0		1	9	1	1	2	10	6	1	0	3	4	2	0	2	8	5	5	2	Madhosagar
																												Central India, East
−0·2	8·7	13·13	− 0·68	2·94	1	18	+ 3·9	4·2	+ 1·1	2	7	0	0	1	17	2	1	1	5	7	3	0	0	11	3	1	1	Nowgong
+1·1	7·9	10·59	− 3·66	2·17	14	20	+ 4·3	4·2	− 0·9	0	2	1	2	1	9	10	0	6	2	1	5	0	0	5	9	6	3	Sutna
+0·6	8·7	13·93	− 3·82	2·01	20	18	− 2·1	3·8	0	1	0	0	1	5	16	7	0	1	2	2	3	0	1	7	10	3	3	Umaria
																												Berar
0	8·0	7·87	− 1·92	1·25	8	17	+ 4·6	8·2	+ 1·3	0	0	0	0	0	7	22	2	0	0	0	0	0	0	1	15	14	1	Akola
+1·0	9·2	14·36	+ 4·95	3·30	29	16	+ 3·2	10·5	+ 2·9	0	0	0	0	0	24	5	2	0	0	0	0	0	0	21	3	7	0	Amraoti

* Data not reliable. *R*—Register not received.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature, °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature, °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature, °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Wet bulb temperature, °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Relative humidity, % Mean 8 hrs. I. S. T.	Departure from normal.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
C. P., West																						
Khandwa ...	1,044	965·4	− 1·0	962·9	85·8	− 2·1	96	7	74·3	− 1·0	72	5 days	77·2	83·8	74·6	77·0	28·1	+1·3	28·6	88	+ 5	7
Hoshangabad ...	992	966·1	− 1·5	963·9	84·3	− 1·8	95	7, 8	74·6	− 0·5	71	22, 30, 31	76·2	82·2	74·5	77·0	28·4	+0·2	29·3	95	+ 6	7
Saugor ...	1,808	938·3	− 0·9	936·6	86·7	+ 0·8	97	8	74·6	+ 0·7	71	30	76·4	81·6	74·2	76·3	28·0	+1·4	28·8	89	+ 3	7
Jubbulpore ...	1,289	955·7	− 0·7	953·0	87·1	+ 0·7	97	7, 8	75·1	+ 0·4	72	1, 30	77·4	83·4	75·1	77·5	28·7	+1·3	29·4	89	+ 5	7
Seoni ...	2,027	932·1	− 0·8	930·0	84·0	− 0·1	93	6, 7	73·3	+ 1·0	71	6 days	75·4	80·1	73·9	75·8	28·0	+1·9	28·8	93	+ 7	6
Nagpur ...	1,022	966·0	− 1·2	963·6	87·8		98	7	75·4		71	30	78·2	83·0	74·3	75·8	27·5		27·2	83		7
Gondia ...	1,026	965·3		962·8	86·0		95	6, 7	75·3		71	4	78·5	81·3	75·6	77·3	28·9		30·2	89		8
C. P., East																						
Pendra ...	2,040	931·1	− 0·6	928·8	83·9	+ 0·4	90	6, 7, 8	73·6	+ 1·2	71	4 days	76·5	79·4	74·4	75·9	28·3	+1·4	29·1	91	+ 4	8
Champa ...	876	972·6		969·8	88·0		94	6, 7	76·8		73	21	78·8	84·2	77·3	79·2	33·7		31·8	93		8
Raipur ...	970	967·1	− 0·7	965·3	86·0	− 0·7	93	7	74·0	− 1·0	71	21	77·9	82·1	75·5	77·4	29·0	+0·5	29·9	90	+ 3	7
Titilagarh ...	691	976·8		974·0	87·8		94	5, 6	76·4		72	21	78·8	84·6	75·7	78·0	29·0		29·8	86		7
Kanker ...	1,318	956·5	0	954·0	84·3	+ 0·3	91	7	73·7	− 0·2	71	16	77·9	82·4	74·2	76·1	27·2	+0·3	27·9	84	− 1	7
Chanda ...	634	980·1	− 0·5	977·0	87·6	− 0·8	98	6	75·5	− 0·3	72	21	78·2	85·4	74·4	76·8	27·4	−0·3	27·6	84	+ 3	6
Jagdalpur ...	1,815	940·6	− 0·5	938·3	82·7	− 0·2	89	6	72·4	+ 0·5	69	21	75·7	79·9	73·3	75·0	26·9	+0·3	27·7	90	+ 3	8
Konkan																						
Dahanu ...	15	1002·1		1000·7	85·8		90	5, 6, 7	79·1		75	16, 17	82·4	84·1	80·5	80·8	34·8		34·4	90		8
Bombay ...	37	1002·1	− 0·9	1000·9	86·1	+ 0·6	91	7, 8	78·4	+ 1·7	73	17	81·3	82·8	78·2	78·6	31·5	+ 1·0	31·5	87	+ 1	8
Alibag ...	23	1003·4	− 0·4		85·1	+ 0·7	89	5, 6, 13	78·4	+ 0·8	72	9	81·4		79·0		32·8	+ 1·7		90	+3	
Harnai ...	66	1001·5		1001·5	85·2		90	5, 6, 7	75·1		70	24	80·9	81·5	77·5	77·5	30·6		30·4	85		8
Devgad ...	110	1001·2		999·9	83·6		88	5	77·4		74	16, 17	80·1	80·9	78·0	78·3	31·8		31·9	91		8
Marmagao ...	202	999·5	− 0·2	997·6	81·7	− 0·9	85	4, 5					79·0	79·2	76·8	76·4	30·5	+ 0·6	29·8	90	+ 1	8
Honavar ...	85	1004·6		1003·0	83·1		87	5	73·8		71	8, 15	77·1	79·3	76·2	76·8	30·4		30·3	96		8
Bombay, Deccan																						
Jalgaon ...	660	978·0		976·3	87·5		98	6	74·8		71	2	77·7	84·5	75·6	78·1	29·3		29·9	91		
Malegaon ...	1,432	958·6	− 0·8	950·5	86·3	− 1·9	94	6	72·8	− 0·7	70	30, 31	77·0	82·4	73·7	74·2	26·9	+ 1·6	25·2	35	+ 8	
Ahmednagar ...	2,154	930·8	− 1·0	928·6	84·5	− 0·8	93	7	71·0	+ 0·4	69	6 days	74·6	80·6	70·7	71·7	24·0	+ 0·7	22·5	83	+ 3	
Poona ...	1,834	941·9	− 0·6	940·4	83·1	+ 0·6	89	7, 8	72·3	+ 0·6	69	16	74·8	78·5	71·5	72·6	24·5	+ 0·8	24·7	85	+ 3	
Sholapur ...	1,570	951·1	− 0·4	947·8	89·8	+ 0·6	99	6, 7	72·4	+ 0·3	70	30	75·0	86·1	71·7	74·2	25·2	+ 1·5	24·0	84	+ 8	
Miraj ...	1,817	943·1	− 1·3	941·4	84·4	+ 2·6	91	5	71·4	+ 0·6	69	31	73·8	80·1	71·7	73·0	25·7	+ 1·3	24·9	90	+ 4	
Kolhapur ...	1,885	941·7		939·8	80·0		86	5	70·7		69	17, 21	73·2	76·5	71·1	72·1	25·2		25·1	90		
Bijapur ...	1,950	938·9	− 0·7	936·7	88·7	+ 2·1	97	4	71·4	+ 0·5	68	30	74·8	84·2	71·2	73·2	24·6	+ 1·2	23·4	83	+ 3	
Belgaum ...	2,562	920·0	− 0·5	918·6	76·5	+ 0·3	82	4	68·1	+ 0·7	66	21	70·8	73·1	69·7	70·3	24·3	+ 1·2	24·1	94	+ 1	
Gadag ...	2,131	934·2	− 0·4	932·1	84·5	+ 1·4	90	4	70·4	+ 0·4	69	7, 16, 31	73·1	78·0	70·1	71·3	23·9	+ 0·3	23·5	86	0	
Hyderabad, North																						
Aurangabad ...	1,205	939·1	− 0·7	936·7	83·5	− 2·5	91	1, 5, 6	71·2	+ 0·3	70	7 days	74·1	79·9	72·7	74·8	26·9	+ 2·6	27·5	93	+ 9	
Parbhani ...	1,350	955·8		952·7	80·9		96	7	72·1		70	8, 30	75·8	84·0	73·3	76·2	26·9		27·3	89		
Bidar ...	2,178	930·0		927·2	83·3	− 2·3	93	6, 7	71·0	+ 1·5	68	21	72·8	82·5	70·9	73·9	25·0	+ 1·0	25·1	88	+ 2	
Nizamabad (R) ...	1,250																					
Ramakundam ...	527	984·5		981·5	89·4		100	7	76·5		72	18	79·0	85·8	75·1	77·4	28·0		28·3	83		
Hyderabad, South																						
Gulbarga (R) ...	1,503																					
Raichur ...	1,311	960·2	− 0·7	956·6	88·3	− 2·0	98	3	74·2	+ 1·3	73	8	76·4	87·9	72·1	73·9	25·0	+ 0·5	23·2	81	+ 4	
Hyderabad (Begumpet)	1,778	943·3	− 0·8	940·6	88·1	+ 0·7	95	2, 5, 6	73·7	+ 1·2	71	4 days	75·8	83·6	72·2	75·4	25·4	+ 0·4	26·3	84	+ 1	
Hanamkonda ...	881	972·6	− 0·9	969·6	89·5	+ 1·4	98	2	75·8	+ 0·1	72	20, 23, 24	78·8	86·4	74·7	76·4	27·5	+ 1·6	26·5	83	+ 6	
Khammameth ...	567	990·3		987·0	91·9		101	2	77·1		70	20	79·6	89·2	73·5	83·8	32·5		37·2	93		
Mysore																						
Chitaldrug ...	2,405	925·6	− 0·4	923·4	80·5	− 2·1	85	13	69·0	+ 0·1	67	16, 29	71·6	76·8	69·1	70·7	23·3	+ 1·0	23·2	88	+ 4	
Hassan ...	3,149	902·6		901·0	76·3	− 1·3	81	13	66·1	+ 0·5	65	6, days	68·5	72·2	67·0	68·1	22·0	+ 0·6	21·9	92	+ 4	
Bangalore ...	3,021	906·3	− 0·7	904·6	80·9	− 0·5	85	3, 6, 13	66·8	+ 1·1	65	13	68·8	76·9	67·2	69·4	22·1	+ 1·0	21·5	92	+ 4	
Mysore ...	2,518	923·1	− 0·7	921·2	82·0	− 0·2	87	5	67·9	+ 0·7	67	9 days	71·2	73·3	68·3	70·3	22·5	+ 0·8	22·1	86	+ 3	
Malabar																						
Mangalore ...	72	1005·4	− 0·4	1003·6	83·4	− 0·2	87	2, 4	74·2	− 0·1	72	5, 15	77·0	80·6	75·9	77·6	30·1	+ 0·8	31·0	95	+ 2	
Calicut ...	27	1007·3	− 1·1	1005·5	83·6	+ 1·2	88	4 days	74·5	+ 0·4	72	28, 29	76·4	80·7	75·6	78·1	29·9	+ 1·2	31·7	96	+ 1	
Palghat ...	319	997·3		995·1	82·4		86	3, 5, 25	73·1		71	15, 28	75·5	79·3	74·2	75·7	28·3		28·7	94		
Cochin ...	10	1008·5	− 1·2	1006·6	82·5	− 0·1	85	3, 9	74·1	− 0·6	72	28, 29	76·9	80·1	75·5	76·7	29·5	+ 1·1	29·8	94	+ 4	
Alleppey ...	12	1008·4		1006·6	84·6		88	2	74·2		72	6, 27, 28	77·4	80·4	75·9	77·1	29·9		30·9	93		
Trivandrum ...	211	1001·6	− 0·9	999·6	83·9		87	31	74·0		72	4 days	76·4	80·8	74·7	76·2	28·6	+ 0·9	28·8	92	+ 2	
Nagercoil ...	195	1001·5		999·0	85·7		92	31	75·3		73	10, 15	77·6	82·5	74·3	76·0	27·5		27·7	85		

~~Pressure and cloud refer to aerodrome site, other remarks refer to cantonment site.~~ b—Mean of 19 days. (R)—Register not received.

Cloud amount (tenths of sky)		Rainfall, inches				Number of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from																		STATION
										8 hrs. I. S. T.										17 hrs. I. S. T.								
Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												C. P., West
+1·9	9·7	23·38	+14·26	7·00	29	16	+ 3·9	8·7	+ 1·3	0	0	0	0	0	13	17	1	0	0	0	0	0	0	8	23	0	0	Khandwa
+1·2	9·5	28·00	+11·29	6·51	21	22	+ 6·3	1·9	− 1·6	0	0	0	0	2	10	10	1	8	0	0	0	0	6	11	9	3	2	Hoshangabad
+1·2	9·5	16·81	+ 1·24	3·49	29	16	− 0·5	12·8	+ 0·2	1	0	0	0	1	8	18	2	1	1	1	1	0	0	6	18	2	2	Saugor
+1·4	9·3	20·35	+ 0·97	4·51	19	22	+ 3·9	6·1	+ 2·7	0	0	0	0	1	16	11	1	2	1	0	0	1	1	14	9	1	4	Jubbulpore
+0·3	6·8	18·38	+ 2·18	2·01	8	21	+ 2·3	3·9	+ 0·6	1	0	0	0	2	12	12	1	3	3	1	0	1	2	8	9	5	2	Seoni
+1·1	9·5	18·65	+ 4·05	3·82	29	20	+ 3·5	7·1		2	0	0	1	0	18	9	3	0	0	0	0	0	0	10	14	7	0	Nagpur
	8·5	15·13		2·30	28	21		4·1		1	0	0	1	2	15	9	2	1	1	1	0	2	1	13	8	3	2	Gondia
																												C. P., East
+1·6	9·1	17·07	+ 2·36	1·97	18	19	− 0·1	4·2	− 0·3	3	1	1	2	14	3	1	3	3	5	2	0	3	13	2	2	0	4	Pendra
	8·8	15·19		3·61	20	16		5·9		0	0	0	2	1	14	12	0	2	3	1	0	0	5	12	9	0	1	Champa
+1·5	9·3	11·72	− 3·27	2·18	3	18	+ 2·0	6·2	− 0·5	0	0	0	0	0	28	3	0	0	0	0	1	1	1	13	3	12	0	Raipur
	8·0	13·42		2·31	7	16		3·7		0	0	0	0	14	12	3	0	2	1	0	0	0	9	12	4	2	3	Titilagarh
+0·2	9·5	11·98	− 3·74	2·25	28	14	− 3·9	6·8	+ 0·8	0	0	0	0	0	19	1	0	11	0	0	0	0	1	15	10	0	5	Kanker
−0·4	7·8	16·32	+ 0·01	3·24	25	20	+ 3·1	6·2	+ 1·0	0	0	0	1	0	16	0	11	3	0	1	0	2	0	16	0	11	1	Chanda
+0·7	9·1	8·41	− 6·72	2·33	19	17	− 2·4	7·3	− 3·0	0	0	0	0	0	28	0	1	2	0	0	0	0	0	27	0	2	2	Jagdalpur
																												Konkan
	9·3	21·43		5·19	16	18		16·8		0	0	0	1	3	10	16	1	0	0	0	0	1	0	11	18	1	0	Dahanu
− 0·2	9·2	27·16	+ 2·89	6·80	9	19	− 3·1	9·9	− 1·7	0	0	0	0	3	9	15	2	2	0	0	1	1	1	6	19	2	1	Bombay
[illegible]0		30·43	+ 6·99	8·06	9	21	− 2·3	15·3	− 2·4	0	0	0	2	1	15	11	2	0										Alibag
		32·90		9·55	15	26		11·9		0	1	0	4	2	19	3	2	0	0	0	1	7	1	18	2	2	0	Harnai
	9·5	39·74		8·28	16	25		15·1		0	0	1	2	0	1	20	7	0	0	0	0	0	0	1	16	14	0	Dodgad
[illegible]0	9·1	47·44	+16·15	5·50	7	29	+ 2·4	11·2	+ 1·3	0	0	1	2	2	5	16	5	0	1	0	0	1	2	1	21	5	0	Marmagao
	8·6	48·26	+ 3·92	4·34	8	30	+ 1·7	3·3		0	0	4	2	0	4	12	1	8	0	0	1	1	3	3	15	4	4	Honavar
																												Bombay Deccan
	7·2	17·40	+ 7·89	3·38	9	18	+ 3·7	7·6		0	0	0	1	0	8	20	1	1	1	0	0	1	0	1	21	7	0	Jalgaon
+ 0·3	8·9	6·31	+ 1·89	1·55	16	12	+ 4·6	7·7	− 1·9	0	0	0	0	0	4	17	0	10	0	0	0	0	0	9	18	2	2	Malegaon
+ 0·6	9·0	6·30	+ 2·52	2·53	9	7	+ 0·2	6·3	− 3·4	0	0	0	0	0	17	12	1	1	1	0	0	0	0	10	11	9	0	Ahmednagar
+ 0·2	8·8	4·00	− 2·56	0·98	22	9	− 3·7	4·9	− 5·3	0	0	0	0	0	0	28	0	3	0	0	0	0	0	0	30	0	1	Poona
+ 1·4	9·3	4·47	+ 0·29	0·85	8	9	+ 1·8	8·2	− 1·9	0	0	0	0	0	30	0	1	0	0	1	0	0	0	22	1	7	0	Sholapur
− 1·5	8·5	1·90	− 2·23	0·60	21	7	− 2·1	10·5	[illegible]0	0	0	0	0	0	9	22	0	0	3	0	0	0	0	0	25	3	0	Miraj
	8·2	11·35		2·50	21	15		11·7		0	0	0	0	0	3	28	0	0	0	0	0	0	0	1	29	1	0	Kolhapur
− 2·0	6·4	1·65	− 0·72	0·47	7	8	+ 3·7	10·1	+ 0·7	0	0	0	0	0	10	16	5	0	0	0	0	0	0	11	16	4	0	Bijapur
− 0·7	8·0	10·99	− 6·21	3·16	22	21	− 1·1	5·9	− 0·3	0	0	0	0	0	0	31	0	0	0	0	0	0	0	2	21	8	0	Belgaum
+ 0·8	9·3	1·23	− 1·66	0·62	18	5	− 2·9	8·8	+ 0·8	0	0	0	0	0	11	15	5	0	0	0	0	0	0	11	15	5	0	Gadag
																												Hyderabad, North
[illegible]0	9·3	7·61	+ 0·87	0·78	15	17	+ 5·7	10·9	− 0·1	0	0	0	0	0	5	23	0	0	0	0	0	0	0	3	27	1	0	Aurangabad
	8·4	12·01	+ 4·69	4·35	8	16	+ 4·9			0	0	0	0	1	6	24	0	0	1	0	0	1	1	2	22	3	1	Parbhani
+ 1·5	9·0	5·86	− 2·25	0·73	28	16	+ 4·4	12·9	− 0·9	0	0	0	0	0	14	15	2	0	0	0	0	0	0	9	11	11	0	Bidar
																												Nizamabad (*B*)
	9·3	8·84		1·26	21	15		2·3		0	0	0	0	0	2	13	2	14	1	1	0	0	3	3	12	5	6	Ramakundam
																												Hyderabad, South
																												Gulbarga (*B*)
+ 1·7	8·4	2·62	− 2·18	0·57	25	8	− 0·4	14·4	+ 4·8	0	0	0	0	0	20	9	1	0	0	0	0	0	0	14	10	7	0	Raichur
+ 1·1	9·1	7·37	+ 1·38	3·13	24	11	− 0·1	11·7	+ 1·6	0	0	0	0	0	5	24	2	0	1	0	0	0	0	4	19	6	1	Hyderabad (Begumpet)
+ 0·3	8·0	6·29	− 2·85	0·69	15	16	+ 2·6	6·9	+ 0·2	1	0	0	1	3	4	15	4	3	3	0	1	0	2	5	10	10	3	Hanamkonda
	7·2	9·42		2·10	24	17		5·9		3	0	0	1	1	13	10	1	2	8	1	0	0	0	6	5	11	0	Khammamath
																												Mysore
+ 0·4	8·9	4·49	+ 1·62	1·01	25	12	+ 3·8	9·3	+ 1·1	0	0	0	0	0	11	19	1	0	0	0	0	0	0	8	21	3	0	Chitaldrug
+ 0·5	9·2	3·77	− 2·03	1·40	18	7	− 6·2	9·4	+ 2·4	0	0	0	0	0	6	25	0	0	0	0	0	0	0	3	27	1	0	Hassan
+ 0·5	9·5	5·85	+ 1·92	1·27	13	13	+ 5·0	10·4	+ 2·0	0	0	0	0	0	11	19	1	0	0	0	0	0	0	1	17	13	0	Bangalore
+ 0·7	9·3	1·43	− 1·26	0·56	14	4	− 3·5	8·4	− 0·5	0	0	0	0	0	17	14	0	0	0	0	0	0	0	5	25	1	0	Mysore
																												Malabar
+ 0·5	9·6	32·61	− 5·29	5·83	7	25	+ 0·5	4·8	− 0·8	1	2	3	0	2	3	3	5	1	2	0	0	0	0	9	11	9	0	Mangalore
+ 0·5	9·3	27·86	− 4·60	3·99	28	29	+ 2·5	5·2	+ 0·4	6	7	3	4	2	0	3	3	1	2	1	1	0	0	5	13	9	0	Calicut
	8·8	18·29		3·19	19	25		7·1		0	0	0	0	0	4	25	1	1	0	0	0	0	0	8	20	3	0	Palghat
+ 1·3	9·3	17·57	− 5·74	2·67	7	21	− 3·2	5·6	+ 0·6	2	3	3	4	0	1	4	1	13	2	1	0	0	1	5	8	14	0	Cochin
	9·5	31·71		3·37	6	26		5·4		4	4	4	2	0	1	2	9	5	3	2	0	0	0	1	5	20	0	Alleppey
− 0·8	7·6	7·93	+ 0·16	1·46	5	15	+ 0·7	6·3	− 0·1	10	1	0	0	0	0	1	17	2	2	0	0	0	0	0	6	23	0	Trivandrum
	8·7	2·90		0·68	8	9		10·3		0	0	0	0	0	0	22	8	1	0	0	0	0	0	0	23	8	0	Nagercoil

(*B*)—Register not received.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Wet bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Relative humidity % Mean 8 hrs. I. S. T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madras, Southeast																					
Pamban ...	37	1005·8	− 0·5	1002·9	87·9	− 1·4	89	15 days	81·0	+ 1·7	79	2, 31	84·1	83·9	78·2	78·6	30·6	+ 1·0	31·3	75	− 3
Madura ...	437	991·4	− 1·0	987·9	97·6	+ 1·7	101	3, 5	78·7	+ 1·4	75	14, 31	83·8	92·4	73·7	75·3	23·8	+ 1·0	22·2	60	0
Negapatam ...	31	1005·1	− 0·8	1001·7	97·1	+ 1·1	102	6	80·1	+ 1·2	76	5, 28, 31	83·9	88·8	75·9	79·6	26·9	[illegible]	30·4	67	− 1
Trichinopoly ...	255	997·8	− 0·7	994·1	97·0	[illegible]	101	5	79·8	+ 1·5	74	13	82·7	93·8	74·7	75·7	24·9	+ 1·3	22·1	66	+ 4
Coimbatore ...	1,341	961·1	− 1·2	959·0	85·5	− 1·2	91	5	72·0	+ 1·0	70	15, 28, 29	74·9	81·1	71·5	72·7	24·8	[illegible]	23·6	83	0
Salem ...	913	975·3	− 1·1	971·7	92·3	− 0·7	97	5	74·8	+ 0·8	70	25	76·9	87·1	73·1	74·7	26·1	+ 0·4	23·7	83	+ 3
Cuddalore ...	39	1004·3	− 0·9	1000·7	96·9	+ 0·9	102	5 days	79·3	+ 0·7	73	17, 24	82·7	91·3	75·8	79·0	27·3	− 0·4	28·2	72	0
Vellore ...	703	981·6	− 0·4	977·9	95·1	+ 1·0	100	2, 3	78·9	+ 1·7	72	24	82·0	90·8	74·8	77·9	26·2	+ 1·3	26·8	70	0
Madras	51	1003·3	− 0·7	999·7	96·4	+ 0·1	103	2, 3	79·8	+ 0·5	76	4 days	83·8	89·9	75·8	78·7	26·8	+ 1·3	28·4	68	+ 3
Arogyavaram ...	2,299	928·9		926·1	86·7		91	4, 5, 12	71·9		69	13, 30	75·1	83·3	69·0	71·1	21·8		21·1	73	
Madras, Deccan																					
Cuddapah ...	428	990·5	− 0·9	986·4	95·8	+ 0·2	101	5	79·3	+ 1·2	74	31	84·1	91·1	77·1	79·6	28·9	+ 3·2	27·6	72	+ 4
Bellary ...	1,473	955·2	− 0·8	952·2	89·7	− 0·9	95	4	75·9	+ 0·9	73	17	78·2	86·6	71·1	72·7	22·8	+ 0·7	21·1	69	+ 1
Kurnool ...	923	973·4	− 0·6	969·3	92·0	+ 0·4	98	3, 4, 7	75·1	0	72	29	79·1	89·4	74·0	75·9	26·4	+ 1·6	24·4	78	+ 3
Rentichintala ...	348	991·3		987·8	94·1	+ 1·0	102	2, 3	78·9	+ 0·2	72	19	82·5	93·0	76·2	78·1	28·0	+ 0·8	26·1	78	+ 5
Anantapur ...	1,148	966·1		962·6	92·7		98	4	75·9		71	13, 24	78·9	88·5	73·0	75·4	25·0		24·1	74	
Madras Coast, North																					
Nellore ...	66	1001·7	− 1·0	998·1	98·6	+ 1·7	104	4, 5, 12	80·3	+ 0·4	75	13	85·2	94·8	76·8	78·6	28·0	+ 1·8	26·8	63	+ 2
Ongole ...	38	1002·2		998·5	96·3		103	2, 4, 5	80·7		75	19, 25	85·0	93·7	76·5	77·6	27·3		25·0	67	
Masulipatam ...	10	1002·7	− 1·0	999·5	92·8	+ 0·4	102	2	78·6	+ 0·5	74	19, 20	81·5	89·6	78·1	80·2	31·3	+ 1·6	31·0	85	+ 4
Cocanada ...	26	1000·7	− 0·5	998·9	89·9	− 0·4	99	4	78·1	− 0·3	72	22	81·7	87·7	78·1	80·0	31·2	+ 1·5	31·5	85	+ 4
Vizagapatam ...	126	997·2	− 0·4	994·6	88·1	− 0·9	94	27	79·4	+ 0·6	76	16, 20	82·5	85·1	77·7	78·8	30·2	+ 0·3	30·7	80	+ 1
Calingapatam ...	19	1000·3	− 0·4	998·0	89·2	− 0·6	97	26	79·3	+ 0·4	75	6, 7	82·1	84·7	78·5	80·0	31·6	+ 0·4	32·3	85	+ 2
Hill Stations, excluding Kashmir and Baluchistan																					
Shillong ...	4,921	844·4	+ 0·1	842·3	74·9	− 0·4	80	6	64·8	+ 0·2	62	19, 22	68·5	71·0	66·7	66·8	21·6	+ 0·9	20·9	89	+ 5
Cherrapunji ...	4,309	863·6	+ 0·6	861·3	71·3	− 1·0	78	6, 7	64·6	− 0·7	63	5 days	66·9	68·7	66·3	67·6	22·5	+ 0·6	22·7	100	+ 7
Aijal ...	3,599	884·8		882·7	76·6		81	5	64·9		63	18	70·2	71·7	69·0	70·6	23·8		25·2	94	
Darjiling ...	7,432	772·3	− 0·1	770·2	65·8	+ 0·1	71	28	57·4	− 0·6	53	16, 17	61·1	61·8	60·7	61·5	17·8	− 0·1	18·3	98	+ 2
Kalimpong ...	3,965	871·9	− 0·9	869·8	74·9	− 0·4	80	9	68·0	+ 0·8	67	5 days	70·1	72·7	69·0	70·9	24·7	+ 0·8	25·1	95	+ 1
Katmandu ...	4,338	860·1		857·4	82·9	− 0·8	89	1	68·2	− 0·5	66	11, 13, 26	72·5	78·0	69·9	72·4	24·0	+ 0·5	25·0	88	+ 5
Muktesar ...	7,592	766·8	− 1·1	765·5	69·7	+ 0·3	78	4, 7	58·3	+ 0·3	53	14	60·7	65·2	60·0	62·6	17·6	+ 0·7	18·3	96	+ 3
Mussooree ...	6,940	791·3		790·6	69·2	0	73	10	60·7	+ 0·1	57	16	63·9	67·3	62·9	65·8	19·2	+ 0·2	21·1	94	− 2
Simla ...	7,224	776·6	− 0·3	775·8	70·3	− 0·6	81	4	60·5	+ 1·3	55	15, 19	64·7	67·9	60·4	63·4	16·5	− 0·5	18·4	81	− 2
Abu ...	3,945	878·1	+ 5·9	878·3	79·6	+ 4·3	89	1	66·7	+ 0·6	63	31	68·1	75·3	66·3	67·8	21·1	− 0·8	20·1	91	− 3
Pachmarhi ...	3,528	885·1	− 1·0	883·3	75·0	− 1·5	85	7	68·0	+ 0·2	65	30, 31	70·0	73·7	68·8	71·2	23·8	+ 1·0	25·0	95	+ 4
Mahabaleshwar ...	4,534	857·2	− 1·0	856·3	65·1	+ 0·7	70	5	62·3	0	60	8, 17, 18	63·8	64·3	64·0	64·4	20·3	+ 0·1	20·6	100	0
Mercara ...	3,781	882·5	− 0·9	881·2	66·3	− 2·4	70	14	63·2	+ 1·1	61	4 days	65·0	66·5	64·8	66·0	20·9	+ 1·0	21·7	99	+ 1
Ootacamund ...	7,364	777·7	− 0·1	776·4	62·5	+ 0·7	67	4 days	52·6	+ 0·5	48	12	55·5	57·9	54·1	55·8	13·8	+ 0·5	14·5	92	0
Coonoor ...	5,780	824·4			72·1	+ 1·3	76	1					66·7		60·7		16·0	+ 1·4		72	0
Kodaikanal ...	7,688	768·9	+ 0·1	767·8	63·6	+ 1·3	68	12, 23	52·5	+ 0·4	49	22	56·4	57·9	53·7	56·3	13·1	+ 0·6	14·9	85	+ 5
Ceylon ...																					
Colombo ...	24	1008·4	− 0·7	1006·2	84·9	− 0·5	86	8 days	77·3	+ 0·3	73	15, 16	79·6	81·9	76·3	76·9	29·5	+ 0·5	29·3	86	− 1
Trincomalee ...	24	1006·0	− 0·3	1003·2	94·5	+ 2·3	97	4 days	78·6	+ 1·0	75	12, 31	81·5	83·5	75·8	77·5	27·9	+ 0·7	27·2	75	− 4
Hambantota ...	61	1005·4	− 1·5	1003·2	85·7	− 1·9	93	11	75·5	− 0·8	75	19 days	77·5	82·1	75·3	76·8	28·9	+ 0·6	29·1	90	+ 2
Mannar ...	12	1006·6		1004·3	87·1		89	23, 25, 31	79·5		79	16 days	81·5	83·4	77·3	77·9	30·1		30·1	82	
N.-W. F. Province																					
Peshawar ...	1,164	957·3	− 0·8	953·8	102·6	+ 0·1	114	2, 3	80·2	0	71	23, 24	86·0	99·7	75·7	78·7	26·7	+ 1·3	24·0	60	0
Miranshah ...	3,026	897·0		894·5	96·3	− 0·3	110	3, 4	74·4	− 4·7	70	22, 25	81·6	93·3	71·0	76·3	21·2	− 1·8	24·0	60	+ 1
Dera Ismail Khan ...	570	976·6	− 0·5		103·4	+ 0·1	116	3, 4	80·9	− 1·8	73	24, 27	82·3		74·6		25·7	− 5·2		68	− 3

d—mean of 27 days. e—Mean of 26 days.

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d amount hs of sky). Departure from normal.	Mean 17 hrs. I. S. T.	Rainfall, inches. Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Number of rainy days (0·10" or more). Total in the month.	Departure from normal.	Wind velocity, miles per hour. Mean.	Departure from normal.	Wind direction—Number of winds from 8 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	STATION
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Madras, Southeast
+ 1·8	5·0	0·22	− 0·24	0·22	31	1	+ 0·2	9·8	+ 0·3	1	0	0	0	11	11	7	1	0	0	0	0	3	18	10	0	0	0	Pamban
+ 0·4	8·3	2·48	+ 0·53	1·40	24	5	+ 2·3	4·7	− 0·2	2	0	0	0	0	0	17	6	6	1	0	0	1	2	3	18	3	3	Madura
+ 2·8	8·0	0·64	− 1·06	0·25	28	3	+ 0·1	6·5	+ 0·5	0	0	0	0	0	14	13	1	3	0	1	0	7	10	12	1	0	0	Negapatam
+ 0·9	7·9	1·47	+ 0·12	0·75	31	3	+ 0·9	9·3	+ 1·6	0	0	0	0	0	1	26	3	1	0	0	0	0	0	7	19	5	0	Trichinopoly
+ 1·7	7·6	0·85	− 0·80	0·23	8	4	− 0·7	11·1	+ 4·5	0	0	0	0	11	15	4	1	6	0	0	0	0	10	16	5	0	0	Coimbatore
+ 0·2	9·0	4·11	+ 0·32	0·90	25	10	+ 0·9	5·1	+ 0·9	0	0	0	0	0	25	5	0	1	0	0	0	0	0	7	9	2	18	Salem
+ 1·2	8·0	2·77	+ 0·17	1·24	23	4	− 1·3	6·6	+ 2·0	0	0	0	2	2	20	6	1	0	1	1	2	12	2	7	4	2	0	Cuddalore
+ 1·5	8·8	2·12	− 2·43	1·24	24	3	− 3·3	5·9	+ 0·9	0	0	0	0	2	17	8	0	4	0	0	2	1	5	15	5	1	2	Vellore
+ 1·2	8·8	3·35	− 0·25	0·77	19	7	+ 0·2	11·2	+ 0·4	0	0	0	2	2	4	21	2	0	0	1	0	26	1	0	2	1	0	Madras
	8·9	3·93		1·00	15	8		8·6		0	0	0	0	0	2	21	8	0	2	0	0	0	0	2	19	7	1	Arogyavaram
																												Madras, Deccan
− 0·2	7·9	3·01	− 1·06	1·40	31	8	+ 1·3	7·8	− 0·1	0	0	0	0	0	0	21	0	10	1	0	0	0	0	0	21	4	5	Cuddapah
+ 0·9	8·4	0·59	− 1·02	0·28	23	2	− 1·4	9·7	+ 1·2	0	0	0	0	0	1	30	0	0	0	0	0	0	0	4	23	4	0	Bellary
+ 0·7	9·1	3·75	− 3·67	1·55	19	7	− 2·3	10·6	+ 0·2	0	0	0	0	0	10	19	2	0	0	0	0	0	0	5	15	10	1	Kurnool
− 0·2	8·8	5·42	+ 0·62	2·08	3	6	− 3·0	8·7	− 0·7	1	0	0	0	0	10	15	1	4	1	0	0	0	0	8	16	6	0	Bentichintala
	8·7	1·17	− 1·46	0·72	13	3	− 0·9	14·0		0	0	0	0	0	2	28	1	0	0	1	0	0	0	2	26	2	0	Anantapur
																												Madras Coast, North
+0·4	9·1	1·80	− 0·95	0·35	18	9	+ 3·5	5·8	+ 0·3	0	0	0	0	1	0	14	4	12	1	0	2	2	2	2	9	7	6	Nellore
	9·0	2·29		0·60	22	6		7·8		0	0	0	0	0	9	17	0	5	0	0	0	1	0	6	21	1	2	Ongole
+0·3	7·5	8·31	+ 1·92	2·81	25	11	+ 0·3	8·3	+ 1·7	0	0	0	0	3	10	12	5	1	1	0	0	0	6	3	3	12	6	Masulipatam
−0·1	7·0	11·18	+ 4·63	2·06	25	14	+ 2·9	8·9	+ 3·1	0	0	0	0	0	30	0	1	0	0	1	0	0	0	27	1	2	0	Cocanada
−0·3	7·9	3·10	− 1·32	0·71	7	7	− 1·5	6·5	+ 1·0	1	0	0	0	2	13	11	1	3	0	0	1	0	10	12	4	1	3	Vizagapatam
+1·3	8·1	9·38	+ 3·84	4·23	6	7	− 1·6	9·6	+ 2·1	0	0	0	0	1	14	13	3	0	0	0	0	0	7	21	3	0	0	Calingapatam
																												Hill Stations, excluding Kashmir and Baluchistan
+1·2	9·2	19·51	+ 5·86	5·14	12	21	+ 2·8	3·3	+ 1·1	0	0	0	1	5	6	1	0	18	0	0	0	3	3	13	0	0	12	Shillong
+0·6	9·1	61·09	+34·75	13·85	12	31	+ 3·5	8·2	+ 2·9	0	3	1	3	17	5	1	0	1	0	4	2	2	4	14	4	0	1	Cherrapunji
	9·2	11·33		1·83	7	22		6·7		0	0	9	5	4	13	0	0	0	0	0	2	3	1	19	5	1	0	Aijal
+0·6	9·5	32·79	− 0·13	5·71	20	25	− 0·6	5·3	+ 1·8	0	1	19	5	1	1	1	0	3	0	0	11	5	5	1	4	0	5	Darjiling
0	7·5	24·86	+ 2·10	2·73	20	22	+ 0·1	4·9	− 0·5	1	0	0	5	0	0	0	7	18	0	0	0	23	3	0	0	0	5	Kalimpong
+0·7	8·5	16·87	+ 2·18	2·49	11	21	− 1·7	0·8	− 0·1	0	1	1	2	0	0	0	0	27	5	0	1	2	0	0	0	1	22	Katmandu
+0·3	7·5	8·43	− 3·94	1·48	22	16	− 1·8	9·4	+ 4·2	0	4	8	3	1	3	7	4	1	0	1	5	3	0	5	13	2	2	Muktesar
−0·3	9·0	20·45	− 7·01	2·52	26	23	− 0·2	2·3	− 1·9	1	4	2	4	2	2	1	1	14	2	2	2	4	12	5	2	1	1	Mussooree
−1·7	8·0	15·43	− 0·87	2·50	10	17	− 2·7	1·0	− 1·5	4	4	1	0	1	2	2	0	17	2	0	1	1	9	8	0	1	9	Simla
−1·8	5·3	21·82	− 0·17	8·10	30	14	− 3·8	9·3	+ 1·3	1	10	1	1	0	4	2	9	3	1	6	2	1	0	8	2	4	7	Abu
+0·7	9·4	30·55	+ 4·32	4·00	21	25	+ 3·0	4·4	− 2·8	1	0	0	0	0	3	20	4	3	1	0	0	0	0	3	18	7	2	Pachmarhi
0	10·0	72·93	−32·40	7·34	22	30	− 0·1	11·6	− 1·2	0	0	0	0	0	25	5	1	0	0	0	0	0	0	24	4	3	0	Mahabaleshwar
+0·4	9·6	35·24	− 7·87	3·10	10	31	+ 2·5	10·3	+ 3·1	0	0	0	0	0	3	15	13	0	0	0	0	0	0	2	16	13	0	Mercara
−0·6	8·9	5·94	− 2·42	1·52	14	15	− 0·8	6·9	+ 0·9	0	0	0	0	0	11	16	1	3	0	0	0	0	0	9	17	2	3	Ootacamund
−2·8		2·29	− 0·32	0·64	9	10	+ 3·0	5·4	+ 0·5	4	0	0	5	2	2	4	4	10										Coonoor
+0·5	9·3	4·52	− 0·13	1·43	14	10	− 0·2	11·4	+ 0·9	0	0	0	0	0	1	19	9	2	0	0	0	1	0	1	13	13	3	Kodaikanal
																												Ceylon
−0·2	8·0	1·99	− 3·00	0·55	16	8	− 0·4			0	0	1	2	2	12	10	1	3	0	0	0	0	0	14	15	3	0	Colombo
+0·8	7·2	0·22	− 1·57	0·11	23	1	− 1·3			0	0	0	0	0	28	2	1	0	3	2	2	1	1	20	1	0	1	Trincomalee
+2·4	8·2	0·11	− 2·02	0·07	31	0	− 4·2			0	0	1	0	0	30	0	0	0	1	0	0	0	0	30	0	0	0	Hambantota
	6·9	0·01		0·01	5	0				1	0	0	0	16	14	0	0	0	1	0	0	0	15	15	0	0	0	Mannar
																												N.-W. F. Province
		2·23	+ 0·97	1·44	23	3	+ 1·0			11	2	0	1	2	0	0	3	12	4	11	3	2	5	2	2	0	1	Peshawar
		1·71	+ 0·14	0·66	18	5	+ 1·7			2	4	7	2	5	3	2	2	2	0	1	13	10	3	0	1	3	0	Miranshah
		3·13	+ 0·64	2·05	27	4	+ 1·2			0	10	1	3	0	0	2	3	8										Dera Ismail Khan

d—Mean of 27 days.

 TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.) AT 4TH CLASS STATIONS—JULY 1

STATION.	Maximum temperature °F.				Minimum temperature °F.				Mean dry bulb temperature 8 hrs. I. S. T. °F.	Mean wet bulb temperature 8 hrs. I. S. T. °F.	Vapour pressure, millibars.		Relative Humidity %		Mean cloud amount 8 hrs. I. S. T.	Rainfall, inches.				Number of rainy days (0·10" or more).		Wind
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I. S. T.	Departure from normal.	Mean 8 hrs. I. S. T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11.	12	13	14	15	16	17	18	19	20.	21	22	23
Assam																						
Lumding ...	93·4	+ 2·2	97	3, 4, 5	76·5	+ 0·1	74	4 days	85·8	77·8	28·5	− 2·5	68	− 17		3·23	− 4·36	0·95	6	10	− 1·5	
Kashmir																						
Jammu ...	96·2	+ 0·8	111	3, 4	77·7	− 1·6	60	14	82·8	75·5	27·5	− 0·5	73	0	6·9	19·61	+ 6·82	3·18	27	13	+ 1·5	N 13 E
Kargil (*R*) ...																						
Mysore																						
Balehonnur ...	72·6	− 0·5	77	13	65·4	0	62	5	68·2	67·2	22·4	+ 0·5	95	− 2		30·33	− 4·26	4·07	18	31	+ 2·7	
Tibet																						
Yatung (Chumbi) ...	65·7	+ 0·3	71	18	50·3	− 1·0	46	28	56·0	54·8	14·1	− 0·4	94	+ 4	8·7	4·53	− 1·88	0·56	16	12	− 5·7	

(*R*)—Register not received.

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days (0·10" or more).		DIVISION.	STATION.	Rainfall, inches.				Number of rainy days (0·10" or more).	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
;am ...	Mawsynram ...	199·35		21·30	30	31		Madras Southeast.	Palamcottah ...	0	−0·33	0		0	− 0·6
ngal ...	Bankura ...	13·73	+0·75	2·52	15	18	+2·3	Sikkim ...	Lachung ...	12·38	+1·97	1·20	10	24	− 1·3
	Cooch Behar ...	35·98	+4·96	5·04	12	18	−2·5								
har ...	Muzaffarpur ...	17·90	+5·12	2·90	19	18	+4·0								
	Chapra ...	16·88	+4·81	3·31	19	18	+4·2								
	Arrah ...	16·94	+3·92	2·63	14	18	+3·5								
nited Provinces, West.	Meerut ...	14·69	+6·10	6·97	28	10	−0·3								
ast Punjab,	Dharampore ...	14·25	−1·63	3·16	27	13	−4·7								
	Kyelang ...	3·88	+2·58	1·71	21	6	+2·2								
	Dalhousie ...	28·25	+6·33	3·80	13	20	0								
Kashmir ...	Sonamarg ...	6·10	+2·53	1·54	22	9	+0·1								
	Gurez (R) ...														
ombay, Deccan...	Khandala ...	51·40	−17·02	4·01	9	28	−2·0								

R—Register not received.

TABLE V—ABSTRACT OF OBSERVATIONS RECORDE

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Wet bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Relati humid % Mean 8 hrs. I. S. T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
West Punjab																					
Jhelum ...	765	971·8		968·6	96·7		113	2, 4	77·0		70	22, 23	83·2	95·9	75·9	82·2	27·2		31·5	70	
Lahore ...	702	973·3	− 0·5	970·5	98·5	− 1·1	115	3	80·3	+ 0·2	70	20	84·3	97·0	77·8	80·5	29·6	+0·2	28·0	76	+
Sialkot ...	880	968·7	− 1·1	966·9	98·4	+ 1·0	114	3	80·2	+ 0·4	70	22	84·2	95·0	76·7	79·0	28·0	−0·9	26·6	74	−
Rawalpindi ...	1,674	942·1	− 0·1	938·7	99·8	+ 2·0	114	4	81·8	+ 4·7	63	23	83·7	96·4	74·7	90·9	25·7	−0·8	29·7	65	−
Khushab ...	612	975·3	− 1·2	973·1	101·8	− 0·4	117	3	78·8	− 3·6	55	1	85·9	99·2	78·9	82·5	30·6	+1·5	30·3	72	+
Lyallpur ...	605	975·5	− 0·8	972·8	100·7	− 0·8	116	3	82·5	− 0·2	73	14	86·0	98·5	78·7	81·0	30·2	+2·0	28·1	71	+
Montgomery ...	558	982·9	+ 5·0	974·6	101·8	− 1·1	115	3	81·4	− 2·3	73	20, 28	86·0	99·1	76·0	83·4	26·1	−5·5	31·8	71	−
Multan ...	413	981·2	− 1·1	979·7	103·8	+ 1·4	117	2	83·6	− 1·9	73	31	87·8	101·5	80·1	84·8	31·6	−0·8	33·7	70	
Fort Abbas ...	475	979·5		978·8	106·2		116	4 days	83·7		67	5	88·3	103·3	78·0	87·5	28·4		33·6	61	
Bahawalpur ...	384	982·7	− 0·7		102·0	− 1·3	112	10	82·8	− 0·9	74	4 days	86·2		79·9		32·2	+0·3		75	+
Khanpur ...	297	985·8	− 0·7	981·4	103·1	− 2·3	116	2	85·7	+ 2·6	79	27	86·2	103·1	78·9	83·1	30·4	+1·0	29·5	71	+
Baluchistan																					
Fort Sandeman ...	4,614	851·3	+ 0·4	850·2	100·6	+ 1·3	107	13, 14	73·6	− 1·5	65	1	78·4	95·0	66·9	72·5	17·7	− 1·6	181·	53	−
Loralai ...	4,699	847·4		845·0	93·6		101	3, 4, 17	68·5		64	25	74·3	91·2	65·8	70·7	17·4		17·1	61	
Sibi ...	441	979·9	− 0·9	978·9	109·7	+ 1·9	120	2	88·7	+ 1·5	80	31	91·4	107·3	77·7	80·8	26·2	− 0·9	23·7	52	−
Quetta ...	5,490	824·3	− 1·5	822·7	95·2		98	5 days	65·7		55	1	74·2	93·2	65·7	69·7	19·0	+ 0·9	16·3	64	+
Kalat ...	6,616	793·6	− 0·1	793·2	90·4	− 0·7	94	7 days	60·4	− 1·8	49	1	69·6	87·5	58·3	63·8	12·1	− 0·2	10·7	51	+
Dalbandin ...	2,785	905·1	− 0·5	900·4	104·2	− 4·5	112	19	76·7	− 0·5	67	1	88·3	105·6	64·6	69·6	11·2	− 1·5	10·1	24	−
Sind																					
Jacobabad ...	186	989·1	− 0·7	983·1	107·1	− 0·9	116	2	84·5	− 0·5	70	30	87·3	103·7	79·0	81·2	30·4	−2·7	27·1	68	−
Afghanistan																					
Jalalabad ...	1,950	926·0		923·2	103·1		113	3, 4	79·7		73	5	83·2	101·1	78·5	85·6	31·4		35·5	80	
Hill Stations																					
Murree ...	7,082	779·9	−0·3	778·8	76·9	+ 0·7	87	3, 4	61·3	+ 2·4	54	22, 23	67·3	68·6	61·3	62·6	16·4	−0·8	17·2	73	−
Cherat ...	4,272	860·9	−0·8		93·3	+ 3·6	105	3, 4	72·2	+ 0·5	62	23	75·7		68·4		20·8	+0·3		68	−
Parachinar ...	5,673	819·2	−1·0	818·4	89·3	+ 2·2	101	23	67·6	+ 1·2	62	4, 5	72·2	83·6	64·5	68·9	18·0	+0·6	18·9	66	+
Drosh ...	4,723	844·2	−3·0	840·9	97·3	+ 0·6	104	13	73·8	+ 0·3	40	4	79·4	94·4	65·9	65·4	16·0	−1·4	9·6	47	−

a—Mean of 30 days. b—Mean of 29 days c—Mean of 28 days. d—Mean of 27 days. e—Mean of 26 days. f—Mean of 25 days. g—Mean of 24 day

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10 or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													West Punjab
			b 22·16		5·54	21	10				0	2	3	8	0	0	0	1	15	2	2	2	9	5	4	3	1	3	Jhelum
			10·97	+ 5·52	3·21	14	7	+ 1·1			0	1	3	11	1	3	0	1	12	1	0	3	6	1	4	3	1	10	Lahore
			9·03	+ 0·68	2·00	23	10	+ 1·0			1	6	12	4	1	1	3	2	1	1	3	2	6	3	0	5	7	4	Sialkot
			9·97	+ 1·90	2·95	23	7	− 1·8			3	9	1	10	3	2	0	0	3	0	2	3	14	2	5	5	0	0	Rawalpindi
			7·54	+ 3·64	2·20	14	6	+ 1·7			0	7	8	3	1	0	0	0	12	0	6	8	8	0	1	0	0	8	Khushab
			6·27	+ 3·41	2·58	27	7	+ 3·2			1	5	2	4	5	4	0	0	9	2	5	0	7	5	7	1	0	3	Lyallpur
			6·31	+ 3·89	2·00	28	9	+ 5·7			0	9	1	8	1	7	1	2	2	0	0	3	6	0	0	1	0	21	Montgomery
			3·12	+ 1·11	1·30	31	4	+ 1·7			3	4	2	2	8	6	2	0	4	3	3	2	0	4	4	2	2	11	Multan
			a 0		0		0				2	5	1	1	2	14	2	1	1	1	3	2	2	2	8	3	0	1	Fort Abbas
			4·06	+ 1·62	3·40	29	3	− 0·2			10	0	0	0	4	0	0	0	16										Bahawalpur
			0·18	− 2·34	0·17	28	1	− 1·9			2	2	0	1	0	19	2	4	1	0	6	0	0	0	19	3	1	2	Khanpur
																													Baluchistan
			1·91	− 0·23	0·80	31	3	− 0·8			1	1	3	1	1	0	0	1	23	6	3	1	2	4	3	2	1	9	Fort Sandeman
			1·39	− 0·15	1·16	31	3	+ 1·0			3	1	4	0	2	1	17	0	3	1	0	1	2	19	3	0	1	0	Loralai
			a' 0·92	− 0·48	0·50	20	2	− 0·6			0	0	6	8	3	4	3	0	6	0	0	3	4	5	11	7	0	0	Sibi
			0·11		0·06	31	0				1	2	0	8	11	3	0	0	6	5	2	1	1	3	4	4	8	1	Quetta
			0·40	− 0·20	0·35	31	1	− 0·5			0	0	0	21	8	2	0	0	0	4	1	1	2	0	0	3	20	0	Kalat
			0	− 0·12	0		0	− 0·4			1	0	0	0	0	4	2	1	22	0	1	2	1	4	13	4	0	6	Dalbandin
																													Sind
			1·85	+ 0·90	1·31	31	3	+ 1·5			2	0	7	20	1	0	0	0	1	0	0	5	17	7	0	0	2	0	Jacobabad
																													Afghanistan
			a' 0·51		0·51	24	a 1				0	1	1	2	0	1	5	1	18	0	7	16	1	0	0	3	0	3	Jalalabad
																													Hill Stations
			14·44	+ 2·04	2·21	23	16	+ 2·7			1	0	3	5	0	1	8	1	12	0	0	1	9	0	2	5	6	7	Murree
			0	− 3·64	0		0	− 4·8			15	0	1	1	12	1	0	0	0										Cherat
			1·15	− 2·37	0·42	27	5	− 1·9			3	3	2	4	1	1	1	3	13	1	1	5	14	4	3	0	0	1	Parachinar
			0·21	− 0·39	0·15	9	1	− 0·5			0	1	1	6	3	7	0	0	13	2	0	0	1	0	22	2	0	1	Drosh

a' – Total for 30 days

S 2777—325—6-49—Q4*

Monthly Means of Upper Winds

Note.—Data up to 9·0 Km. a. s. l. are given under Table A and data above 9·0 Km. under Table B. In Tables A and B—

n represents the number of observations,

V represents the mean wind speed in m/second irrespective of directions,

v represents the resultant mean velocity in m/second, and

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

For the co-ordinates of the stations for which data have been published in these tables and other particulars, please refer to the Monthly Weather Report, January 1948. In addition to data for stations mentioned therein the data for Dibrugarh Lat. 27°28′ N., Long. 73°49′ E., height 106 m. a. s. l., have been included. The data for Minicoy have not been included in this issue.

ERRATA.

Page 193 - Read the following for 0700 hrs.in Trichinopoly.

Ht. in Km.	n	V	v	D
Surface	31	3.3	3.2	276
0.15 a.g.	31	9.0	8.9	273
0. 6 a.s.l.	31	15.0	14.9	277
1.0 "	31	14.5	14.4	280
1.5 "	31	11.9	11.5	275
2.0 "	31	9.1	8.6	280
2.5 "	30	9.3	8.9	281
3.0 "	30	8.0	7.1	283
4.0 "	27	7.6	6.5	277
5.0 "	14	6.7	5.3	251
6.0 "	12	4.3	2.4	238
7.5 "	6	6.1	3.0	80
9.0 "	5	10.6	10.4	90

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

JULY 1948

Station.	AHMEDABAD												ALLAHABAD											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	3·8	254	31	2·9	2·6	242	31	3·6	3·0	240	31	1·5	0·4	53	31	1·7	0·3	110	31	2·2	0·2	52
0·15 a. g.	31	9·8	9·5	255	30	7·1	6·6	247	30	7·3	6·6	247	30	6·2	1·9	226	29	5·5	1·3	159	30	5·1	1·0	13
0·6 a. s. l.	30	12·3	11·9	260	30	10·5	9·9	257	30	7·9	7·4	248	29	7·3	2·3	173	25	7·3	3·1	251	30	6·8	0·9	24
1·0 "	28	11·7	11·3	258	28	11·9	11·3	265	30	8·9	8·5	250	24	7·1	1·9	200	17	7·5	4·5	268	29	6·9	0·7	280
1·5 "	24	8·9	8·8	252	25	10·1	9·5	256	27	8·5	8·1	252	17	5·5	1·3	211	15	6·5	3·5	254	23	6·6	1·5	278
2·0 "	12	6·9	5·3	233	20	8·5	7·7	247	25	9·1	8·7	251	14	5·6	1·7	295	14	6·5	3·1	263	19	6·9	1·2	353
2·5 "	6	4·5	2·0	112	14	7·5	6·4	245	12	7·4	6·3	266	8	5·6	2·8	324	13	6·8	3·6	300	12	6·2	0·6	209
3·0 "	6	5·8	2·6	107	10	8·5	5·1	247	9	5·4	3·3	268	6	5·6	2·8	343	10	7·6	3·7	330	11	6·6	0·6	343
4·0 "					3	4·3	4·0	53	4	5·2	2·6	19					6	7·2	3·3	15	6	5·5	1·1	81
5·0 "					2	6·0	10·6	76	1	2·0	2·0	186					5	5·6	2·0	64	2	10·3	6·9	296
6·0 "																	4	7·3	4·1	98	1	6·5	6·5	140
7·5 "																	4	6·6	5·5	84	1	5·0	5·0	110
9·0 "																	4	8·1	7·5	113				

Station.	AMBALA												ANANTAPUR											
Time I. S. T.	0100				0700				1600				0700				1600							
Ht. in km.	n	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	118	31	3·3	3·0	106	31	2·1	1·4	110	31	4·8	4·6	262	31	7·5	6·9	274				
0·15 a. g.	31	7·1	6·4	123	31	8·0	7·7	112	31	5·4	3·3	111	31	7·6	7·5	253	31	12·0	11·3	267				
0·6 a. s. l.	31	8·0	7·0	128	31	9·8	8·9	126	31	5·7	4·0	117	31	9·5	9·4	255	31	12·0	11·5	266				
1·0 "	31	7·4	5·7	135	31	9·8	8·2	138	31	6·2	4·7	127	31	13·7	13·9	271	31	11·3	11·1	268				
1·5 "	30	7·0	3·2	141	29	9·5	4·9	141	29	6·6	4·0	137	30	13·9	13·7	281	30	11·7	11·6	272				
2·0 "	28	7·1	1·8	158	29	9·1	2·7	120	26	6·1	0·8	142	30	12·1	11·9	285	30	11·7	11·5	278				
2·5 "	15	4·8	2·1	336	26	8·5	1·5	360	24	7·6	1·4	278	28	11·0	10·6	285	25	11·0	10·7	279				
3·0 "	8	4·4	1·3	53	23	7·5	3·1	342	21	7·4	3·2	306	24	10·5	10·0	286	13	9·7	9·2	257				
4·0 "	1	0·5	0·5	245	16	6·6	2·5	339	16	7·3	4·6	329	13	6·5	6·0	285	2	8·7	7·3	273				
5·0 "					11	4·3	0·3	210	12	6·7	3·8	324	7	6·4	5·7	279	1	6·0	6·0	225				
6·0 "					10	5·7	2·5	208	11	6·4	3·3	289	5	4·8	3·3	290	1	7·0	7·0	270				
7·5 "					5	7·7	7·6	237	3	7·2	1·5	87	2	4·5	3·7	43								
9·0 "					4	8·3	7·9	255	1	9·0	9·0	325	1	10·0	10·0	80								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JULY 1948

STATION.	ASANSOL.												BANGALORE.											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	1·5	154	31	1·6	0·8	152	31	2·6	1·7	128	31	5·1	4·8	256	31	4·7	4·5	253	31	5·5	5·2	277
0·15 a. g.	28	5·6	4·1	164	30	4·3	2·4	160	30	4·9	3·3	132	27	8·6	8·5	253	30	9·3	9·1	249	30	9·0	8·6	264
0·6 a. s. l.	28	7·3	4·9	184	29	5·9	3·1	222	30	5·4	3·6	142												
1·0 „	19	7·3	5·2	216	21	6·7	4·8	247	28	5·6	3·4	153	27	6·9	6·9	252	31	7·4	7·3	248	30	7·5	7·2	264
1·5 „	14	5·7	3·8	218	15	5·7	4·1	254	16	4·4	1·8	196	28	12·8	12·6	268	9	14·6	14·1	275	30	9·6	9·4	268
2·0 „	5	5·0	3·3	225	11	5·0	3·7	239	13	4·6	2·2	213	17	13·7	13·5	278	5	16·2	15·9	294	25	10·3	10·0	277
2·5 „	2	7·0	3·5	226	7	4·9	3·2	244	4	6·4	1·9	190	4	9·5	9·3	290	4	14·3	13·3	297	16	10·1	9·8	281
3·0 „	2	7·0	3·5	244	4	3·6	1·1	192	2	8·0	3·6	279	1	3·0	3·0	285	2	6·3	6·1	306	10	10·8	10·3	276
4·0 „					2	5·0	2·5	200	1	8·5	8·5	165					1	6·0	6·0	5	2	3·5	3·1	260
5·0 „					1	1·5	1·5	175	1	10·0	10·0	170					1	5·0	5·0	55				
6·0 „					1	3·5	3·5	180																
7·5 „																								
9·0 „																								

STATION.	BAREILLY.								BHOPAL.												BHUJ.			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	2·3	8	31	2·4	1·9	105	31	4·4	3·7	251	31	4·4	4·0	258	31	4·7	4·0	268	31	4·7	4·5	235
0·15 a. g.	28	6·4	5·8	106	30	4·5	3·4	111	26	10·2	9·3	252	25	8·2	7·9	268	26	7·3	6·9	263	31	9·6	9·4	242
0·6 a. s. l.	28	9·2	8·6	120	29	6·3	4·8	117	27	8·9	8·0	249	25	7·2	6·9	265	27	6·8	6·1	262	31	12·7	12·5	247
1·0 „	26	8·9	6·9	122	29	7·1	5·3	118	24	12·6	11·5	265	16	12·5	12·1	286	24	8·6	8·0	271	12	12·0	11·7	243
1·5 „	24	9·1	5·5	112	27	7·3	4·4	113	22	11·6	9·9	279	13	9·2	8·1	306	20	9·5	8·5	277	6	9·5	8·1	238
2·0 „	20	7·7	1·8	57	26	8·0	3·7	113	11	7·3	5·3	302	11	6·0	3·5	20	17	7·6	6·6	278	2	8·7	5·5	208
2·5 „	15	8·4	3·5	12	19	6·4	1·0	353	7	5·5	4·1	305	8	6·6	3·7	21	14	6·8	4·9	240				
3·0 „	15	8·4	4·3	25	19	7·2	1·3	358	3	7·6	2·7	340	5	9·4	6·7	39	9	5·9	2·9	320				
4·0 „	11	5·1	2·6	48	13	6·6	1·8	321	2	5·3	4·3	347	3	6·2	4·8	38	6	6·4	2·0	348				
5·0 „	7	4·1	2·0	84	11	5·2	1·0	333	1	7·3	7·3	65	2	8·8	5·5	38	4	6·6	6·3	331				
6·0 „	6	3·6	1·2	159	11	5·0	0·6	314					1	2·5	2·5	24	4	5·8	4·4	325				
7·5 „	3	4·8	3·1	272	8	5·3	2·5	293									2	8·0	8·0	95				
9·0 „	1	7·0	7·0	231	5	6·5	1·9	271									2	5·5	5·5	112				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JULY 1948

Station.	BHUJ								BIKANER								BOMBAY							
Time I. S. T.	0700				1600				0700				1600				0100				0700			
Ht. in km.	n	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	3·8	242	31	7·5	7·2	237	31	3·3	2·3	241	31	3·6	1·8	234	31	5·6	5·3	244	31	5·2	4·6	243
0·15 a. g.	31	8·4	8·2	241	31	12·5	12·3	240	30	7·9	5·9	243	31	5·9	3·0	228	28	7·6	7·5	247	30	7·9	7·3	247
0·6 a. s. l.	31	18·2	12·8	254	31	13·7	13·5	247	29	9·7	7·5	259	31	6·0	3·5	231	23	9·4	9·1	257	27	10·3	10·1	260
1·0 ,,	23	12·7	12·3	254	31	13·5	13·3	251	28	9·4	7·6	265	29	5·8	3·3	225	16	9·2	8·8	259	20	10·8	10·5	265
1·5 ,,	15	9·9	9·3	252	17	12·4	12·0	251	27	7·5	4·8	271	27	5·1	2·3	243	8	8·2	7·8	253	9	10·0	9·6	258
2·0 ,,	10	7·8	6·3	249	7	8·7	6·8	255	26	5·0	2·3	333	23	5·6	2·4	248	3	5·9	5·3	304	5	8·0	7·2	248
2·5 ,,	3	6·2	2·1	59	2	5·0	3·9	56	21	5·0	3·0	3	18	4·4	1·1	293					3	6·2	3·9	267
3·0 ,,	1	10·0	10·0	75	1	5·5	5·5	100	19	5·3	3·4	13	17	4·7	2·4	339								
4·0 ,,	1	10·5	10·5	70					10	6·0	5·0	15	9	5·1	4·1	351								
5·0 ,,	1	8·0	8·0	90					6	6·8	3·9	10	8	7·6	5·7	339								
6·0 ,,									6	5·0	2·2	145	6	6·2	3·7	297								
7·5 ,,									3	4·2	2·8	15	6	6·7	3·9	266								
9·0 ,,									2	2·8	2·9	4	2	1·5	1·3	89								

Station.	BOMBAY				CALCUTTA												COCHIN							
Time I. S. T.	1600				0100				0700				1600				0100				0700			
Ht. in km.	n	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	6·3	5·2	259	31	3·0	2·3	170	31	2·8	2·0	166	31	3·4	3·0	182	31	1·8	0·6	320	31	0·8	0·1	295
0·15 a. g.	24	9·2	8·8	256	29	8·9	7·0	175	31	5·6	3·9	178	29	6·5	5·5	172	22	4·2	3·3	295	29	3·4	1·7	284
0·6 a. s. l.	21	10·8	10·5	262	28	11·9	10·5	204	29	8·6	6·6	210	29	8·6	6·5	180	21	9·8	8·5	296	29	9·1	8·7	289
1·0 ,,	16	11·2	10·9	265	26	11·2	9·1	209	27	8·1	6·4	224	26	7·5	5·8	182	20	11·7	11·5	299	28	11·7	11·4	293
1·5 ,,	6	10·4	10·3	256	23	9·1	7·3	213	22	6·8	5·2	232	24	6·3	4·1	177	13	11·6	11·5	298	18	12·6	12·3	295
2·0 ,,	1	12·0	12·0	245	16	7·3	5·8	210	19	7·2	5·4	235	23	6·3	4·0	174	6	10·4	10·4	293	10	12·7	12·5	296
2·5 ,,	1	12·0	12·0	245	10	6·0	3·7	193	17	6·3	4·0	228	19	5·9	3·4	171					6	11·5	11·1	291
3·0 ,,	1	8·0	8·0	245	6	5·3	2·9	146	14	6·0	3·0	208	17	5·7	2·8	162					5	9·9	9·7	294
4·0 ,,					1	6·0	6·0	210	6	5·2	4·3	204	10	4·1	2·1	190					1	3·5	3·5	210
5·0 ,,									2	4·0	3·7	240	7	4·6	0·6	174								
6·0 ,,													4	6·0	2·0	81								
7·5 ,,																								
9·0 ,,																								

Table A—Monthly mean directions and velocities of upper wind

Winds up to 9·0 km. above sea level

JULY 1948

Station.	COCHIN				COOCH BEHAR								CUTTACK											
Time I. S. T.	1600				0700				500				0100				0700				1600			
Ht. in km.	n	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	3·2	289	31	1·6	1·2	101	31	1·7	1·1	127	31	1·2	0·9	223	31	1·0	0·6	241	31	1·2	0·9	202
0·10 a. g.	27	5·3	5·0	291	20	4·4	3·7	110	29	4·0	3·0	135	28	5·6	4·4	227	31	5·1	4·1	237	28	5·4	4·3	208
0·6 a. s. l.	26	10·5	10·2	266	16	6·3	5·5	126	26	4·9	4·0	149	28	8·8	7·4	234	27	8·3	6·5	265	28	5·4	4·2	224
1·5 ,,	24	12·5	12·3	297	14	6·7	5·7	115	26	5·6	3·7	147	28	8·0	6·5	243	26	9·1	7·2	278	25	5·0	3·6	249
1·5 ,,	20	13·6	13·4	299	12	6·7	5·7	105	24	5·5	3·4	138	22	7·2	5·8	258	22	7·5	5·8	273	17	5·6	4·2	269
2·0 ,,	15	13·7	13·4	300	9	7·5	7·2	101	20	4·9	3·2	146	16	6·7	5·0	265	18	6·9	4·7	267	15	6·0	4·2	270
2·5 ,,	7	11·5	10·5	294	6	9·2	7·4	102	15	5·4	3·5	141	8	5·6	2·3	290	16	6·7	5·8	262	12	5·4	2·9	276
3·0 ,,	4	11·6	9·7	287	4	4·3	2·4	90	8	6·6	3·4	132	4	3·6	2·0	251	14	5·9	5·3	250	9	4·6	3·4	247
4·0 ,,	2	6·5	4·8	342	3	4·3	2·5	118	7	7·7	3·1	166	1	3·0	3·0	240	11	4·9	2·9	254	7	5·4	3·5	253
5·0 ,,	2	5·3	1·9	352	2	5·0	0·7	171	5	6·9	2·7	218					7	3·3	2·0	137	7	3·4	1·5	276
6·0 ,,	2	5·0	2·9	320					4	6·9	4·2	269					5	5·4	4·2	123	4	2·5	1·0	29
7·5 ,,									3	6·7	3·8	277					2	6·0	5·6	95	1	1·5	1·5	340
9·0 ,,																	1	10·0	10·0	100	1	6·5	6·5	95

Station.	DEOLALI				DIBRUGARH								GADAG								GAYA			
Time I. S. T.	0830				0700				1600				0700				1600				0100			
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	11	3·3	3·3	252	31	1·2	0·2	22	31	1·7	0·7	39	31	5·0	4·9	248	31	7·9	7·7	258	31	2·7	1·5	114
0·15 a. g.	11	7·1	7·0	245	18	4·2	2·0	78	27	3·6	1·2	70	31	8·8	8·7	250	31	11·9	11·7	259	28	5·1	2·7	154
0·6 a. s. l.	11	4·7	4·6	251	17	6·2	1·4	172	27	3·8	1·9	167									28	6·1	3·5	179
1·0 ,,	10	9·1	9·0	256	15	6·2	1·9	212	26	5·0	3·4	209	31	12·3	12·1	266	31	12·9	12·7	264	28	5·9	3·1	188
1·5 ,,	6	10·8	10·8	258	12	5·3	1·5	215	23	5·7	4·7	225	36	14·0	13·8	278	30	12·5	12·3	275	25	6·1	3·0	197
2·0 ,,	3	6·3	5·9	237	10	7·0	3·2	218	21	6·6	5·6	214	23	11·6	11·4	281	23	11·9	11·6	284	12	4·6	2·6	155
2·5 ,,	2	2·7	1·9	335	8	4·9	2·1	145	18	5·5	4·4	212	20	9·5	9·3	281	15	11·1	9·1	280	4	4·4	3·3	140
3·0 ,,	1	2·0	2·0	89	7	5·3	1·6	148	18	6·1	4·7	215	15	8·8	8·5	279	10	8·6	8·1	288	3	4·8	4·2	142
4·0 ,,					4	6·7	6·0	114	15	6·0	2·7	212	7	8·5	6·9	274	4	6·7	4·3	261				
5·0 ,,					1	3·0	3·0	140	11	6·5	2·4	209	5	3·9	2·1	261	4	4·3	2·2	248				
6·0 ,,					1	3·5	3·5	190	11	5·9	1·9	215	2	3·3	2·6	119	1	3·5	3·5	75				
7·5 ,,									10	5·3	3·3	268	1	5·5	5·5	70								
9·0 ,,									7	5·5	1·1	232												

Table A—Monthly mean directions and velocities of upper winds

Winds up to 3·0 km. above sea level

JULY 1948

Station	GAYA								GOPALPUR								GORAKHPUR							
Time I. S. T.	0700				1600				0700				1600				0700				1600			
Ht in km.	n	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	1·2	126	31	3·5	0·5	60	31	4·7	4·4	209	31	7·2	6·9	197	31	2·6	2·4	80	31	2·6	2·2	95
0·15 a. g.	31	4·9	1·7	147	29	5·0	1·1	95	31	6·6	6·0	218	30	10·4	10·3	198	25	7·9	7·3	86	31	6·0	5·2	99
0·6 a. s. l.	30	7·1	2·3	216	29	5·8	2·0	113	31	6·7	5·7	251	30	5·7	4·7	220	17	11·0	10·4	103	30	7·0	6·1	103
1·0 ,,	30	7·2	2·1	228	28	6·2	2·2	134	31	7·4	6·3	269	29	5·3	4·3	270	13	9·2	8·5	107	23	7·9	6·2	106
1·5 ,,	23	5·8	2·7	243	24	6·7	1·9	164	30	7·9	7·2	280	28	6·4	5·5	276	9	12·2	11·7	104	17	7·9	6·3	109
2·0 ,,	20	5·7	2·5	214	20	6·4	2·2	176	26	7·5	6·7	280	25	7·3	5·9	270	6	16·4	14·5	103	9	5·5	3·3	124
2·5 ,,	20	6·0	3·2	204	14	6·7	1·7	169	23	7·3	6·0	276	23	7·2	5·7	267	3	9·8	6·9	76	8	5·0	3·4	126
3·0 ,,	12	6·5	4·1	191	9	7·2	2·1	128	18	8·0	6·6	271	20	7·4	6·1	257	2	6·3	4·1	39	5	5·9	3·3	121
4·0 ,,	6	5·1	3·3	147	3	6·2	2·9	129	11	6·6	4·2	274	11	6·0	5·0	257					2	3·7	1·7	210
5·0 ,,	4	4·4	2·3	163	2	8·5	8·5	104	5	5·5	3·7	197	10	5·3	3·9	239					1	3·5	3·5	105
6·0 ,,	3	6·0	1·9	175					3	4·5	3·7	110	10	3·9	2·3	233					1	6·0	6·0	115
7·5 ,,	2	1·5	0·6	172					3	6·8	6·3	107	3	5·2	5·1	74					1	6·5	6·5	80
9·0 ,,									3	8·8	8·8	90	2	10·5	10·5	100								

Station.	HYDERABAD (Dn.)												JAGDALPUR								JAMNAGAR			
Time I. S. T.	0100				0700				1600				0700				1600				0700			
Ht. in km.	n	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	4·6	297	31	4·7	4·4	262	31	4·6	4·5	269	31	2·1	2·0	124	31	2·7	2·2	237	16	7·4	7·2	232
0·15 a. g.	31	8·6	7·9	280	31	9·4	9·0	268	31	9·2	9·0	267	26	5·4	5·1	230	26	6·3	5·4	247	16	7·8	7·7	246
0·6 a. s. l.	31	7·8	6·9	281	31	7·1	6·9	264	31	6·6	6·4	269	26	4·1	3·9	230	26	5·3	4·5	247	15	11·2	11·1	255
1·0 ,,	31	9·4	8·9	278	31	13·1	12·8	276	31	18·1	12·6	284	18	8·2	7·8	259	25	7·1	6·5	259	13	12·3	12·2	257
1·5 ,,	31	10·1	9·7	280	30	13·8	13·7	280	25	13·4	13·1	293	10	10·1	9·2	272	18	7·9	7·2	268	11	10·6	10·2	257
2·0 ,,	28	10·6	10·3	280	26	12·3	12·1	279	24	11·8	11·2	284	6	8·0	7·6	265	13	8·5	7·8	275	2	4·7	4·6	243
2·5 ,,	13	10·8	10·4	283	4	8·4	8·2	280	22	10·2	9·5	283	4	6·9	6·6	273	10	8·5	7·5	281	1	3·5	3·5	310
3·0 ,,	7	10·9	10·4	288	2	7·7	7·5	277	22	8·0	6·7	287	3	8·7	8·7	271	8	7·9	6·9	269				
4·0 ,,									13	5·3	4·7	277	3	4·3	4·3	239	3	8·2	7·3	267				
5·0 ,,									7	5·9	5·3	268	2	5·7	5·7	225	1	6·0	6·1	210				
6·0 ,,									6	5·9	5·2	257	2	3·5	3·5	314								
7·5 ,,									2	3·0	1·6	358	2	2·7	2·4	237								
9·0 ,,																								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

JULY 1948

STATION.	JAMNAGAR.				JAMSHEDPUR.								JHARSUGUDA.											
Time I. S. T.	1600				0700				1600				0100				0700				1600			
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	15	14·1	13·7	267	31	1·9	0·9	219	31	2·7	0·5	141	31	1·3	1·1	203	31	1·8	1·5	209	31	1·7	1·5	224
0·15 a. g.	15	10·3	10·2	273	30	3·1	2·0	229	31	4·3	1·1	151	23	5·8	4·4	222	27	5·3	4·7	226	27	5·1	4·6	226
0·6 a. s. l.	14	11·9	11·7	256	29	5·5	4·1	238	30	4·8	1·8	173	22	7·3	5·3	242	23	6·9	6·1	247	26	6·0	5·3	240
1·0 "	11	11·1	10·6	245	23	6·7	5·7	251	28	5·5	2·3	186	18	9·5	8·5	246	13	8·9	7·4	263	24	6·3	5·2	250
1·5 "	5	9·1	8·7	287	16	7·0	5·4	259	23	5·8	2·3	232	15	7·8	7·1	260	9	8·4	6·2	265	19	6·3	4·3	268
2·0 "	2	3·5	0·9	195	14	7·3	4·8	251	19	6·3	1·4	234	11	7·2	6·0	258	7	9·1	7·1	259	17	6·1	3·9	278
2·5 "	2	4·7	3·4	38	9	6·1	3·9	236	13	6·1	1·6	254	6	7·3	4·3	283	5	8·0	5·9	280	14	5·3	2·3	270
3·0 "	2	5·7	5·1	49	7	6·0	3·8	228	12	5·9	1·9	242	4	8·3	2·5	290	4	7·1	4·1	280	9	4·5	2·6	244
4·0 "	2	5·3	5·2	51	2	2·5	2·2	203	10	4·9	3·8	225	1	7·0	7·0	70	2	6·0	1·8	212	8	3·9	1·8	222
5·0 "	2	4·3	3·9	41	1	1·5	1·5	125	5	5·0	3·6	210					1	3·5	3·5	105	7	2·9	1·9	204
6·0 "	1	0·5	0·5	305													1	4·0	4·0	130	5	5·3	4·0	153
7·5 "	1	7·0	7·0	90													1	6·0	6·0	125	3	3·5	2·6	81
9·0 "																					1	6·0	6·0	120

STATION.	JODHPUR.												JUBBULPORE.											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	3·0	229	31	2·9	2·7	234	31	3·2	3·0	219	31	2·0	1·7	250	31	3·4	2·1	243	31	2·3	1·9	254
0·15 a. g.	30	10·8	10·1	231	27	9·4	8·9	235	30	6·5	6·5	219	27	6·8	6·5	252	27	6·5	6·2	249	31	6·4	5·5	253
0·6 a. s. l.	30	13·7	12·4	239	26	11·8	11·0	246	30	6·8	6·3	221	27	7·6	7·4	255	27	7·4	7·0	254	31	6·4	5·5	256
1·0 "	29	14·5	13·4	240	26	13·3	12·1	244	27	7·1	6·1	229	21	9·2	8·1	264	16	11·1	9·3	281	29	6·8	5·9	273
1·5 "	20	9·8	8·4	245	24	11·7	9·8	246	23	8·1	7·0	235	15	8·4	7·1	279	14	9·3	6·8	289	24	6·9	5·8	292
2·0 "	13	5·9	4·5	267	14	5·1	1·9	248	20	7·1	4·4	247	11	5·8	4·0	295	11	7·1	5·2	303	20	7·0	5·2	296
2·5 "	4	7·1	5·0	24	11	5·3	0·8	5	13	6·7	2·1	241	6	5·3	2·0	359	11	6·7	4·5	316	13	6·5	4·8	298
3·0 "					10	6·1	1·7	29	10	6·7	1·0	281	2	5·0	2·9	321	6	6·4	4·9	349	10	6·6	5·4	285
4·0 "					5	5·6	2·8	43	8	6·1	3·0	5	1	5·5	5·5	340	2	4·7	3·7	341	5	6·7	5·9	235
5·0 "					2	5·5	5·3	19	7	5·6	2·3	357					1	6·0	5·9	325	2	4·5	1·4	328
6·0 "					1	4·0	4·0	30	6	5·3	2·6	280									1	2·0	2·0	171
7·5 "									2	3·7	3·7	96									1	2·5	2·5	110
9·0 "																					1	2·0	2·0	91

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

JULY 1948

Station.	MADHOSAGAR.								MADRAS												MALEGAON.			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	1·8	252	31	3·1	1·3	274	31	4·6	3·7	240	31	3·1	3·0	262	31	4·5	1·9	240	31	5·8	5·7	267
0·15 a. g.	27	5·2	2·5	268	31	4·9	2·1	35	31	8·3	7·5	245	31	9·1	8·9	262	31	6·5	3·2	281	31	10·9	10·7	264
0·6 a. s. l.	25	7·7	4·1	293	30	5·0	1·7	319	31	11·2	10·5	260	31	11·1	10·9	277	31	5·2	4·7	267	31	10·9	10·7	264
1·0 ,,	24	8·6	5·2	307	29	5·6	1·7	334	31	11·5	10·7	280	31	11·7	11·4	283	31	6·6	6·2	272	31	12·3	12·2	268
1·5 ,,	22	7·4	5·2	306	28	6·5	2·6	339	30	10·3	9·7	277	30	11·5	11·1	289	31	8·3	7·9	276	25	10·7	9·7	276
2·0 ,,	14	7·1	3·6	337	25	7·1	2·9	351	26	8·8	8·4	282	29	10·1	9·4	282	26	9·7	9·3	277	18	6·7	5·9	311
2·5 ,,	9	8·1	6·1	15	14	6·6	3·0	314	14	7·8	7·0	283	27	9·3	8·8	279	17	10·4	9·9	277	7	4·5	3·7	350
3·0 ,,	8	8·0	6·7	331	12	6·3	2·4	316	6	7·0	6·8	261	25	8·9	8·5	275	11	8·9	8·3	283	5	3·8	2·5	357
4·0 ,,	2	5·5	4·1	71	8	7·0	2·1	297					22	9·2	8·5	269	8	6·0	5·3	273	1	5·0	5·0	20
5·0 ,,	2	6·3	5·5	72	7	6·9	1·9	303					19	9·3	8·5	262	5	4·3	2·2	189				
6·0 ,,	2	6·5	6·4	109	4	9·9	5·3	271					15	5·5	2·9	259	2	6·5	6·3	104				
7·5 ,,	1	13·0	13·0	105	3	6·2	2·2	123					13	5·6	4·1	84	1	10·5	10·5	95				
9·0 ,,					3	6·0	1·8	91					11	10·7	10·2	88	1	13·0	13·0	100				

Station.	MALEGAON								MANGALORE												MASULIPATAM			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	4·0	267	31	6·5	6·2	271	31	2·9	1·0	254	31	2·5	0·3	269	31	3·0	2·5	282	31	2·7	2·3	280
0·15 a. g.	27	8·2	8·1	266	28	10·8	9·8	270	25	6·3	4·5	270	29	5·5	2·6	248	29	6·8	6·0	284	28	8·2	7·4	226
0·6 a. s. l.	27	8·2	8·1	266	28	10·8	9·8	270	21	10·1	9·7	276	26	9·4	9·2	277	23	10·5	10·1	278	28	10·4	9·5	247
1·0 ,,	27	11·1	10·8	269	28	9·9	9·7	271	9	10·2	10·0	288	19	11·1	11·0	281	16	12·1	11·9	281	27	10·7	9·6	261
1·5 ,,	24	11·8	11·2	271	27	10·5	9·9	273	5	8·0	8·9	294	7	9·6	9·5	276	8	10·4	10·4	283	25	10·4	9·5	269
2·0 ,,	16	9·0	8·1	274	22	9·4	8·1	272	2	9·3	9·3	290	3	10·8	10·8	273	3	11·5	11·3	280	14	9·7	8·2	275
2·5 ,,	12	7·2	5·5	276	14	7·1	5·8	281					3	8·7	8·0	278	1	7·0	7·0	285	6	8·3	8·0	285
3·0 ,,	12	5·5	4·1	267	11	5·6	5·1	287					3	6·3	5·6	280					6	7·4	7·0	289
4·0 ,,	5	4·1	0·7	360	4	6·5	5·5	282					1	2·0	2·0	120					1	7·0	7·0	255
5·0 ,,	5	4·3	2·3	24	2	1·5	1·2	270					1	5·5	5·5	105								
6·0 ,,	4	4·4	2·1	26	1	2·5	2·5	15																
7·5 ,,	4	3·9	1·9	65																				
9·0 ,,	3	3·5	3·0	57																				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JULY 1948

Station.	MASULIPATAM								NAGERCOIL												NAGPUR			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	1·7	255	31	2·9	2·3	275	31	5·2	5·0	287	31	4·1	3·9	286	31	7·1	6·7	278	31	2·6	2·3	240
0·15 a. g.	29	6·8	5·8	257	30	6·2	5·3	271	31	10·5	10·5	296	31	8·5	8·3	294	31	12·7	12·4	283	21	4·2	5·7	263
0·6 a. s. l.	29	11·5	10·6	275	30	7·7	7·1	276	29	18·4	18·0	291	29	17·0	16·5	297	31	15·6	15·5	292	21	6·6	7·0	272
1·0 ,,	29	12·0	11·6	281	30	9·1	8·8	283	29	19·5	19·2	300	28	18·7	18·4	297	30	17·6	17·5	298	20	8·6	8·1	284
1·5 ,,	29	12·0	11·6	284	28	11·5	11·2	283	29	17·3	17·0	296	28	16·2	15·7	293	29	18·4	18·0	299	18	7·6	6·9	283
2·0 ,,	26	11·5	11·2	283	24	11·6	11·2	282	28	16·1	15·7	290	25	15·9	15·2	292	26	16·1	16·2	295	13	5·3	4·1	283
2·5 ,,	21	10·9	10·5	277	20	11·7	11·2	283	15	11·1	10·3	286	23	13·3	12·9	288	24	14·1	13·5	292	7	6·8	5·1	288
3·0 ,,	16	9·8	9·5	273	18	10·7	10·3	283	14	8·1	7·4	278	21	7·6	7·0	288	24	11·3	10·6	289	1	3·0	3·0	80
4·0 ,,	11	8·8	8·1	278	10	7·1	6·3	286	6	3·6	2·9	281	14	5·5	4·6	274	21	9·0	7·9	284				
5·0 ,,	5	7·2	6·5	275	9	8·1	7·0	284	3	~~16·5~~ 5·5	1·0	192	7	4·6	1·0	220	15	8·5	7·3	273				
6·0 ,,	1	7·0	7·0	270	5	7·4	5·9	262	3	4·8	4·0	94	6	5·2	0·7	166	9	6·0	3·0	268				
7·5 ,,	1	7·0	7·0	285	4	6·4	3·9	282	2	10·0	9·9	87	4	6·3	4·8	130	4	4·4	3·6	63				
9·0 ,,					2	5·8	5·1	44	1	13·0	13·0	105	4	12·7	9·9	97	3	8·5	8·2	86				

Station.	NAGPUR								NEW DELHI												POONA			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	1·8	262	31	3·5	2·8	260	31	3·1	2·1	91	31	3·6	1·7	123	31	4·5	1·0	88	31	3·4	3·6	266
0·15 a. g.	29	6·4	5·7	265	26	6·6	6·1	266	31	6·6	4·6	140	30	6·1	3·1	147	31	5·8	1·6	92	30	7·3	7·2	259
0·6 a. s. l.	29	8·1	7·7	279	26	7·3	6·7	272	29	7·8	4·7	145	28	7·5	3·0	192	29	5·5	0·9	136	30	5·2	5·2	259
1·0 ,,	27	10·0	9·3	293	24	8·1	7·7	283	26	6·7	3·9	165	26	7·1	2·1	199	25	5·5	0·3	181	30	9·4	9·3	263
1·5 ,,	21	8·3	7·5	300	19	8·5	7·7	292	22	6·2	2·1	186	23	5·7	0·8	232	23	6·0	0·4	290	22	12·6	12·4	267
2·0 ,,	14	6·0	5·1	288	17	8·4	7·4	286	11	4·9	0·5	274	19	6·5	0·5	41	18	6·3	3·6	293	17	10·6	10·2	275
2·5 ,,	14	5·7	4·1	286	14	9·1	7·7	281	8	4·6	1·8	340	12	4·7	4·0	338	14	6·8	5·3	308	6	5·1	3·9	295
3·0 ,,	13	5·3	3·5	226	13	8·6	6·9	291	3	3·5	2·4	34	9	5·8	4·9	344	10	5·9	4·8	331	4	2·8	1·7	279
4·0 ,,	9	5·2	2·3	337	7	7·7	5·9	281	1	1·0	1·0	120	7	4·9	2·8	354	9	5·1	3·5	328				
5·0 ,,	5	4·3	3·1	8	2	4·0	3·9	330					4	2·3	1·1	183	7	2·8	1·3	347				
6·0 ,,	1	3·5	3·5	50	1	7·0	7·0	334					3	3·0	2·4	176	2	3·5	2·9	214				
7·5 ,,	1	5·0	5·0	85									2	4·3	3·5	168	2	8·0	7·2	203				
9·0 ,,	1	13·0	13·0	90													1	5·0	4·9	195				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JULY 1948

STATION.	POONA.								PORT BLAIR.												RAIPUR.			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	2·5	269	31	4·2	4·1	271	31	4·4	4·1	233	31	4·1	3·7	235	31	5·5	5·0	234	31	3·5	3·3	22[illegible]
0·15 a. g.	31	6·6	6·4	263	30	7·5	7·5	267	29	7·4	7·2	226	26	7·2	6·8	226	29	7·6	7·3	231	19	10·0	9·8	23[illegible]
0·6 a. s. l.	31	4·1	4·1	263	30	5·6	5·5	268	29	10·0	9·6	232	26	11·3	10·6	232	29	10·1	9·8	236	19	11·3	10·9	24[illegible]
1·0 ,,	31	10·0	9·9	265	30	10·1	9·9	265	25	8·7	8·2	237	23	9·6	8·8	237	23	9·4	9·0	237	19	9·8	8·9	26[illegible]
1·5 ,,	28	12·0	11·9	267	21	12·3	12·2	269	18	7·1	6·7	234	18	7·6	6·6	234	16	7·7	7·3	237	18	8·2	7·6	26[illegible]
2·0 ,,	22	11·5	11·1	272	7	9·2	8·3	273	18	5·0	4·1	230	16	6·8	5·9	236	10	7·5	6·1	238	6	7·3	6·1	26[illegible]
2·5 ,,	17	9·5	9·0	277	3	6·5	5·9	313	10	4·9	3·7	211	15	6·1	5·1	240	10	5·9	4·3	230	5	7·5	6·2	25[illegible]
3·0 ,,	17	8·3	7·4	293	1	3·0	3·0	360	7	6·3	5·3	194	14	5·9	4·0	237	9	6·3	4·6	232	3	6·3	6·3	28[illegible]
4·0 ,,	10	5·5	4·3	316	1	3·0	3·0	30	2	6·0	5·9	169	10	6·3	3·5	211	5	7·7	5·4	238				
5·0 ,,	7	4·1	3·6	328	1	5·0	5·0	50					9	5·3	1·2	229	3	4·0	1·6	175				
6·0 ,,	5	3·6	3·2	40	1	6·5	6·5	50					5	4·6	3·7	157	2	5·3	1·3	270				
7·5 ,,	4	5·5	5·0	85	1	5·5	5·5	100					1	3·5	3·5	100	1	10·0	10·0	125				
9·0 ,,	3	6·5	6·2	104																				

STATION.	RAIPUR.								BAHARSA.								TEZPUR.							
Time I. S. T.	0700				1600				0700				1600				0100				0700			
Ht. in km.	n	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	2·6	230	31	3·3	3·0	235	31	1·5	1·5	85	31	2·4	2·1	94	31	1·4	1·0	219	31	1·0	0·6	20[illegible]
0·15 a. g.	25	8·3	8·1	246	27	8·3	7·7	242	21	5·7	5·5	86	30	5·9	5·1	98	29	4·7	2·9	217	28	3·7	2·2	21[illegible]
0·6 a. s. l.	25	10·3	9·3	260	27	7·9	7·3	247	18	6·5	5·8	103	30	7·3	6·5	105	27	6·5	4·7	248	26	6·1	4·3	23[illegible]
1·0 ,,	20	10·3	9·5	274	24	7·7	7·0	256	12	7·2	6·5	105	25	7·7	6·4	115	25	7·4	5·7	255	24	7·4	4·5	23[illegible]
1·5 ,,	16	9·0	7·7	280	16	6·8	5·8	264	6	4·9	4·5	101	17	5·4	4·2	129	17	8·1	5·9	245	21	6·5	3·9	24[illegible]
2·0 ,,	16	7·2	5·8	279	11	8·2	6·6	278	6	4·5	3·5	115	12	4·6	3·3	152	14	9·0	6·2	238	14	7·1	4·1	23[illegible]
2·5 ,,	11	6·7	5·2	277	8	6·1	3·9	279	6	4·2	3·5	130	8	5·1	3·4	138	7	9·8	6·8	235	12	7·4	2·5	23[illegible]
3·0 ,,	5	6·5	4·8	297	5	9·1	6·1	268	4	5·5	5·5	117	5	3·3	2·0	192	5	9·7	5·3	221	7	6·3	2·9	22[illegible]
4·0 ,,	4	6·5	4·2	324	3	7·5	5·0	307	2	4·7	4·3	124					1	6·0	6·0	225	5	6·1	5·9	24[illegible]
5·0 ,,	4	5·6	3·7	320	3	6·7	3·3	334													1	5·5	5·5	25[illegible]
6·0 ,,	2	2·3	2·2	350	3	4·0	1·0	263													1	4·0	4·0	26[illegible]
																					1	2·0	2·0	27[illegible]
7·5 ,,																								
9·0 ,,																								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

JULY 1948

Station	TEZPUR				TRICHINOPOLY												TRIVANDRUM				UDAIPUR			
Time I. S. T.	1600				0100				0700				1600				0700				0100			
Ht. in km.	n	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	0·9	231	31	4·8	4·7	272	31	9·1	8·6	280	31	5·0	4·7	268	31	2·1	1·9	334	31	2·1	1·9	218
0·15 a. g.	31	4·1	2·3	230	30	10·3	10·2	269	30	9·3	8·9	281	31	9·7	9·3	264	31	7·4	7·0	322	29	5·6	5·3	248
0·6 a. s. l	31	5·2	3·0	220	30	14·8	14·7	273	30	8·0	7·1	293	31	10·8	10·1	266	31	11·5	11·0	306				
1·0 ,,	31	6·3	4·4	224	30	13·8	13·6	278	27	7·6	6·5	277	31	11·1	10·9	263	31	14·1	13·6	302	29	7·1	6·9	252
1·5 ,,	31	6·9	5·3	237	30	10·3	10·1	276	14	6·7	5·8	251	31	11·7	11·3	264	28	14·2	13·8	301	24	8·9	8·2	269
2·0 ,,	28	7·4	5·5	239	30	8·5	7·9	273	12	4·3	2·4	238	31	11·4	11·0	264	24	12·9	12·6	300	18	4·7	2·8	285
2·5 ,,	25	7·4	5·2	235	19	6·3	5·8	277	6	6·1	3·0	80	31	11·3	10·8	269	19	11·3	11·0	299	16	4·5	1·0	355
3·0 ,,	23	8·2	4·8	240	17	6·9	6·2	285	5	10·6	10·4	90	30	10·7	10·3	274	18	9·0	8·5	300	9	5·3	2·6	37
4·0 ,,	18	6·9	3·9	238	31	3·3	3·2	275					27	9·3	8·9	279	14	5·5	4·5	291				
5·0 ,,	17	5·6	2·2	231	31	9·0	8·9	273					14	8·4	7·1	269	10	3·3	1·6	160				
6·0 ,,	16	5·6	2·4	228	31	15·0	14·9	277					10	6·9	4·3	266	8	4·6	2·5	126				
7·5 ,,	10	5·3	0·8	154	31	14·5	14·4	280					4	4·9	3·1	264	6	10·4	9·0	99				
9·0 ,,	5	7·0	2·4	268	31	11·9	11·5	275					1	1·0	1·0	30	6	16·2	15·9	86				

Station	UDAIPUR								VENGURLA												VERAVAL			
Time I. S. T.	0700				1600				0100				0700				1600				0100			
Ht. in km.	n	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	1·9	235	31	3·1	2·6	236	31	0·9	0·8	258	31	1·1	0·9	250	31	1·8	1·7	256	31	9·7	8·4	255
0·15 a. g.	30	5·4	4·9	253	31	7·6	6·4	240	13	5·7	5·5	260	24	6·3	5·5	264	19	7·6	7·3	270	31	10·1	9·8	255
0·6 a. s. l									11	9·4	9·3	268	21	11·0	10·6	273	18	11·1	10·7	276	31	10·5	10·3	258
1·0 ,,	29	7·0	6·6	262	31	7·5	6·9	254	6	9·4	9·4	282	13	11·2	10·6	279	11	12·5	12·3	285	26	10·4	10·1	258
1·5 ,,	22	7·8	6·5	279	30	6·9	5·9	264	2	9·5	9·5	285	5	10·6	10·6	289	6	10·0	10·0	288	11	7·6	6·1	243
2·0 ,,	17	5·7	1·8	347	27	6·7	4·9	275	1	7·0	7·0	275	2	12·0	11·9	283	3	8·8	8·7	286	6	4·1	2·8	268
2·5 ,,	17	5·7	2·5	31	25	5·6	3·4	298									1	8·0	8·0	300	2	4·0	3·3	292
3·0 ,,	15	5·8	4·0	30	19	5·6	3·0	339									1	10·0	10·0	290	1	3·0	3·0	289
4·0 ,,	9	5·8	4·6	10	10	5·0	2·4	350																
5·0 ,,	6	6·0	5·3	352	7	4·5	2·0	330																
6·0 ,,	3	3·8	2·3	352	7	5·0	4·0	277																
7·5 ,,	1	7·5	7·5	70	3	4·2	0·7	224																
9·0 ,,																								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

JULY 1948

Station.	VERAVAL								VIZAGAPATAM															
Time I. S. T.	0700				1600				0100				0700				1600							
Ht. in km.	n	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	8·8	8·5	262	31	8·5	8·0	265	31	2·2	1·9	254	31	2·3	2·0	248	31	3·8	3·3	219				
0·15 a. g.	31	9·9	9·6	258	31	10·1	9·9	256	30	7·6	7·4	246	30	7·3	7·0	251	29	7·1	6·4	219				
0·6 a. s. l.	31	11·5	11·2	261	30	12·0	11·8	262	29	10·7	10·4	249	29	10·6	10·3	255	29	7·3	6·9	249				
1·0 „	31	10·5	10·2	261	30	11·7	11·4	262	29	11·0	10·6	263	29	10·2	9·6	264	28	7·7	7·4	263				
1·5 „	28	9·8	9·4	266	22	9·3	8·9	265	27	11·8	11·3	273	29	10·0	9·1	275	28	9·1	8·3	271				
2·0 „	20	8·4	7·6	274	12	7·1	6·3	261	21	10·8	10·2	276	27	9·5	8·5	278	27	9·3	8·7	272				
2·5 „	14	7·6	6·4	280	3	4·3	3·7	260	12	8·7	7·6	283	24	8·8	7·9	279	27	8·5	8·0	268				
3·0 „	13	7·5	6·5	289	2	7·0	6·9	273	6	8·9	7·4	289	20	7·9	6·6	287	22	8·4	7·7	267				
4·0 „	6	5·6	3·9	283	1	4·5	4·5	235					8	6·7	5·3	278	13	7·4	6·6	273				
5·0 „	5	6·9	4·8	266	1	2·0	2·0	205					3	4·0	1·3	332	10	6·2	5·3	261				
6·0 „	2	3·5	2·5	56	1	2·5	2·5	140					1	1·5	1·5	330	5	5·3	4·2	261				
7·5 „	1	7·5	7·5	65													1	3·5	3·5	345				
9·0 „	1	10·0	10·0	80																				

Table B—Monthly mean directions and velocities of upper winds

Winds above 9·0 km. above sea level

JULY 1948

Ht. in km.	n	V	v	D
	ALLAHABAD			
10·0	3	11·8	11·8	103
11·0	3	12·2	12·1	104
12·0	1	17·0	17·0	105
13·0	1	17·5	17·5	105
14·0	1	18·0	18·0	115
15·0	1	18·0	18·0	75
16·0	1	18·5	18·5	75
17·0	1	23·0	23·0	85
	AMBALA			
10·0	1	9·0	9·0	315
11·0	1	10·5	10·5	285
12·0	1	11·0	11·0	280
13·0	1	12·0	12·0	290
	BAREILY			
10·0	4	7·7	2·2	182
11·0	4	8·6	0·7	114
12·0	1	7·0	7·0	280
13·0	1	6·5	6·5	280
14·0	1	5·5	5·5	25
15·0	1	10·0	10·0	20
16·0	1	5·0	5·0	15
17·0	1	9·0	9·0	290
18·0	1	12·5	12·5	250
19·0	1	15·0	15·0	275

Ht. in km.	n	V	v	D
	BHOPAL			
10·0	2	10·3	6·9	105
11·0	1	3·5	3·5	25
12·0	1	16·0	16·0	310
13·0	1	26·5	26·5	290
	BIKANER			
10·0	1	6·5	6·5	60
	CUTTACK			
10·0	1	14·0	14·0	100
11·0	1	19·5	19·5	85
12·0	1	21·0	21·0	85
	DIBRUGARH			
10·0	5	5·6	3·5	346
11·0	5	5·4	2·7	347
12·0	4	6·3	5·6	34
13·0	4	9·6	7·7	33
14·0	3	10·2	8·2	15
15·0	2	11·3	10·0	32
16·0	1	14·0	14·0	45
	GOPALPUR			
10·0	5	14·1	14·1	96
11·0	1	22·0	22·0	95
12·0	1	28·0	28·0	90

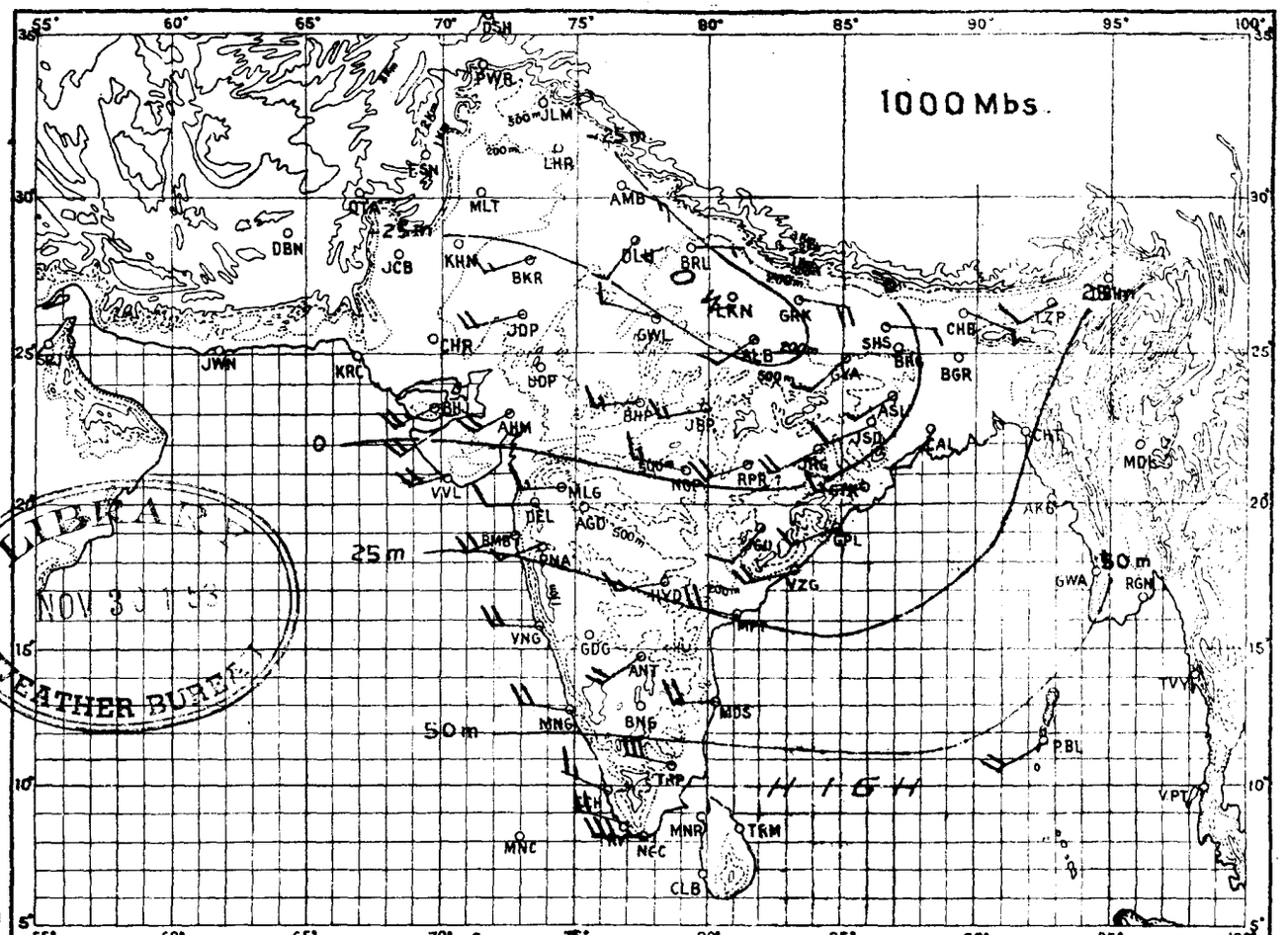
Ht. in km.	n	V	v	D
	MADHOSAGAR			
10·0	1	2·0	2·0	320
11·0	1	2·5	2·5	350
12·0	1	4·0	4·0	15
13·0	1	5·5	5·5	90
14·0	1	6·0	6·0	50
	MADRAS			
10·0	11	16·1	15·8	94
11·0	8	21·0	20·8	86
12·0	8	26·7	26·4	89
13·0	7	33·2	33·1	89
14·0	5	40·2	40·0	91
15·0	4	38·9	37·8	91
16·0	3	32·5	31·4	94
17·0	2	35·5	35·5	86
18·0	1	30·0	30·0	84
	MASULIPATAM			
10·0	1	4·0	4·0	15
	NAGERCOIL			
10·0	7	12·4	11·4	97
11·0	1	23·5	23·5	90

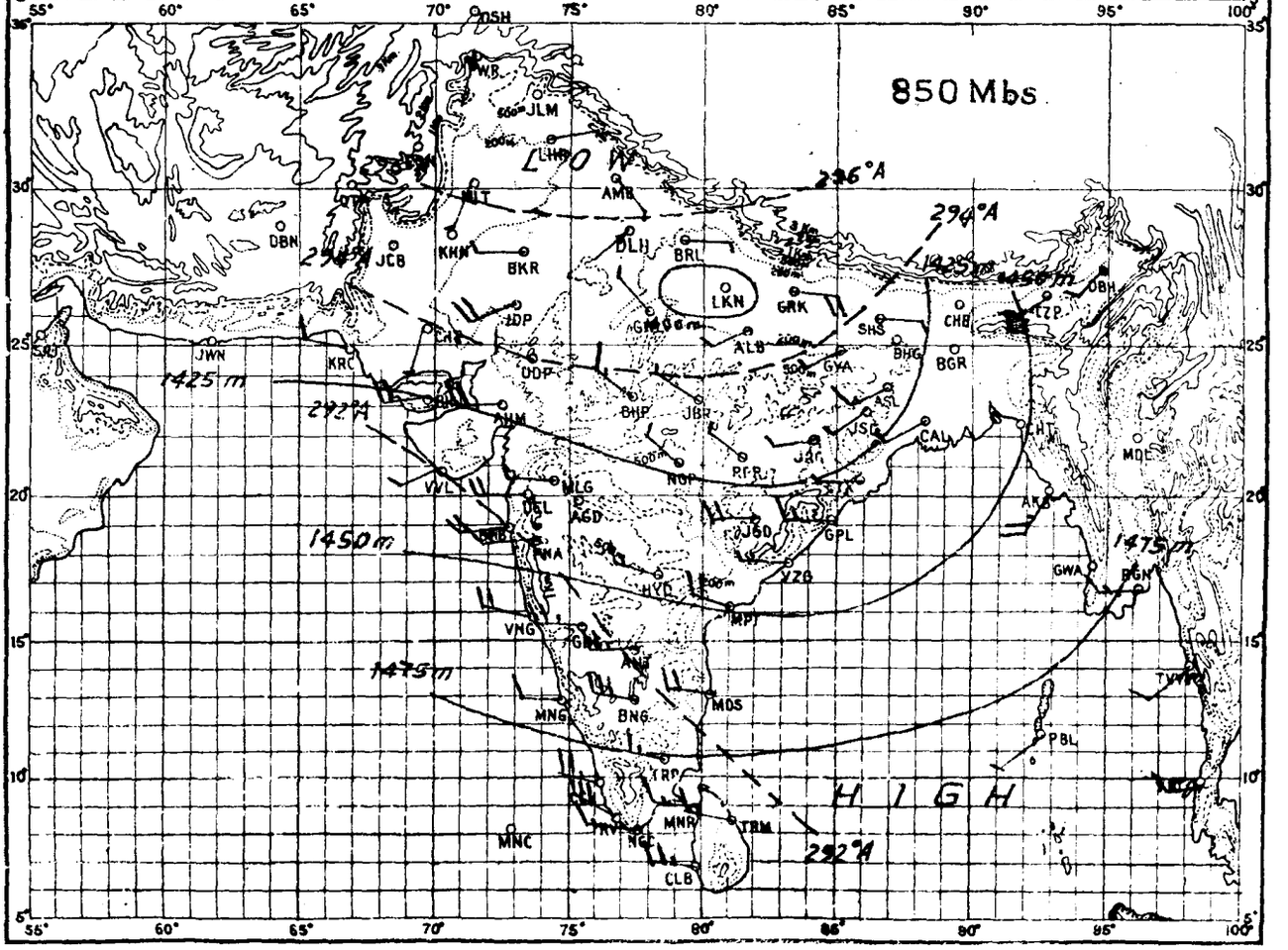
Ht. in km.	n	V	v	D
	NAGPUR			
10·0	1	13·0	13·0	95
11·0	1	19·0	19·0	105
12·0	1	21·5	21·5	85
13·0	1	19·0	19·0	90
14·0	1	29·0	29·0	90
	POONA			
10·0	2	12·3	12·3	91
11·0	1	15·0	15·0	80
12·0	1	26·0	26·0	90
13·0	1	25·0	25·0	85
14·0	1	36·0	36·0	80
15·0	1	32·5	32·5	80
	TEZPUR			
10·0	2	2·7	2·3	291
11·0	2	3·5	3·4	335
12·0	2	6·7	4·8	344
13·0	1	3·0	3·0	60
	TRICHINOPOLY			
10·0	1	4·5	4·5	85
	TRIVANDRUM			
10·0	6	18·9	18·8	90
11·0	4	23·2	23·1	77
12·0	1	26·0	26·0	85
13·0	1	35·5	35·5	80

MONTHLY MEAN CONSTANT PRESSURE CHARTS

JULY 1948

Plate I.





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

- - - - - *Isotherms in degrees Absolute* ——— *Contours in geopotential Metres.*

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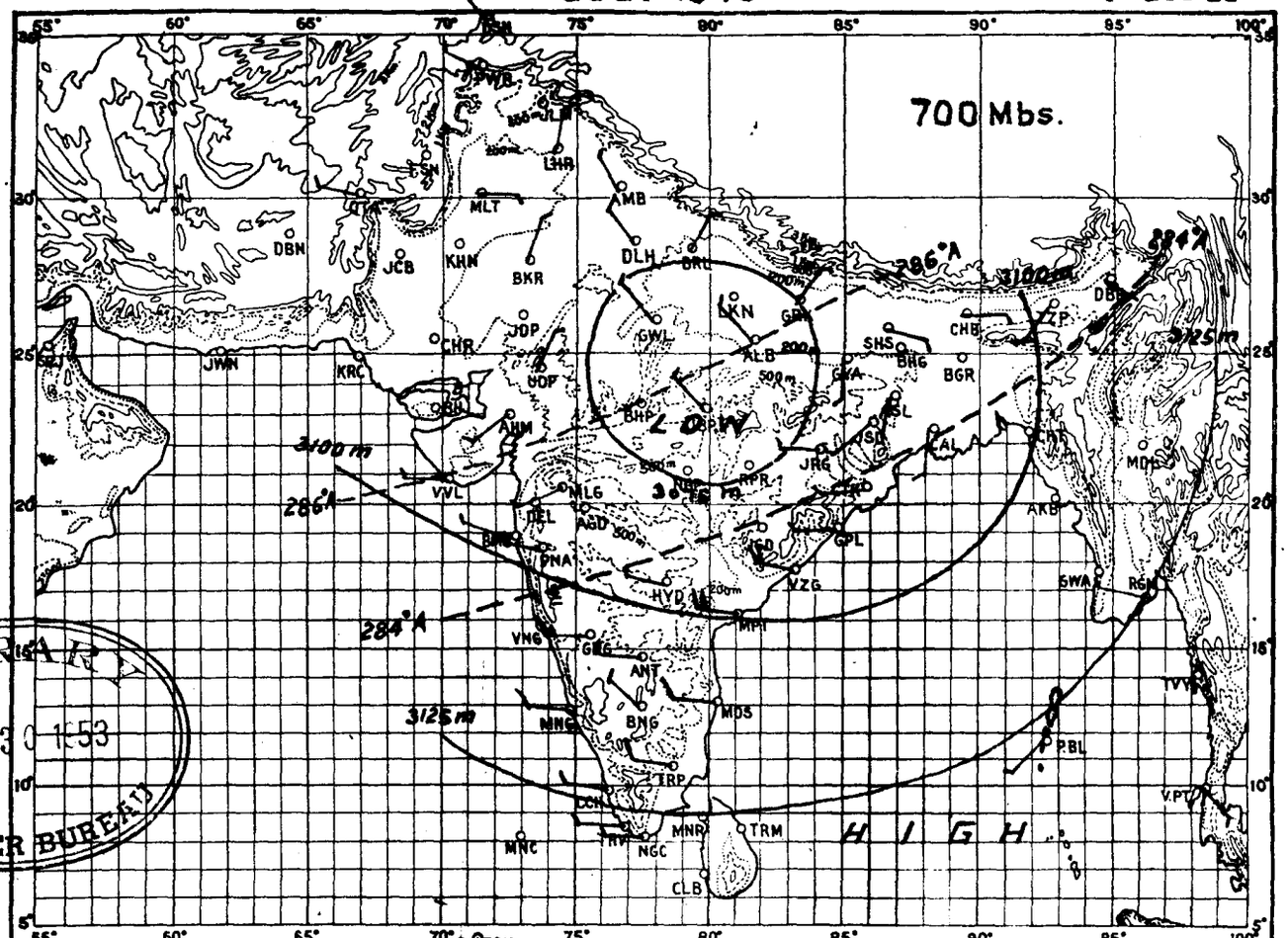
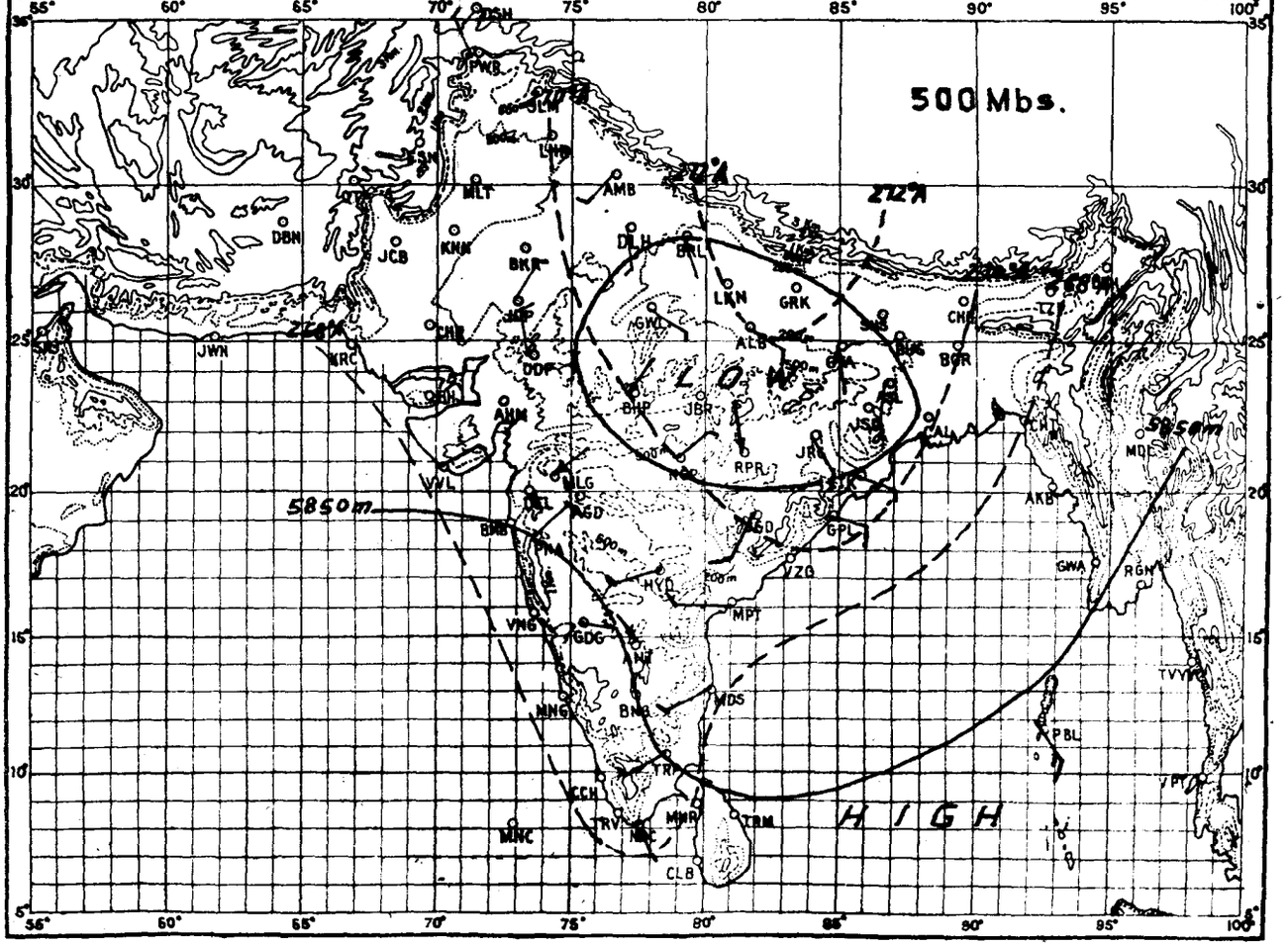
MONTHLY MEAN CONSTANT PRESSURE CHARTS

JULY 1948

Plate II





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

G.P.Z.P. POONA, 1951.

- - - - - *Isotherms in degrees Absolute* ——— *Contours in geopotential Metres.*

Registered No. B-3097

INDIA WEATHER REVIEW, 1948

Monthly Weather Report

August

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Published by authority of the Government of India

Chief features:—(*i*) Vigorous monsoon in the United Provinces during the last ten days of the month and generally good monsoon elsewhere except in Gujarat and the eastern half of the Peninsula. (*ii*) One cyclonic storm and two depressions in the Bay of Bengal.

During the first four days of August, the activity of the monsoon was confined to the region from the United Provinces to Assam and Eastern Pakistan. A low pressure wave which moved westwards across the extreme south of the country, however, caused fairly widespread thundershowers in the southern half of the Peninsula during this period. In association with a "low" which developed over Bihar and moved upto north Rajputana, the monsoon strengthened in Bihar and the United Provinces and extended into the Punjab between the 7th and 12th. The monsoon was also active in the western half of the peninsula during this period, while elsewhere over the country, it continued to be weak.

A depression developed in the northwest Bay, centred near Lat. 18°N., Long. 86½°E., on the morning of the 12th. It intensified into a cyclonic storm by the 14th morning when it was centred about 150 miles southwest of Calcutta. The storm crossed the coast near Chandbali on the same afternoon and moving northwestwards and weakening at the same time, it became unimportant over the southwest United Provinces and neighbourhood by the 18th. Under the influence of this storm, the monsoon was active over the region from the north Konkan and Gujarat to north Orissa, locally heavy rain occurring in the north Konkan, the east Central Provinces and along the Orissa-Circars coast. During this period, normal monsoon conditions prevailed elsewhere except in Bihar, Chota Nagpur and southeast Madras, where rainfall was deficient. Thereafter till the end of the month, the monsoon was generally weak in the eastern half of the Peninsula, Western Pakistan and northeast India, while it was strong over the central parts of the country, the United Provinces, the East Punjab and east Rajputana.

A depression formed with centre near Saugor Island on the 20th and after moving northwestwards upto the south United Provinces, curved towards north and broke up over the west United Provinces hills on the 25th. Under its influence, widespread rain occurred over the region from Central India and the west United Provinces to Chota Nagpur and Orissa, the rainfall being locally very heavy in the west United Provinces. Another depression formed on the 23rd with its centre 100 miles south of Calcutta. It crossed the coast by the 25th and moving slowly westnorthwestwards lingered as a trough of low pressure over the south United Provinces till the end of the month. This helped to maintain the activity of the monsoon over the central parts of the country, the United Provinces and east Rajputana. The continued heavy rain in the west United Provinces during the last ten days of August resulted in heavy floods in the Ganga whose level went on rising to record heights endangering many cities, flooding many villages and causing serious damage to standing crops.

The total rainfall of the month was in large excess in the United Provinces, the East Punjab and Mysore and in slight to moderate excess in Bihar, east Rajputana, west Central

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India, the east Central Provinces, the Konkan, the Bombay Deccan, south Hyderabad, Malabar and the Madras Deccan. It was normal in Assam, West Bengal, west Rajputana, east Central India, Berar and the west Central Provinces and in slight to moderate defect elsewhere. Averaged over the plains of India, the month's rainfall was 14 per cent in excess.

The Maximum temperature was below normal in the East Punjab and normal elsewhere. The minimum temperature was normal. Relative humidity was in excess in the west United Provinces, the East Punjab and west Rajputana and normal elsewhere. Cloud amount was in excess in the East Punjab and East Rajputana, and normal elsewhere.

Data for Kashmir are absent.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amount for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N. B.—**The Indian Standard Time used in this publication is 5 hours 30 minutes in advance of G. M. T.**

POONA No. 5:
The 19th November 1948.

C. RAMASWAMY,
for *Director-General of Observatories.*

Errata to India Weather Review, 1940

Monthly Weather Report

August

Station	Column	For	Read
Page 201			
Silchar	35	-	1
Burdwan	24	7.2[c]	7.2
Chandbali	24	8.1[c]	8.1[e]
"	26	8.2[c]	8.2[e]
"	31	17[a]	17[f]
"	33	6.0[a]	6.0[f]
Darbhanga	33	5.4	5.7
Banaras	30	27	2, 7
	Foot-note.	ean	Mean
	"	f	e
	"	28 days	26 days
	"	h	f
	"	23 days	25 days
Page 202			
New Delhi	4	-1.5	-1.6
Sri Ganganagar	14	83	83.4
Ahmedabad	13	5830, 31	2, 30, 31
Page 203			
Amraoti	24	-	8.9
Page 204			
Titilagarh	9	4 ays	4 days
Chanda	11	0.0	0
Parbhani	21	94	84
Page 205			
Hyderabad (Begumpet)	40	1	0
Page 207			
Salem	51	-	1
Madras	30	1, 18	1, 8
	Foot-note	a - Mean of 29 days.	b - Mean of 29 days.
	"	-	c - Mean of 28 days.
Page 205			
Gondia	25	Delete +1.3	
Page 206	Foot-note	Delete "d - Mean of 27 days".	
	"	Delete "e - Mean of 26 days".	

	Rainfall.				Departure from normal of				
							8 hrs. I. S. T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
	"	"	"		"	"	mb.	%	
Division									
...am ...	11·43	11·16	+0·27	+ 2	+0·5	−0·1	0	− 1	+0·2
...st Bengal ...	14·28	14·37	−0·09	− 1	0	0	+0·2	+ 1	+0·8
...sa ...	11·82	13·34	−1·52	− 11	+0·1	+0·8	+0·6	+ 1	+1·1
...ar ...	13·89	12·99	+0·90	+ 7	+0·4	+0·3	+0·6	+ 1	+0·7
...ited Provinces.	19·28	12·13	+7·15	+ 59	−0·8	0	+1·5	+ 5	+1·2
...st Punjab ...	10·77	6·66	+4·11	+ 62	−4·3	−0·8	+2·3	+11	+1·4
...jputana ...	7·09	6·19	+0·90	+ 15	−1·2	0	+1·2	+ 5	+0·3
...mbay ...	9·80	9·04	+0·26	+ 3	+0·7	+0·9	+0·9	+ 1	+0·3
...b-division									
...y Islands ...	23·54	16·29	+ 7·25	+ 45	+0·3	+0·9	+0·2	+ 1	+0·8
...sam ...	11·43	11·16	+ 0·27	+ 2	+0·5	−0·1	0	− 1	+0·2
...est Bengal ...	14·28	14·37	− 0·09	− 1	0	0	+0·2	+ 1	+0·8
...rissa ...	11·82	13·34	− 1·52	− 11	+0·1	+0·8	+0·6	+ 1	+1·1
...hota Nagpur ...	10·83	13·64	− 2·81	− 21	+0·4	0	+0·4	+ 1	+0·8
...ihar ...	15·58	12·63	+ 2·95	+ 23	+0·4	+0·6	+0·8	+ 1	+0·6
...nited Provinces, East.	18·40	12·12	+ 6·28	+ 52	−0·2	+0·1	+0·6	+ 2	+1·2
...Do. do. West.	20·15	12·13	+ 8·02	+ 66	−1·4	−0·2	+2·1	+ 8	+1·3
...ast Punjab ...	10·77	6·66	+ 4·11	+ 62	−4·3	−0·8	+2·3	+11	+1·4
...Kashmir ...	Data	in	complete.						
...Rajputana, West.	4·12	3·79	+ 0·33	+ 9	−1·4	−0·4	+1·9	+ 6	−0·9
...Rajputana, East.	10·06	8·60	+ 1·46	+ 17	−1·1	+0·2	+0·6	+ 5	+1·5
...Gujarat ...	3·36	5·71	− 2·35	− 41	+1·2	+1·1	+0·5	− 1	+0·3
...Central India, West.	12·89	10·92	+ 1·97	+ 18	−0·8	+0·3	+1·5	+ 5	+ 1·4

							8 hrs. I. S. T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division—*contd.*	"	"	"		"	"	mb.	%	
9. Central India ...	13·02	11·87	+1·15	+ 10	−0·4	+ 0·1	+1·4	+ 5	+1·1
10. Central Provinces and Berar.	13·59	12·17	+1·42	+ 12	−0·3	+0·5	+0·8	+ 2	+0·8
11. Hyderabad ...	6·02	6·17	−0·15	− 2	−0·4	+0·7	+1·0	+ 3	+0·3
12. Mysore ...	14·31	7·79	+6·52	+ 84	−1·7	+0·4	+0·7	+ 4	+0·7
13. Madras ...	5·53	5·84	−0·31	− 5	−0·4	+0·6	+0·4	0	+0·7
Mean of India ...	10·90	9·54	+1·36	+ 14	−0·5	+0·3	+0·9	+ 3	+0·7
Sub-division—*contd.*									
15. Central India East.	13·18	13·14	+ 0·04	0	+0·2	−0·2	+1·3	+ 4	+0·7
16. Berar ...	6·05	6·41	−0·36	− 6	−1·3	+0·4	+1·0	+ 3	+0·3
17. Central Provinces, West.	13·64	12·85	+ 0·79	+ 6	−0·3	+0·6	+1·1	+ 3	+0·9
18. Do. do. East.	16·55	13·65	+2·90	+ 21	0	+0·5	+0·4	+ 2	+1·0
19. Konkan ...	21·14	18·15	+ 2·99	+ 16	0	+1·1	+0·9	+ 2	−0·2
20. Bombay Deccan...	11·09	9·06	+ 2·03	+ 22	+0·2	+0·4	+1·2	+ 3	+0·5
21. Hyderabad, North	5·41	6·63	− 1·22	− 18	−1·4	+0·8	+1·3	+ 4	−0·3
22. Do. South	6·82	5·55	+ 1·27	+ 23	+0·6	+0·6	+0·6	+ 3	+0·9
23. Mysore ...	14·31	7·79	+ 6·52	+ 84	−1·7	+0·4	+0·7	+ 4	+0·7
24. Malabar ...	16·72	14·83	+ 1·89	+ 13	−0·1	−0·5	+0·7	+ 3	+0·7
25. Madras, Southeast	2·40	3·51	− 1·11	− 32	−0·3	+1·2	+0·1	− 1	+1·1
26. Do. Deccan...	4·68	3·79	+ 0·89	+ 23	−0·9	+0·1	+0·9	+ 1	+0·5
27. Do. Coast, North	3·70	5·36	− 1·66	− 31	−0·4	+0·6	+0·5	0	0

STATION.	Height of bar. above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Maximum temperature °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Wet bulb temperature °F. Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Vapour pressure, millibars. Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Bay Islands																				
Port Blair ...	261	998·9	−0·5	996·8	83·7	+ 0·8	86	4 days	75·6	+0·9	71	22	79·7	79·5	76·9	77·0	30·2	+0·2	30·5	88
Assam																				
Dibrugarh ...	348	991·8	− 0·5	987·4	88·7	+ 1·5	96	31	76·2	+0·3	73	1,2	79·8	85·6	77·9	86·3	31·6	+0·9	32·8	91
Sibsagar ...	317	992·9	− 0·3	988·6	88·4	− 0·4	96	28	77·3	− 0·4	74	14	81·1	85·9	78·8	80·3	32·3	−0·2	33·0	89
Tezpur ...	258	995·0	− 0·3	990·7	89·6	+ 0·2	96	29	77·5	−0·2	75	6 days	80·6	85·9	78·9	80·8	32·4	+0·1	33·6	91
Gauhati ...	182	996·7	− 0·8	993·0	89·2	− 1·1	95	29	78·5	+0·5	76	1,2	82·5	85·8	79·2	80·0	32·5	+0·2	32·2	86
Dhubri ...	115	998·9	− 0·4	995·5	86·6	+ 0·3	91	29	78·5	0	74	8	81·0	85·6	79·0	81·4	32·9	+0·5	34·7	92
Silchar ...	96	1000·9	− 0·2	996·7	88·7	− 0·8	94	28	76·8	−0·1	75	3,11,28	80·7	85·4	78·2	79·8	31·8	−0·3	32·2	89
West Bengal																				
Dum Dum ...	38	999·8		996·9	88·7		92	13	79·0		75	4,5	82·7	84·3	79·0	79·3	32·3		31·9	84
Calcutta ...	21	1000·2	− 0·9	997·3	89·4	+ 0·4	92	4 days	79·2	+0·9	75	5	82·3	84·7	80·2	80·6	33·9	+0·9	34·1	91
Saugor Island ...	10	1000·2	− 1·0	997·7	86·4	− 0·5	87	17 days	79·3	−0·3	73	2	83·1	84·2	80·2	80·7	33·9	+0·8	34·2	87
Sandheads ...	28	999·5	− 1·2	997·3									82·9	83·8	81·4	82·1	35·9	+2·6	36·8	93
Midnapore ...	149	995·1	− 1·4	992·5	89·8	+ 0·6	93	18,20	78·3	−0·1	75	3,4,5	81·9	83·6	79·5	79·9	33·3	+1·1	33·3	90
Contai ...	35	999·2		996·5					78·8		72	20	82·5	84·5	80·4	81·0	34·5		34·5	91
Burdwan ...	106	997·2	− 0·9	994·1	89·3	+ 0·1	92	13,17,18	78·8	−0·1	75	3	82·4	84·4	79·3	79·8	32·8	+0·1	32·7	87
Krishnagar ...	48	999·3	− 1·3	996·5	90·5	+ 1·0	93	3,13,17	78·3	−0·1	75	5	80·7	84·8	79·3	80·5	33·5	+0·4	33·5	94
Asansol ...	414	986·7	− 0·4	983·5	88·7	− 0·1	92	3,18	77·8	+0·3	73	3	81·5	84·2	78·9	79·8	32·6	+0·2	32·7	89
Berhampore ...	62	999·3	− 0·5	995·9	89·7	+ 0·6	94	19	78·8	0	76	4,5,17	82·9	85·3	79·8	80·7	32·4	+0·1	33·7	86
Malda ...	108	998·1	− 0·7	994·8	88·2	− 0·9	91	4 days	79·3	+0·2	73	2	82·9	85·6	79·8	80·3	33·4	0	32·8	87
Jalpaiguri ...	271	993·5	− 0·2	990·0	87·3	− 1·5	92	24,26,30	76·9	−0·4	74	3,5	80·0	84·1	77·4	79·1	31·0	−1·4	31·7	89
Orissa																				
Balasore ...	65	998·3	− 1·0	995·8	88·1	− 0·2	91	1,6,7	78·6	+0·2	75	24	82·1	84·2	79·4	79·9	33·1	+0·9	32·8	88
Chandbali ...	20	999·7	− 1·6	997·1	88·4	+ 0·1			78·8	+0·4			82·1	84·7	79·4	80·0	33·1	+0·6	32·9	89
Puri ...	20	1000·2	− 1·2	997·5	87·6	0	91	19	80·9	+1·3	76	2	83·5	84·5	79·3	80·0	33·1	+0·5	33·6	85
Gopalpur ...	56	999·3	− 1·1	996·5	88·2	+ 0·4	92	22	79·2	+0·4	75	12,27	82·9	84·7	79·2	81·0	32·5	+0·5	34·5	84
Cuttack ...	87	997·4	− 1·8	994·7	88·3	− 0·7	93	4,9	79·2	+1·1	75	15	81·5	85·2	78·7	79·9	32·2	+1·0	32·4	87
Angul ...	455	985·3	− 1·0	982·3	88·2	+ 0·6	92	4 days	78·0	+1·1	76	4 days	80·4	84·1	76·8	78·2	29·9	−0·1	30·2	84
Sambalpur ...	486	984·2	− 1·2	981·3	87·3	+ 0·6	93	12,13	77·5	+0·6	75	7	80·4	83·7	77·4	79·0	30·7	+0·6	31·8	81
Chota Nagpur																				
Jamshedpur ...	428	986·1	− 1·0	983·1	89·2	+ 0·3	95	1	78·4	+0·4	75	2,4,5	82·0	84·0	78·1	78·8	31·0	+0·3	31·3	83
Chaibasa ...	742	975·1	− 0·8	972·0	88·9	+ 0·6	93	1,5	77·2	+0·3	74	4	80·1	84·7	77·5	78·9	31·1	+1·1	31·0	89
Ranchi ...	2,150	928·7	− 0·8	926·3	84·6	+ 1·3	89	17	71·8	−1·0	69	4	74·9	80·1	72·5	75·4	25·9	−1·0	27·8	89
Hazaribagh ...	2,006	933·4	− 1·2	930·9	84·2	+ 0·2	89	24	73·2	−0·1	70	3	76·6	80·0	74·4	75·9	27·9	+1·1	28·5	90
Daltonganj ...	725	975·4	− 1·1	972·1	88·2	− 0·5	92	12	77·1	+0·2	73	3	81·8	83·2	78·0	78·8	30·9	+0·5	31·6	84
Dhanbad ...	889	972·1			87·7		90	27, 30	76·2		73	3	80·1		77·8		31·4			90
Bihar																				
Purnea ...	124	997·3	− 0·6	993·9	89·5	+ 0·4	93	14,24,30	79·0	+0·5	76	3,4,11	83·1	85·8	80·0	80·9	33·6	+0·3	33·7	87
Saharsa ...	156	995·7		992·6									83·3	87·6	80·5	81·6	34·2		33·9	88
Darbhanga ...	161	995·6	− 0·6	992·3	89·9	+ 0·8	95	24	79·9	+0·8	75	1,2	83·6	87·5	80·3	81·4	33·7	+1·3	33·9	86
Motihari ...	218	993·8	− 0·7	990·0	89·9	+ 0·5	94	24	79·0	+0·7	74	2	84·9	86·0	80·2	80·9	33·4	+0·9	33·9	81
Patna ...	173	994·3	− 1·1	991·2	89·6	+ 0·5	93	4 days	80·3	+0·6	76	2,3	84·0	86·9	79·9	80·5	33·1	−0·1	32·6	85
Dehri ...	352	987·8		984·5	88·8		94	19, 24	79·1		75	2, 4	83·1	85·0	79·4	80·4	33·1		33·4	86
Gaya ...	365	987·1	− 1·5	984·0	89·8	− 0·1	93	14,19,30	79·2	+1·0	74	4	82·7	86·2	79·9	81·6	33·5	+2·5	34·8	86
Naya Dumka ...	489	984·3	− 0·7	980·9	88·9	+ 0·4	92	30	74·3	−3·3	70	6	82·3	84·7	78·8	81·0	32·0	+0·2	34·5	86
Sabour ...	122	996·8	− 0·8	993·5	89·5	+ 0·5	92	5 days	79·4	+0·2	76	1	83·3	86·1	80·1	81·4	33·7	+0·2	34·5	87
U. P., East																				
Gonda ...	360	988·3		985·2	90·2	+ 0·4	94	26	79·1	+ 0·6	76	2, 12	82·2	85·9	79·4	80·9	33·0	+ 0·7	33·8	8
Gorakhpur ...	254	991·7	− 1·0	988·5	89·8	+ 0·3	93	5 days	79·3	+ 0·6	74	12	83·4	87·1	79·5	80·5	32·7	+ 0·1	32·5	8
Banaras ...	250	991·0	− 1·3	988·0	89·6	0	94	25	78·8	+ 0·3	75	2	82·4	85·9	80·2	81·5	33·9	+ 1·6	36·8	9
Allahabad (Bamrauli)	322	988·5	− 1·3	985·6	89·2	− 0·2	93	15,27,30	78·7	+ 0·2	75	28	82·0	85·7	79·4	80·1	33·2	+ 0·8	32·5	8
Fatehpur ...	375	986·8		984·1	89·7	0	94	14,15,30	78·6	+ 0·1	74	21	81·9	82·8	79·9	81·4	34·1	+ 1·5	35·8	9
Kanpur ...	413	985·7	− 0·9	983·0	89·6	− 0·1	93	4 days	78·4	− 0·3	71	25	81·7	85·7	79·6	80·7	33·6	+ 1·5	33·3	9
Lucknow ...	371	987·4	− 0·7	984·7	89·2	− 1·3	94	27	79·5	+ 0·9	77	3, 5	82·1	86·1	80·2	81·7	34·4	+ 2·2	35·0	9
Bahraich ...	407	987·0	− 0·1	984·1	89·3	− 0·8	93	5 days	77·9	− 1·2	74	5	82·0	85·6	79·1	81·1	32·7	+ 0·9	34·2	8

Cloud amount in tenths of sky			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
1	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands
.1	+ 0·8	9·2	23·54	+ 7·25	3·48	8	21	+ 0·1	3·9	+ 0·5	0	0	0	0	2	14	15	0	0	0	0	0	0	2	16	12	0	1	Port Blair
																													Assam
.3	+ 1·4	5·5	17·30	− 0·46	3·95	1	18	− 0·7	1·1	+ 0·1	4	1	2	0	1	2	2	7	12	3	2	1	1	2	0	1	2	19	Dibrugarh
.4	+ 0·6	7·2	14·29	− 2·08	2·35	15	20	+ 1·9	2·6	+ 0·6	7	4	4	0	6	3	0	1	6	7	4	2	2	4	4	2	2	4	Sibsagar
.9	− 0·2	5·1	12·76	− 0·26	2·70	26	17	+ 1·1	1·3	− 0·1	0	4	9	4	0	1	4	0	9	0	3	10	1	1	1	2	0	13	Tezpur
.2	+ 0·6	6·8	8·30	− 1·96	1·51	7	12	− 1·1	2·1	+ 0·8	5	4	6	6	5	2	0	3	0	5	4	3	1	5	4	4	3	2	Gauhati
			15·51	+ 2·22	6·04	1	10	− 4·6	3·8	+ 0·3	3	7	13	1	4	0	0	0	3	7	8	3	3	6	0	1	0	3	Dhubri
.1	+ 0·1	7·2	33·69	+13·43	4·15	24	24	+ 1·8	1·1	− 0·4	[illegible]	3	9	1	2	0	0	0	15	1	1	1	0	2	3	9	1	13	Silchar
																													West Bengal
.3		8·9	15·15		2·55	21	21				9	0	7	11	5	4	0	0	4	0	0	0	12	11	7	0	0	1	Dum Dum
.8	+ 0·4	8·8	14·82	+ 1·90	2·27	21	19	+ 1·0	2·1	− 1·3	0	1	9	7	3	4	0	0	7	0	0	5	5	8	3	1	0	9	Calcutta
.1	− 0·4	7·7	10·08	− 3·20	1·65	1	19	+ 2·7	13·4	+ 2·8	0	3	1	4	5	14	2	0	2	0	0	2	5	10	13	0	1	0	Saugor Island
.0	+ 1·7	8·2	13·11	+ 4·27	3·60	24	17	+ 5·0			0	0	2	4	4	15	2	3	1	0	2	2	2	9	13	2	1	0	Sandheads
.9	+ 1·8	9·3	24·84	+12·09	4·95	4	20	+ 3·2	3·2	+ 1·0	0	7	2	2	8	6	0	0	6	0	2	1	7	9	5	1	0	6	Midnapore
.5		7·5	11·66		1·83	31	16		8·6		1	7	3	3	6	9	1	1	0	0	1	0	9	16	4	1	0	0	Contai
.2	− 1·0	6·2	9·24	− 2·68	2·15	8	17	+ 0·8	5·7	+ 3·4	1	2	14	4	5	4	1	0	0	0	1	7	10	7	5	1	0	0	Burdwan
.9	+ 1·1	8·2	9·55	− 0·83	1·37	2	18	+ 2·7	3·3	− 0·2	0	3	18	9	7	0	0	0	4	1	0	3	18	4	1	0	0	4	Krishnagar
.2	+ 1·0	9·0	11·48	− 1·80	3·02	8	20	+ 3·0	5·0	+ 0·3	0	0	9	11	2	4	1	0	4	0	0	7	14	2	2	0	0	6	Asansol
.7	+ 0·4	8·0	12·49	+ 1·08	4·39	17	19	+ 2·7	3·2	+ 0·2	0	0	16	8	5	1	0	0	1	0	1	12	4	10	2	0	0	2	Berhampore
.4	+ 1·4	7·6	6·53	− 4·49	2·25	2	11	− 3·6	4·5	− 0·2	0	1	12	9	4	3	0	0	2	0	1	10	12	4	2	0	0	2	Malda
.6	+ 2·4	7·6	25·02	− 0·25	6·34	10	17	− 3·4	3·9	− 2·2	1	15	11	0	0	0	1	0	3	4	4	2	4	4	0	1	1	4	Jalpaiguri
																													Orissa
.6	+ 2·3	9·4	14·00	+ 2·24	2·20	22	19	+ 4·2	4·9	+ 1·3	0	5	2	1	7	9	1	0	6	0	1	1	6	7	9	0	1	6	Balasore
.1	+ 0·5	8·2	13·02				17		6·0	− 0·3	1	1	2	1	7	3	9	0	2	0	1	1	5	10	4	4	0	1	Chandbali
.9	+ 1·9	9·0	12·79	+ 1·87	6·05	15	11	− 1·9	13·3	+ 3·4	2	2	0	1	2	13	9	1	1	0	1	2	2	2	21	3	0	0	Puri
.2	+ 3·0	9·1	9·71	+ 2·01	4·07	15	8	− 2·8	10·1	+ 2·4	4	0	0	0	3	17	2	0	5	0	0	1	1	9	15	0	1	4	Gopalpur
.7	+ 1·2	8·7	19·23	+ 5·83	5·90	15	15	− 0·3	3·7	+ 1·5	0	2	0	0	1	2	1	2	23	1	1	0	0	2	2	2	1	22	Cuttack
.7	+ 0·2	8·0	5·38	− 5·68	1·35	2	10	− 5·1	4·8	− 0·1	3	2	2	2	2	1	9	5	5	1	2	3	2	4	4	9	5	1	Angul
.0	+ 0·7	9·5	7·22	−11·82	1·41	25	18	− 0·9	5·7	+ 2·1	2	0	3	2	2	18	2	1	1	0	1	2	3	6	13	5	0	1	Sambalpur
																													Chota Nagpur
.8	+ 0·2	9·0	10·05	− 5·36	1·99	1	18	0	4·5	+ 0·5	0	3	10	3	0	5	6	1	3	0	2	10	7	2	3	2	1	4	Jamshedpur
.3	+ 1·3	9·5	9·06	− 3·13	1·26	26	18	+ 1·4	1·9	− 0·2	1	7	1	3	1	9	2	0	7	0	5	1	6	3	6	1	0	9	Chaibasa
.6	+ 0·2	8·3	9·77	− 4·07	1·80	4	16	− 2·6	3·5	− 1·1	3	1	4	1	9	4	1	2	6	3	0	1	2	9	0	1	2	13	Ranchi
.3	+ 0·3	8·8	14·70	+ 1·42	3·52	19	16	− 1·6	5·8	− 0·1	1	2	9	1	6	4	6	0	2	2	1	7	8	5	2	2	2	1	Hazaribagh
.2	+ 1·9	8·9	10·59	− 2·92	1·70	4	18	+ 1·6	3·4	+ 0·1	0	2	14	2	1	0	3	1	2	2	1	11	1	0	0	8	1	7	Daltonganj
			11·59		2·12	22	17		6·1		0	0	15	6	0	3	0	0	7										Dhanbad
																													Bihar
.3	+ 1·0	7·5	11·67	− 1·48	2·00	4	14	− 2·2	3·3	+ 1·0	0	2	13	2	0	0	0	0	14	0	3	11	5	0	0	0	0	12	Purnea
.3		7·6	12·79		4·75	8	13		5·3		0	3	23	3	1	0	0	0	1	1	1	16	5	0	0	0	0	8	Saharsa
.0	+ 0·4	6·8	13·97	+ 0·46	5·88	1	11	− 2·8	5·4	+ 2·5	0	10	17	2	1	0	1	0	0	0	3	12	13	0	2	1	0	0	Darbhanga
.5	+ 1·1	7·0	12·20	− 0·77	4·71	1	12	− 1·2	3·7	− 0·1	0	0	23	0	0	0	0	0	3	0	0	10	0	0	0	0	0	21	Motihari
.5	− 0·1	7·5	13·52	+ 0·43	6·30	3	15	+ 1·1	5·6	+ 1·7	0	6	17	5	0	2	0	0	1	0	6	17	3	0	1	1	2	1	Patna
.0		8·8	29·46	+16·24	9·05	7	19	+ 4·4	4·1		0	4	4	13	1	6	0	1	2	0	4	6	6	1	3	0	4	7	Dehri
.1	+ 1·6	8·7	17·88	+ 4·13	5·88	6	13	− 2·7	7·7	+ 2·4	0	6	12	4	4	2	1	1	1	2	7	8	2	2	4	2	1	3	Gaya
.5	− 1·8	5·7	10·73	− 2·21	2·05	2	20	+ 2·4	4·1	+ 2·0	0	2	5	20	0	3	0	0	1	0	3	5	19	2	2	0	0	2	Naya Dumka
.6	+ 0·3	8·3	11·01	+ 0·50	3·35	1	15	0	4·5	− 1·1	0	0	20	7	3	0	1	0	0	0	5	16	4	0	1	1	1	3	Sabour
																													U. P., East
.7	0	7·5	16·59	+ 0·94	2·65	2	17	+ 3·5	4·2	+ 0·6	0	0	27	0	0	1	2	0	1	1	0	14	0	1	0	1	0	14	Gonda
.8	+ 0·8	6·3	13·07	− 0·68	5·30	12	20	+ 5·1	3·5	+ 1·5	0	6	18	1	0	0	1	0	5	1	3	17	0	0	0	1	0	9	Gorakhpur
.8	+ 0·7	8·3	33·30	+21·29	5·28	27	20	+ 5·1	5·0	+ 1·8	3	3	12	2	0	4	4	0	3	2	8	6	0	0	4	4	2	5	Banaras
.1	+ 0·6	9·1	18·24	+ 3·21	4·49	8	18	+ 3·3	4·4	+ 0·1	0	10	10	1	3	2	3	1	1	2	6	6	2	3	2	3	3	4	Allahabad (Hamraulli)
.5	+ 1·0	8·1	16·32	+ 3·29	2·43	28	21	+ 6·6			0	7	5	0	1	3	2	2	11	0	2	4	1	1	1	2	1	19	Fatehpur
.0	+ 3·2	8·3	16·66	+ 5·46	1·82	7	19	+ 5·7	6·2	− 0·3	0	9	10	3	2	3	2	2	0	3	6	5	4	2	2	3	1	5	Kanpur
.5	+ 1·1	7·6	16·63	+ 5·13	2·62	2	18	+ 4·3	2·1	+ 0·1	0	1	12	0	1	0	4	0	13	4	0	11	0	4	1	3	0	8	Lucknow
	+ 2·5	8·9	16·38	+ 3·59	3·29	25	20	+ 7·5	4·8	+ 2·6	1	2	15	8	0	1	0	1	3	1	1	13	8	0	2	0	0	6	Bahraich

a—Mean of observations for 30 days. b—Mean of observations for 29 days. c—Mean of observations for 28 days. h—Mean of observations for 23 days. (n) Mean of 17 days.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			R hu
		Mean 8 hrs., I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
U. P., West																				
Jhansi ...	823	971·8	− 1·6	969·2	88·9	− 0·4	94	12	76·9	0	71	25	79·6	85·3	77·7	79·8	31·5	+ 2·2	32·3	92
Agra ...	558	981·1	− 0·8	978·5	89·8	− 1·6	95	15, 27	79·2	+ 0·3	77	4 days	81·3	85·4	79·0	83·6	32·8	+ 3·3	38·5	90
Mainpuri ...	516	982·4	− 0·7	979·7	89·3	− 2·5	95	16,18,27	78·9	+ 0·4	76	10,12,16	82·1	85·7	79·9	80·9	33·9	+ 2·5	33·8	90
Aligarh ...	615	978·8		976·3	89·2	− 2·3	96	18	78·1	− 0·2	75	3,24	80·7	85·5	79·0	80·6	33·5	+ 3·5	33·4	94
Bareilly ...	568	980·7	− 1·0	977·7	88·7	− 1·5	93	14, 30	77·6	− 0·6	75	5,12,30	81·4	85·2	79·3	80·7	33·3	+ 1·6	33·7	91
Roorkee ...	899	969·8	− 0·8	966·9	88·0	− 1·7	96	30	76·2	− 0·9	72	24	78·9	85·7	77·2	79·9	31·3	+ 1·3	32·2	93
Dehra Dun ...	2,239	926·4	− 0·5	924·3	84·2	0	90	30	72·3	− 0·6	69	6,24	75·7	80·1	73·7	75·5	27·6	+ 0·5	28·3	91
East Punjab.																				
New Delhi ...	714	975·1	− 1·5	972·7	89·6	− 3·4	96	16,17,18	78·1	− 0·3	74	24	80·9	85·8	78·3	80·1	31·9	+ 2·1	32·6	89
Hissar ...	725	975·2	− 0·6	972·8	90·4	− 5·9	96	18,30	77·8	− 1·2	75	24,25	80·7	88·0	78·3	81·6	32·0	+ 3·3	32·3	89
Ambala ...	892	968·5	− 1·9	966·5	89·0	− 4·2	97	1,28,30	75·5	− 0·5	73	25	80·0	86·4	77·9	80·5	31·8	+ 1·4	32·7	91
Ludhiana ...	812	972·0	− 0·9	970·0	91·3	− 3·6	99	28	77·9	− 1·3	72	24	81·7	86·7	78·7	80·9	32·2	+ 2·5	33·4	87
Kashmir																				
Srinagar ...	5,205	834·4	− 0·9	834·5	83·2	− 3·4	90	5	64·9	+ 1·5	59	24, 31	69·6	80·6	66·4	70·4	20·8	+ 0·9	21·7	85
Gulmarg (*R*) ...	8,569																			
Dras (*R*) ...	10,059																			
Leh ...	11,503	668·7	+ 3·5	663·9	74·7	− 1·2	79	4 days	50·7	+1·0	48	27	57·7	72·3	50·4	55·4	9·9	+ 0·3	9·6	63
Skardu (*R*) ...	7,505																			
Gilgit (*R*) ...	4,890																			
Misgar (*R*) ...	10,190																			
Rajputana, West																				
Sri Ganganagar ...	580	978·7		976·2	97·1	− 2·8	104	28, 29	80·1	− 0·3	76	11	83·[illegible]	94·1	78·9	81·3	31·7	+ 3·8	30·6	82
Bikaner ...	734	974·1	− 1·3	971·3	97·7		104	29	80·5		77	1, 12	83·1	96·0	76·9	82·8	28·9		32·3	75
Phalodi ...	783	973·1		971·2	94·2		101	12	77·1		71	26	79·7	92·5	76·3	80·8	29·4		29·6	85
Jodhpur ...	736	975·3	− 0·2	972·8	90·3	− 1·5	100	12	76·1	− 0·9	74	4 days	79·1	88·9	75·6	79·2	28·7	+ 1·2	29·7	82
Barmer ...	638	978·5	− 0·8	975·9	92·7	+ 0·2	104	12	76·9	0	73	1	79·4	91·6	75·5	79·1	28·4	+ 0·8	28·3	83
Rajputana, East																				
Sikar ...	1,406	952·1		949·6	91·4		97	4 days	76·6		73	25	79·5	88·3	75·3	77·7	28·0		27·6	82
Jaipur ...	1,431	952·1	− 1·6	945·5	88·5	− 2·4	95	28	76·3	+ 0·4	74	4 days	78·7	86·3	75·3	77·6	28·4	− 1·0	28·3	85
Ajmer ...	1,593	946·8	− 1·6	944·5	87·0	− 0·7	94	12	75·8	− 0·2	73	1,3,4	77·3	85·0	73·5	76·6	26·7	+ 0·3	27·8	83
Kotah ...	843	972·0	− 1·1	968·9	88·2	− 0·9	95	12	77·8	+ 0·1	74	5	79·9	85·7	76·6	78·7	29·8	+ 2·1	30·4	86
Jhalawar ...	1,053	964·0	− 1·7	961·9	86·5	− 0·6	94	11	75·6	+ 0·6	71	7	77·8	84·3	75·6	77·7	29·2	+ 0·9	29·4	90
Rajsamand ...	1,850	938·7			84·8		91	11,25,28	74·5		72	13, 22	76·9		73·1		26·3			83
Udaipur ...	1,910	936·5		935·3	83·9		90	11	73·6		71	2	76·1	80·2	72·5	74·5	25·8		26·8	84
Gujarat																				
Deesa ...	466	986·4	− 0·6	983·4	89·3	− 0·3	97	12, 17	77·2	+ 1·2	70	30	80·5	88·2	75·9	77·7	28·5	+ 0·1	27·6	79
Bhuj ...	343	990·3	− 0·4	987·6	91·7	+ 3·3	101	12	77·8	+ 1·4	72	31	79·9	88·6	74·9	76·0	27·3	− 1·3	24·9	78
Dwarka ...	37	1000·8	− 1·4	999·3	85·3	+ 0·6	88	15	78·6	0	77	6 days	79·1	83·0	76·4	77·8	29·8	0	30·2	88
Jamnagar ...	60	1000·7	− 0·4		89·0	+ 0·9	92	1, 13	77·3	+ 0·6	75	5 days	81·1		77·0		30·7	+ 1·3		76
Rajkot ...	482	987·3	− 1·3	984·6	92·4	+ 3·6	96	11, 12	77·7	+ 2·9	74	28	78·6	88·5	76·2	77·9	29·8	+ 1·8	27·8	88
Veraval ...	26	1001·9	− 1·9	1000·2	83·9		89	12	77·5		75	5	79·4	81·8	78·6	80·0	33·0		34·4	96
Surat ...	39	1001·5	− 1·8	999·5	87·5	+ 1·0	92	27	78·9	+ 1·9	74	13	80·7	84·9	77·5	78·5	30·8	+ 1·0	30·3	86
Bhavnagar ...	55	1001·0	− 1·2	998·1	93·3	+ 2·4	98	5,8	78·1	+ 1·5	75	13	80·2	91·1	75·7	77·4	28·3	+ 0·2	24·8	80
Ahmedabad ...	162	996·8	− 1·3	993·5	91·7	+ 1·8	99	13	78·2	+ 1·4	76	5830, 31	80·2	90·5	76·4	78·5	29·3	+ 0·6	27·8	84
Dohad ...	1,093	953·5		963·1	93·4	+ 1·9	89	15	73·9	− 0·4	72	5 days	75·8	81·6	74·2	76·3	28·4	+ 0·6	28·6	93
Baroda ...	115	998·8		995·6	90·3	+ 0·7	97	12	77·5	+ 0·9	75	4 days	79·4	88·3	76·8	78·9	30·3	+ 1·1	29·5	88
Central Ind., West																				
Neemuch ...	1,626	946·7	− 1·3	944·8	83·4	− 1·4	90	12	73·6	+ 0·8	71	30, 31	75·1	79·7	73·8	75·2	28·0	+ 1·8	28·0	94
Indore ...	1,829	940·6	− 1·7	938·5	81·6	− 0·8	87	11,15,16	71·8	+ 0·4	69	30	73·5	79·3	72·1	73·5	26·6	+ 1·4	25·8	94
Bhopal ...	1,649	945·8	− 1·7	943·7	83·0	− 1·1	90	11	73·2	0	71	4 days	74·9	79·4	73·1	74·9	27·1	+ 0·9	27·5	92
Guna ...	1,571	947·8	− 1·2	945·6	85·3	0	98	16	73·7	+ 0·1	71	12	75·5	82·7	74·9	77·3	29·5	+ 2·1	29·5	97
Gwalior ...	681	976·6		974·0	89·0		94	12	77·0		72	3	81·9	83·6	78·6	79·2	31·9		32·3	86
Madhosagar ...	757	973·9		971·3	88·7		93	12	78·3		76	4 days	81·1	84·1	78·2	79·0	31·7		31·5	87
Central India, East																				
Nowgong ...	750	974·3	− 1·5	971·4	88·3	+0·2	93	15	77·2	+0·3	75	4 days	78·8	84·8	77·2	79·1	31·2	+ 1·4	31·4	89
Sutna ...	1,041	964·9	− 0·8	961·8	86·2	+ 0·2	91	15	75·8	− 0·4	72	30	79·1	82·2	77·1	78·2	30·8	+ 1·4	31·0	92
Umaria ...	1,506	948·9		946·6	85·0	+ 0·1	91	12	73·8	− 0·6	71	24	77·2	81·5	74·6	77·3	28·2	+ 1·0	30·6	90
Berar																				
Buldana ...	2,133	931·7		929·3	80·9		85	5 days	70·5		68	28	72·6	76·9	70·3	73·4	24·3		26·8	89
Akola ...	925	971·0	− 1·8	967·7	86·1	− 1·3	92	7	74·3	+ 0·6	72	28,29,30	76·6	83·1	73·6	75·3	26·9	+ 1·2	26·4	86
Amraoti ...	1,213	960·9	− 1·9	958·0	84·5	− 1·4	92	7	73·3	+ 0·2	71	28,29,30	74·9	82·6	72·7	74·7	26·5	+ 0·8	25·7	89

R—Register not received. *a*—Mean of 30 days.

Cloud amount (tenths of sky).			Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														U. P., West
7·6	+ 1·3	8·9	13·20	+ 1·61	2·81	31	17	+ 3·7	4·0	+ 0·5	1	0	0	0	1	1	4	2	22	0	1	2	0	0	0	13	1	14		Jhansi
8·1	+ 1·1	7·7	8·61	+ 0·50	2·73	19	16	+ 5·7	2·3	- 1·4	1	4	5	3	0	2	2	3	11	1	1	2	1	2	2	0	3	18		Agra
8·0	+ 1·1	7·3	15·09	+ 5·04	3·06	20	15	+ 4·5	2·2	+ 0·3	2	2	8	6	1	3	3	0	6	1	2	1	6	1	1	7	3	9		Mainpuri
8·2	+ 2·4	8·1	9·93	+ 2·00	2·06	6	12	+ 2·6	4·8	+ 0·7	0	0	15	0	0	1	7	0	8	0	3	4	3	5	1	8	2	5		Aligarh
9·1	+ 1·7	9·6	37·67	+26·07	8·83	24	20	+ 7·7	2·9	+ 1·1	2	3	7	8	3	2	2	1	3	5	1	7	3	3	1	4	0	7		Bareilly
7·1	+ 0·5	4·8	26·85	+15·63	5·76	24	18	+ 6·2	2·1	+ 0·1	0	0	0	16	0	0	0	1	14	0	1	0	15	0	2	0	3	10		Roorkee
8·6	+ 0·5	7·7	34·20	+ 5·41	6·80	14	21	- 0·3	1·8	- 0·1	2	1	0	2	3	2	0	1	20	4	1	1	2	2	3	4	3	11		Dehra Dun
																														East Punjab.
8·7	+ 2·6	8·5	14·67	+ 7·38	4·44	3	14	+ 5·0	3·3		1	6	8	2	4	3	2	1	4	3	6	8	2	2	2	1	1	6		New Delhi
5·3	+ 1·6	4·4	7·48	+ 2·61	2·76	13	7	+ 1·5	4·9	0	0	3	4	6	4	5	2	0	7	4	8	4	5	3	1	1	4	1		Hissar
5·2	- 0·7	4·8	13·70	+ 5 81	3·28	24	15	+ 6·0			0	2	0	13	0	0	0	3	13	0	3	0	15	0	0	0	5	8		Ambala
6·6	+ 2·0	5·7	7·22	+ 0·57	2·15	3	12	+ 4·7	2·3	+ 0·8	0	1	8	6	4	0	0	0	12	0	2	1	6	1	4	0	2	15		Ludhiana
																														Kashmir
6·1	+ 1·4	5·9	2·92	+ 0·50	0·58	13	9	+ 3·7	1·7	- 0·6	0	3	1	10	1	0	2	0	14	3	0	0	8	1	1	6	5	7		Srinagar
																														Gulmarg (*R*)
																														Dras (*R*)
5·3	+ 0·6	5·3	0·41	- 0·18	0·12	14	1	- 0·9	2·2	+ 0·5	0	3	0	0	4	2	0	0	22	0	1	0	0	1	17	6	0	6		Leh
																														Skardu (*R*)
																														Gilgit (*R*)
																														Misgar (*R*)
																														Rajputana, West
2·4	+0·3	3·6	9·60	+ 7·55	5·75	11	7	+ 3·7	5·7	- 0·2	0	0	7	6	8	8	1	0	1	8	3	6	1	1	6	1	1	4		Sri Ganganagar
2·0	- 1·7	3·6	1·71	- 1·89	0·89	10	5	+ 0·1	6·2	- 0·1	0	0	0	1	0	22	0	5	3	0	4	0	2	0	18	0	6	1		Bikaner
4·9		5·8	1·97	- 1·20	0·60	22	6	+ 1·6	12·0		0	1	0	0	3	18	9	0	0	1	1	0	1	7	16	3	2	0		Phalodi
6·7	- 0·8	7·4	4·30	- 0·54	2·24	12	5	- 0·9	2·0	- 7·1	0	0	0	0	1	17	4	0	9	1	0	0	0	6	18	1	1	10		Jodhpur
5·3	- 1·4	5·3	3·02	- 2·25	1·46	16	3	- 2·8	5·5	- 0·9	1	1	0	1	5	15	2	0	6	0	0	1	0	6	19	4	1	0		Barmer
																														Rajputana, East
6·7		8·3	2·25		1·05	10	5		3·4		0	0	0	1	0	8	14	3	6	1	0	2	2	0	5	2	6	6		Sikar
8·0	+1·2	9·1	9·11	+ 1·05	2·73	23	11	+ 0·8	3·9	- 0·6	3	1	2	3	1	2	7	5	4	6	2	3	1	1	2	6	7	3		Jaipur
7·9	+1·6	7·7	2·34	- 4·41	0·34	23	11	+ 2·6	5·3	+ 0·2	0	0	0	0	0	14	12	0	5	0	1	0	0	1	12	13	1	3		Ajmer
9·1	+2·6	9·0	9·71	+ 0·05	1·12	4	18	+ 2·6	4·2	+ 0·8	2	1	0	0	1	3	8	4	12	1	1	0	0	0	6	9	4	10		Kotah
8·6	+0·8	8·2	22·52	+11·01	4·40	31	16	+ 3·2	4·7	+ 0·8	2	0	0	0	0	7	15	1	6	2	2	0	0	0	6	13	4	3		Jhalawar
7·9			3·53		0·95	22	8		5·0		2	0	1	0	1	8	12	4	3											Rajsamand
8·2		9·1	6·64	- 0·37	1·66	22	12	+ 3·4	3·9		0	1	0	2	1	11	13	2	1	0	2	2	0	1	15	8	3	0		Udaipur
																														Gujarat
7·7	- 0·7	6·0	0·74	- 0·19	0·28	30	3	- 6·1	11·1	+ 1·7	1	0	0	0	9	15	4	2	0	1	1	0	5	12	4	5	0	0		Deesa
7·4	- 0·1	6·6	1·41	- 1·52	0·92	15	2	- 1·7	10·3	+ 0·3	0	0	0	0	0	3	24	4	0	0	0	0	0	0	11	17	3	0		Bhuj
9·0	+0·5	8·8	0·57	- 2·01	0·33	14	2	- 1·8	12·0	- 0·6	0	0	0	0	0	10	15	6	0	0	0	0	0	0	9	16	6	0		Dwarka
8·0	+1·0		0	- 3·85	0			- 5·2	7·8	- 5·2	0	0	0	0	0	11	11	0	9											Jamnagar
6·8	- 1·3	7·3	3·45	- 1·65	1·17	14	5	- 2·0	15·1	+ 4·9	1	0	0	0	1	13	12	4	0	2	1	0	0	0	8	14	6	0		Rajkot
9·2	+0·8	8·3	9·40	+ 5·79	4·36	15	9	+ 3·1	13·0		0	0	0	0	0	3	18	10	0	0	0	0	0	0	4	20	7	0		Veraval
9·4	+0·8	8·8	5·12	- 2·33	1·37	17	7	- 5·4	7·0	+ 3·2	0	0	0	1	2	17	9	0	2	0	0	0	0	0	30	0	0	1		Surat
8·6	+0·7	9·0	3·37	- 1·96	2·31	16	3	- 4·3	6·9	+ 0·6	0	0	0	0	1	12	12	1	5	0	0	0	1	4	8	15	1	2		Bhavnagar
8·3	+0·5	8·7	3·24	- 4·81	1·03	13	7	- 4·0	4·5	+ 0·3	0	0	0	1	1	11	13	3	2	1	0	1	2	2	7	11	6	1		Ahmedabad
9·1	0	8·8	6·31	- 0·66	1·38	17	16	+ 5·3	12·3	+ 4·4	0	0	0	0	2	15	12	1	1	1	0	0	0	1	11	18	0	0		Dohad
8·7	+0·5	8·3	3·31	- 5·71	0·84	17	8	- 1·7	3·6	- 1·3	0	0	0	1	2	14	7	0	7	1	0	0	0	4	9	12	2	3		Baroda
																														Central India., West
9·0	+1·5	9·5	10·12	+ 0·97	2·10	17	14	+ 4·0	7·7	- 0·2	0	1	0	0	0	9	18	2	1	0	1	0	0	0	8	22	0	0		Neemuch
9·6	+0·6	9·0	9·69	+ 1·54	1·75	29	16	+ 4·7	5·3	+ 0·2	0	0	0	1	1	6	17	5	1	1	0	0	0	0	11	11	6	2		Indore
9·5	+1·3	9·5	10·93	- 0·01	1·99	30	20	+ 5·2	6·2	+ 1·1	0	0	0	0	1	4	14	9	3	0	0	0	1	0	3	14	8	5		Bhopal
9·0	+2·1	9·3	20·84	+ 5·39	3·52	21	21	+ 7·4	6·8	+ 0·9	0	4	0	0	0	10	9	4	4	0	2	0	0	0	8	6	10	5		Guna
8·8		9·1	17·30		2·81	31	18		2·9		0	1	7	2	0	4	4	3	10	1	2	2	1	0	2	4	5	14		Gwalior
9·5		9·5	16·28		3·82	19	16		6·5		0	7	1	0	1	9	3	3	7	2	9	1	1	0	6	4	8	0		Madhosagar
																														Central India, East
9·0	+1·1	8·8	14·06	- 0·97	5·92	19	14	+ 0·1	3·5	+ 1·0	4	4	3	1	1	15	1	1	1	2	2	3	1	3	12	4	2	2		Nowgong
8·6	+0·6	8·5	14·27	+ 1·07	1·77	19	20	+ 4·9	3·7	- 0·6	1	2	4	1	1	7	7	2	6	0	4	3	2	0	7	6	7	2		Sutna
9·1	+0·3	8·8	11·21	- 2·91	2·40	26	18	+ 2·0	3·6	- 0·3	1	1	3	1	2	11	10	2	0	1	1	0	1	2	7	10	6	3		Umaria
																														Berar
6·9		7·9	5·04		1·08	15	12		6·9		1	0	0	0	0	9	13	8	0	1	0	0	0	2	1	17	10	0		Buldana
7·2	- 0·5	7·2	6·53	+ 0·21	2·63	8	15	+ 5·9	7·0	+ 0·6	0	0	0	0	1	1	21	6	2	0	0	0	0	0	0	15	14	2		Akola
[illegible]	+1·1	8·6	5·56	+ 0·9[illegible]	2·15	28	10	+ 0·2	9·0	+ 2·4	0	0	0	0	0	26	0	5	0	0	0	0	0	1	11	10	9	0		Amraoti

R—Register not received.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, Millibars.			Rela hum	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	2
C. P., West																					
Khandwa ...	1,044	966·7	− 1·6	964·2	84·7	− 1·1	92	14	74·2	+ 0·2	71	29	76·1	81·8	73·7	75·4	27·3	+1·2	27·0	89	+
Hoshangabad ...	992	967·5	− 2·1	965·1	82·8	− 1·7	92	14	74·2	− 0·3	71	23, 24	75·8	80·5	74·4	76·5	28·4	+0·7	29·3	93	+
Saugor ...	1,808	939·7	− 1·6	937·2	83·1	− 0·3	90	14	73·3	+ 0·7	71	4 days	75·1	79·6	73·7	75·5	27·7	+1·6	28·5	93	+
Jubbulpore ..	1,289	957·0	− 1·3	954·1	85·4	+ 0·9	92	12	74·5	+ 0·9	72	4 days	77·1	81·8	74·8	76·9	28·4	+1·3	29·8	90	+
Seoni ...	2,027	933·4	− 1·2	930·8	83·6	+ 0·9	95	29	72·9	+ 1·4	70	23,24,31	74·5	79·7	72·6	74·9	26·5	+0·9	27·6	91	+
Nagpur ...	1,010	967·8	− 1·7	964·6	86·7	− 0·6	94	4	75·3	+ 0·3	72	24, 31	77·7	83·2	74·0	75·5	27·0	+1·7	26·6	84	+
C. P., East																					
Gondia ...	1,026	966·6		963·8	85·5		91	4	75·5		65	16	77·6	81·4	74·9	76·5	28·2		28·9	89	
Pendra ...	2,040	932·2	− 1·2	929·5	83·0	+ 0·8	88	14	73·1	+ 1·2	69	20	75·6	79·8	73·9	75·7	27·9	+1·5	28·7	92	+
Champa ...	805	973·3		970·1	88·3		93	14	77·0		73	20	78·8	85·2	76·7	78·6	30·4		30·3	91	
Raipur ...	970	967·7	− 1·7	965·0	86·0	+ 0·2	91	4	75·0	+ 0·2	72	7, 9	77·9	83·6	75·5	77·1	31·3	+0·4	28·9	90	+
Titilagarh ...	691	977·4		974·6	87·3		93	4 days	76·6		73	16	78·8	83·6	75·5	77·3	28·7		29·1	85	
Kanker ...	1,318	957·6	− 0·9	954·8	84·7	+ 0·3	89	4, 6, 8	74·3	+ 0·6	73	8 days	77·8	80·6	73·7	75·3	26·8	−0·3	27·6	84	−
Chanda ...	634	981·1	− 1·2	978·1	85·4	− 1·9	92	7	75·2	0·0	72	28, 29	77·7	82·3	74·5	76·3	27·7	+0·1	28·2	85	+
Jagdalpur ...	1,815	941·3	− 1·2	938·7	83·1	+ 0·4	90	11	72·0	+ 0·7	68	7	75·2	79·0	73·0	74·5	26·9	+0·1	27·3	90	+
Konkan																					
Dahanu ...	15	1003·3		1001·5	85·3		88	6	78·0		71	14	80·4	83·4	78·1	79·4	31·9		32·5	90	
Bombay ...	37	1003·2	− 1·9	1001·6	85·6	+ 0·6	90	28	77·5	+ 1·4	75	4 days	79·9	83·5	76·9	77·9	30·2	+ 0·7	30·5	87	+
Alibag ...	23	1004·5	− 1·2		84·0	+ 0·1	87	3	77·7	+ 0·7	74	16	80·2		78·1		31·9	+ 1·8		91	+
Harnai ...	66	1003·0		1002·1	84·8		85	26 days	74·3		70	12,13,27	79·5	80·9	76·4	76·8	29·7		29·7	86	
Devgad ...	110	1002·3		1000·5	83·2		89	4	76·3		74	8, 28	78·5	80·0	76·7	77·4	30·5		30·6	91	
Marmagao ...	202	1000·5	− 0·3	998·1	81·6	− 0·6	84	1					78·3	79·5	76·0	76·5	29·6	+ 0·3	29·8	90	
Honavar ...	85	1005·3		1003·4	83·3		87	3, 6, 7	74·2		71	8, 9	77·1	79·4	75·9	77·1	30·0		30·7	95	
Bombay Deccan																					
Jalgaon ...	660	979·1		977·2	86·8		93	6	74·0		72	3,29,30	76·3	84·4	75·0	77·3	29·1		28·8	94	
Malegaon ...	1,432	954·6	− 1·7	951·2	87·3	0	93	8	72·1	+ 0·2	70	4 days	76·9	83·4	73·1	73·7	26·2	+ 1·9	24·0	82	+
Ahmednagar ...	2,154	931·7	− 1·7	929·1	34·7	− 0·6	90	5	69·3	+ 0·3	68	22	73·0	81·1	69·9	71·5	23·7	+ 1·1	22·5	84	+
Poona ...	1,834	942·8	− 1·4	940·8	82·7	+ 1·0	87	5	71·0	+ 0·5	69	3	78·7	77·5	70·9	72·3	24·7	+ 1·5	25·0	87	+
Sholapur ...	1,570	952·0	− 1·1	948·6	88·8	0	94	7	71·5	+ 0·4	69	8, 30	74·0	81·4	76·2	74·0	24·9	+ 1·8	25·6	87	+
Miraj ...	1,817	944·2	− 1·6	941·9	83·2	+ 1·1	93	5	70·4	+ 0·4	69	6 days	72·3	79·3	70·7	72·5	25·0	+ 1·0	24·5	92	+
Kolhapur ...	1,885	942·2		940·2	79·5		86	5	69·6		68	10	71·8	75·9	70·2	71·8	24·6		24·9	92	
Bijapur ...	1,950	939·6	− 1·4	936·8	86·0	− 0·8	94	3	70·6	+ 0·6	67	29	73·5	82·4	70·3	72·4	24·0	+ 1·2	23·1	85	+
Belgaum ...	2,562	920·7	− 1·2	918·8	76·6	+ 0·1	83	7, 8, 9	67·6	+ 0·9	66	3	69·9	73·4	68·7	70·3	23·5	+ 0·7	24·1	94	-
Gadag ...	2,131	935·0	− 0·7	932·3	84·6	+ 0·9	94	14	69·7	+ 0·2	68	28, 30	72·3	76·6	69·6	71·3	23·7	+ 0·5	24·0	87	
Hyderabad, North																					
Aurangabad ...	1,905	940·2	− 1·4	937·1	84·7	− 0·1	89	4 days	70·5	+ 0·9	68	30	72·2	81·8	71·3	73·2	25·4	+ 1·9	24·4	91	-
Parbhani ...	1,350	956·7		953·2	87·6		92	3	72·5		70	30	75·5	84·9	72·1	74·7	25·3		24·7	94	
Bidar ...	2,178	931·3		927·8	81·0	− 3·0	88	3	69·8	+ 1·1	37	5,30	71·7	80·4	70·2	72·9	24·6	+ 0·9	24·6	91	-
Nizamabad ...	1,250	961·5	− 1·1	958·1	85·6	− 1·2	91	6	73·4	+ 0·4	72	7 days	76·1	82·6	72·8	75·8	26·1	+ 1·2	27·4	85	-
Ramakundam ...	527	985·6		982·2	88·5		95	3	76·2		71	196	78·3	85·1	75·0	77·5	28·3		28·8	85	
Hyderabad, South																					
Gulbarga ...	1,503	953·9	− 1·5	950·2	87·6	− 1·2	93	3	71·7	+ 0·2	70	4 days	74·2	84·8	71·5	74·0	25·3	+ 1·7	25·0	87	
Raichur ...	1,311	961·1	− 1·1	957·2	89·7	− 0·2	94	1,2,4	73·2	+ 0·6	71	6,19	75·4	86·7	71·2	73·6	24·2	+ 0·1	22·4	81	
Hyderabad (Begumpet)	1,778	944·2	− 1·2	941·3	86·1	+ 0·2	90	3	72·6	+ 0·6	70	9	74·6	83·4	71·7	74·9	25·2	+ 0·5	26·2	87	
Hanamkonda ...	881	973·4	− 1·6	970·3	88·5	+ 1·3	93	3	75·6	+ 0·5	73	7,29	73·9	85·2	74·5	76·3	26·9	+ 1·2	26·9	80	
Khammameth ...	367	990·8		987·5	90·6		94	4	76·7		74	23	80·6	88·2	76·8	78·5	29·9		28·9	83	
Mysore																					
Chitaldrug ...	2,405	926·1	− 1·1	923·6	80·6	− 2·0	86	1, 6	68·7	+ 0·2	64	8	70·8	77·1	68·5	71·5	22·8	+ 0·7	24·1	88	
Hassan ...	3,149	903·0		901·1	76·5	− 2·2	83	6	65·7	+ 0·4	61	3	68·1	72·1	66·7	68·1	21·8	+ 0·6	21·9	93	
Bangalore ...	3,021	906·7	− 1·2	904·3	80·1	− 1·3	86	5	66·4	+ 0·8	65	6 days	68·6	75·5	67·1	69·3	22·1	+ 0·9	22·0	92	
Mysore ...	2,518	923·5	− 1·3	921·5	81·2	− 1·8	88	1	67·4	+ 0·6	65	8, 9	70·1	77·6	68·0	70·1	22·6	+ 1·0	22·1	90	
Malabar																					
Mangalore ...	72	1006·3	− 0·9	1004·2	83·0	− 0·9	86	4 days	73·8	− 0·4	70	8, 9	76·5	79·3	75·5	76·7	29·7	+ 0·5	30·2	96	
Calicut ...	27	1008·0	− 1·1	1005·9	84·1	+ 1·2	87	17,24	74·0	− 0·3	72	11,14,15	76·1	81·6	74·9	79·0	28·0	− 0·7	32·7	96	
Palghat ...	319	998·0		995·2	83·4		87	2,3,5	72·9		71	5 days	75·2	80·0	74·0	75·7	28·1		28·4	95	
Cochin ...	10	1009·3	− 0·9	1006·9	81·9	− 0·5	84	4 days	74·3	− 0·7	72	2,5,14	77·7	80·1	75·7	77·1	30·5	+ 2·1	30·4	91	
Alleppey ...	12	1009·2		1006·9	84·6		87	4 days	74·1		70	5	77·3	81·4	72·6	77·4	25·2		30·3	93	
Trivandrum ...	211	1002·2	− 1·3	999·9	84·5		88	1, 2	73·3		72	4 days	76·4	81·2	74·8	75·9	28·7	+ 1·0	28·2	93	
Nagercoil ...	195	1001·9		999·5	86·6		93	1, 2	75·0		72	3, 14	77·4	82·8	74·4	75·8	27·7		27·3	87	

Cloud amount (tenths of sky)		Rainfall, inches.				Number of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from																			STATION.
										8 hrs. I. S. T.									17 hrs. I. S. T.										
Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																													C. P., West
+2·0	9·1	8·84	+ 2·59	2·72	29	13	+ 3·1	7·4	+ 0·6	0	0	0	0	1	9	20	1	0	1	1	0	0	2	8	15	4	0		Khandwa
+1·0	9·1	16·64	+ 1·58	1·85	30	19	+ 3·3	1·7	− 1·3	0	0	0	0	0	14	9	0	8	0	0	0	0	2	9	8	3	9		Hoshangabad
+1·0	9·6	15·29	+ 1·22	2·30	18	21	+ 5·4	11·3	− 0·8	0	3	0	0	1	12	12	2	1	1	3	1	1	1	10	11	3	0		Saugor
+0·9	9·3	17·13	+ 0·16	4·87	20	18	+ 0·6	5·1	+ 1·7	0	1	1	2	1	11	10	1	4	1	2	2	1	0	11	7	4	3		Jubbulpore
−1·0	6·7	16·71	+ 3·40	4·10	16	18	+ 1·5	4·5	+ 0·7	3	1	0	2	4	9	8	4	0	2	0	0	1	3	9	10	5	1		Seoni
+1·3	9·1	7·21	− 4·21	1·85	28	13	− 0·3	6·0		0	0	0	0	1	14	9	3	4	1	0	0	1	1	8	15	5	0		Nagpur
																													C. P., East
+1·3	7·4	16·55		2·85	16	18		4·1		1	0	0	1	4	14	6	3	2	1	0	1	1	0	16	6	2	4		Gondia
+1·9	8·9	19·51	+ 5·19	5·00	20	19	+ 0·6	3·9	+ 0·1	2	1	1	2	8	5	1	4	7	4	1	0	0	10	6	3	5	2		Pendra
	8·6	14·48		2·72	8	17		6·5		2	0	3	2	1	11	10	2	0	0	1	1	3	0	8	8	7	3		Champa
+1·5	9·5	21·38	+ 7·06	5·95	15	13	− 2·5	5·8	+ 0·8	0	2	0	1	0	19	5	4	0	0	2	0	0	0	19	1	8	1		Raipur
	8·2	16·81		8·71	15	13		2·7		1	0	1	3	12	10	2	0	2	0	0	1	1	9	10	4	1	5		Titilagarh
+0·6	9·5	19·38	+ 7·14	5·35	20	14	− 1·2	6·4	+ 1·1	0	0	0	1	0	16	5	2	7	0	0	0	0	0	21	5	1	4		Kanker
0	7·7	12·73	+ 0·13	4·18	29	18	+ 3·2	5·3	+ 0·7	0	0	0	1	0	18	0	9	3	0	0	0	2	0	12	0	15	2		Chanda
+1·1	9·4	9·73	− 6·55	1·95	12	15	− 4·9	6·8	+ 3·2	0	0	0	0	0	24	2	3	2	0	0	0	0	0	20	2	6	3		Jagdalpur
																													Konkan
	9·0	9·70		1·41	16	13		15·0		0	0	3	3	0	8	16	1	0	0	0	0	0	1	11	19	0	0		Dahanu
− 0·3	8·5	17·03	+ 3·64	3·26	17	13	− 6·0	9·1	− 0·8	0	0	0	1	1	9	18	1	1	0	0	0	0	0	5	24	2	0		Bombay
+ 0·2		14·82	− 1·62	3·00	14	16	− 5·1	15·1	+ 0·4	0	0	0	1	0	11	14	1	4											Alibag
		23·32		3·70	15	23		12·9		0	5	1	0	0	19	5	1	0	0	0	0		0	21	2	5	0		Harnai
	8·4	27·59		5·15	15	23		13·6		1	1	3	0	0	0	19	7	0	0	0	0	0	0	2	15	14	0		Devgad
− 0·6	6·7	21·25	+ 4·14	4·75	8	25	+ 3·8	11·3	+ 3·1	1	2	2	0	2	3	18	3	0	0	0	0	0	0	2	14	15	0		Marmagao
	8·4	31·47	+ 5·83	3·96	11	27	+ 1·7	3·8		0	0	2	1	3	1	14	4	6	0	0	1	0	0	3	19	6	2		Honavar
																													Bombay Deccan
	6·8	5·72	− 0·64	1·13	29	13	+ 1·7	5·9		0	0	0	0	0	3	27	1	0	0	2	0	0	1	6	17	5	0		Jalgaon
0	7·3	3·95	+ 0·91	1·50	11	4	− 1·3	6·5	− 2·1	0	0	0	0	1	1	18	0	11	0	1	1	0	0	4	18	5	2		Malegaon
+ 1·5	9·0	4·04	+ 1·32	1·64	10	6	+ 1·4	5·7	− 3·1	0	0	0	0	0	14	6	6	5	1	0	0	0	0	6	19	5	0		Ahmednagar
+ 0·4	9·0	2·68	− 0·87	0·66	14	7	− 1·3	4·2	− 4·7	0	0	0	0	0	0	24	1	6	0	0	0	0	0	1	24	5	1		Poona
+ 2·2	9·3	12·56	+ 7·28	3·26	9	12	+ 5·0	7·7	+ 1·0	0	0	0	0	0	25	0	6	0	0	0	0	0	0	24	0	7	0		Sholapur
+ 0·1	8·9	3·62	− 1·09	0·72	14	9	− 0·2	8·8	− 0·4	1	0	0	0	0	10	18	2	0	3	0	0	0	0	4	19	5	0		Miraj
	8·1	10·52		2·03	14	18		10·8		0	0	0	0	0	1	27	1	2	0	0	0	0	0	0	29	2	0		Kolhapur
		5·23	+ 2·83	1·75	5	10	+ 6·3	9·3	+ 0·5	0	1	0	0	1	12	13	4	0	4	0	0	1	0	8	13	5	0		Bijapur
− 0·9	8·2	9·34	− 0·30	1·24	14	22	+ 4·4	6·0	+ 0·7	0	0	0	0	0	0	31	0	0	0	0	0	0	0	0	30	1	0		Belgaum
+ 1·8	9·1	2·68	+ 1·40	0·89	2	6	− 2·3	11·9	+ 1·6	0	0	0	0	0	13	15	3	0	0	0	0	1	1	8	14	7	0		Gadag
																													Hyderabad, North
− 0·7	8·5	3·32	− 1·47	0·81	13	8	− 0·9	10·5	+ 0·4	0	0	0	0	1	4	26	0	0	0	1	0	0	0	2	25	3	0		Aurangabad
	8·4	3·26	− 2·55	1·36	8	7	+ 2·0			0	0	0	0	0	11	18	0	2	0	0	0	1	0	6	22	2	0		Parbhani
+ 1·7	8·7	8·87	+ 1·69	3·20	9	14	+ 3·6	11·2	+ 0·2	1	0	0	0	0	13	14	3	0	3	0	0	0	0	7	12	8	1		Bidar
− 2·0	4·8	6·21	− 3·55	1·33	9	15	+ 1·2	4·0	− 0·8	0	0	0	0	0	27	0	1	3	1	0	0	0	1	12	1	13	3		Nizamabad
	9·3	8·07		1·66	6	12		2·5		0	0	0	0	1	2	11	3	14	2	1	0	0	0	2	11	9	6		Ramakundam
																													Hyderabad, South
− 2·1	5·2	10·91	+ 5·84	3·10	9	12	+ 4·3	10·6	+ 1·5	0	0	0	0	0	14	12	5	0	2	0	0	0	1	7	14	7	0		Gulbarga
+ 1·4	7·5	7·98	+ 3·59	3·90	8	8	+ 0·2	13·0	+ 3·4	0	0	0	0	0	16	7	8	0	0	0	0	0	0	5	12	14	0		Raichur
+ 1·5	8·4	7·21	+ 0·76	1·80	9	10	+ 0·5	10·5	+ 4·4	1	0	0	0	0	1	25	3	2	1	0	0	0	0	1	18	8	3		Hyderabad (Begumpet)
− 0·1	7·6	5·26	− 1·72	2·55	12	10	− 0·7	6·8	+ 0·8	0	0	0	2	1	4	18	6	0	4	1	1	0	2	1	11	10	1		Hanamkonda
	7·2	6·08		2·15	17	12		5·5		0	0	0	4	1	2	17	7	0	8	1	0	2	0	1	6	13	0		Khammameth
																													Mysore
+ 1·0	8·8	6·98	+ 3·60	2·45	3	10	+ 2·6	9·2	+ 1·8	0	0	0	0	0	8	21	2	0	0	0	0	0	0	5	25	1	0		Chitaldrug
+ 1·0	8·8	8·31	+ 4·41	2·36	3	11	+ 1·8	9·9	+ 3·7	1	1	0	1	0	2	25	1	0	0	1	0	0	1	4	25	0	0		Hassan
+ 0·5	9·1	11·24	+ 6·26	4·14	6	17	+ 7·7	10·0	+ 2·3	1	0	0	1	0	10	16	3	0	1	0	0	0	2	4	18	6	0		Bangalore
+ 0·5	9·0	5·54	+ 2·25	2·52	2	9	+ 2·0	8·6	+ 0·9	2	0	0	0	1	15	11	2	0	1	0	1	0	0	4	24	1	0		Mysore
																													Malabar
+ 1·4	9·5	29·78	+ 6·26	4·04	10	26	+ 0·9	5·3	+ 0·3	2	1	4	1	2	8	7	4	2	4	0	0	0	0	8	10	9	0		Mangalore
+ 1·0	8·0	12·93	− 4·23	1·85	11	24	+ 3·7	6·3	+ 1·8	6	5	5	0	1	0	3	9	2	0	0	0	0	1	4	14	12	0		Calicut
	8·0	17·05		1·73	24	27		7·4		0	0	0	0	1	7	23	0	0	0	0	0	0	0	7	21	3	0		Palghat
+ 1·0	8·7	16·42	+ 2·53	4·28	2	25	− 6·3	7·0	+ 2·0	5	2	2	1	0	2	5	6	8	1	0	0	0	0	3	10	16	1		Cochin
	8·6	19·01		4·10	5	25		6·0		6	5	1	0	1	1	3	13	1	5	0	0	0	0	2	5	19	0		Alleppey
− 0·6	7·7	7·74	+ 3·01	1·95	3	13	+ 3·2	6·8	+ 0·2	9	0	0	0	0	0	0	20	2	0	0	0	0	0	0	7	24	0		Trivandrum
	8·8	4·16		1·79	3	8		10·4		1	0	0	0	0	0	20	10	0	0	0	0	0	0	0	26	5	0		Nagercoil

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature °F.				Minimum temperature °F.				Dry bulb temperature °F.		Wet bulb temperature °F.		Vapour pressure, millibars.			
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Madras, Southeast																				
Pamban ...	37	1006·4	− 0·6	1003·0	90·0	+ 0·9	91	9 days	80·2	+ 1·4	77	2	83·8	84·4	78·2	78·6	30·7	+ 1·1	31·1	77
Madura ...	437	992·1	− 1·1	988·6	95·3	+ 0·1	99	28, 29	77·8	+ 1·3	72	2, 4	82·3	90·8	73·4	74·8	24·5	+ 0·6	22·9	64
Negapatam ...	31	1005·9	− 1·1	1002·6	94·8	+ 0·7	98	4 days	79·7	+ 2·0	78	26	82·7	90·1	75·1	79·0	27·3	+ 0·1	28·8	69
Trichinopoly* ..	255	998·6	− 0·8	994·7	94·6	− 1·8	99	30	78·1	+ 0·9	75	4 days	81·4	91·7	73·5	75·5	24·6	+ 0·1	22·8	69
Coimbatore ...	1,341	961·7	− 1·4	959·2	85·8	− 1·6	89	30	72·3	+ 1·3	70	1, 9	75·7	81·7	70·9	72·3	23·7	− 1·2	22·9	78
Salem ..	913	976·0	− 1·2	972·3	90·8	− 1·5	95	5 days	73·7	+ 0·5	73	14days	75·9	86·0	72·5	75·1	25·7	− 0·1	26·0	84
Cuddalore ...	39	1005·0	− 1·2	1001·2	95·1	+ 0·9	100	4 days	78·5	+ 1·5	75	4 days	81·7	91·8	75·7	78·8	27·6	− 0·8	27·7	75
Vellore ...	703	982·1	− 0·8	978·4	93·4	+ 0·2	97	5, 19, 24	77·3	+ 0·9	73	3, 5, 10	80·3	91·1	74·0	76·9	25·9	+ 0·5	25·1	73
Madras ..	51	1004·0	− 1·1	1000·2	94·5	− 0·3	99	24,30,31	73·7	+ 0·7	73	6	82·8	90·3	75·5	78·1	26·8	+ 0·6	27·3	71
Arogyavaram ...	2,299	929·5		926·4	84·4		88	5	71·1		68	7	74·4	81·5	68·9	71·1	21·6		21·3	75
Madras, Deccan																				
Cuddapah ...	428	991·3	− 1·3	986·9	93·6	− 1·1	99	5	77·5	0	73	10	82·4	90·1	74·9	77·3	26·2	+ 0·4	26·2	69
Bellary ...	1,473	955·9	− 1·4	952·6	88·3	− 0·2	96	6	74·5	+ 0·6	69	4	76·7	85·1	71·1	73·2	23·5	+ 1·4	22·5	74
Kurnool ...	923	974·0	− 1·4	969·8	90·3	− 0·2	95	6	74·1	− 0·2	72	6, 9, 16	77·3	88·0	72·9	75·0	25·4	+ 0·9	23·7	78
Rentichintala ...	348	992·2		988·4	92·9	0	98	3, 27	78·5	+ 0·1	74	22	81·4	90·7	74·8	76·3	26·5	+ 0·8	24·4	73
Anantapur ...	1,148	966·8		963·1	91·2		95	1, 23, 27	74·9		72	6, 9	77·8	87·6	73·0	75·6	25·8		25·3	79
Madras Coast, North																				
Nellore ...	66	1002·5	−1·4	998·8	96·3	+ 0·3	101	2	79·6	+ 0·2	74	11	83·5	92·7	75·8	78·2	26·9	+0·5	26·4	69
Ongole ...	38	1002·7		998·9	95·1		101	27	80·6		74	11	83·7	91·9	76·2	78·6	27·5		27·3	70
Masulipatam ...	10	1003·5	−1·4	1000·0	90·9	− 0·4	95	17, 22	78·7	+ 0·8	75	26	81·5	88·8	77·4	79·4	30·3	+0·5	30·1	83
Cocanada ...	26	1002·4	−1·1	999·1	88·8	− 0·9	93	1, 22	78·6	+ 0·3	75	26,27,30	81·8	87·1	78·0	79·4	31·0	+0·8	30·8	84
Visagapatam ...	126	997·7	−1·4	994·9	88·7	− 0·4	96	22, 23	79·6	+ 1·0	75	25	82·7	86·1	77·5	78·9	29·9	+0·5	30·5	78
Calingapatam ...	19	1000·8	−1·4	998·1	89·5	− 0·5	93	22, 23	79·4	+ 0·8	76	8, 14	82·0	85·8	78·4	80·5	31·5	0	33·2	85
Hill Stations, excluding Kashmir																				
Shillong ...	4,921	845·5	−0·2	842·7	75·0	− 0·1	80	23	63·5	− 0·5	61	5 days	69·0	70·7	66·2	67·6	20·8	+0·3	21·9	66
Cherrapunji ...	4,309	864·5	+0·1	861·8	73·1	+ 0·6	79	23	64·5	− 0·8	62	2	68·0	69·9	67·0	68·0	22·2	+0·4	22·6	96
Aijal ...	3,599	885·2		882·8	77·3		82	23	64·7		62	1, 2	70·5	72·4	69·4	71·0	24·1		25·3	95
Darjiling ...	7,482	773·4	−0·2	771·0	66·7	+ 1·1	72	30	57·7	0	56	8, 22, 28	61·1	61·9	60·8	61·4	17·8	+0·1	18·2	96
Kalimpong ...	3,965	873·0	−1·3	870·0	75·4	− 0·1	79	4 days	67·6	+ 0·4	66	11	69·9	72·9	68·8	71·0	23·6	− 0·1	25·1	92
Katmandu ...	4,338	861·3		858·4	83·3	− 0·1	88	14, 27	68·0	− 0·3	65	29	72·7	77·7	69·9	72·4	23·8	+0·7	25·0	87
Muktesar ...	7,592	768·0	−1·1	766·4	67·0	− 1·0	71	17	57·7	+ 0·3	55	30, 31	60·0	63·2	59·9	62·3	17·0	+0·2	18·8	97
Mussooree ...	6,699	790·7		791·2	67·1	− 1·1	73	30	60·2	+ 0·3	57	24, 25	63·3	64·4	62·4	64·2	18·7	0	20·1	99
Simla ...	7,224	777·4	−0·8	776·3	66·1	− 2·3	76	12, 15	59·1	− 0·1	57	3, 24	61·6	63·8	60·8	62·9	17·9	+0·9	18·6	90
Abu ...	3,945	874·2	+0·3	873·3	73·2	+ 1·2	82	15	65·2	+ 0·8	63	4 days	66·8	70·3	65·8	64·5	21·3	+0·6	18·3	93
Pachmarhi ...	3,528	885·6	−1·8	883·9	74·0	− 0·8	82	15	67·2	+ 0·3	65	4 days	69·2	72·1	68·5	70·2	23·4	+1·3	24·2	97
Mahabaleshwar ...	4,534	857·8	−1·5	856·4	63·9	+ 0·3	72	5	62·3	+ 0·8	59	2	62·9	64·3	62·9	64·3	19·6	+0·1	20·6	10
Mercara ...	3,781	882·5	−1·6	881·2	66·3	− 2·9	74	5	62·9	+ 0·9	60	9	64·2	66·2	64·0	65·6	20·3	+0·8	21·3	9
Ootacamund ...	7,364	778·0	−0·4	776·6	62·9	+ 0·1	71	4	52·6	+ 0·9	51	5 days	54·9	53·1	53·9	56·0	13·9	+0·8	14·6	9
Coonoor ...	5,730	825·0			72·1	+ 1·2	75	6 days					66·4		60·1		15·7	+1·0		7
Kodaikanal ...	7,688	769·2	−0·3	768·0	62·9	+ 0·2	67	29	51·9	0	49	15	55·4	57·9	53·1	55·8	12·9	+0·4	14·4	8
Ceylon ...																				
Colombo ...	24	1009·0	−0·7	1006·6	84·7	− 0·9	87	1	76·9	− 0·1	73	4 days	79·6	81·7	75·9	76·4	28·9	−0·1	28·7	8
Trincomalee ...	24	1006·7	−0·3	1003·7	92·9	+ 0·3	98	17	78·5	+ 1·5	75	1, 2	80·7	87·5	75·2	76·8	27·1	0	26·6	7
Hambantota ...	61	1006·2	−1·2	1003·4	88·3	+ 1·5	94	20	76·8	+ 0·7	74	1, 5	79·2	83·8	75·9	77·1	29·1	+0·9	28·8	8
Mannar ...	12	1007·3		1004·6	86·5		92	2	77·5		75	2, 3	80·7	82·6	76·7	77·3	29·6		29·6	8

a—Mean of 30 days. d—mean of 27 days. e—Mean of 26 days.

Cloud amount (tenths of sky). 17 hrs. I. S. T.	Cloud amount (tenths of sky). Departure from normal.	Cloud amount (tenths of sky). Mean 17 hrs. I. S. T.	Rainfall, inches. Total of the month.	Rainfall, inches. Departure from normal.	Rainfall, inches. Heaviest fall in 24 hours.	Rainfall, inches. Date.	Number of rainy days (0·10" or more). Total in the month.	Number of rainy days (0·10" or more). Departure from normal.	Wind velocity, miles per hour. Mean.	Wind velocity, miles per hour. Departure from normal.	Wind direction—Number of winds from:— 8 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	STATION.
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	45	44	45	46	47	48	49	50	51	52	53
																													Madras, Southeast
5	+ 2·0	5·1	0	− 0·59	0		0	− 1·0	9·7	+ 1·6	2	0	1	2	7	9	10	0	0	0	1	2	4	15	9	0	0	0	Pamban
0	+ 0·5	8·2	3·43	+ 0·65	2·29	2	4	− 2·0	4·9	+ 1·1	1	0	0	0	0	0	17	9	4	1	0	1	1	0	3	20	4	1	Madura
6	+ 1·9	7·6	0·01	− 3·04	0·01	6	0	− 4·9	6·0	+ 0·8	0	0	0	0	1	9	19	2	0	0	0	1	6	6	15	3	0	0	Negapatam
3	+ 0·5	7·8	0·75	− 3·08	0·54	6	1	− 3·7	9·0	+ 2·8	0	0	0	0	0	3	21	7	0	0	1	0	0	1	3	20	4	2	Trichinopoly
9	+ 1·5	6·5	2·77	+ 1·54	0·93	2	4	+ 0·9	11·7	+ 6·3	0	0	0	0	9	15	7	0	0	0	0	0	0	8	16	7	0	0	Coimbatore
0	+ 0·4	8·4	4·68	− 1·89	0·59	26	14	+ 4·1	5·1	+ 1·4	0	0	0	0	2	24	3	0	2	1	0	0	0	3	3	12	1	11	Salem
7	+ 1·5	7·4	4·68	− 0·12	1·50	27	9	+ 1·9	6·4	+ 2·2	0	0	0	0	1	13	16	0	1	0	0	2	7	5	5	9	2	1	Cuddalore
3	+ 1·2	7·7	2·33	− 3·41	0·74	3	7	− 0·4	5·5	+ 1·5	0	0	0	0	2	20	4	0	5	0	0	1	1	3	20	4	0	2	Vellore
1	+ 0·6	8·1	3·49	− 1·09	0·68	1,18	10	+ 1·1	11·2	+ 0·5	0	0	0	2	2	8	18	1	0	0	0	1	20	1	2	5	2	0	Madras
		8·3	6·25		1·80	6	11		8·6		2	0	0	0	1	1	19	7	1	0	2	0	1	0	3	15	9	1	Arogyavaram
																													Madras, Deccan
1	− 0·3	7·6	5·05	− 0·19	1·08	5,11	7	− 0·7	6·5	− 0·1	0	0	0	0	0	0	21	2	8	0	0	1	3	0	1	16	4	6	Cuddapah
0	+ 1·0	8·2	6·44	+ 4·06	4·14	4	5	+ 1·0	8·8	+ 0·9	2	0	0	0	0	1	25	2	1	1	0	0	0	0	2	23	3	2	Bellary
1	+ 0·8	8·3	5·13	+ 0·68	1·71	12	8	− 0·6	9·7	+ 0·5	0	0	0	0	0	9	18	1	3	1	0	0	0	0	5	11	7	6	Kurnool
1	+ 0·6	9·0	4·21	+ 0·67	1·00	12	10	+ 2·2	8·4	− 0·2	0	0	0	2	0	6	17	2	4	0	1	1	2	0	1	16	8	2	Rentichintala
		8·3	2·59	− 0·71	0·62	3	7	+ 2·2	12·8		1	0	0	0	0	1	24	4	1	0	0	0	1	0	1	23	5	1	Anantapur
																													Madras Coast, North
	−0·7	7·5	4·25	+ 1·23	2·52	8	5	− 0·5	6·0	+ 0·5	0	0	0	0	3	1	14	5	8	0	0	2	3	1	1	16	4	4	Nellore
		7·9	3·30		1·15	11	8		8·3		0	0	0	0	1	5	20	0	5	0	1	1	4	0	1	19	2	3	Ongole
	+0·1	8·2	2·09	− 4·17	0·60	12	6	− 4·2	7·3	+ 1·3	0	0	0	0	4	9	10	7	1	2	0	0	0	6	3	5	12	3	Masulipatam
	−0·5	7·1	4·84	− 0·72	1·82	25	11	+ 1·4	9·5	+ 3·1	0	0	0	0	0	31	0	0	0	0	0	0	0	0	31	0	0	0	Cocanada
	−0·1	6·8	1·92	− 3·24	0·39	11	7	− 1·2	6·2	+ 1·6	0	0	0	0	0	6	14	0	11	0	0	0	1	8	9	8	1	4	Visagapatam
	+1·3	8·0	5·40	− 1·40	4·10	14	5	− 4·5	8·2	+ 2·1	1	0	0	0	0	6	13	10	0	0	0	1	2	3	16	8	1	0	Calingapatam
																													Hill Stations excluding Kashmir
	+0·9	9·0	15·10	+ 2·61	2·56	1	20	+ 1·5	2·2	+ 0·5	1	2	1	2	0	2	0	1	32	1	1	1	3	1	4	1	0	19	Shillong
	0	7·6	71·40	+ 1·32	12·68	1	27	+ 0·8			0	7	7	5	5	2	0	1	4	0	7	4	1	2	8	1	0	8	Cherrapunji
		8·6	19·22		2·38	26	23		5·1		0	1	15	5	2	5	1	0	2	0	1	0	0	1	11	10	4	4	Aijal
	+0·5	8·8	15·91	−10·65	1·75	2	24	+ 0·3	4·4	+ 1·0	0	2	18	8	0	0	0	0	3	0	1	16	9	1	1	0	1	2	Darjiling
	+0·6	7·3	15·60	− 4·28	2·02	10	21	− 0·5	4·4	− 0·9	1	0	0	1	0	0	0	7	22	0	0	0	17	1	0	0	0	13	Kalimpong
	−0·1	8·3	14·96	+ 1·28	3·24	27	19	− 1·8	0·7	− 0·2	0	2	1	3	0	0	0	0	25	6	2	1	0	0	2	0	0	20	Katmandu
	+0·7	8·6	21·71	+ 9·45	8·02	24	26	+ 8·1	7·1	+ 2·0	0	9	10	1	2	3	3	0	3	0	1	3	3	3	10	9	1	1	Muktesar
	+0·4	9·8	34·87	+ 7·53	4·02	2	26	+ 2·2	2·2	− 1·4	2	3	1	5	5	2	0	1	12	2	4	1	6	12	3	0	0	3	Mussooree
	+1·3	9·6	19·55	+ 2·70	3·10	21	28	+ 8·3	0·8	− 1·4	1	3	0	3	4	1	0	0	19	1	0	0	3	6	5	1	1	14	Simla
	−1·0	7·0	13·51	− 9·24	4·62	1	13	− 4·4	7·0	− 0·8	0	0	0	1	3	18	4	0	5	0	5	0	0	0	6	0	3	17	Abu
	+0·2	9·1	31·68	+ 7·86	6·87	16	26	+ 4·1	6·0	− 0·4	1	0	0	0	0	2	18	6	4	1	1	0	0	2	1	20	4	2	Pachmarhi
	+0·2	10·0	76·63	+ 3·52	8·89	17	27	− 2·8	10·3	− 0·5	1	0	0	0	0	26	2	2	0	2	0	0	0	0	24	2	3	0	Mahabaleshwar
	+0·5	9·5	44·54	+17·74	5·42	13	30	+ 3·5	11·1	+ 4·7	1	1	0	0	0	3	14	12	0	1	0	0	0	0	4	14	12	0	Mercara
	0	8·5	4·02	− 1·67	0·67	2	11	− 1·3	7·5	+ 2·2	1	3	1	0	0	8	11	3	4	1	2	0	0	1	5	19	3	0	Gotacamund
	−1·7		2·17	− 2·82	0·61	4	6	− 3·1	6·5	+ 2·5	2	1	1	1	2	1	4	4	15										Coonoor
	−0·7	9·0	7·40	+ 0·40	3·04	3	8	− 4·1	12·7	+ 4·1	0	1	1	0	2	0	16	11	0	0	3	0	1	1	1	10	15	0	Kodaikanal
																													Ceylon
	−0·1	7·5	7·33	+ 3·63	2·27	2	8	+ 1·1			0	0	0	1	1	12	15	1	1	0	0	0	0	2	17	12	0	0	Colombo
	−1·4	7·6	0·36	− 3·49	0·19	31	2	− 2·8			0	0	0	0	0	29	1	0	1	3	2	2	1	1	20	2	0	0	Trincomalee
	−4·9	9·6	1·15	− 0·48	0·54	3	3	− 0·9			0	0	0	0	0	30	0	0	1	0	0	0	0	1	30	0	0	0	Hambantota
		7·9	1·96		1·96	3	1				0	0	0	2	9	20	0	0	0	1	0	0	0	9	21	0	0	0	Mannar

a—Mean of 23 days.

STATION.	Maximum temperature °F.				Minimum temperature °F.				Mean dry bulb temperature 8 hrs. I. S. T. °F.	Mean wet bulb temperature 8 hrs. I. S. T. °F.	Vapour pressure, millibars.		Relative Humidity %		Mean cloud amount 8 hrs. I. S. T.	Rainfall, inches.				Number of rainy days (0·10" or more).	
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I. S. T.	Departure from normal.	Mean 8 hrs. I. S. T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Assam																					
Lumding ...	92·9	+ 2·7	97	29, 30, 31	76·1	− 0·5	74	11	84·3	78·2	30·2	− 0·9	75	− 11		9·14	+ 1·06	2·78	11	13	+ 1·7
Kashmir																					
Jammu ...	89·5	− 2·3	96	28	77·4	− 0·3	72	7,29	80·8	77·1	30·2	+ 1·2	86	+ 4	7·1	25·56	+ 13·81	5·72	6	15	+ 3·9
Kargil (*R*) ...																					
Mysore																					
Balehonnur ...	72·7	− 1·3	81	5, 6	65·3	− 0·1	63	9	67·5	66·7	22·0	+ 0·1	96	− 1	...	39·49	+ 16·09	5·67	11	28	+ 3·5
Tibet																					
Yatung (Chumbi) ...	65·2	+ 0·5	69	31	50·4	+ 0·1	46	17,29	54·1	53·2	13·4	− 0·5	95	+ 6	7·7	4·59	− 1·52	0·71	22	13	− 4·4

(*R*)—Register not received.

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days (0·10" or more).	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8
Assam ...	Mawsynram ...	101·09		16·30	1	26	
West Bengal ...	Bankura ...	10·06	−2·07	1·48	4	16	0
	Cooch Behar ...	22·99	−0·75	4·89	3	12	−6·7
Bihar ...	Muzaffarpur ...	16·99	+4·43	4·50	8	14	+0·4
	Chapra ...	13·69	+2·41	3·07	3	12	−1·4
	Arrah ...	12·06	−0·51	2·61	3	10	−4·6
United Provinces, West.	Meerut ...	15·68	+6·88	4·41	19	16	+3·2
East Punjab,	Dharampore ...	18·82	+6·26	3·04	19	25	+8·5
	Kyelang ...	2·97	+1·58	0·95	3	6	+2·2
	Dalhousie ...	25·93	+3·18	3·90	12	27	+5·5
Kashmir ...	Sonamarg ...	3·67	+0·05	0·65	14	11	+2·0
	Gurez (R) ...						
Bombay, Deccan...	Khandala ...	61·10	+11·40	9·95	17	27	−2·3
Madras Southeast.	Palamcottah ...	1·89	+1·23	0·89	2	3	+ 2·0
Sikkim ...	Lachung ...	13·16	+3·84	1·12	17	28	+ 3·1

R—Register not received.

Monthly Means of Upper Winds

Notes.—Data upto 9·0 Kms. a. s. l. are given under Table A and data above 9·0 Kms. under table B. In Table A and B,—

n represents the number of observations,

V represents the mean wind speed in M/second, irrespective of direction,

v represents the resultant mean velocity in M/second, and

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

For the coordinates of the stations for which data have been published in these tables and other particulars, please refer to the Monthly Weather Report, January 1948 and other subsequent issues. The data for Minicoy and Port Blair have not been included in this issue.

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea leavel.

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Station.	AHMEDABAD.												ALLAHABAD.											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	261	31	1·7	1·4	236	30	2·4	1·8	255	31	0·9	0·2	31	31	1·6	0·3	76	31	2·0	0·2	2[illegible]
0·15 a. g.	30	7·8	7·1	254	31	5·9	5·0	252	30	5·4	4·2	258	27	6·1	2·2	112	29	5·9	1·8	97	28	4·8	1·5	7[illegible]
0·6 a. s. l.	30	9·9	9·2	259	29	9·8	8·6	266	30	6·0	4·9	253	27	7·4	2·5	109	26	6·8	1·1	119	27	5·7	2·8	9[illegible]
1·0 ,,	30	8·9	7·9	258	24	8·9	8·3	264	30	6·6	5·8	254	22	7·1	1·8	129	22	6·6	1·0	96	27	6·3	3·0	10[illegible]
1·5 ,,	26	6·7	5·4	258	20	7·8	6·7	242	28	7·8	6·5	256	18	5·8	2·0	115	15	5·7	0·9	75	23	6·9	3·4	10[illegible]
2·0 ,,	17	5·7	2·1	251	18	6·8	4·3	235	21	6·9	4·7	261	11	4·7	3·0	100	12	5·6	0·7	68	16	5·5	4·3	11[illegible]
2·5 ,,	12	4·9	2·8	71	9	4·7	1·7	219	13	5·8	2·4	254	8	4·6	3·1	102	11	6·0	1·8	98	11	5·2	4·3	11[illegible]
3·0 ,,	11	5·3	3·7	58	8	5·7	2·1	45	9	4·0	0·9	145	5	4·9	3·6	108	11	6·7	2·7	101	8	4·5	3·3	1[illegible]
4·0 ,,	6	3·9	2·9	78	5	3·1	2·1	53	6	5·4	3·1	124					8	7·5	6·0	105	6	3·7	2·3	[illegible]
5·0 ,,	1	10·5	10·5	55	4	3·5	2·5	70	5	5·5	3·2	111					7	9·8	8·0	102	5	4·1	2·2	[illegible]
6·0 ,,					4	2·4	2·1	98	4	6·9	4·9	101					6	8·9	8·0	115	4	4·3	2·7	
7·5 ,,					3	6·0	5·4	98	1	3·0	3·0	10					6	9·6	9·5	100	4	5·0	3·7	1[illegible]
9·0 ,,					1	9·0	9·0	50	1	4·0	4·0	35					4	11·1	10·5	99	1	13·0	13·0	1[illegible]

Station.	AMBALA.												ANANTAPUR.						
Time I. S. T	0100				0700				1600					0700				1600		
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D		n	V	v	D	n	V	v
Surface	31	1·2	1·0	115	31	1·6	1·2	108	31	1·7	1·0	108		31	3·9	3·8	263	31	7·2	7·0
0·15 a. g.	30	4·8	3·9	125	30	5·5	4·3	121	30	3·9	2·7	130		30	7·5	7·1	258	31	10·9	10·3
0·6 a. s. l.	30	5·3	4·3	137	28	6·2	4·3	136	30	4·4	3·1	134		30	9·1	8·9	261	31	10·8	10·3
1·0 ,,	29	5·3	3·5	141	28	6·5	3·8	130	29	5·4	3·3	138		30	13·4	13·0	272	31	10·7	15·5
1·5 ,,	28	5·5	2·4	132	22	5·8	2·7	118	25	6·2	3·6	137		29	13·7	13·3	279	30	11·2	11·0
2·0 ,,	27	5·4	1·4	127	17	5·5	3·3	101	23	6·0	3·7	139		22	10·9	10·1	283	26	11·2	10·6
2·5 ,,	18	5·1	1·3	100	14	4·1	1·5	97	18	5·0	2·4	118		18	9·4	8·4	286	13	8·7	7·2
3·0 ,,	11	3·5	0·5	354	12	4·1	1·3	87	15	5·3	2·6	102		15	8·5	6·6	282	9	7·2	4·8
4·0 ,,	2	2·7	2·7	325	5	2·8	2·0	109	12	4·0	2·0	106		7	7·6	3·2	223	4	6·1	2·1
5·0 ,,					3	1·3	0·9	336	7	3·5	0·2	325		4	5·5	2·3	168	3	4·8	4·5
6·0 ,,					1	1·5	1·5	300	7	4·3	0·5	313		3	4·8	2·0	189	1	5·0	5·0
7·5 ,,									4	6·1	4·6	235		1	4·5	4·5	70	1	10·5	10·5
9·0 ,,									3	5·3	2·3	221								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9-0 k-m. above sea level

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Station.	ASANSOL												BANGALORE											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	138	31	2·0	1·5	114	31	2·5	1·7	123	30	4·3	3·8	258	31	4·1	3·8	262	31	5·4	4·9	272
0·15 a. g.	26	5·4	3·7	137	28	4·7	3·2	115	29	5·2	3·8	128	25	8·7	7·6	258	29	9·0	8·7	252	29	9·3	8·6	260
0·6 a. s. l.	26	6·7	4·4	154	27	6·4	2·7	143	29	6·4	4·5	126												
1·0 ,,	16	6·9	4·0	178	14	7·0	3·8	223	27	6·3	4·5	133	26	7·1	6·8	257	30	7·4	6·9	251	29	8·3	7·6	262
1·5 ,,	12	6·9	3·8	163	8	9·5	5·6	218	14	5·4	4·8	132	21	11·8	10·5	276	15	11·8	11·0	268	26	9·7	8·9	266
2·0 ,,	6	6·8	3·6	200	3	6·5	4·3	155	7	6·3	5·7	138	7	10·0	8·4	293	5	9·4	4·6	284	20	11·0	9·9	275
2·5 ,,	2	3·5	2·9	130	1	5·0	5·0	180	4	5·7	5·5	128	2	3·7	3·3	74	2	5·0	5·0	71	9	8·9	6·8	285
3·0 ,,	2	4·3	3·9	134	1	5·5	5·5	180	1	7·0	7·0	125					1	4·0	4·0	90	5	8·6	5·1	291
4·0 ,,	1	4·0	4·0	115													1	4·0	4·0	100	2	4·3	4·1	117
5·0 ,,																	1	6·0	6·0	90	1	8·0	8·0	120
6·0 ,,																	1	7·0	7·0	105				
7·5 ,,																	1	8·0	8·0	105				
9·0 ,,																								

Station.	BAREILLY												BHOPAL											
Time I. S. T.					0700				1600				0100				0700				1600			
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	1·9	1·2	82	31	2·1	1·0	102	31	3·4	2·8	266	31	3·6	3·2	263	31	4·4	3·6	274
0·15 a. g.					26	5·5	[illegible]·8	98	30	5·0	2·1	114	24	7·6	7·1	261	25	6·6	5·9	275	27	6·6	6·0	273
0·6 a. s. l.					26	7·1	5·3	136	28	5·4	2·9	127	25	6·8	6·2	258	25	5·7	5·1	273	27	5·9	5·6	272
1·0 ,,					25	7·5	5·6	130	28	6·0	3·5	139	22	9·3	8·8	271	16	8·6	7·7	295	23	7·3	6·1	282
1·5 ,,					22	6·9	4·9	119	27	6·4	3·9	137	17	8·3	6·7	281	12	7·4	6·2	303	20	8·0	5·9	286
2·0 ,,					20	6·6	4·6	116	24	5·7	3·5	132	14	7·0	4·2	282	9	5·2	1·6	270	13	7·3	3·5	282
2·5 ,,					15	6·5	5·9	112	21	5·9	4·0	127	8	5·4	1·3	209	7	4·9	1·3	295	12	6·2	2·5	270
3·0 ,,					14	6·8	6·0	113	19	5·3	3·5	130	5	4·7	4·1	153	5	4·0	1·6	160	9	4·3	0·5	10
4·0 ,,					5	4·9	3·9	115	12	4·6	2·3	90	1	5·5	5·5	110	4	2·6	1·5	117	7	3·9	2·1	78
5·0 ,,					2	6·0	1·3	45	6	3·3	2·3	129					3	4·7	3·5	148	4	4·9	2·9	104
6·0 ,,					1	4·0	4·0	14	4	2·7	2·5	122					3	6·3	4·4	137	3	7·2	6·9	82
7·5 ,,					1	8·0	8·0	24	3	2·2	1·2	7·7					2	10·5	9·2	92	1	9·5	9·5	100
9·0 ,,									3	3·0	2·6	60					2	12·8	12·8	100	1	8·0	8·0	90

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

AUGUST 1948

Station.	BHUJ.												BIKANER.							
Time I. S. T.	0100				0700				1600					0700				1600		
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	4·8	4·2	239	31	3·6	3·3	244	31	5·5	5·1	244		31	2·6	2·4	226	31	2·9	1·7	205
0·15 a. g. .	31	7·8	7·7	251	31	7·7	7·4	250	31	9·2	8·5	246		31	7·3	6·5	236	31	5·2	2·6	222
0·6 a. s. l. .	30	10·5	10·1	254	31	12·9	12·5	261	31	10·8	10·3	258		31	9·7	6·8	257	31	5·3	2·4	235
1·0 ,, .	20	9·1	7·5	246	26	11·4	11·1	256	30	9·7	8·9	257		30	8·0	5·8	271	31	5·0	2·0	252
1·5 ,, .	12	6·4	1·5	191	14	7·6	6·1	254	22	7·8	6·8	266		29	5·2	1·9	319	31	4·6	1·9	307
2·0 ,, .	8	4·9	2·6	41	9	5·3	0·9	357	5	3·6	2·2	345		29	6·2	4·1	11	25	5·6	3·4	340
2·5 ,, .	4	5·7	3·1	33	5	6·2	5·6	55	3	5·5	5·1	20		29	6·3	4·7	11	22	5·9	4·5	354
3·0 ,, .	3	4·8	2·7	358	4	7·9	7·8	56	3	7·0	6·7	30		26	6·4	5·3	16	20	5·9	5·0	359
4·0 ,, .	1	3·5	3·5	250	1	8·5	8·5	55	3	7·3	6·9	56		24	7·6	6·4	20	16	5·7	5·0	10
5·0 ,, .					1	8·0	8·0	50	2	3·7	3·2	6		16	5·1	3·1	12	10	5·3	3·6	
6·0 ,, .									1	4·0	4·0	355		14	5·3	0·9	89	8	4·6	2·1	331
7·5 ,, .														6	4·9	3·0	82	2	7·0	2·1	66
9·0 ,, .														6	4·7	3·1	103	1	11·0	11·0	30

Station.	BOMBAY.												CALCUTTA.											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	5·6	5·1	253	31	4·7	4·1	246	31	5·8	5·3	265	31	2·4	1·7	141	31	2·8	1·9	128	31	2·8	2·3	166
0·15 a. g. .	26	6·8	6·2	253	28	7·2	6·3	252	29	8·2	7·6	261	29	6·8	4·9	144	31	5·0	3·2	140	30	5·2	4·1	164
0·6 a. s. l. .	23	8·6	8·4	262	24	9·7	9·3	263	29	9·8	9·4	265	28	9·4	7·2	185	30	7·6	4·1	176	28	7·0	5·6	164
1·0 ,, .	18	8·6	8·4	262	13	11·5	10·9	265	21	9·4	9·2	273	27	9·5	6·8	192	27	7·6	3·7	175	29	7·1	5·2	166
1·5 ,, .	13	7·7	7·6	257	11	11·0	10·7	260	16	9·3	9·0	264	24	8·1	5·3	187	25	7·2	3·1	167	27	6·8	4·7	167
2·0 ,, .	4	5·6	5·6	255	6	11·7	11·7	257	10	7·1	6·7	257	24	7·2	4·2	176	24	6·7	3·1	178	25	6·5	4·1	176
2·5 ,, .	3	9·2	7·6	300	4	13·3	13·1	262	8	7·2	6·9	255	14	6·8	4·1	160	20	5·9	2·4	190	21	7·7	4·1	170
3·0 ,, .	2	3·7	3·8	287	2	4·7	4·1	265	3	6·1	6·1	251	8	5·9	3·1	169	20	6·8	2·7	185	16	6·5	3·7	158
4·0 ,, .					2	2·5	2·5	246	3	7·2	6·8	271	1	6·5	6·5	130	8	5·1	2·1	165	7	7·1	6·3	111
5·0 ,, .					2	4·0	3·8	277	2	3·7	2·7	325	1	10·0	10·0	120	1	5·0	5·0	110	3	4·0	3·8	121
6·0 ,, .					2	3·0	2·3	330	2	4·0	3·5	319									1	8·0	8·0	71
7·5 ,, .									1	4·5	4·5	115												
9·0 ,, .																								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

AUGUST 1948

Station.	COCHIN												COOCH BEHAR							
Time I. S. T.	0100				0700				1600				0700				1600			
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	2·7	2·1	312	31	1·2	0·7	312	31	4·9	4·4	294	31	1·4	1·1	85	31	1·6	1·1	127
0·15 a g.	27	5·1	4·4	298	30	4·2	3·4	301	31	5·9	5·6	290	27	4·0	3·2	105	30	3·5	2·4	148
0·6 a. s. l.	26	10·8	10·3	293	29	11·1	10·1	293	31	10·7	10·4	295	27	5·0	4·3	127	28	4·1	3·0	152
1·0 „	24	13·5	13·3	294	26	12·8	12·3	297	28	13·2	12·7	299	26	5·0	4·4	111	25	4·3	3·3	136
1·5 „	20	12·7	12·5	295	21	13·2	12·6	301	21	13·1	12·9	298	26	6·3	5·9	97	22	4·7	3·5	129
2·0 „	8	12·9	12·5	298	14	12·2	11·3	300	16	12·5	11·8	295	16	7·1	6·9	95	21	4·9	3·9	129
2·5 „	5	9·6	8·9	308	8	11·7	10·8	302	16	13·0	12·0	296	14	7·0	6·9	92	18	5·1	4·6	109
3·0 „	4	8·5	8·3	322	5	11·9	11·0	302	10	12·7	12·1	293	12	6·4	6·2	100	16	5·0	4·8	111
4·0 „	1	4·0	4·0	5					4	7·5	5·9	292	10	4·8	4·1	103	14	4·9	4·1	120
5·0 „									4	7·6	4·2	261	7	3·8	3·1	109	11	4·2	3·2	118
6·0 „									3	5·7	3·4	97	4	3·3	2·2	136	7	4·4	3·0	185
7·5 „									3	5·8	4·8	148	3	4·8	4·0	103	5	4·5	3·4	91
9·0 „									1	5·0	5·0	50	2	6·0	5·7	101	3	6·0	5·8	71

Station.	CUTTACK												DEOLALI			
Time I. S. T.	0100				0700				1600				0830			
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	31	1·1	0·3	245	31	1·0	0·3	250	31	1·9	0·9	217	16	2·7	2·5	246
0·15 a. g.	27	4·6	2·5	238	30	4·5	2·5	259	28	4·7	2·0	220	16	6·5	6·2	255
0·6 a. s. l.	26	7·9	5·6	239	29	7·7	5·4	263	27	5·9	3·0	249	16	4·1	4·0	253
1·0 „	25	7·5	4·8	252	28	7·9	5·5	274	25	6·0	4·0	268	13	9·4	9·1	255
1·5 „	24	6·9	4·1	261	24	7·0	5·6	275	20	6·3	5·2	269	10	10·7	10·4	260
2·0 „	15	5·8	4·2	249	21	6·8	5·6	270	17	6·6	4·8	267	8	7·9	7·4	276
2·5 „	4	7·6	7·5	265	17	7·0	5·6	266	16	6·4	4·9	269	4	5·3	3·3	267
3·0 „	2	8·3	8·2	264	15	7·1	5·2	267	10	5·7	2·9	273	3	3·8	2·1	284
4·0 „					12	6·2	1·9	278	6	4·6	1·6	267				
5·0 „					8	6·8	1·4	244	3	6·2	2·7	294				
6·0 „					1	5·5	5·5	260	2	7·0	1·8	91				
7·5 „									1	3·0	3·0	345				
9·0 „																

Table A—Monthly mean directions and velocities of upper wind

Winds up to 9·0 km. above sea level

August 1948

Station.	DIBRUGARH								GADAG						
Time I. S. T.		0700				1600				0700				1600	
Ht. in km.		n	V	d	D	n	V	d	D		n	V	v	D	n	V	v
Surface		31	1·5	0·5	340	31	1·7	0·9	329		31	5·1	4·9	249	31	7·1	6·8
0·15 a. g.		18	2·5	0·3	9	29	2·5	0·5	314		31	9·3	9·1	255	31	11·6	11·3
0·6 a. s. L.		18	3·1	0·7	66	29	2·7	0·5	208								
1·0 „		16	3·8	1·7	58	25	3·1	0·6	234		30	11·9	11·3	267	31	11·[illegible]	11·7
1·5 „		14	3·0	1·6	100	23	3·4	1·7	217		18	11·0	10·2	282	28	12·3	11·8
2·0 „		13	3·6	1·7	123	23	3·6	2·5	199		15	10·1	8·6	280	15	8·1	7·7
2·5 „		12	4·1	2·7	136	23	3·8	2·8	193		10	8·3	5·6	269	8	6·3	5·4
3·0 „		11	4·7	3·0	150	23	3·5	2·3	190		9	6·3	4·3	279	6	4·6	2·3
4·0 „		9	4·8	3·2	167	23	3·5	1·7	207		4	4·3	2·1	25	3	5·2	4·1
5·0 „		5	5·0	2·7	138	23	3·3	1·5	220		3	3·5	2·1	106	3	4·7	4·6
6·0 „		1	6·5	6·5	230	23	3·6	1·5	202		3	4·8	4·6	94	3	6·0	6·0
7·5 „						22	3·5	0·3	204		1	11·0	11·0	75	3	9·5	9·0
9·0 „						16	4·6	2·2	351						1	13·0	13·0

Station.	GAYA												GOPALPUR						
Time I. S. T.	0100				0700				1600					0700				1600	
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D		n	V	v	D	n	V	v
Surface	31	4·0	1·8	120	31	4·2	1·5	119	31	4·3	1·4	102		31	3·8	3·0	222	31	6·6	5·4
0·15 a. g.	24	5·7	5·2	112	28	5·5	3·6	112	29	5·8	2·6	98		30	6·1	4·4	233	30	8·1	6·4
0·6 a. s. L.	24	6·9	6·1	126	28	7·5	4·3	131	29	6·5	3·1	113		30	6·2	4·0	263	30	5·4	2·7
1·0 „	24	6·3	5·3	127	28	7·8	4·1	12	27	7·1	4·2	121		30	7·3	4·9	279	30	6·1	3·9
1·5 „	22	5·7	4·9	122	28	7·8	4·7	104	21	7·1	6·0	130		30	7·7	5·5	293	29	6·8	4·4
2·0 „	16	6·3	5·5	121	22	8·0	5·4	98	19	7·3	6·1	130		30	6·7	4·6	293	27	6·3	4·0
2·5 „	5	5·8	5·4	115	17	7·5	6·9	100	14	7·3	7·0	125		20	6·5	4·4	280	26	6·9	3·8
3·0 „	1	8·0	8·0	100	16	7·0	6·3	101	13	7·2	6·7	121		19	7·3	4·9	282	25	7·2	3·7
4·0 „					8	4·7	4·1	106	8	7·5	7·2	105		14	6·9	3·2	265	19	6·5	2·5
5·0 „					8	4·6	4·2	108	6	8·4	8·0	94		8	6·5	2·3	237	17	6·8	1·5
6·0 „					6	4·1	3·6	99	4	10·5	10·5	102		4	4·9	1·5	184	13	7·7	0·3
7·5 „					4	6·7	6·5	90	1	10·0	10·0	95		3	3·0	1·1	352	9	7·9	5·5
9·0 „																		6	9·3	6·4

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

AUGUST 1948

Station.	GORAKHPUR								HYDERABAD (Dn.)											
Time I. S. T.	0700				1600				0100				0700				1600			
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	2·3	76	31	2·5	1·8	97					5	2·0	1·8	290	5	2·7	2·5	331
0·15 a. g.	30	6·9	6·1	88	30	5·5	4·1	103												
0·6 a. s. l.	27	10·5	10·2	109	29	6·8	6·2	102	5	2·6	0·8	140	5	5·8	3·1	289	5	3·5	3·0	351
1·0 „	24	10·8	10·7	106	23	7·3	6·7	108	5	5·4	2·9	144	5	8·8	6·8	251	5	2·9	2·1	317
1·5 „	18	12·2	12·0	101	20	8·8	8·3	111	5	4·4	3·0	261	5	5·9	4·0	227	5	3·5	2·7	272
2·0 „	15	10·5	10·1	100	8	8·8	8·3	112	5	4·6	3·9	281	4	3·6	2·6	253	5	4·9	4·2	246
2·5 „	11	6·5	5·8	92	5	5·3	4·9	118	4	4·4	4·2	279	3	4·5	4·1	285	5	6·2	5·4	242
3·0 „	10	6·5	5·4	102	3	5·2	5·1	123	1	4·5	4·5	275	3	2·3	1·9	255	5	8·0	6·8	241
4·0 „	4	5·0	3·1	97	2	2·5	2·5	125	1	2·0	2·0	175	1	5·5	5·5	165				
5·0 „	4	4·3	3·5	104									1	4·0	4·0	225				
6·0 „	1	5·5	5·5	130									1	2·0	2·0	170				
7·5 „													1	4·0	4·0	105				
9·0 „													1	6·5	6·5	95				

Station.	JAMNAGAR								JAMSHEDPUR							
Time I. S. T.	0700				1600				0700				1600			
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface	15	7·2	5·3	238	16	12·3	11·5	277	31	1·8	0·6	141	31	3·0	1·7	102
0·15 a. g.	15	8·4	7·8	256	16	9·6	9·4	277	31	3·1	1·0	161	30	4·9	2·4	113
0·6 a. s. l.	15	11·8	11·3	264	15	10·3	9·8	261	29	4·8	1·0	202	30	5·5	2·5	133
1·0 „	13	11·8	11·7	261	14	10·1	8·9	247	19	6·7	2·3	255	29	6·3	2·4	144
1·5 „	7	9·1	8·4	257	12	8·5	5·6	252	13	6·9	1·5	297	25	6·0	2·5	141
2·0 „	3	5·8	3·8	250	7	5·2	3·0	29	11	7·8	1·5	301	21	6·7	2·9	150
2·5 „	2	3·7	1·3	140	4	6·0	5·5	22	6	5·3	1·5	24	16	5·0	2·9	142
3·0 „	2	3·5	2·3	93	4	5·6	5·4	27	4	3·7	3·5	76	14	5·0	3·2	131
4·0 „	2	4·5	4·3	45	4	4·7	3·2	32	1	4·5	4·5	135	4	4·5	3·7	112
5·0 „	2	6·3	6·1	38	3	4·5	1·5	239	1	3·0	3·0	180	3	4·2	3·5	81
6·5 „	2	3·0	2·0	50	3	4·5	1·9	83	1	6·5	6·5	145	2	4·7	4·7	65
7·5 „	2	6·0	5·8	65	2	5·5	5·3	31								
9·0 „					2	7·5	7·5	60								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

AUGUST 1948

Station.	JHARSUGUDA												JODHPUR											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	188	31	1·3	0·5	216	31	2·1	1·1	235	31	1·2	1·1	228	31	1·7	1·6	228	31	1·9	1·8	232
0·15 a. g.	23	5·7	3·1	228	30	5·0	2·5	229	31	5·0	2·6	237	29	9·8	9·2	230	30	8·4	7·6	241	30	5·3	4·9	224
0·6 a. s. l.	22	6·9	3·9	226	29	6·7	3·7	254	31	5·9	3·5	245	29	11·6	11·0	237	29	10·3	10·3	245	30	5·7	4·7	231
1·0 "	15	7·7	4·3	231	21	8·5	4·2	252	28	6·4	3·3	259	28	10·0	9·3	245	26	10·5	9·6	245	30	6·6	5·0	240
1·5 "	13	6·5	2·9	244	16	7·0	3·5	302	27	6·1	2·4	273	20	5·7	2·6	241	22	7·2	5·6	258	21	6·0	2·5	286
2·0 "	11	6·9	2·9	260	16	7·6	3·4	301	21	6·7	3·1	279	16	4·3	2·1	3[illegible]	17	7·0	2·7	254	19	5·7	1·6	325
2·5 "	8	5·9	1·9	218	12	8·3	4·2	279	18	5·9	2·2	253	5	5·6	5·2	32	14	5·0	2·9	37	18	5·6	2·5	340
3·0 "	7	4·9	1·9	150	8	6·5	0·7	50	16	6·1	2·5	259	3	6·0	6·0	40	11	5·2	3·5	39	12	5·5	3·7	1
4·0 "	4	6·1	4·6	127	6	5·3	1·5	66	12	5·5	0·5	46					4	4·6	3·4	45	11	6·4	4·6	8
5·0 "					5	5·8	5·3	105	7	4·5	1·3	64					3	6·0	2·0	186	9	6·1	4·7	35
6·0 "					4	6·5	6·1	107	6	5·4	1·9	70					3	4·8	4·2	128	5	4·9	2·3	24
7·5 "					4	7·5	6·8	98	4	6·5	5·1	89					3	6·2	5·0	95	3	7·7	3·0	23
9·0 "					3	9·2	9·1	87	2	10·3	9·9	78					2	9·3	9·1	112	2	5·3	4·0	60

Station.	JUBBULPORE												JAGDALPUR							
Time I. S. T.	0100				0700				1600					0700			1600			
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	1·8	1·5	252	31	2·1	1·7	257	31	2·6	1·8	278		31	2·2	2·0	236	31	3·1	2·8	245
0·15 a. g.	28	6·4	5·2	260	26	6·4	4·7	258	30	5·8	3·6	275		26	5·1	4·7	242	28	5·7	5·1	252
0·6 a. s. l.	28	6·9	5·8	263	26	6·9	5·2	262	30	6·1	4·1	275		26	3·8	3·5	241	28	4·7	4·1	252
1·0 "	20	7·5	5·6	277	17	8·2	7·0	276	27	6·8	4·6	288		22	8·2	7·7	276	27	6·6	6·1	264
1·5 "	16	8·4	5·3	294	12	7·8	5·3	279	22	6·8	4·3	288		12	11·3	10·8	289	17	5·4	4·9	284
2·0 "	10	8·3	5·0	298	11	6·6	3·5	283	17	7·2	4·2	287		10	10·1	9·4	288	13	6·0	5·1	287
2·5 "	4	5·1	1·9	202	10	6·9	3·2	282	16	8·0	3·5	290		6	7·3	6·3	282	11	6·7	4·8	288
3·0 "	3	4·3	4·3	129	10	7·1	2·4	267	9	6·2	3·1	285		4	7·7	7·1	262	10	5·9	2·9	293
4·0 "					5	4·8	1·6	113	6	3·9	0·9	98		3	4·8	3·9	248	6	6·3	1·0	246
5·0 "					4	5·5	3·4	103	4	3·6	3·3	102		1	6·0	6·0	245				
6·0 "					2	5·0	4·7	87	4	4·5	4·2	76		1	4·5	4·5	281				
7·5 "					1	10·0	10·0	105	1	5·5	5·5	120									
9·0 "					1	7·0	7·0	80	1	8·5	8·5	120									

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level.

AUGUST 1948

Station.	MADHO-SAGAR.												MADRAS.											
Time I. S. T.		0700				1600				0100				0700				1600						
Ht. in km.		n	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	240	31	3·1	1·9	287	31	4·2	3·4	233	31	3·4	3·3	261	31	5·4	2·3	272
0·15 a. g. .		28	4·4	1·4	256	30	5·1	2·3	302	31	8·5	7·4	243	31	9·2	8·9	260	31	6·4	3·3	265
0·6 a. s. l. .		24	7·1	2·6	285	30	5·3	2·2	315	31	12·6	12·3	277	31	12·1	11·4	273	31	7·2	6·0	268
1·0 ,, .		22	7·7	3·3	304	28	5·9	2·0	303	30	12·0	11·0	272	31	12·7	12·0	280	31	7·9	7·1	273
1·5 ,, .		21	6·4	3·0	334	24	6·0	1·3	335	27	10·3	9·4	280	31	12·2	11·5	287	29	8·9	8·1	278
2·0 ,, .		18	5·8	2·0	6	19	5·5	1·1	49	21	8·7	7·3	286	31	10·5	9·5	286	27	9·2	8·6	278
2·5 ,, .		13	5·5	0·8	338	14	5·8	2·2	64	10	6·4	3·7	305	31	10·1	8·6	281	18	9·2	7·9	280
3·0 ,, .		11	5·3	1·4	69	9	4·4	2·0	52	6	7·5	2·7	302	31	10·1	8·1	273	11	9·1	6·1	270
4·0 ,, .		5	4·1	2·5	80	7	4·3	1·8	84	1	5·5	5·5	135	27	10·7	7·7	268	6	7·7	2·6	176
5·0 ,, .		5	4·0	3·5	62	4	5·0	2·9	78					22	9·3	5·6	264	4	6·3	5·3	142
6·0 ,, .		3	5·7	5·5	73	3	5·0	3·4	132					19	6·8	1·7	247	4	6·4	4·5	120
7·5 ,, .		3	6·5	6·5	99	2	5·0	4·5	114					17	7·4	3·3	105	1	6·5	6·5	125
9·0 ,, .		1	18·0	18·0	140	2	6·7	6·1	101					15	9·9	7·6	90				

Station.	MALEGAON.												MANGALORE.											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	4·8	264	31	3·0	2·9	269	31	5·7	5·5	269	31	2·8	2·1	276	31	2·3	0·9	249	31	3·2	2·5	271
0·15 a. g. ...	31	9·3	9·2	265	29	7·4	7·3	270	31	8·9	8·5	269	24	6·7	5·7	275	29	5·8	3·8	273	29	7·6	6·8	276
0·6 a. s. l. .	31	9·3	9·2	265	29	7·4	7·3	270	31	8·9	8·5	269	13	12·4	10·5	281	26	11·2	10·3	280	23	11·1	10·5	281
1·0 ,, .	31	10·6	10·3	268	29	9·6	9·5	272	31	8·6	8·3	269	9	13·6	12·9	289	15	11·4	10·6	292	13	11·9	11·3	295
1·5 ,, .	28	10·1	9·4	275	26	9·9	0·4	271	28	9·1	8·6	267	1	15·0	15·0	310	7	12·2	11·7	297	9	11·4	10·9	298
2·0 ,, .	17	5·9	4·7	287	21	7·5	6·6	272	23	8·3	7·9	265					2	9·7	7·7	306	4	6·0	5·0	312
2·5 ,, .	12	3·8	2·2	280	16	5·0	4·1	276	20	7·4	6·4	268									3	3·7	1·5	35
3·0 ,, .	10	4·3	0·8	285	14	4·5	3·1	281	9	6·1	4·4	275									2	4·7	4·5	104
4·0 ,, .	2	5·7	2·1	86	8	4·4	0·2	328	1	5·0	5·0	235									2	6·7	6·5	120
5·0 ,, .					6	5·6	3·4	87	1	5·0	5·0	260									1	9·0	9·0	100
6·0 ,, .					3	4·7	3·0	74	1	3·0	3·0	335									1	11·5	11·5	115
7·5 ,, .					2	7·2	7·1	96	1	3·0	3·0	355												
9·0 ,, .									1	4·0	4·0	105												

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9 km. above sea level.

AUGUST 1948

Station.	MASULIPATAM												NAGERCOIL										
Time I. S. T.	0100				0700				1600				0100				0700				1600		
Ht. in 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	2·0	1·6	247	31	1·9	1·7	260	31	2·8	2·2	278	31	5·0	4·8	287	31	4·8	4·5	282	31	7·4	7·1
0·15 a. g.	30	8·5	7·2	239	30	7·9	7·2	258	31	6·8	4·9	271	31	10·3	10·2	296	31	8·8	8·5	296	31	13·5	13·2
0·6 a. s. l.	30	10·5	9·1	256	30	12·0	11·0	270	31	8·3	7·5	275	29	17·6	17·2	299	29	16·6	16·3	300	31	14·2	14·1
1·0 "	30	10·5	9·6	266	30	13·0	12·0	280	31	10·3	10·0	281	29	17·9	17·6	299	28	17·5	17·1	00	29	16·3	15·7
1·5 "	27	10·2	9·5	272	29	12·2	11·4	298	29	12·4	12·0	284	29	16·6	16·3	297	28	15·5	15·1	296	27	17·6	17·3
2·0 "	21	10·3	9·7	275	28	10·9	10·3	287	28	12·7	12·4	285	26	15·3	14·3	292	27	15·2	14·5	291	24	17·1	16·6
2·5 "	9	9·1	8·5	270	24	9·7	9·2	281	26	11·9	11·7	285	11	11·5	9·9	289	25	13·0	11·9	290	23	15·3	14·8
3·0 "	7	6·2	5·9	264	22	8·5	8·2	279	23	18·8	11·4	284	10	10·9	8·9	288	22	10·7	9·0	288	22	13·6	12·9
4·0 "	3	4·3	2·5	256	14	6·4	5·5	267	15	9·8	8·0	285	4	5·3	4·9	302	18	6·3	3·8	300	17	9·9	8·8
5·0 "					6	3·7	1·2	226	10	6·5	3·3	289	2	2·0	1·1	183	11	8·7	3·9	281	12	7·7	5·1
6·0 "					3	8·3	7·8	76	8	5·7	0·6	319	2	8·5	8·5	134	11	8·2	0·6	245	11	6·7	1·8
7·5 "					2	14·0	13·0	92	3	4·2	1·0	20	1	10·0	10·0	110	5	7·8	2·3	47	7	6·2	3·9
9·0 "									1	7·0	7·0	360	1	14·0	14·0	115	6	6·5	5·0	118	6	8·3	6·4

Station.	NAGPUR												NEW DELHI										
Time I. S. T.	0100				0700				1600				0100				0700				1600		
Ht. in 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	2·4	1·9	264	31	2·3	2·0	259	31	3·8	3·3	268	31	2·0	1·0	112	31	2·4	0·5	83	31	2·6	1·2
0·15 a. g.	28	5·6	5·0	270	29	5·7	5·3	278	30	7·1	6·6	269	30	5·8	3·1	150	27	4·2	1·4	149	30	4·6	2·1
0·6 a. s. l.	28	6·6	6·1	279	29	7·5	7·1	285	30	7·7	7·3	273	28	6·1	3·0	161	22	5·2	1·9	170	30	4·3	1·6
1·0 "	28	8·6	8·0	297	26	9·3	8·4	294	29	8·6	7·9	277	25	5·8	2·7	181	20	5·4	0·9	171	26	5·1	1·8
1·5 "	24	8·9	8·2	294	23	8·5	7·5	297	24	8·4	7·8	281	21	5·1	1·8	157	16	4·1	0·3	48	24	6·3	1·3
2·0 "	16	8·0	6·9	291	19	7·0	5·9	287	16	8·1	7·5	271	17	4·4	1·3	137	12	3·4	1·5	55	21	6·2	1·4
2·5 "	7	7·9	7·6	285	16	7·0	6·3	276	10	7·7	6·6	275	8	4·3	0·4	155	10	3·5	1·5	82	17	5·2	1·0
3·0 "	3	11·5	9·1	313	11	6·3	4·9	265	6	5·0	3·0	290	2	3·0	1·9	77	8	2·7	1·4	79	16	5·3	1·4
4·0 "					8	6·9	3·1	283	2	10·5	7·6	300					8	2·3	1·5	53	12	3·3	0·5
5·0 "					6	6·8	2·2	266	1	5·0	5·0	35					6	4·3	1·3	86	11	3·4	1·2
6·0 "					5	7·5	0·3	245									4	3·6	2·9	77	5	2·3	1·3
7·5 "					4	9·3	1·9	77									2	2·3	1·8	105	2	2·7	2·3
9·0 "					4	11·5	5·2	99									2	1·7	1·5	161			

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

August 1948

Station.	POONA												RAIPUR											
Time I. S. T.	0100				0600				1600				0100				0700				1600			
Ht. in km.	n	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	2·1	268	31	2·3	2·3	267	31	3·6	3·6	268	31	3·2	2·9	241	31	2·9	2·7	236	31	3·7	3·5	241
0·15 a. g.	30	6·4	6·2	260	30	6·0	5·9	259	31	7·5	7·3	263	25	7·6	7·1	242	29	7·4	6·9	246	29	7·5	6·5	251
0·6 a. s. l	30	4·5	4·4	256	30	3·6	3·5	259	31	5·4	5·3	267	25	8·7	7·7	255	29	9·6	8·6	260	29	7·5	6·7	252
1·0 „	30	8·7	8·5	266	30	8·5	8·3	265	31	9·4	9·2	267	20	8·7	6·7	280	22	7·9	6·9	281	25	7·7	6·5	261
1·5 „	19	11·5	11·4	267	25	11·0	10·7	266	22	11·6	11·4	268	16	7·4	5·8	278	20	7·5	6·2	282	20	6·9	5·3	277
2·0 „	18	10·8	9·8	262	22	10·5	9·7	266	18	11·6	11·3	268	13	7·0	5·4	266	18	7·6	6·3	281	14	8·0	5·1	281
2·5 „	10	7·7	6·1	257	21	9·8	8·5	270	7	8·9	7·5	262	9	4·9	3·3	252	18	7·3	5·9	278	13	7·8	4·1	291
3·0 „	6	6·8	5·1	261	18	7·0	6·6	280	5	7·1	6·5	275	7	4·0	2·1	207	13	6·7	4·6	277	11	7·6	4·4	319
4·0 „	1	2·0	2·0	265	16	4·6	2·6	287	3	4·5	4·5	291	3	4·0	3·5	181	9	6·7	1·0	291	8	6·6	1·9	331
5·0 „					10	4·1	2·3	319					1	3·5	3·5	86	7	6·2	1·2	298	7	6·0	4·2	77
6·0 „					9	4·2	0·8	23					1	4·0	4·0	140	5	8·1	3·2	92	6	8·5	5·5	67
7·5 „					9	6·3	3·8	72									2	11·7	11·5	94	2	10·0	9·9	70
9·0 „					7	11·8	10·4	97									1	11·0	11·0	115	1	8·5	8·5	70

Station	SAHARSA								TEZPUR											
Time I. S. T.					0700				1600				0100				0700				1600			
Ht. in km.					n	V	v	D	n	V			n	V	v	D	n	V	v	D	n	V	v	D
Surface					31	1·7	1·6	92	31	2·8	3·4	98	31	1·1	0·3	186	31	0·8	0·3	119	31	6·5	0·1	54
0·15 a. g.					29	5·9	5·7	92	31	5·5	4·5	106	30	3·8	1·1	146	26	2·6	1·3	130	31	2·1	1·1	64
0·6 a. s. l.					25	7·7	7·5	106	31	6·6	5·9	114	30	3·7	1·1	141	23	3·8	0·9	144	31	2·4	0·6	93
1·0 „					17	7·5	7·3	105	28	7·8	7·3	117	30	4·2	1·5	256	21	4·6	0·6	40	31	3·4	1·1	161
1·5 „					10	7·9	7·3	96	23	7·9	7·3	117	26	4·0	1·5	255	18	4·2	0·6	62	29	4·0	2·0	205
2·0 „					6	7·3	7·1	100	19	7·5	7·2	114	18	4·3	1·9	242	16	4·4	0·9	245	27	4·8	2·3	204
2·5 „					2	6·3	6·3	107	11	7·5	7·1	115	17	4·6	2·5	232	14	4·2	0·5	200	25	4·9	2·0	199
3·0 „					2	5·5	5·5	101	7	7·7	7·5	127	15	5·0	3·4	223	12	5·0	1·0	197	24	4·3	1·5	200
4·0 „					1	6·0	6·0	115	2	10·0	9·1	121	8	9·2	4·5	226	7	3·9	2·1	75	23	3·4	0·7	178
5·0 „					1	6·0	6·0	120									6	6·4	2·3	61	19	3·5	1·0	109
6·0 „																	3	5·2	2·9	74	19	3·3	1·7	112
·5 „																	2	3·0	2·5	122	12	2·9	0·4	130
9·0 „																	1	3·5	3·5	95	6	5·2	3·1	33

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level.

AUGUST 1948

Station.	TRICHINOPOLY												TRIVANDRUM											
Time I. S. T.	0100				0700				1600								0700							
Ht. in km.	n	V	v	D	n	V	v	D	n	V	v	D					n	V	v	D				
Surface	31	4·7	4·5	270	31	3·6	3·4	275	31	4·9	4·6	278					29	2·3	2·1	342				
0·10 a. g.	31	9·9	9·5	267	31	8·7	8·6	272	31	10·3	9·9	269					28	7·4	6·8	326				
0·6 a. s. 1	31	14·8	14·1	271	31	13·9	13·8	274	31	12·9	11·9	268					28	12·4	11·7	308				
1·0 „	30	14·2	13·4	276	31	13·6	13·2	275	31	11·8	11·5	262					27	14·5	13·8	303				
1·5 „	29	11·1	10·2	281	31	11·4	10·8	278	31	11·5	11·0	259					27	14·7	14·1	304				
2·0 „	28	9·1	8·5	283	31	10·9	9·4	276	31	11·5	10·3	253					25	13·7	13·1	306				
2·5 „	14	7·7	6·9	280	29	10·1	8·2	282	31	11·2	9·9	269					24	12·3	11·4	295				
3·0 „	10	7·7	6·6	277	28	9·1	6·9	263	30	10·3	8·9	274					20	11·3	10·0	291				
4·0 „					18	8·6	4·3	263	19	9·5	6·6	272					14	8·1	6·8	280				
5·0 „					11	7·5	1·9	211	10	10·4	4·8	256					11	7·1	3·8	258				
6·0 „					8	6·6	3·9	138	7	9·5	2·1	181					8	7·2	0·9	70				
7·5 „					5	7·1	6·7	91	3	8·2	5·9	102					6	4·3	3·2	104				
9·0 „					4	10·4	9·1	93	1	3·0	3·0	325					1	11·5	11·5	90				

Station.	UDAIPUR												VENGURLA											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	0·9	252	31	1·4	1·2	251	31	2·5	1·8	243	31	1·2	1·2	165	31	0·5	0·4	273	31	2·9	2·7	268
0·15 a. g.	29	4·4	4·1	253	31	4·5	4·0	262	31	5·3	4·8	252	26	6·1	5·5	277	30	6·0	5·1	275	28	6·9	6·6	276
0·6 a. s. 1									31	5·7	4·9	259	22	9·9	9·3	280	23	10·7	9·9	285	25	10·7	10·2	284
1·0 „	29	5·9	5·5	260	31	5·9	5·4	265	26	5·2	3·7	273	10	9·1	8·7	296	13	11·8	11·0	287	17	11·4	10·8	286
1·5 „	25	5·4	3·7	267	23	4·9	3·0	269	18	4·4	2·2	332	8	9·0	8·9	286	7	7·5	7·3	292	12	9·3	8·6	288
2·0 „	20	3·3	0·7	2	16	3·1	1·7	52	12	4·1	3·5	9	6	4·7	4·0	262	5	3·8	2·1	263	4	6·5	5·2	311
2·5 „	16	3·9	2·6	33	14	3·4	2·3	43	11	4·8	3·9	352	5	4·4	3·2	152	4	4·7	2·5	154	2	2·5	2·4	229
3·0 „	14	4·2	3·5	37	15	4·4	2·7	63					5	4·8	3·6	110	5	5·2	4·9	137	1	1·5	1·5	118
4·0 „	2	4·5	4·3	74	13	4·7	3·1	35	8	4·5	3·2	10	5	3·5	2·6	86	3	4·6	3·1	126	1	3·0	3·0	85
5·0 „					8	3·3	2·0	73	4	3·6	0·3	38	2	7·5	3·6	83	2	4·5	2·8	150				
6·0 „					5	4·3	3·3	74	2	1·8	1·7	325					2	5·5	5·3	101				
7·5 „																	1	6·0	6·0	65				
9·0 „																								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9.0 km. above sea level.

AUGUST 1946

Station.	VERAVAL.												VIZAGAPATA M.											
Time I. S. T.	0100				0700				1600				0100				0700				1600			
Ht. in km.	n	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	6·1	270	31	5·0	4·7	267	31	5·8	5·5	270	31	2·1	1·9	254	31	1·7	1·5	255	31	3·4	2·9	232
0·15 a. g. .	30	8·5	7·7	261	30	8·2	7·5	266	30	9·2	9·0	262	28	7·9	7·7	251	29	6·8	6·5	260	29	7·4	6·7	234
0·6 a. s. l. .	30	10·7	10·2	266	30	10·9	10·2	271	29	10·7	10·5	267	25	9·2	8·9	257	28	8·9	8·4	260	29	7·6	7·1	256
1·0 ,, .	27	9·8	9·3	264	28	10·4	9·9	270	28	10·4	9·9	268	23	9·2	8·7	272	28	8·7	7·7	273	29	7·3	6·6	272
1·5 ,, .	17	8·6	7·7	253	23	8·8	8·2	276	24	9·0	7·9	270	20	9·3	8·4	279	27	9·5	8·6	290	28	8·2	7·4	289
2·0 ,, .	12	7·2	6·1	257	18	8·3	6·1	270	13	6·2	4·8	277	15	7·4	6·4	279	24	9·9	8·7	299	25	8·3	7·7	289
2·5 ,, .	2	4·2	3·4	346	10	6·8	3·7	333	7	6·6	4·7	309	10	6·1	5·6	265	20	8·6	7·1	290	22	7·7	7·5	279
3·0 ,, .	2	5·2	4·2	322	8	6·3	3·4	338	6	6·4	4·5	336	7	4·6	4·0	272	17	7·6	6·5	279	20	7·7	7·3	274
4·0 ,, .					6	4·6	2·1	18	2	4·0	3·1	158	2	6·5	1·9	261	12	6·8	4·0	270	18	7·9	5·5	272
5·0 ,, .					2	7·5	6·9	80	1	1·0	1·4	35					6	4·9	0·8	200	7	6·4	2·3	280
6·0 ,, .					1	12·0	12·0	95									6	4·7	2·4	93	1	3·0	3·0	275
7·5 ,, .																	4	9·7	8·8	105	1	5·0	5·0	45
9·0 ,, .																	4	12·6	12·4	99	1	8·0	8·0	80

Table B—Monthly mean directions and velocities of upper winds

Winds above 9·0 km. above sea level

AUGUST 1948

Height (Km)	n	V	v	D
	AHMEDABAD			
10·0	2	9·0	8·7	67
	ALLAHABAD			
10·0	5	13·7	13·8	99
11·0	4	13·9	13·7	91
12·0	3	14·3	13·7	92
13·0	2	13·7	13·5	92
14·0	1	18·0	18·0	95
15·0	1	15·0	15·0	85
16·0	1	19·0	19·0	80
17·0	1	22·0	22·0	85
18·0	1	21·5	21·5	85
	AMBALA			
10·0	1	6·0	6·0	255
11·0	1	7·0	7·0	275
12·0	1	9·0	9·0	255
13·0	1	10·0	10·0	250
14·0	1	7·5	7·5	245
	BAREILLY			
10·0	3	3·0	2·3	87
11·0	3	4·5	2·2	111
12·0	1	10·0	10·0	70
13·0	1	8·5	8·5	80
14·0	1	8·0	8·0	95
15·0	1	15·0	15·0	85
	BHOPAL			
10·0	1	11·0	11·0	110
	BIKANER			
10·0	7	7 2	4·8	104
11·0	1	9·0	9·0	60
12·0	1	8·5	8·5	80
13·0	1	7·5	7·5	70

Height (Km)	n	V	v	D
	COCHIN			
10·0	1	8·5	8·5	90
	COOCH BEHAR			
10·0	3	9·7	9·1	64
11·0	2	14·3	14·0	72
12·0	1	14·0	14·0	65
	DIBRUGARH			
10·0	10	6·2	5·1	18
11·0	6	9·8	6·5	12
12·0	4	13·6	8·3	2
13·0	3	12·8	8·7	25
	GADAG			
10·0	1	17·0	17·0	95
	GOPALPUR			
10·0	1	4·0	4·0	75
11·0	1	13·0	13·0	110
	JAMNAGAR			
10·0	2	10·7	10·6	78
11·0	1	14·0	14·0	80
	JODHPUR			
10·0	3	17·0	11·0	107
11·0	2	11·5	6·1	226
12·0	1	8·5	8·5	85
	MADHOSAGAR			
10·0	2	22·0	11·1	110
11·0	1	17·5	17·5	120
12·0	1	23·0	23·0	105
13·0	1	19·0	19·0	110
14·0	1	27·0	27·0	120

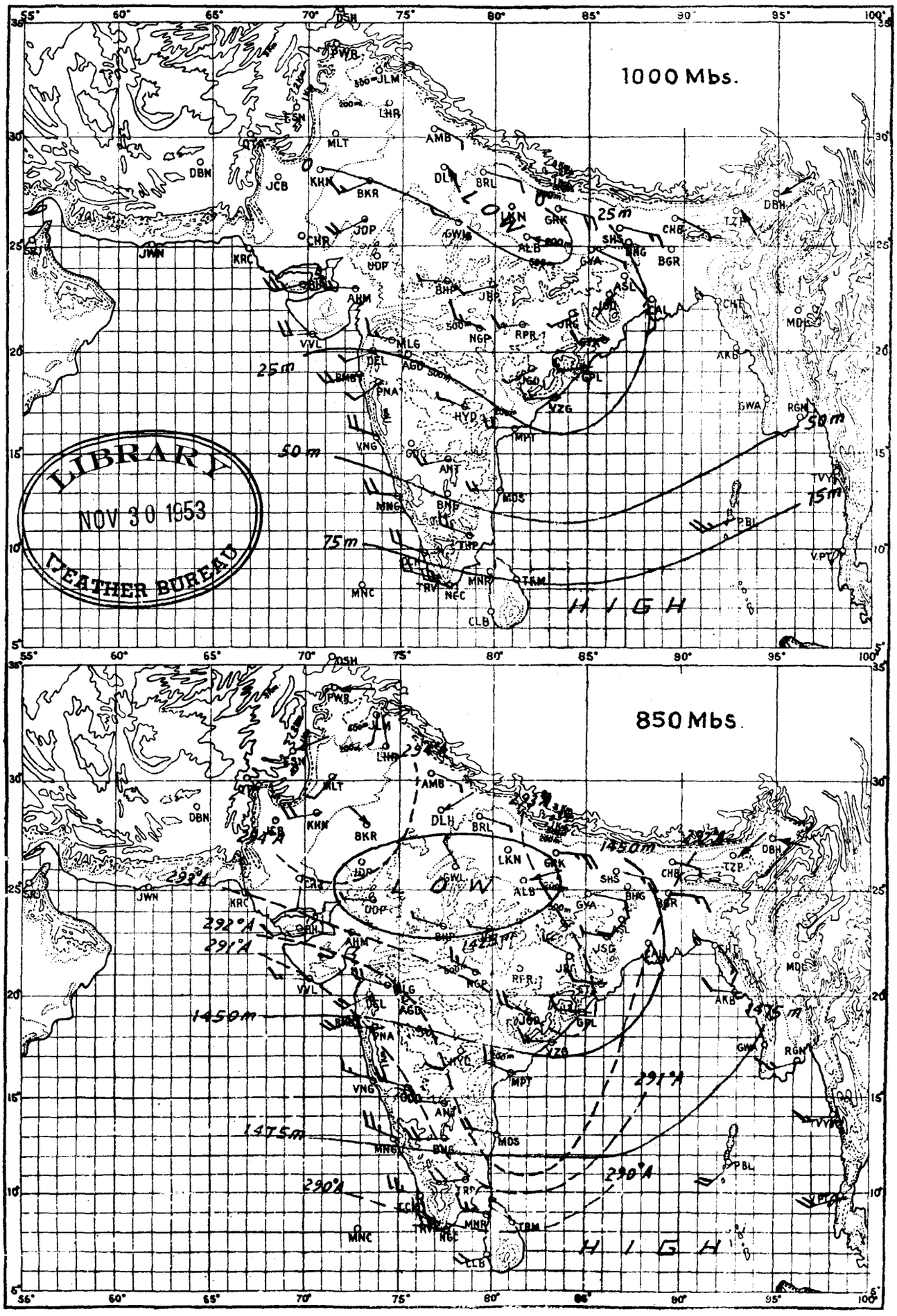
Height (Km)	n	V	v	D
	MADRAS			
10·0	13	13·9	12·8	95
11·0	10	20·2	20·0	89
12·0	8	26·7	26·6	84
13·0	7	28·1	28·0	86
14·0	5	28·7	28·6	84
15·0	4	30·1	29·9	87
16·0	3	28·2	28·1	86
17·0	3	26·2	26·2	93
18·0	2	27·0	26·8	80
	MALEGAON			
10·0	1	8·0	8·0	85
	MASULIPATAM			
10·0	2	16·7	16·7	95
	NAGERCOIL			
10·0	13	12·3	9·4	103
11·0	5	15·9	13·6	108
12·0	5	18·6	17·4	99
13·0	2	18·7	18·7	90
14·0	2	25·5	25·5	93
15·0	1	26·0	26·0	90
	NAGPUR			
10·0	3	14·2	14·2	82
11·0	3	17·5	9·0	79
12·0	1	22·0	22·0	90
13·0	1	23·0	23·0	85
14·0	1	23·5	23·5	80
15·0	1	23·5	23·5	75
16·0	1	35·0	35·0	75
17·0	1	35·5	35·5	85

Height (Km)	n	V	v
	POONA		
10·0	6	12·7	12·6
11·0	5	16·8	16·6
12·0	4	18·9	18·7
13·0	3	20·6	20·7
14·0	1	21·5	21·5
15·0	1	22·0	22·0
16·0	1	21·0	21·0
17·0	1	24·0	24·0
	RAIPUR		
10·0	1	11·5	11·5
	TEZPUR		
10·0	5	7·0	5·9
11·0	3	10·5	9·3
12·0	2	5·5	5·3
	TRICHINOPOLI		
10·0	4	13·5	12·0
	TRIVANDRUM		
10·0	1	15·5	15·5
11·0	1	27·0	27·0
12·0	1	33·5	33·5
	VIZAGAPATAM		
10·0	4	15·5	14·7
11·0	1	17·0	17·0

MONTHLY MEAN CONSTANT PRESSURE CHARTS

AUGUST 1948

Plate I



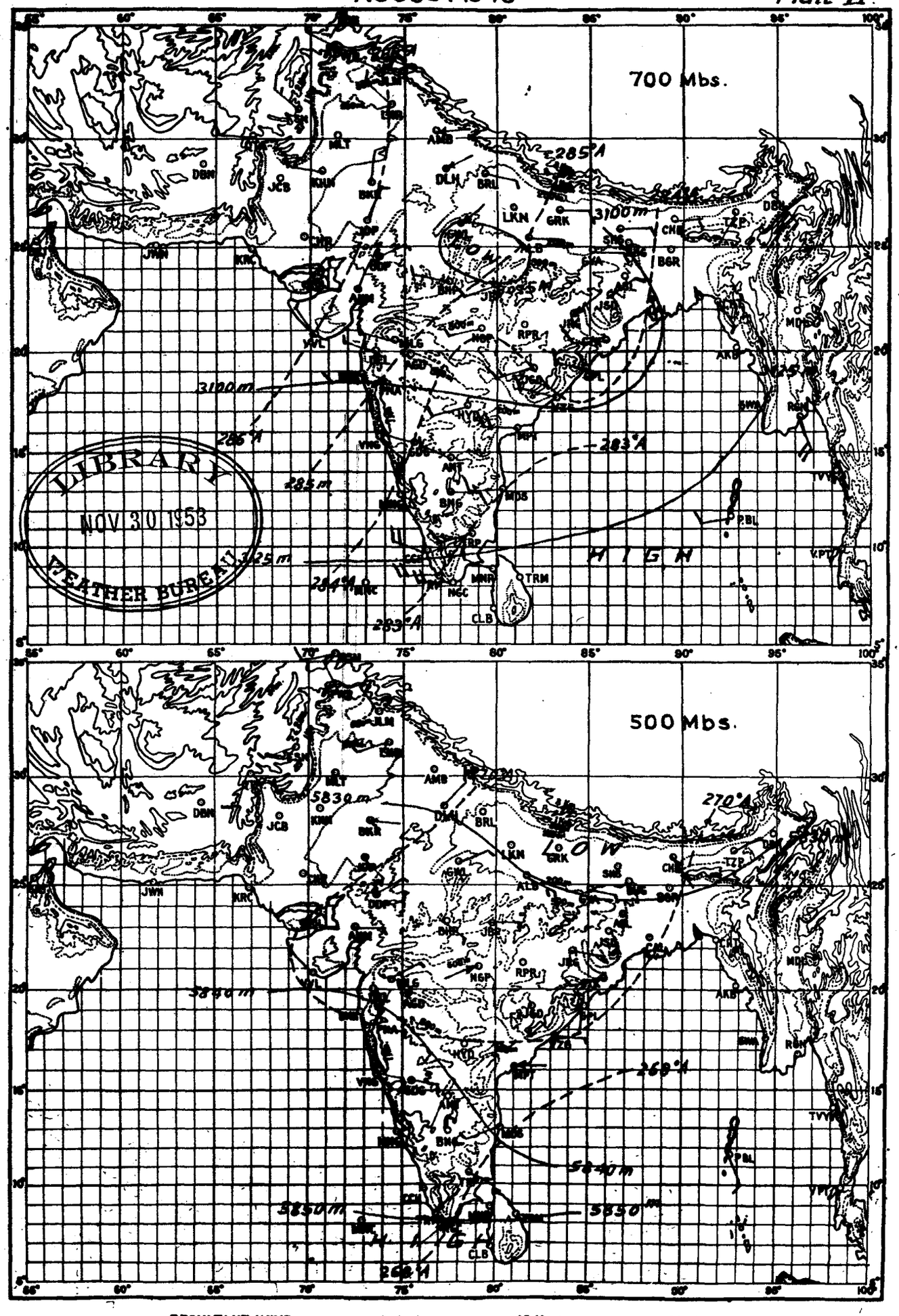
RESULTANT WIND —— = 5 Knots, —— = 10 Knots, —— = 50 Knots.

- - - - - *Isotherms in degrees Absolute* —— *Contours in geopotential Metres.*

MONTHLY MEAN CONSTANT PRESSURE CHARTS

AUGUST 1948

Plate II.



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

S.P.Z.R. POONA, 1951.

----Isotherms in degrees Absolute ——— Contours in geopotential Metres.

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WEATHER BUREAU

INDIA WEATHER REVIEW, 1948

Monthly Weather Report

September

Published by Authority of the Government of India.

Chief features :—(*i*) Strong or vigorous monsoon in the Gangetic plain, Central India and the northern districts of the Central Provinces during the first half of the month, and in the Deccan and the Konkan during the second half ; (*ii*) two depressions from the Bay, one of which moved into the Arabian Sea and became a severe cyclone.

During the first week of September, the monsoon was strong over the East Punjab, the west United Provinces, Central India and the west Central Provinces and generally weak elsewhere. A 'low' developed over Eastern Pakistan on the 3rd and moved up to east Rajputana by the 8th before becoming unimportant. Under its influence, widespread rain fell in West Bengal, Chota Nagpur and Bihar on the 3rd and 4th and in the central parts of the country, the west United Provinces and the southeast Punjab from the 4th to 8th ; during this period locally very heavy rain occurred in the southeast Punjab and the west United Provinces with local falls of heavy rain in and near Central India. The rainfall also extended to east Gujarat. The heavy rains in the west United Provinces resulted in unprecedented floods in the Ganga and the Yamuna. The Ganga rose to record levels, overflowing its banks and submerging hundreds of villages thus rendering thousands of people homeless. The most affected districts were Banaras, Allahabad, Kanpur and Lucknow.

The seasonal monsoon trough became accentuated during the next week and, while the strength of the monsoon abated in the west United Provinces, it increased over the region from the north Central Provinces to the east United Provinces and Bihar. Locally very heavy rain occurred in and around Bihar, and this, coming on top of the already overflooded Ganga, resulted in further disasters due to flooding in Bihar and the southeast United Provinces. The monsoon withdrew from northwest India and Western Pakistan on the 13th and from the United Provinces and Central India in the beginning of the third week.

The Peninsula outside the west coast experienced unusually dry weather during the first fortnight of the month. A depression developed in the Bay of Bengal with its centre about 150 miles east of Vizagapatam on the 19th morning. Moving westwards, it crossed the coast on the night of the 21st moved across the Deccan as a low pressure area and emerged into the Arabian Sea where it lay as a depression centred 50 miles west of Harnai on the 23rd morning. It rapidly intensified into a severe cyclone while moving north-westwards upto Lat. 22°N. Thereafter it moved away westwards towards the Arabian coast and became unimportant by the 1st October. The high winds associated with this storm were responsible for the foundering of three countrycraft off Ratnagiri and for the sinking of some barges in the Bombay docks. During the movement of the storm across the Peninsula, the monsoon strengthened along the Orissa coast, in Chota Nagpur, the east Central Provinces and the Peninsula outside southeast Madras. Locally very heavy rain was recorded in the Bombay, Deccan and the Konkan. In the later stages, the storm gave fairly widespread light to moderate rain in south and west Kathiawar.

Another depression formed in the Bay on the 26th with its centre about 200 miles east of Vizagapatam. Moving northwest-wards, it weakened into a trough of low pressure off Orissa-West Bengal coast by the 29th. The trough moved into Gangetic West Bengal on the 30th and became unimportant by the next day. Associated with this trough, widespread rain fell in northeast India, the Eastern Pakistan, east Central India, the east Central Provinces and the north Madras coast on the 29th.

Three western disturbances moved across the country during the month of which only two were active ; the first caused scattered showers in the North-West Frontier Province, the northwest Punjab and Kashmir between the 9th and 12th and the third was responsible for local showers in the same regions during the last week.

The total rainfall for the month was in large excess in central India and in slight to moderate excess in Chota Nagpur, Bihar, the United Provinces, east Rajputana, Berar and north Hyderabad. It was normal in Assam, Orissa, the Central Provinces, the Konkan, the Bombay Deccan, south Hyderabad, the Madras Deccan and the north Madras Coast. Elsewhere it was in slight to moderate defect, except in west Rajputana where it was in large defect. Averaged over the plains of the country the month's rainfall was 8 per cent. in excess.

(*Price Re.* 1/-/-)

The mean maximum temperature was below normal in Berar, the west Central Provinces, and north Hyderabad and normal elsewhere. The mean minimum temperature was normal over the whole country. Relative humidity was in excess in the west United Provinces and Central India and normal elsewhere. The cloud amount was in excess in northeast India outside Assam, in the United Provinces, the Central parts of the country and southeast Madras and in defect in the East Punjab and west Rajputana. Elsewhere it was normal.

Data from the Bay Islands and Kashmir are not available.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amount for the 13 chief political divisions and the 25 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N. B :—**The Indian Standard Time used in this publication is 5 hrs 30 mins. in advance of Greenwich Mean Time.**

POONA 5, S. BASU,

The 14th January, 1949. for *Director General of Observatories.*

—	Rainfall				Departure from normal of				
							8 hrs I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION.	"	"	"		°	°	mb.	%	
Assam ..	9·04	9·03	+0·01	0	+1·6	+0·6	+0·6	—2	+0·7
West Bengal ..	10·02	11·55	—1·53	—13	—0·3	+0·3	+0·4	+2	+1·4
Orissa ..	8·34	9·20	—0·86	—9	—0·9	+0·2	+0·2	+2	+1·3
Bihar ..	11·51	8·39	+3·12	+37	—0·2	+0·3	+0·9	+3	+1·5
United Provinces	8·92	7·05	+1·87	+27	—1·3	+0·8	+1·9	+6	+2·1
East Punjab ..	3·11	4·18	—1·07	—26	+0·2	+0·5	+1·7	+5	—0·9
Rajputana ..	2·65	2·62	+0·03	+1	+0·3	+0·6	+0·2	+1	—0·5
SUB-DIVISION									
1. Bay Islands	28·63	17·40	+11·23	+65	+0·8	+0·5	0	0	+1·4
2. Assam ..	9·04	9·03	+0·01	0	+1·6	+0·6	+0·6	—2	+0·7
3. West Bengal	10·02	11·55	—1·53	—13	—0·3	+0·3	+0·4	+2	+1·4
4. Orissa ..	8·34	9·20	—0·86	—9	—0·9	+0·2	+0·2	+2	+1·3
5. Chota Nagpur	9·34	8·08	+1·26	+16	—0·7	+0·1	+0·8	+3	+1·5
6. Bihar ..	12·71	8·56	+4·15	+48	+0·4	+0·6	+1·1	+2	+1·6
7. United Provinces, East.	10·48	7·69	+2·79	+36	—1·7	+0·7	+1·3	+5	+2·8
8. United Provinces, West	7·37	6·40	+0·97	+15	—0·9	+0·9	+2·6	+6	+1·2
9. East Punjab	3·11	4·18	—1·07	—26	+0·2	+0·5	+1·7	+5	—0·9
10. Kashmir ..	Data incomplete.								
11. Rajputana, West.	0·02	1·10	—1·08	—98	+1·4	+0·7	+0·5	+1	—1·1
12. Rajputana, East	5·28	4·14	+1·14	+28	—0·6	+0·5	0	+2	+0·1
13. Gujarat ..	2·47	3·71	—1·24	—33	+0·3	+1·4	+0·2	—1	—0·1
14. Central India, West.	11·80	7·81	+3·99	+51	—1·7	+0·1	+0·5	+6	+2·1

—	Rainfall				Departure from normal of				
							8 hrs I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION—*contd.*	"	"	"		°	°	mb.	%	
8. Bombay ..	6·14	6·51	—0·37	—6	—0·2	+0·5	+0·3	+1	+0·1
9. Central India..	13·82	7·58	+6·24	+82	—1·7	0	+1·2	+7	+2·2
10. Central Provinces and Berar.	8·48	8·12	+0·36	+4	—2·1	+0·6	+0·6	+4	+2·1
11. Hyderabad ..	8·41	7·46	+0·95	+13	—1·5	—0·1	+0·1	+3	+0·9
12. Mysore ..	2·81	5·60	—2·79	—50	—1·1	—0·1	—0·2	+2	+0·3
13. Madras ..	4·66	5·35	—0·69	—13	0	+0·4	—0·1	—1	+0·9
Mean of India ..	7·24	6·68	+0·56	+8	—0·6	+0·4	+0·6	+2	+0·9
SUB-DIVISION—*contd.*									
15. Central India, East	16·52	7·28	+9·24	+127	—1·8	—0·1	+2·0	+8	+2·4
16. Berar ..	6·96	5·92	+1·04	+18	—3·5	0	+0·5	+5	+1·6
17. Central Provinces, West.	8·30	7·78	+0·52	+7	—2·1	+0·8	+0·9	+4	+2·4
18. Central Provinces, East	9·30	9·42	—0·12	—1	—1·4	+0·7	+0·3	+4	+2·0
19. Konkan ..	11·24	10·52	+0·72	+7	—0·5	+0·1	+0·2	+3	—0·3
20. Bombay Deccan.	7·78	7·71	+0·07	+1	—0·6	—0·3	+0·4	+3	+0·5
21. Hyderabad, North.	9·65	8·05	+1·60	+20	—2·9	—0·3	+0·5	+4	+0·8
22. Hyderabad, South	6·75	6·67	+0·08	+1	—0·1	+0·1	—0·3	+2	+0·9
23. Mysore ..	2·81	5·60	—2·79	—50	—1·1	—0·1	—0·2	+2	+0·3
24. Malabar ..	6·31	7·65	—1·34	—18	+0·1	—0·2	+1·0	+1	+0·1
25. Madras, South-east.	2·97	3·95	—0·98	—25	+0·9	+1·0	—0·7	—3	+1·2
26. Madras, Deccan	5·23	5·58	—0·35	—6	—1·7	—0·3	—0·2	0	+0·9
29. Madras Coast, North.	6·13	6·09	+0·04	+1	—0·5	+0·1	+0·1	+1	+0·8

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative hum %	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
BAY ISLANDS—																					
Port Blair ..	259	1000·8	+0·3	998·6	83·9	+0·8	87	10	74·3	+0·5	71	22, 24	79·6	78·2	76·6	75·8	29·9	0	29·3	87	0
ASSAM—																					
Dibrugarh ..	348	995·3	—0·7	990·9	88·8	+2·4	96	5, 6	75·6	+1·1	74	7 days	79·8	83·9	77·3	79·4	30·9	+1·1	32·2	89	0
Sibsagar ..	317	996·4	—0·5	991·9	88·8	—1·2	96	6	76·9	+0·7	73	20	80·5	84·7	78·1	79·7	31·6	+0·2	32·4	90	0
Tezpur ..	258	998·5	—0·6	994·1	90·2	+1·4	96	4	76·9	+0·4	74	30	80·4	85·2	78·0	80·0	31·6	+0·5	32·7	90	+1
Gauhati ..	182	1000·4	—0·5	996·4	89·9	+0·5	94	2, 6	77·2	+1·0	74	30	81·8	84·7	78·3	79·0	31·5	+0·4	31·3	87	+2
Dhubri* ..	115	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Silchar ..	96	1004·3	—0·3	1000·0	88·8	—0·9	92	5 days	76·7	+0·5	75	4 days	80·5	84·3	77·9	79·9	31·5	0	32·8	89	+2
WEST BENGAL—																					
Dum Dum ..	33	1003·7	..	1000·6	88·9	..	92	5 days	79·0	..	76	3	82·8	84·7	78·6	78·6	31·6	..	30·7	82	..
Calcutta ..	21	1004·2	—1·0	1000·9	89·5	—0·4	94	16, 17	79·1	+1·1	77	3	81·9	84·1	79·8	80·0	34·1	+1·5	33·2	91	+8
Saugor Island ..	10	1004·2	—1·0	1001·4	85·9	—1·8	88	18	79·0	—0·5	77	5 days	82·3	83·3	79·6	79·5	33·4	+0·5	32·6	88	+4
Sandheads ..	28	1004·1	—0·7	1001·5	..	..	..	..	..	..	..	..	83·3	84·1	82·5	83·2	37·4	+4·5	38·3	97	+15
Midnapore ..	149	999·1	—1·5	996·1	89·9	+0·2	94	16	78·2	+0·1	74	3	81·3	84·1	79·1	79·5	33·1	+1·4	32·3	91	+6
Contai ..	35	1003·1	..	1000·0	..	..	..	..	78·6	..	76	3	82·3	83·1	79·7	79·8	33·5	..	33·1	89	..
Burdwan ..	106	1001·1	—1·1	997·7	89·3	—0·7	93	17	79·0	+0·4	77	3, 29	82·7	84·7	79·4	79·4	32·7	+0·4	31·8	86	0
Krishnagar ..	48	1003·4	—0·7	1000·1	90·6	+0·5	94	16, 17	77·9	—0·1	73	28	82·6	85·3	80·0	80·2	33·8	+0·9	32·9	89	+5
Asansol ..	414	990·6	—0·7	987·1	88·7	—1·2	91	12, 19	77·7	+0·7	74	29	82·1	83·4	79·1	79·3	32·6	+0·7	32·4	87	+1
Berhampore ..	62	1002·8	—1·2	999·5	90·5	+0·9	94	17, 18	78·8	+0·2	76	26	84·2	85·2	79·8	80·0	32·7	—0·2	33·3	82	—3
Malda ..	103	1001·8	—0·6	998·4	88·4	—0·6	92	19	79·0	+0·7	74	30	83·8	84·8	79·8	79·6	32·9	+0·1	32·2	83	—1
Jalpaiguri ..	271	997·1	—0·5	993·4	88·2	+0·1	93	6, 24	75·6	—0·3	73	30	78·4	84·2	76·1	78·6	29·6	—1·3	30·9	89	—1
ORISSA—																					
Balasore ..	65	1002·5	—0·8	999·3	87·2	—1·6	91	15, 16	78·5	+0·5	75	24	82·2	83·7	79·1	79·4	32·6	+0·3	32·2	87	+1
Chandbali ..	20	1004·0	—0·6	1000·9	87·8	—1·0	92	15, 16	78·5	+0·2	75	11	81·9	84·2	79·0	79·7	32·5	+0·1	32·6	87	+1
Puri ..	20	1004·0	—0·9	1001·0	88·5	—0·1	92	3, 17	79·4	—0·3	76	8, 9	82·9	84·5	79·3	80·2	32·6	+0·3	32·1	85	+2
Gopalpur ..	56	1002·8	—1·0	999·7	88·2	—0·4	92	18	79·0	+0·6	74	18	82·4	84·2	79·0	79·8	32·3	+0·4	33·7	85	+1
Cuttack ..	87	1001·5	—1·4	998·1	88·7	—1·3	94	18	78·4	+0·6	76	13, 18,29	81·6	84·7	78·3	79·7	31·5	+0·4	32·3	85	+2
Angul ..	455	969·1	—0·9	965·8	87·9	—0·9	92	15, 17, 18	77·0	+0·5	75	5, 27	79·7	82·4	76·5	77·3	29·8	—0·5	29·7	86	+1
Sambalpur ..	486	988·0	—1·2	984·6	88·0	—0·7	92	26	76·7	—0·2	74	13	79·7	83·6	77·2	78·7	30·7	+0·5	31·2	89	+4
CHOTA NAGPUR																					
Jamshedpur ..	423	990·1	—0·7	986·7	88·5	—1·4	92	18	77·6	0	74	14	81·6	83·6	77·6	78·3	30·5	+0·1	30·6	83	—1
Chaibasa ..	742	979·1	—0·9	975·7	88·6	—0·7	91	9, 16	76·4	+0·4	73	13	79·7	83·5	76·9	78·4	30·2	+0·7	30·9	88	+4
Ranchi ..	2,150	932·6	—0·9	929·4	84·4	+0·3	89	4	71·9	0	69	15	75·6	79·1	73·2	74·6	26·5	+0·7	27·1	89	+5
Hazaribagh ..	2,006	937·4	—0·8	964·3	84·8	+0·1	89	20	72·3	0	69	14, 15	76·0	79·0	73·7	74·5	27·0	+1·1	27·0	89	+5
Daltonganj ..	725	979·6	—1·2	976·0	87·8	—1·9	91	2, 7, 9	75·4	0	71	14	80·5	82·2	76·9	77·7	30·0	+1·3	30·5	84	+2
Dhanbad ..	839	976·4	..	..	88·5	..	91	26	76·0	..	74	4 days	80·7	..	77·5	..	30·9	..	..	86	..
BIHAR—																					
Purnea ..	124	1001·4	—0·5	997·6	89·6	+0·6	93	20	77·9	+0·5	74	12	82·1	85·0	79·1	79·7	32·6	+0·2	32·1	87	—1
Saharsa ..	156	999·9	..	996·0	..	..	..	..	..	..	..	..	82·5	85·0	79·7	80·3	33·3	..	33·3	88	..
Darbhanga ..	161	999·8	—0·5	996·1	90·2	+1·0	95	20	78·1	—0·4	75	9, 27,28	82·8	86·7	79·5	80·9	32·8	+1·7	33·3	86	+6
Motihari ..	218	997·9	—0·2	994·0	89·4	—0·2	95	20	77·6	+0·6	75	20, 25,27	84·4	84·7	79·6	80·8	32·0	+0·3	34·0	81	—2
Patna ..	173	998·6	—1·0	995·2	89·7	0	94	1, 20	79·7	+0·8	75	26, 27	84·0	86·3	79·5	79·7	32·3	+0·3	31·7	81	—1
Dehri ..	352	992·0	..	998·4	88·2	..	92	26	77·7	..	73	18	80·9	83·9	78·3	79·8	32·2	..	32·9	90	..
Gaya ..	365	991·5	—1·2	987·9	89·9	—0·6	93	4 days	78·4	+1·3	71	13	82·0	85·8	79·1	81·3	32·6	+2·3	34·4	87	+9
Naya Dumka ..	489	988·4	—0·7	984·8	88·8	—0·3	92	18	77·2	+0·5	75	4 days	82·9	84·3	78·5	79·1	31·3	+0·4	31·7	81	—3
Sabour ..	122	1000·7	—0·2	997·0	90·2	+0·9	93	6, 19	79·1	+0·8	75	12	83·8	84·9	80·2	80·7	33·6	+1·1	34·0	84	—2

* Data not reliable except rainfall.

Cloud amount, (tenths of sky).			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
9·1	+1·4	9·5	28·63	+11·23	5·76	20	24	+2·1	10·7	+0·3	0	0	0	0	0	11	16	2	1	0	0	0	0	0	10	17	2	1	BAY ISLANDS— Port Blair
																													ASSAM—
8·9	+1·6	6·0	5·17	—8·68	1·46	11	9	—6·4	1·1	+0·2	4	2	5	0	1	1	5	7	5	3	0	0	1	1	2	1	0	22	Dibrugarh.
9·3	+0·9	7·0	13·43	+1·60	3·78	6	12	—2·8	2·0	+0·3	4	9	1	2	1	4	0	2	7	4	6	1	1	4	2	1	0	11	Sibsagar.
7·5	+0·2	5·3	10·86	+2·58	3·55	12	10	—2·7	1·1	—0·3	0	3	14	3	1	0	3	0	6	0	4	6	2	0	2	3	0	13	Tezpur.
7·2	+0·4	6·8	4·84	—1·75	1·75	9	6	—3·3	1·9	+0·6	3	5	5	6	4	3	0	2	2	2	6	2	5	2	10	2	1	0	Gauhati.
..	..	..	8·78	—5·24	3·63	12	9	—3·5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Dhubri.
8·3	+1·0	6·2	16·70	+1·38	3·20	19	15	—1·2	1·0	—0·3	2	2	5	1	0	1	2	0	17	0	0	2	0	1	0	12	0	15	Silchar.
																													WEST BENGAL—
8·4	..	8·6	8·36	..	3·53	3	11	..	6·2	..	0	0	7	10	7	2	0	0	4	0	0	3	8	12	5	0	0	2	Dum Dum.
7·7	+0·6	8·4	6·50	—3·45	0·94	3	13	—0·2	2·3	—0·5	0	1	7	6	4	4	0	0	8	0	0	4	4	6	4	0	0	12	Calcutta.
7·8	+0·2	7·3	12·63	+2·28	2·31	4	20	+7·1	10·1	+1·7	1	2	2	6	7	9	1	1	1	0	1	2	6	11	9	1	0	0	Saugor Island.
7·4	+1·1	7·7	5·92	+1·13	1·70	5	5	—3·4	..	..	0	5	2	2	6	9	1	1	4	0	3	4	3	9	9	1	1	0	Sandheads.
7·9	+2·3	8·7	15·63	+7·12	5·88	3	15	+3·1	2·7	+0·8	0	2	9	3	4	3	2	0	7	0	0	3	7	11	5	1	0	3	Midnapore.
7·8	..	7·1	12·04	..	2·49	3	18	..	5·9	..	3	0	7	2	9	5	1	0	3	3	0	1	3	17	4	2	0	0	Contai.
7·2	+0·5	7·8	6·51	—2·29	2·59	3	9	—2·3	4·5	+2·7	0	2	16	3	5	4	0	0	0	0	3	10	7	6	3	0	0	1	Burdwan.
7·9	+1·2	8·5	2·57	—5·39	0·61	29	7	—4·2	2·5	—0·3	0	4	8	10	4	0	0	0	4	0	1	2	12	6	0	0	0	9	Krishnagar.
7·9	+1·4	8·1	7·76	—0·49	4·04	3	10	—0·7	3·8	—0·2	1	1	8	5	3	2	0	1	9	0	0	9	10	4	1	1	0	5	Asansol.
8·6	+1·8	7·3	9·71	+0·57	3·07	1	14	+2·5	2·0	—0·5	1	0	11	3	8	0	0	0	7	0	2	8	5	4	4	1	0	6	Berhampore.
7·2	+2·0	7·4	9·69	—1·83	2·39	12	8	—3·6	3·4	—0·5	0	4	14	10	1	1	0	0	0	1	1	8	12	4	0	0	0	4	Malda.
7·9	+2·4	7·7	20·87	—0·35	3·17	20	17	+0·6	3·3	+1·8	4	15	6	0	1	1	0	1	2	3	6	4	6	1	2	1	1	6	Jalpaiguri.
																													ORISSA—
8·8	+2·3	9·3	8·82	—2·24	1·50	28	12	—0·9	3·8	+1·3	0	2	1	3	3	9	0	4	8	0	0	2	8	7	6	1	0	6	Balasore.
6·7	0	7·3	8·33	—0·59	1·65	5	13	—1·1	4·7	—0·4	5	0	3	2	9	3	6	0	2	0	1	6	10	6	4	2	1	0	Chandbali.
7·7	+1·8	8·0	8·66	—0·39	1·40	11	16	+3·9	9·7	+1·6	6	5	0	3	2	6	5	1	2	0	1	1	9	4	14	1	0	0	Puri.
8·2	+3·0	8·5	5·68	—1·90	1·30	18	9	—0·5	..	..	5	2	1	0	4	6	1	3	8	2	3	2	4	8	9	1	0	1	Gopalpur.
7·0	+0·7	8·1	12·87	+3·11	2·12	28	17	+4·4	2·3	+0·5	0	0	1	0	0	0	0	0	29	0	0	1	1	2	1	1	0	24	Cuttack.
7·7	+0·9	7·9	5·34	—2·01	1·05	27	11	—0·1	4·2	+0·4	3	3	2	2	4	2	7	3	4	0	6	6	2	3	1	9	3	0	Angul.
8·3	+2·0	8·9	6·03	—3·02	1·74	6	14	+2·6	4·1	+1·3	0	8	4	0	3	12	3	0	0	1	4	6	1	4	6	5	1	2	Sambalpur.
																													CHOTA NAGPUR—
7·1	0	8·4	9·45	+2·34	2·97	3	14	+2·6	3·1	0	0	1	6	5	1	5	4	0	8	0	3	6	8	4	2	4	2	1	Jamshedpur.
8·4	+2·0	9·4	6·83	—1·08	1·18	6	14	+2·4	1·6	0	0	10	0	4	0	9	0	0	7	0	6	1	4	1	3	3	2	10	Chaibasa.
7·3	+0·9	(5) 6·4	8·31	—0·99	1·85	3	9	—3·3	2·3	—1·7	0	1	3	4	7	1	1	0	13	0	0	3	3	5	0	2	0	16	Ranchi.
8·4	+1·4	8·2	9·64	+0·70	1·97	2	16	+4·5	4·7	—0·6	1	1	2	10	6	1	1	2	6	1	2	5	9	8	0	1	2	2	Hazaribagh.
7·7	+3·3	8·3	12·45	+5·31	1·81	11	18	+8·7	2·7	—0·1	0	0	13	2	1	1	3	0	10	2	5	9	1	1	0	5	0	7	Daltonganj.
..	..	..	5·12	..	1·42	2	12	..	4·9	..	1	1	14	9	1	1	0	1	2	..	..	..	..	..	..	..	..	..	Dhanbad.
																													BIHAR—
7·4	+1·5	6·9	16·17	+4·57	3·63	7	11	—0·5	2·8	+0·9	2	4	17	4	0	1	0	1	1	0	0	12	3	1	0	0	0	14	Purnea.
7·1	..	7·5	9·98	..	1·44	13	15	..	4·1	..	0	10	15	2	0	0	0	0	3	0	2	8	4	0	0	0	0	16	Saharsa.
6·5	+0·6	7·1	11·48	+2·24	4·02	9	13	+3·6	4·2	+1·6	0	11	17	2	0	0	0	0	0	0	7	11	11	0	1	0	0	0	Darbhanga.
7·3	+2·4	7·4	6·36	—2·69	2·35	20	8	—1·1	2·5	—0·5	0	0	29	0	0	0	0	0	1	0	0	13	0	1	0	0	0	16	Motihari.
8·0	+1·9	7·1	14·99	+6·39	4·54	14	10	+0·8	4·5	+1·2	0	10	12	4	0	1	0	0	3	0	9	15	1	0	0	0	0	5	Patna.
7·3	..	8·5	16·28	+8·89	2·94	15	17	+8·1	3·2	..	3	3	3	9	2	1	1	2	6	0	9	4	1	0	1	1	5	9	Dehri.
7·5	+2·9	7·7	11·68	+4·18	4·06	13	11	+1·7	5·6	+1·1	2	3	13	2	2	3	0	1	4	1	12	8	0	2	1	1	1	4	Gaya.
5·8	+0·1	7·1	3·62	—5·97	0·88	13	10	—2·5	3·0	+1·1	1	2	9	17	0	0	1	0	0	0	4	11	13	0	0	0	0	2	Naya Dumka.
8·1	+1·0	8·2	8·13	—0·23	3·40	12	10	+0·2	4·6	+0·1	1	0	20	7	2	0	0	0	0	0	2	14	8	1	0	0	0	5	Sabour.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F.				Minimum temperature, °F.				Dry bulb temperature, °F		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
U. P., EAST—																						
Gonda ..	360	992·6	..	986·5	87·9	—3·2	95	20	77·0	—0·1	72	25, 27	80·8	84·7	77·8	79·6	31·1	+0·2	32·2	88	+4	8
Gorakhpur ..	254	996·0	—0·8	992·7	89·9	—0·5	94	4 days	78·2	+1·0	73	30	82·4	85·5	78·5	79·6	31·3	+0·2	31·6	84	0	7
Banaras ..	250	995·3	—1·3	992·1	89·3	—1·7	94	2	77·9	+0·6	73	19	81·7	76·0	79·4	80·7	33·4	+2·7	33·5	90	+7	7
Allahabad (Bamrauli).	322	993·0	—1·2	990·0	89·2	—2·3	94	19,21	77·6	+1·0	72	25	81·0	85·0	78·7	79·4	32.5	+2·1	31·7	90	+8	7
Fatehpur ..	375	991·3	..	988·0	89·3	—1·2	96	20	77·6	+0·9	72	24, 25	80·6	85·1	78·5	80·3	32·2	+1·3	32·7	89	+5	8
Kanpur ..	413	990·3	—0·6	987·0	89·8	—1·1	96	20	77·8	+1·6	72	24, 25	80·6	86·3	78·2	79·2	31·8	+2·2	31·1	90	+5	7
Lucknow ..	371	992·3	—0·1	989·4	89·6	—2·3	95	20	77·3	+0·8	73	24, 26	80·6	84·9	78·8	80·9	33·0	+3·0	34·3	92	+10	8
Bahraich ..	407	991·3	+0·1	988·1	90·0	—1·2	94	20, 21	76·4	—0·1	70	24, 25	81·4	85·3	78·1	79·7	31·3	+1·5	32·1	86	+5	7
U. P., WEST—																						
Jhansi ..	823	976·1	—1·5	973·9	89·4	—2·3	95	20, 22	75·4	0	72	24	98·2	85·7	75·6	78·0	29·1	+2·1	29·2	90	+13	7
Agra ..	553	985·7	—0·5	983·2	91·3	—1·6	98	8	76·8	+0·6	73	27	80·2	87·7	76·4	78·4	29·2	+1·9	29·4	83	+5	6
Mainpuri ..	516	986·2	—1·2	983·6	91·2	—1·7	98	21	77·5	+1·9	72	24	81·9	87·1	78·9	79·2	32·5	+4·5	30·5	86	+7	6
Aligarh ..	615	983·5	..	980·8	91·6	—0·7	99	22	76·3	+0·4	73	24, 27,30	79·8	88·7	76·7	78·1	30·0	+2·3	28·2	86	+12	6
Bareilly ..	568	985·2	—0·7	982·0	90·7	—0·2	96	21	76·7	+1·0	71	24, 25	82·3	86·6	78·3	78·7	31·1	+2·3	29·7	83	0	7
Roorkee ..	899	972·9	—0·8	971·0	90·3	—0·2	94	4 days	74·6	+1·5	70	24	78·6	87·2	76·3	79·3	29·9	+3·4	30·3	88	+6	6
Dehra Dun ..	2,239	930·2	—0·3	928·0	86·3	+0·4	88	6 days	70·5	+1·0	65	24	75·3	81·8	71·7	74·7	25·1	+1·6	26·5	84	+1	7
EAST PUNJAB—																						
New Delhi ..	714	979·6	—1·3	977·1	92·6	—0·9	97	22	75·9	+0·4	72	4 days	80·2	89·1	74·7	77·7	25·8	—0·1	25·8	77	+3	6
Hissar ..	725	979·6	—0·6	976·9	96·8	+0·1	102	22	74·5	0	68	28, 29	78·7	94·1	73·1	77·8	25·3	+1·2	25·3	75	+7	4
Ambala ..	892	973·8	—0·9	970·3	94·3	+0·3	99	21	75·8	+1·8	71	11, 24,28	78·4	91·0	75·4	77·5	28·7	+2·9	22·4	86	+9	5
Ludhiana ..	812	976·6	—0·8	974·2	96·3	+1·4	102	22	74·8	0	69	28	80·3	91·9	75·2	77·7	27·7	+2·6	26·2	77	+2	5
KASHMIR—																						
Srinagar ..	5,205	839·6	—0·4	836·3	82·5	—1·0	90	6, 8	54·2	+0·7	46	30	60·3	78·2	57·4	64·1	14·8	—0·2	15·3	84	—4	4
Gulmarg (R) ..	8,569																					
Dras (R)	10,059																					
Leh (R) ..	11,503																					
Skardu (R) ..	7,505																					
Gilgit (R) ..	4,890																					
Miagar (R) ..	10,190																					
RAJPUTANA, WEST—																						
Sri Ganganagar	580	984·0	..	981·1	100·8	+0·8	105	23	74·8	+0·7	68	20	80·4	99·2	72·8	75·8	24·1	+1·3	19·5	68	+5	33
Bikaner ..	734	979·4	—0·7	976·3	101·4	..	106	23	79·0	..	72	28	81·4	100·2	73·0	84·0	23·9	..	32·4	63	..	49
Phalodi ..	800	978·4	..	977·1	98·1	..	104	23	73·8	..	69	15, 16	78·3	95·5	72·9	76·9	25·2	..	27·7	76	..	42
Jaisalmer† ..	793	977·9	..	974·8	99·4	..	106	23, 25	75·7	..	71	5 days	79·0	97·3	72·9	77·6	25·0	..	23·1	74	..	39
Jodhpur ..	736	980·4	+0·8	977·3	95·6	+1·4	103	23	75·7	+0·9	72	5 days	79·2	93·6	71·9	74·2	23·5	—1·3	20·0	69	—7	30
Barmer ..	638	983·4	—0·1	980·7	97·2	+2·0	105	23	76·3	+0·6	72	2	78·6	94·5	74·1	77·8	26·6	+1·5	24·9	79	+5	40
RAJPUTANA, EAST																						
Sikar ..	1,406	957·2	..	954·3	96·6	..	101	23	73·7	..	68	16, 17	78·5	92·9	71·1	73·9	22·6	..	20·0	68	..	39
Jaipur ..	1,431	956·8	—1·2	954·1	92·7	—0·4	100	22	73·7	+0·9	69	26, 28	79·5	89·2	72·5	74·7	24·1	+0·3	22·8	71	—2	5
Ajmer ..	1,593	951·5	—1·1	949·0	92·0	+2·0	99	22	76·3	+1·8	71	26	78·5	89·4	70·7	73·7	22·4	—1·5	21·4	68	—2	4
Kotah ..	843	976·4	—0·8	973·7	89·9	—2·4	96	22	75·5	—0·9	71	24	78·8	87·5	74·1	77·1	26·3	+0·8	21·0	80	+8	6
Jhalawar ..	1,053	968·8	—1·0	966·3	87·9	—1·5	94	22	73·7	+0·4	72	29, 30	76·5	85·8	73·7	75·9	27·4	+0·3	25·9	87	+3	6
Rajsamand ..	1,882	943·0	..	..	..	..	..	..	73·6	..	70	4 days	77·2	..	72·9	..	25·8	..	..	81	..	..
Udaipur ..	1,910	941·6	..	939·7	87·3	..	95	22	71·9	..	66	18	76·0	82·4	70·9	73·4	23·8	..	24·5	77	..	6

† Observations for 23 days.

(R)—Register not received.

Cloud amount, (tenths of sky) (0·10″ or more)			Rainfall, inches.				Number of rainy days		Wind velocity miles per hour		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST—
6·6	+1·4	7·5	10·75	+1·61	1·32	3	19	+8·8	3·0	—0·1	2	1	20	1	0	1	2	0	3	0	2	9	0	1	0	2	1	15	Gonda.
6·0	+1·7	6·0	6·73	—1·79	1·06	13	10	+0·7	2·6	+0·9	1	3	20	1	0	0	0	0	5	1	4	13	0	2	0	0	0	10	Gorakhpur.
8·1	+2·8	7·3	16·86	+9·64	4·68	15	13	+4·3	..	..	4	4	10	1	0	2	4	0	5	4	8	5	1	0	4	1	2	5	Banaras.
8·5	+2·9	8·3	9·14	+0·78	2·04	12	11	—1·5	3·5	—0·2	2	3	6	2	1	1	1	3	11	2	5	5	2	0	1	3	5	7	Allahabad (Bamrauli).
7·1	+2·5	6·4	6·37	+0·86	2·02	4	11	+2·4	1·1	—1·6	0	2	11	2	0	2	1	3	9	0	5	3	0	0	0	0	3	19	Fatehpur.
7·5	+4·2	6·8	7·63	+0·84	1·97	27	8	+0·7	4·6	—0·5	0	8	9	2	0	1	1	1	8	4	5	6	2	1	2	2	4	4	Kanpur.
7·7	+3·2	6·6	14·20	+6·80	3·67	28	12	+4·1	1·5	—0·2	0	1	13	7	2	1	0	0	12	0	2	10	1	0	0	0	1	16	Lucknow.
7·2	+3·7	7·8	12·15	+3·57	2·70	11	15	+8·2	3·5	+1·5	0	2	7	7	0	1	0	0	13	1	3	4	3	0	0	2	1	16	Bahraich.
																													U. P., WEST—
6·2	+2·6	6·2	12·79	+6·89	4·93	8	11	+4·0	3·9	+0·9	0	2	1	0	0	1	8	3	15	1	2	1	0	0	0	17	3	6	Jhansi.
4·5	+0·6	3·3	7·76	+3·18	3·56	8	8	+2·4	2·1	—1·3	3	2	3	1	0	0	2	5	14	3	3	2	0	0	0	0	4	18	Agra.
6·0	+1·7	5·4	4·15	—0·94	1·45	24	8	+1·6	1·9	+0·2	2	0	7	3	0	0	4	4	10	0	1	3	4	0	0	7	8	7	Mainpuri.
4·3	+1·0	3·9	4·98	—0·32	1·41	9	7	+0·9	2·8	—1·1	0	0	7	1	0	0	5	4	13	3	4	3	0	0	0	2	10	8	Aligarh.
6·4	+2·3	6·0	9·17	+1·67	2·37	24	8	+1·2	1·8	+0·3	1	4	6	4	1	1	1	2	10	5	2	3	5	1	2	3	2	7	Bareilly.
3·8	+0·2	3·3	4·85	—1·52	1·80	8	7	+1·0	1·6	—0·1	0	1	6	17	0	0	0	0	12	0	2	0	8	0	1	0	8	11	Roorkee.
4·9	+0·2	4·3	11·78	+1·16	1·87	10	12	+1·3	1·2	—0·3	0	0	1	0	0	3	0	0	26	1	2	0	0	2	3	7	1	14	Dehra Dun.
																													EAST PUNJAB—
3·9	+0·7	3·6	9·28	+4·44	6·38	8	5	+0·4	2·9	..	0	1	5	2	1	5	7	2	7	2	1	8	1	1	0	2	8	7	New Delhi.
0·6	—1·4	0·9	..	—2·81	0	..	0	—3·1	4·5	+0·4	0	2	2	6	2	6	5	2	5	4	6	1	3	2	0	4	6	4	Hissar.
1·3	—1·8	1·5	1·86	—4·45	0·81	7	4	—0·7	..	..	0	2	0	5	0	0	0	11	12	0	1	0	1	0	0	0	21	7	Ambala.
1·1	—1·2	2·3	1·31	—2·64	0·65	11	4	+0·2	1·4	+0·2	0	0	4	3	2	1	0	0	20	0	3	0	1	1	0	1	3	21	Ludhiana.
																													KASHMIR—
2·6	—0·3	2·1	1·52	—0·01	0·95	12	2	—1·5	2·0	—0·2	0	0	1	12	3	1	3	1	9	0	2	0	3	0	0	7	8	10	Srinagar.
																													Gulmarg. (R)
																													Dras. (R)
																													Leh. (R)
																													Skardu. (R)
																													Gilgit. (R)
																													Misgar. (R)
																													RAJPUTANA, WEST—
0	—0·9	0·7	0	—0·12	0	..	0	—0·5	4·0	—1·6	0	0	5	5	6	8	4	0	2	5	2	0	1	1	3	10	6	2	Sri Ganganagar.
0·2	—1·7	1·1	0	—1·31	0	..	0	—2·1	5·5	+0·1	0	0	0	4	0	18	0	7	1	0	4	0	2	0	12	0	9	3	Bikaner.
2·3	..	3·2	0	—0·95	0	..	0	—1·7	10·4	..	0	0	0	3	2	16	8	0	1	2	3	0	0	6	12	5	2	0	Phalodi.
1·6	..	2·9	0	..	0	..	0	..	11·4	..	0	0	3	0	0	20	0	6	0	1	3	0	4	0	15	0	0	0	Jaisalmer.†
3·0	—1·0	4·4	0·07	—2·33	0·06	24	0	—2·8	3·1	—4·2	0	3	1	1	4	12	4	1	4	1	3	0	0	1	13	6	2	4	Jodhpur.
2·7	—0·6	3·3	0·01	—0·72	0·01	29	0	—1·4	6·2	+0·5	0	0	0	1	5	8	8	4	4	0	1	1	2	3	14	3	3	3	Barmer.
																													RAJPUTANA, EAST—
1·9	..	3·7	1·87	..	1·74	7	2	..	3·0	..	0	0	2	0	1	3	8	1	15	2	0	5	0	0	4	8	4	7	Sikar.
3·3	—0·2	5·0	3·32	+0·10	2·10	26	3	—1·7	3·8	—0·2	9	0	2	3	0	0	0	8	8	3	4	4	2	0	2	6	6	3	Jaipur.
2·8	—0·7	4·1	0·33	—2·37	0·09	1	0	—4·0	6·4	+2·3	0	0	0	2	0	11	13	0	4	2	3	2	0	0	7	10	3	3	Ajmer.
5·0	+1·2	5·3	9·05	+4·34	2·18	1	7	+1·3	3·9	+1·3	1	5	0	1	0	4	11	4	4	2	4	0	0	0	3	3	10	8	Kotah.
4·6	—0·1	5·8	10·70	+4·47	2·47	3	13	+6·1	3·3	+0·2	0	4	0	0	0	2	13	1	10	4	2	1	0	0	1	11	8	3	Jhalawar.
4·9	..	..	1·15	..	0·67	25	3	..	5·4	..	0	1	1	0	3	12	9	3	1	..	..	..	..	..	..	..	..	..	Rajsamand.
5·6	..	7·1	3·02	—0·83	1·33	27	6	+0·6	3·1	..	3	0	2	0	0	3	9	9	4	2	1	1	0	3	5	13	3	2	Udaipur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F.				Dry bulb temperature, °F.		Wet bulb temperature, °F.		Vapour pressure, millibars.			Relative humi %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
GUJARAT—																					
Deesa*	466																				
Bhuj ..	343	994·2	—0·9	991·8	92·8	+1·0	103	24	76·0	+1·3	71	30	78·6	89·8	74·1	74·6	26·7	—0·2	22·3	80	+1
Dwarka ..	37	1004·6	—1·8	1002·7	85·2	0	96	25	77·3	—0·4	75	28	78·4	82·9	75·9	77·7	29·4	+0·5	30·1	88	0
Jamnagar ..	60	1004·6	—0·6	..	89·6	+0·2	97	24	75·7	+1·2	72	15, 18	79·6	..	76·2	..	29·3	+1·1	..	84	+2
Rajkot ..	432	991·3	—1·2	988·3	93·6	+1·8	101	23	74·7	+2·1	71	4 days	77·5	88·4	74·9	78·0	28·4	+1·7	28·0	89	+5
Veraval ..	26	1005·2	—2·0	1003·2	85·5	..	88	18, 24	76·4	..	71	18	79·3	82·8	76·5	78·2	24·9	..	30·9	88	+1
Surat ..	39	1005·3	—1·3	1003·2	89·8	+1·1	102	23	77·4	+1·5	74	27	80·0	86·3	76·1	77·5	29·0	+0·1	28·2	83	—1
Bhavnagar ..	55	1004·9	—0·8	1001·8	93·5	+1·1	101	23	76·8	+1·9	74	16	79·1	90·4	74·3	77·9	26·8	0	25·4	78	0
Ahmedabad ..	163	1001·2	—0·8	997·8	93·8	+1·2	103	23	77·5	+1·5	73	6, 7	79·3	91·2	74·4	76·7	26·8	—0·4	24·8	79	—2
Dohad ..	1,093	969·2	..	967·1	85·1	—1·0	93	22	72·2	—0·7	66	6	74·8	82·7	73·1	75·1	27·0	+0·1	26·3	89	0
Baroda ..	115	1002·9	..	999·6	92·5	+1·9	100	22	76·3	+1·7	73	4 days	79·2	89·1	75·2	77·6	28·0	—0·2	27·1	83	—1
CENTRAL INDIA, WEST—																					
Neemuch ..	1,626	951·1	—0·8	948·8	85·6	—2·3	94	22	71·7	+0·5	69	6	74·4	82·8	72·2	74·1	26·0	+1·2	25·2	91	+9
Indore ..	1,823	944·5	—1·1	941·9	82·9	—2·5	91	22	70·5	+0·5	67	6	72·8	81·0	70·8	72·5	24·9	+0·1	23·8	91	+4
Bhopal ..	1,643	949·6	—1·0	947·2	85·0	—0·9	93	22	72·4	+0·3	69	4	74·5	81·9	71·6	74·2	25·2	+0·1	25·8	87	+3
Guna ..	1,571	951·8	—0·7	949·4	86·1	—1·0	94	22	70·5	—1·0	69	30	74·8	83·8	73·0	76·8	27·3	+0·6	28·6	93	+7
Gwalior ..	681	981·2	..	978·3	89·5	..	95	21, 22	75·5	..	70	30	80·9	85·3	75·9	77·8	28·4	..	28·0	81	..
Madhosagar ..	757	978·5	..	976·0	89·4	..	95	20, 21,22	77·0	..	73	26, 27	80·1	85·2	75·8	77·3	28·5	..	28·2	81	..
CENTRAL INDIA, EAST—																					
Nowgong ..	750	978·8	—1·2	975·8	88·6	—1·7	94	20, 21	75·1	+0·3	71	24	78·4	85·3	76·1	78·3	29·7	+1·5	29·9	90	+6
Sutna ..	1,041	968·3	—1·4	965·5	86·7	—1·5	91	21, 22	74·9	+0·1	71	12, 13	77·5	83·9	76·4	77·7	30·5	+2·4	29·7	93	+10
Umaria ..	1,506	953·1	..	950·4	84·3	—2·0	89	21	72·4	—0·7	69	13, 17	76·4	79·8	74·5	76·5	28·4	+2·2	29·8	91	+8
BERAR—																					
Buldhana ..	2,133	935·6	..	932·9	80·4	..	85	25, 26	69·0	..	67	4 days	71·1	78·1	68·3	71·9	22·4	..	24·1	86	..
Akola ..	925	974·2	—1·4	971·1	86·1	—3·3	92	21	73·3	+0·2	71	4 days	75·4	83·1	72·4	74·9	25·9	+0·6	25·8	85	+4
Amraoti ..	1,213	964·0	—1·3	961·1	84·5	—3·7	89	9 days	72·3	—0·2	69	6, 9	74·4	80·8	72·1	74·9	25·9	+0·3	25·9	90	+7
C. P., WEST—																					
Khandwa ..	1,044	970·3	—1·2	967·3	85·6	—2·8	92	4 days	73·0	0	68	6	75·8	83·3	72·6	75·1	25·9	+0·3	26·0	85	+1
Hoshangabad ..	992	971·4	—1·7	968·5	84·3	—2·4	92	22	73·2	—0·1	69	6	75·2	82·2	73·1	75·8	26·9	—0·2	27·5	90	+2
Saugor ..	1,808	943·7	—1·2	941·1	83·9	—2·4	90	22	72·5	+1·1	71	4 days	74·7	81·6	72·8	71·7	26·7	+1·8	26·4	91	+8
Jubbulpore ..	1,289	960·8	—1·1	957·8	85·8	—1·3	92	20, 21	73·8	+1·5	71	3 days	77·1	81·8	74·7	75·8	28·2	+1·9	27·7	89	+5
Seoni ..	2,027	936·8	—1·1	934·2	83·4	—1·6	88	20	71·8	+1·4	69	7	76·7	80·1	72·3	74·2	25·2	+0·5	26·6	87	+5
Nagpur ..	1,010	970·6	—1·3	967·5	87·3	—2·5	97	18	74·1	—0·1	69	6	77·2	82·9	73·3	74·9	26·1	+1·2	26·0	83	+8
C. P., EAST—																					
Gondia ..	1,026	970·0	..	966·9	85·7	..	90	18, 19	74·9	..	72	12	77·4	81·7	75·0	77·4	28·5	..	30·1	90	..
Pendra ..	2,040	935·9	—1·3	933·0	83·0	—0·6	87	.. 27	72·2	+1·7	71	5 days	74·7	78·7	73·4	74·7	27·6	+2·0	27·7	94	+9
Champa ..	805	977·1	..	973·7	87·8	..	92	20, 27	76·5	..	72	13	78·8	83·9	76·3	78·4	29·8	..	30·7	89	..
Raipur ..	970	971·0	—1·8	967·7	86·9	—1·2	90	4 days	74·8	—0·2	72	25	78·5	83·9	75·7	77·7	29·1	+0·6	29·6	87	+3
Tildagarh ..	691	980·4	..	976·6	88·2	..	91	3 days	76·1	..	73	30	78·9	83·1	75·5	77·5	28·8	..	29·7	84	..
Kanker ..	1,318	960·6	—0·6	957·4	84·7	—1·2	88	6 days	74·3	+1·4	72	27	76·9	80·7	73·9	75·6	27·2	+0·1	28·0	86	+1
Chanda ..	634	984·0	—1·0	980·8	85·8	—3·1	93	18	74·2	—0·3	71	30	76·9	82·4	74·3	76·1	27·8	—0·3	31·8	87	+4
Jagdalpur ..	1,815	943·9	—1·4	940·9	83·6	—1·1	87	3 days	71·4	+0·9	69	13, 14	75·2	77·8	72·8	74·2	26·6	—0·8	27·3	89	+2

* Data not reliable.

Cloud amount, (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :— 8 hrs. I. S. T.									17 hrs. I. S. T.									STATION.
Mean 8 hours I.S.T.	Departure from normal.	Mean 17 hours I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													GUJARAT—
																													Deesa.*
3·5	—1·3	5·7	0·83	—0·98	0·52	25	2	—0·2	8·6	+1·0	0	1	3	1	1	9	11	4	0	1	3	1	1	0	10	14	0	0	Bhuj.
6·5	+1·2	6·2	7·85	+6·38	4·28	26	4	+2·0	11·6	+3·1	2	1	0	3	1	9	10	3	1	0	2	0	2	1	8	13	4	0	Dwarka.
4·6	+0·1	..	2·52	+0·29	1·00	26, 30	3	+0·3	4·1	—4·9	0	1	1	0	0	1	2	0	25	..	..	..	..	..	..	..	..	..	Jamnagar.
3·7	—1·7	6·3	1·37	—1·97	0·80	24	2	—2·9	11·1	+4·1	1	0	1	3	3	10	9	3	0	3	1	1	1	2	5	9	8	0	Rajkot.
5·4	—0·2	5·3	2·55	+0·06	1·45	25	5	+1·1	10·8	..	1	0	0	0	5	3	10	8	3	0	1	0	0	4	3	16	6	0	Veraval.
7·3	+0·8	6·6	2·63	—2·17	1·51	7	3	—4·4	5·6	+1·8	0	1	1	3	1	10	8	3	3	0	1	0	2	1	24	2	0	0	Surat.
5·7	—0·1	7·9	0·76	—3·10	0·39	26	3	—2·7	5·7	+0·6	0	0	1	2	3	7	13	3	1	2	1	1	4	10	3	6	1	2	Bhavnagar.
5·3	+0·2	7·1	0·90	—3·26	0·34	27	4	—1·2	4·2	+0·7	1	0	1	4	2	6	10	6	0	1	1	0	3	3	5	10	6	1	Ahmedabad.
6·8	—0·3	5·6	4·49	—1·14	3·01	6	4	—3·2	10·7	+4·2	0	1	1	1	1	11	14	0	1	0	1	0	0	2	12	14	1	0	Dohad.
6·2	+0·7	6·5	20·2	—3·94	0·97	28	4	—2·7	2·9	—0·5	0	0	1	1	3	7	4	2	12	1	1	2	1	2	6	4	3	10	Baroda.
																													CENTRAL INDIA, WEST—
8·7	+2·2	7·5	4·94	—0·03	1·70	25	8	+1·7	6·6	+0·6	0	3	1	1	0	0	17	1	7	0	6	1	0	0	7	15	1	0	Neemuch.
7·9	+1·2	7·7	7·96	+1·50	2·97	5	12	+3·6	4·6	+1·0	1	1	1	1	1	2	15	8	0	5	3	1	2	0	3	11	5	0	Indore.
7·8	+2·1	7·1	12·14	+1·72	4·38	5	11	+0·8	6·4	+1·9	0	1	2	1	0	2	14	9	1	1	3	1	1	1	0	12	10	1	Bhopal.
7·3	+2·7	6·6	22·15	+12·74	4·15	6	11	+2·4	5·8	+1·9	0	3	1	1	0	5	5	5	10	1	4	0	1	0	1	6	15	2	Guna.
6·2	..	6·3	8·11	..	1·25	3	11	..	2·6	..	0	0	4	1	0	0	8	10	7	1	2	3	1	2	1	0	11	9	Gwalior.
7·3	..	7·1	6·13	..	1·38	26	12	..	5·4	..	1	4	1	2	0	4	10	5	3	5	7	1	0	2	0	3	10	2	Madhosagar.
																													CENTRAL INDIA, EAST—
7·5	+2·5	7·5	12·53	+6·72	2·56	11	11	+3·8	2·6	+0·8	4	6	0	0	0	9	5	1	5	5	4	2	0	1	4	4	9	1	Nowgong.
7·8	+2·7	7·1	18·54	+11·65	5·84	12	14	+5·1	3·4	+0·1	1	2	5	1	0	4	1	4	12	4	6	4	1	0	0	2	8	5	Sutna.
8·5	+2·0	8·5	18·50	+9·37	2·94	11	16	+5·6	2·8	—0·4	1	0	5	1	1	5	6	6	5	2	4	2	1	3	5	3	6	4	Umaria.
																													BERAR—
8·4	..	7·4	3·73	..	0·77	5	9	..	7·7	..	1	0	0	0	2	2	14	11	0	1	1	0	0	1	1	15	11	0	Buldhana.
6·8	+0·8	6·8	5·71	—0·09	1·86	5	11	+3·4	7·3	+2·4	1	0	0	1	0	1	19	7	0	1	0	1	1	0	0	11	16	0	Akola.
8·5	+2·4	8·1	8·21	+2·17	2·14	5	16	+7·7	7·7	+3·4	0	0	0	0	0	20	0	10	0	0	2	0	2	1	11	3	11	0	Amraoti.
																													C. P., WEST—
7·4	+1·9	7·1	3·91	—1·78	1·36	5	16	—1·1	7·4	+2·4	0	0	2	0	1	1	17	19	0	1	1	1	0	2	0	15	10	0	Khandwa.
7·8	+1·6	7·6	13·30	+4·94	5·08	5	12	+2·5	1·5	—0·6	0	1	2	0	1	9	8	0	9	2	1	0	0	2	6	7	4	8	Hoshangabad.
8·4	+3·1	8·4	6·84	—0·76	2·17	5	8	—1·6	10·6	+1·1	1	1	5	0	0	3	11	8	1	7	3	2	2	0	1	8	7	0	Saugor.
8·6	+3·0	9·1	8·77	+0·36	1·99	5	11	+1·3	4·5	+2·4	0	1	0	3	2	6	9	3	6	5	4	0	2	0	6	6	5	2	Jubbulpore.
8·6	+2·2	6·6	9·60	+1·01	2·26	9	13	+2·3	4·4	+1·1	5	3	1	1	3	5	6	4	2	7	3	0	1	2	4	5	6	2	Seoni.
8·7	+2·8	8·8	7·39	—0·62	1·68	13	15	+4·4	5·6	..	2	1	2	0	1	4	8	10	2	7	3	1	3	2	1	6	7	0	Nagpur.
																													C. P., EAST—
7·1	..	6·1	6·46	..	0·97	4	14	..	3·3	..	6	1	1	2	2	6	5	4	3	0	5	1	0	0	6	6	8	4	Gondia.
8·1	+2·7	8·6	11·02	+3·12	3·94	11	12	+0·7	3·5	+0·3	4	2	3	3	4	3	1	6	4	3	4	1	2	9	2	2	5	2	Pendra.
8·3	..	8·0	7·98	..	2·12	4	13	..	5·3	..	1	4	5	1	0	8	9	2	0	2	2	6	0	0	7	7	4	2	Champa.
8·8	+3·0	8·9	5·68	—2·01	1·43	26	9	—1·3	5·2	+1·5	0	5	0	1	0	20	1	3	0	0	5	0	1	0	14	0	9	1	Raipur.
8·6	..	7·4	11·54	..	2·80	18	15	..	2·4	..	3	3	1	0	7	8	2	0	6	3	3	1	2	9	5	0	1	6	Titilagarh.
8·2	+1·2	8·9	5·57	—4·67	1·56	19	9	—3·3	4·8	+1·2	0	0	0	0	0	11	4	2	13	0	6	0	0	0	6	12	2	4	Kanker.
7·2	+1·4	7·2	10·43	+1·52	2·27	20	12	+3·3	4·9	+1·8	0	2	0	1	0	7	0	17	3	0	4	0	1	0	12	1	11	1	Chanda.
8·1	+1·8	8·9	13·80	+3·42	4·00	28	15	+1·4	5·3	+2·9	0	0	0	0	0	18	0	8	4	0	5	0	1	0	16	2	5	1	Jagdalpur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature °F				Minimum temperature °F				Dry bulb temperature °F		Wet bulb temperature °F		Vapour pressure. Millibars.			Relative hum %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
KONKAN—																					
Dahanu ..	15	1006·6	—0·7	1004·8	84·8	..	90	24	76·0	..	73	19, 20	78·2	82·9	76·5	78·9	30·4	..	31·9	92	..
Bombay ..	35	1006·8	—1·0	1007·7	85·4	—0·1	89	16	75·9	+0·2	73	17	78·3	81·9	75·9	77·2	29·4	..	29·7	89	+1
Alibag ..	23	1007·6	—0·5	..	84·5	—0·1	87	13	75·9	—0·1	72	24, 25	77·6	..	75·9	..	29 8	+0·6	..	92	+6
Harnai ..	66	1005·5	..	1004·1	..	..	..	..	74·1	..	72	29, 30	78·0	79·9	75·0	76·2	28·3	..	29·2	87	..
Devgad ..	110	1004·8	..	1002·7	83·9	..	88	12	74·7	..	72	22	77·2	80·1	75·2	76·6	28·9	..	29·7	91	..
Marmagao ..	202	1002·3	—0 4	999·9	81·5	—1·2	81	4 days	..	..	..	..	77·2	79·7	75·2	76·0	28·9	—0·1	29·0	91	+1
Honavar ..	85	1007·4	..	1006·2	84·4	..	86	4 days	73 5	..	71	26	76·1	81·8	74·9	77·5	30·0	..	30·2	95	..
BOMBAY DECCAN																					
Jalgaon ..	660	983·2	..	980·5	86·9	..	92	23, 27	72·3	..	70	15, 16.18	75·2	84·7	73·5	76·3	27·4	..	27·2	92	..
Malegaon ..	1,432	958·1	—1·2	954·3	87·6	—1·1	92	16, 17	70·5	+0·3	65	18	76·1	80·7	71·7	72·6	24·5	+0·7	23·7	79	0
Ahmedanagar	2,154	934·6	—1·2	931·9	85·1	—1·0	90	17, 18,19	67·1	—0·8	63	26	71·7	80·0	68·4	71·1	22·4	0	22·4	85	+4
Poona ..	1,834	945·7	—0·9	943·3	84·0	—0·6	89	15	69·4	+0·5	66	19	72·7	79·1	69·6	71·3	23·5	+0·5	23·0	85	+1
Sholapur	1,570	954·6	—0·5	950·6	89·1	+0·4	95	9, 15	70·1	—0·9	68	21, 27	73·0	85·5	69·9	72·9	23·7	+0·6	22·6	85	+5
Miraj ..	1,817	946·6	—1·0	943·6	84·8	+0·5	91	19	68·3	+0·4	65	26	71·0	81·6	69·3	72·6	23·8	+0·2	23·7	92	+6
Kolhapur	1,885	944·7	..	942·2	81·3	..	87	19	67·9	..	66	7, 19	70·4	76·7	68·9	71·4	23·5	..	23·6	92	..
Bijapur ..	1,950	942·0	—0·9	938·4	87·2	—0·2	93	16	69·4	—0·4	66	25 ,26	72·8	83·2	69·2	71·1	22·4	+0·1	21·1	83	+2
Belgaum ..	2,562	923·2	—0·2	920·4	77·3	—2·1	82	4	65·8	+0·1	64	8	69·2	74·1	68·1	70·0	23·1	+0·8	23·4	94	+2
Gadag ..	2,131	937·1	—0·2	933·8	84·9	—0·4	89	4 days	66·8	—2·0	63	22	70·6	79·9	68·1	70·7	22·5	+0·1	22·0	88	+3
HYDERABAD, NORTH—																					
Aurangabad ..	1,905	943·2	—0·9	940·1	84·1	—2·.	88	27, 28	69·0	—0·2	66	26	72·3	81·6	70·0	73·0	24·1	+1·2	24·4	89	+8
Parbhani ..	1,350	959·6	..	956·1	86·7	..	93	19	77·6	..	68	6	74·4	(b) 82·3	71·1	(f) 73·7	24·6	..	(f) 24·5	85	..
Bidar ..	2,178	(d) 932·6	..	(g) 930·8	79·4	—4·9	86	2	(d) 68·8	0	67	8, 11	(d) 71·5	(g) 79·2	(d) 69·5	(g) 71·6	(d) 23·8	+0·1	(g) 23·4	(d) 90	+4
Nizamabad ..	1,250	963·9	—0·8	960·5	86·0	—1·6	92	17	72·2	—0·7	70	20, 29	76·2	83·0	72·6	74·4	25·8	+0·2	25·9	83	0
Ramakundam ..	527	988·1	..	984·8	88·8	..	94	14, 16	75·5	..	73	19,29,30	77·8	84·0	74·4	76·8	27·5	..	28·2	85	..
HYDERABAD, SOUTH—																					
Gulbarga ..	1,503	(e) 955·6	—1·6	(f) 952·1	(c) 87·7	—0·9	91	5 days	(c) 71·5	0	67	28	(c) 74·8	(f) 85·3	(c) 71·5	(f) 73·2	(c) 25·0	+1·4	(f) 23·0	(c) 84	+3
Raichur ..	1,311	(i) 963·5	—0·4	(m) 959·2	(i) 89·5	+0·2	94	4 days	(i) 72·5	—0·1	67	25	(i) 75·2	(m) 88·7	(i) 70·5	(m) 62·4	(i) 23·4	—0·8	(m) 19·8	(i) 79	0
Hyderabad (Begumpet).	1,778	946·7	—0·7	943·3	85·4	—0·8	90	3, 8	71·8	+0·4	69	25	74·0	81·7	71·3	73·9	25·1	+0·1	25·3	87	+4
Hanamkonda ..	881	976·0	—1·1	972·5	88·6	+0·4	94	18	74·1	—0·1	72	19, 21	77·8	84·7	73·8	75·6	26·7	—0·3	26·2	82	+2
Khammamath (R)	367																				
MYSORE—																					
Chitaldrug ..	2,405	928·2	—0·3	925·0	82·8	—1·5	86	16, 19,20	67·9	—0·1	65	22, 24	70·7	79·7	67·6	72·0	21·8	0	23·7	85	+2
Hassan ..	3,149	904·8	..	902·2	79·3	—1·7	87	19	64·1	—0·7	62	4 days	67·4	73·7	65·3	68·0	20·5	—0·4	21·1	90	+5
Bangalore ..	3,021	903·6	—0·4	905·4	81·4	—0·7	86	14	66·0	+0·7	64	4 days	68·3	79·6	65·9	68·7	20·8	—0·4	19·5	88	+1
Mysore ..	2,518	925·3	—0·3	922·2	83·3	—0·9	87	14	66·2	—0·4	63	26	69·5	80·5	67·1	69·6	21·5	—0·1	20·3	88	+6

(e) Mean for 28 days. (R) Registers not received.

Cloud Amount (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I.S.T.									17 hrs. I.S.T.									
Mean 8 hours I.S.T.	Departure from normal.	Mean 17 hours I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													KONKAN—
8·1	..	7·5	6·62	..	1·73	26	13	..	8·5	..	1	0	11	6	1	3	7	1	0	1	0	0	0	3	6	18	2	0	Dahanu.
7·5	+0·4	7·4	11·78	+1·39	2·51	23	18	+5·3	6·0	+1·0	1	3	2	3	5	3	9	2	2	0	1	0	0	4	5	12	8	0	Bombay.
6·9	—0·4	..	9·73	—0·74	1·18	23	18	+3·5	7·7	—1·1	0	1	8	5	2	4	2	1	7	..	..	..	..	..	..	..	..	..	Alibag.
..	..	..	13·03	..	2·46	21	20	..	9·4	..	1	5	4	11	0	7	1	1	0	0	1	0	7	0	11	4	7	0	Harnai.
7·8	..	8·0	20·00	..	9·26	23	21	..	9·0	..	0	3	6	9	1	2	3	3	0	0	1	0	0	1	4	9	12	0	Devgad*
6·2	—0·9	6·1	12·11	+4·45	3·59	4	15	+0·8	7·1	+1·7	2	5	2	2	10	3	4	2	0	0	0	0	0	3	4	15	8	0	Marmagao.
7·9	..	7·6	11·34	—2·23	1·56	5	19	+2·4	2·6	..	0	1	14	4	1	1	3	1	5	0	0	1	1	3	1	15	6	3	Honavar.
																													BOMBAY DECCAN—
7·9	..	5·5	2·83	—3·18	0·69	23	7	—0·7	5·8	..	0	0	2	0	1	3	21	2	1	3	3	1	0	1	1	10	11	0	Jalgaon.
5·8	+0·4	7·5	3·50	—2·29	0·91	28	8	+0·3	5·2	—0·7	0	1	1	2	0	2	14	4	6	1	1	0	2	0	3	14	9	0	Malegaon.
6·4	+0·9	4·7	8·41	+1·87	1·89	23	10	+1·4	4·6	—1·6	0	0	0	4	0	2	5	8	10	4	0	0	0	1	4	7	11	3	Ahmedanagar.
7·1	+0·4	7·2	4·06	—1·23	1·60	22	11	+3·4	3·4	—3·3	0	0	0	0	0	1	10	0	19	0	0	0	0	0	1	21	6	2	Poona.
7·2	+1·0	8·3	13·93	+6·34	4·48	22	12	+2·9	6·1	+0·3	0	0	0	1	0	14	5	8	2	4	0	0	0	0	20	0	5	1	Sholapur.
7·0	+0·9	7·7	4·93	+1·05	1·62	23	5	—0·7	7·9	+0·4	2	0	0	1	0	9	9	3	6	5	0	0	0	0	3	16	6	0	Miraj.
7·2	..	6·9	3·9	..	1·69	22	8	..	8·1	..	0	0	0	0	0	3	15	1	11	0	0	0	0	0	2	23	5	0	Kolhapur.
5·4	+0·6	7·4	5·31	—0·23	1·85	22	8	0	7·6	+1·6	0	0	0	0	1	7	12	10	0	0	0	0	0	1	5	13	11	0	Bijapur.
8·4	+1·0	7·4	7·56	+2·76	3·46	22	11	+1·9	4·5	+0·7	0	0	0	0	0	4	26	0	0	0	0	0	0	0	0	28	2	0	Belgaum.
8·7	+2·0	9·1	6·05	+1·37	2·70	22	8	+1·6	9·6	+1·4	0	0	0	0	0	11	15	4	0	0	0	0	0	1	9	14	6	0	Gadag.
																													HYDERABAD, NORTH—
6·1	—0·5	7·0	3·10	—3·59	0·65	23	10	+1·0	8·4	+1·5	1	0	2	0	0	3	23	1	0	3	0	1	0	0	3	12	10	0	Aurangabad.
6·8	..	(b) 8·0	6·39	—1·66	1·17	20	13	+3·4	..	..	0	0	1	1	0	3	24	1	0	0	0	2	0	0	3	23	2	0	Parbhani.
(d) 7·9	+1·9	(g) 8·4	17·97	+9·43	4·40	21	12	+1·0	8·5	+0·8	0	1	0	0	0	8	12	6	0	1	0	0	0	1	2	9	11	0	Bidar.
6·9	+1·1	6·3	11·16	+2·25	2·77	20	13	+3·0	2·6	—0·5	0	0	0	0	0	19	0	0	11	0	0	0	2	0	3	1	22	2	Nizamabad.
8·4	..	8·6	11·58	..	2·13	28	13	..	2·5	..	1	0	0	2	0	0	10	7	10	3	0	1	3	0	0	8	7	8	Ramakundam.
																													HYDERABAD, SOUTH—
(e) 5·6	—0·5	(f) 6·2	9·64	+2·18	2·66	21	11	+0·9	(g) 8·2	+1·4	1	1	0	0	1	8	10	5	0	3	1	0	0	0	4	10	7	0	Gulbarga.
(i) 5·9	+0·8	(m) 7·3	(i) 4·63	—1·60	2·28	22	(i) 6	—3·4	(i) 10·6	+3·2	0	0	0	0	0	4	6	12	0	0	0	0	0	0	0	7	11	0	Raichur.
7·7	+1·1	8·3	3·84	—2·61	0·97	23	10	+0·5	8·1	+2·0	0	0	0	0	0	0	15	13	2	4	0	0	0	0	2	9	13	2	Hyderabad (Begumpet).
7·2	+0·9	7·4	11·77	+4·43	3·97	22	10	+0·9	6·4	+2·1	3	0	0	1	1	1	10	13	1	3	1	1	1	0	0	7	15	2	Hanamkonda.
																													Khammamett (R)
																													MYSORE—
9·0	+0·2	8·8	1·44	—2·93	0·46	30	4	—3·1	8·0	+2·1	0	0	0	0	0	8	19	3	0	0	0	0	0	0	3	2[illegible]	1	0	Chitaldrug.
8·8	—0·4	7·1	0·63	—3·70	0·09	24	0	—8·1	8·3	+3·2	0	0	0	0	0	4	23	3	0	0	0	0	0	0	9	21	0	0	Hassan.
9·0	+0·8	8·3	2·38	—4·28	1·73	51	3	—5·9	8·8	+3·0	0	0	0	0	0	6	17	7	0	1	0	0	0	0	3	14	12	0	Bangalore.
7·6	+0·4	8·3	3·16	—1·79	1·12	19	5	—3·2	6·9	+5·9	1	0	0	0	0	11	16	0	2	0	0	0	0	0	5	23	1	1	Mysore.

(b)—Mean for 29 days.
(d)—Mean for 27 days.
(f)—Mean for 22 days.
(m)—Mean for 18 days.
(g)—Mean for 24 days.

STATION	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Maximum temperature, °F. Mean.	Departure from normal.	Highest.	Date.	Minimum temperature, °F. Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature, °F. Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Wet bulb temperature, °F. Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Vapour pressure, millibars. Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Relative humidity % Mean 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
MALABAR—																					
Mangalore ..	72	1008·0	—0·1	1005·3	83·6	—0·7	86	24	73·5	—0·8	71	20	76·2	80·8	74·9	76·5	30·0	+1·3	29·2	94	+3
Calicut ..	27	1009·5	—0·2	1006·7	85·4	+1·0	88	27,28,30	74·9	+0·3	73	4 days	77·1	83·1	75·8	79·4	29·9	+1·3	32·6	93	+2
Palghat ..	319	999·4	..	996·1	85·4	..	88	13,14,28	73·9	..	72	5 days	76·0	83·1	74·1	75·3	27·6	..	27·0	91	..
Cochin ..	10	1010·5	—0·3	1007·6	82·9	—0·1	85	16,24,26	75·2	—0·2	71	21	79·2	81·4	75·9	77·0	29·1	+0·6	29·7	85	—2
Alleppey ..	12	1010·3	..	1007·5	85·9	..	88	28, 29	75·1	..	73	4 days	79·1	83·1	76·7	77·7	30·3	..	30·0	90	..
Trivandrum ..	211	1003·5	0	1000·5	86·3	..	89	8	74·4	..	73	21,22	77·3	83·0	74·7	75·8	28·2	+0·7	27·2	88	+2
Nagercoil ..	195	1003·3	..	999·9	83·7	..	94	8	76·1	..	73	22	79·3	84·9	74·1	75·6	26·4	..	26·0	77	..
MADRAS, SOUTH EAST—																					
Pamban ..	37	1007·8	—0·1	1004·5	89·8	+0·6	92	5, 6, 7	79·7	+0·9	77	10	83·6	84·5	78·1	78·6	30·4	+0·4	30·7	77	—3
Madura ..	437	993·7	+0·2	989·4	96·4	+2·6	100	4, 8	77·1	+1·2	71	8	82·2	91·0	73·3	75·3	24·0	—1·1	22·8	64	—5
Negapatam ..	81	1007·6	—0·3	1003·8	94·0	+1·3	98	2, 4	78·7	+1·3	72	7	82·8	87·5	75·9	79·6	27·4	—0·3	30·9	72	—3
Trichinopoly ..	255	1000·2	—0·1	995·5	95·7	+0·4	99	11	76·7	+0·5	73	14	80·5	93·5	73·7	76·3	25·3	—0·1	23·1	71	—1
Coimbatore ..	1,341	963·4	—0·6	960·1	88·1	—0·6	91	17,29,30	71·8	+0·9	70	5, 20, 26	74·9	83·8	70·9	73·0	24·0	—1·1	22·8	81	—3
Salem ..	913	977·7	—0·6	973·0	92·7	+0·9	97	8, 11	74·6	+1·6	71	22	77·2	90·1	72·4	74·2	25·0	—0·9	21·6	78	—3
Cuddalore ..	39	1006·8	—0·5	1002·8	93·5	+1·0	99	5, 6	77·1	+0·3	71	15	80·7	86·9	74·9	78·5	26·0	—1·5	29·5	76	—2
Vellore ..	703	984·1	—0·1	979·7	94·0	+1·8	99	11	77·3	+2·0	72	14	80·3	90·8	73·1	75·8	24·6	—1·2	23·6	70	—6
Madras ..	81	1005·9	—0·4	1001·9	94·1	+0·2	101	5	77·6	+0·4	73	15, 21	81·5	88·0	75·4	77·3	27·3	—0·3	27·1	75	0
Arogyavaram ..	2,299	931·5	..	927·9	85·1	..	89	9, 11	70·6	..	67	4 days	74·3	83·2	67·8	70·0	20·5	..	19·7	71	..
MADRAS, DECCAN—																					
Cuddapah ..	428	993·8	—0·2	988·7	92·7	—0·9	98	3, 8	77·4	+0·9	73	15,20, 21	82·3	88·7	74·8	77·6	26·1	—0·2	27·3	69	—5
Bellary ..	1,473	958·1	—0·7	954·1	88·6	—1·9	95	16	73·0	0	69	18, 26	75·5	86·3	69·8	72·5	22·3	0	21·0	74	+1
Kurnool ..	923	976·3	—0·5	972·1	89·3	—0·7	94	2	72·9	—1·1	68	25	77·0	86·2	71·9	74·7	24·4	—0·3	24·1	77	—1
Rentichintala ..	348	994·7	..	990·7	90·5	—3·2	98	4	76·2	—1·1	72	24	79·6	88·6	74·5	75·6	26·9	—0·2	24·3	78	+5
Anantapur ..	1,148	968·9	..	964·5	91·1	..	96	10	73·7	..	71	14, 18	76·8	87·6	72·1	75·0	24·7	..	24·0	79	..
MADRAS COAST, NORTH—																					
Nellore ..	66	1004·4	—1·0	1000·6	95·7	+1·0	102	9	78·8	+0·6	72	19, 20	82·9	91·0	76·0	78·0	27·5	—0·1	26·8	72	—1
Ongole ..	38	1004·9	..	1001·0	94·2	..	102	9	78·5	..	72	30	82·5	89·4	77·4	80·2	29·8	..	31·0	79	..
Masulipatam ..	10	1005·7	—1·1	1002·2	88·4	—2·1	96	9	78·0	+0·4	74	24	80·6	85·8	76·8	78·2	29·8	—1·0	29·5	85	+1
Cocanada ..	26	1004·8	—0·9	1001·5	87·9	—1·9	95	18	77·1	—1·0	74	15, 24	81·6	84·0	78·5	79·8	31·0	+1·2	32·9	83	0
Vizagapatam ..	126	1000·6	—1·2	997·5	89·4	+1·0	97	4	78·8	+0·4	76	18,26,28	82·1	83·8	78·3	78·9	31·3	+1·2	31·6	84	+4
Calingapatam ..	19	1003·5	—1·7	1000·9	89·1	—0·7	94	1,3,18	78·5	+0·1	75	18	81·3	84·9	78·0	79·8	31·2	—0·6	32·4	86	0

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																	STATION.
											8 hrs. I.S.T.									17 hrs. I.S.T.								
Mean 8 hours I.S.T.	Departure from normal.	Mean 17 hours I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													MALABAR—
8·3	+1·0	8·4	11·57	+1·09	1·99	6	19	+3·5	3·9	0	5	4	11	3	1	2	0	1	3	3	0	0	0	0	7	6	13	1	Mangalore.
7·4	+0·6	7·7	6·42	—1·52	1·26	21	11	—0·7	5·0	+0·6	6	5	6	1	0	1	3	6	2	0	0	0	0	0	4	14	12	0	Calicut.
7·4	..	5·8	4·14	..	1·24	15	8	..	6·7	..	0	0	0	0	0	3	27	0	0	0	0	0	0	0	5	24	1	0	Palghat.
7·0	+0·6	7·1	5·21	—2·46	1·12	6	10	—3·7	5·4	+1·0	2	4	8	2	0	1	2	0	11	1	0	0	0	0	0	12	16	1	Cochin.
7·4	..	7·1	7·78	..	1·58	23	10	..	5·2	..	4	11	4	1	0	0	0	5	5	2	0	0	0	0	0	6	21	1	Alleppey.
4·8	—2·0	6·0	2·06	—2·45	0·90	22	4	—4·1	6·5	+0·7	10	2	0	0	0	0	0	18	0	0	0	0	0	0	0	7	23	0	Trivandrum.
6·9	..	7·2	0·72	..	0·42	23	2	..	9·9	..	0	0	0	0	0	0	19	11	0	0	0	0	0	0	0	26	4	0	Nagercoil.
																													MADRAS SOUTH-EAST—
6·3	+2·7	4·9	0	—1·14	0	..	0	—1·9	9·9	+2·1	0	0	1	6	6	10	7	0	0	0	0	0	13	14	3	0	0	0	Pamban.
6·2	—0·8	7·6	3·71	—0·99	1·66	8	5	—1·5	3·9	+0·7	3	1	1	0	0	0	7	15	3	1	3	4	3	2	0	7	1	9	Madura.
7·0	+1·7	7·1	1·49	—1·81	1·42	7	1	—4·1	5·9	+1·1	0	0	0	0	0	10	16	0	4	0	0	1	10	10	8	1	0	0	Negapatam.
6·4	+1·1	6·9	4·11	—0·61	1·36	15	8	+2·0	6·3	+1·7	0	0	0	0	0	3	19	8	0	1	0	0	1	1	3	11	11	2	Trichinopoly.
5·4	+0·5	5·7	0·06	—1·53	0·05	21	0	—3·3	9·7	+3·0	0	0	0	0	12	15	3	0	0	0	0	0	0	12	15	3	0	0	Coimbatore.
6·0	+0·1	7·3	2·52	—3·55	0·71	13	8	—0·5	5·0	+1·9	0	0	0	0	0	14	12	0	4	1	0	2	0	3	4	12	1	7	Salem.
7·1	+1·4	6·7	8·11	+2·90	3·20	15	7	+0·8	6·2	+2·3	0	0	0	0	2	13	12	1	2	0	0	1	19	6	2	1	1	0	Cuddalore.
7·5	+2·5	8·0	5·53	—1·35	1·68	14	7	—1·1	4·4	+1·3	1	1	0	0	1	11	10	1	5	2	2	1	0	1	14	5	2	3	Vellore.
8·2	+2·0	7·3	4·14	—0·54	1·01	18	9	+2·0	10·5	+0·5	0	0	0	0	3	9	16	2	0	0	1	4	19	0	1	2	3	0	Madras.
9·0	..	7·8	2·32	..	1·48	18	4	..	7·4	..	1	0	0	0	0	0	16	12	1	1	0	0	0	0	3	12	12	2	Arogyavaram.
																													MADRAS, DECCAN—
7·2	+0·5	7·3	4·80	—1·23	3·57	15	7	—1·3	4·6	—0·3	0	0	0	0	0	0	19	1	10	1	0	1	0	1	0	12	5	10	Cuddapah.
6·9	+0·6	7·5	3·88	—0·99	1·50	18	4	—3·1	8·4	+2·1	0	0	0	0	0	2	21	6	1	0	0	0	0	0	3	18	6	3	Bellary.
7·7	+0·9	8·2	5·20	—0·76	1·46	29	11	+1·8	5·1	—1·0	1	0	0	0	0	3	18	5	3	2	0	0	0	0	2	7	11	8	Kurnool.
8·9	+1·7	9·0	8·76	+4·06	2·43	24	15	+7·2	6·0	+0·1	0	0	0	0	0	4	15	3	8	4	2	0	0	1	3	13	6	1	Rentichintala.
7·3	..	7·9	3·49	—2·79	1·00	18	7	+0·1	10·0	..	0	0	0	0	0	7	21	2	0	0	0	0	0	0	4	12	14	0	Anantapur.
																													MADRAS COAST, NORTH—
7·5	+0·7	8·4	2·27	—2·19	0·93	14	3	—2·9	4·7	+0·4	0	0	0	0	0	0	14	3	13	0	0	4	4	1	0	11	5	5	Nellore.
8·2	..	8·5	5·85	..	3·31	15	11	..	5·8	..	0	0	0	0	0	4	14	1	11	0	2	2	2	0	3	11	2	8	Ongole.
7·4	+0·7	8·3	6·18	—0·99	3·67	10	9	—0·9	6·0	+1·5	0	1	0	1	1	4	16	5	2	0	1	1	2	2	1	4	10	9	Masulipatam.
7·0	+0·3	7·8	7·62	+1·46	1·24	22	15	+6·2	6·8	+2·6	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30	0	0	0	Cocanada.
7·6	+0·4	8·3	7·35	+0·80	1·69	22	10	+0·9	4·7	+1·3	0	2	0	0	1	4	8	2	13	0	2	1	1	8	4	5	2	7	Vizagapatam.
7·6	+2·0	8·3	7·25	+0·32	1·50	29	13	+3·9	7·0	+2·5	1	1	1	1	1	7	12	6	0	0	1	5	6	5	9	4	0	0	Calingapatam.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
HILL STATIONS EXCLUDING KASHMIR																						
Shillong ..	4,921	848·5	—0·2	845·5	75·0	—0·3	80	6	61·6	0	57	17	68·6	68·6	65·5	66·2	20·3	+0·9	21·0	85	+3	
Cherrapunji ..	4,309	867·3	—0·2	864·6	73·6	+0·3	79	18,19	64·3	—0·3	61	28	68·2	69·1	66·5	67·3	21·6	+0·6	22·0	93	+6	
Aijal ..	3,599	887·9	..	885·2	79·4	..	80	7 days	64·7	..	63	19	70·8	71·9	68·9	70·6	23·6	..	25·9	94	..	
Darjeeling ..	7,432	775·5	—0·8	773·0	66·5	—1·9	75	1	56·2	+0·2	54	5 days	59·9	60·7	59·1	59·9	16·6	+0·2	17·1	96	+3	
Kalimpong ..	3,965	877·1	—0·6	873·9	75·5	+0·8	80	6	66·2	+0·4	64	24, 30	65·6	71·9	67·8	69·8	23·0	+2·5	24·1	95	+3	
Katmandu ..	4,388	884·7	..	861·5	81·8	—0·8	88	6	66·4	+0·7	63	18	71·2	75·2	68·4	70·7	22·7	+1·5	23·9	87	+5	
Mukteswar ..	7,592	770·8	—1·0	769·1	66·5	—1·2	71	15	56·0	+0·9	51	24	59·9	62·3	57·1	60·4	15·0	+0·7	17·1	85	+1	
Mussooree ..	6,699	795·4	..	794·3	67·3	—0·2	71	1	58·5	+1·2	55	25, 26	62·5	63·5	60·5	63·0	17·3	+1·2	19·5	89	—2	
Simla ..	7,224	780·6	—0·3	779·7	67·6	—0·8	73	3, 21	56·4	+0·1	52	27	60·9	64·5	56·6	60·8	14·1	+0·8	16·8	78	+4	
Abu ..	3,945	875·1	—2·6	871·8	76·9	+1·7	85	23	64·8	0	62	14, 17	68·4	73·5	64·2	66·7	18·8	+0·2	13·1	80	—3	
Pachmarhi ..	3,528	889·4	—1·5	884·0	75·0	—2·5	81	21, 22	67·7	+1·6	64	6, 7, 8	69·3	72·9	68·0	69·8	22·8	+1·4	23·8	93	+7	
Mahabaleshwar	4,534	860·3	—1·0	858·8	66·4	—1·4	70	19, 20	59·8	—1·0	58	6, 20	61·5	63·0	61·5	63·0	18·6	—0·5	19·7	99	—1	
Mercara ..	3,781	884·1	—0·8	882·3	68·3	—3·5	75	14	62·6	+0·8	59	22	64·1	68·1	63·5	66·1	20·3	+0·9	21·1	93	—2	
Cotacamund ..	7,364	779·3	+0·1	777·8	64·4	—0·2	69	8, 13	50·5	—0·5	45	8	54·2	59·1	52·3	55·0	12·7	—0·4	13·9	89	+3	
Coonoor ..	5,730	826·0	..	..	70·3	—0·8	73	8 days	55·6	—0·7	50	24, 26	63·9	..	57·0	..	13·4	—0·9	..	67	—2	
Kodaikanal	7,683	770·6	+0·4	769·0	64·5	+1·8	67	26, 29	52·3	+0·3	50	24, 30	55·7	58·9	52·2	56·4	12·1	—0·4	14·6	79	0	
CEYLON—																						
Colombo ..	24	1010·2	—0·1	1007·3	86·2	+0·2	88	13	76·7	+0·1	72	22	80·4	82·7	76·1	76·4	28·8	0	28·2	82	—4	
Trincomalee ..	24	1008·0	+0·2	1004·7	94·9	+2·9	98	29, 30	77·8	+1·1	75	1, 21	81·4	86·8	74·9	77·5	26·6	—0·6	28·0	72	—9	
Hambantota ..	61	1007·5	—0·6	1003·9	86·4	—0·2	91	5	76·7	+0·7	73	22	80·0	82·6	76·7	78·1	29·9	+1·6	30·9	86	—2	
Mannar ..	12	1009·0	..	1005·8	87·3	..	89	8, 30	79·5	..	78	1, 5, 7	81·7	83·1	77·0	77·6	29·6	..	29·8	80	..	

Cloud amount (tenths of sky)			Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from:—																		STATION.
											8 hrs. I.S.T.									17 hrs. I.S.T.									
Mean 8 hours I.S.T.	Departure from normal.	Mean 17 hours I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.		NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													HILL STATIONS EXCLUDING KASHMIR
8·3	+1·3	9·6	13·86	+2·07	1·89	29	23	+5·7	1·7	+0·2	1	2	2	2	0	1	0	0	22	3	3	1	2	4	1	0	2	14	Shillong.
8·1	+0·5	7·7	42·32	—1·03	9·10	13	21	+1·8	..	..	1	14	6	3	2	2	0	0	2	1	6	2	1	2	7	4	1	6	Cherrapunji.
8·0	..	8·8	18·25	..	2·23	9	26	..	4·2	..	0	0	17	1	1	4	0	1	5	2	1	0	2	0	12	6	4	3	Aijal.
9·4	+1·4	9·0	11·73	—7·17	2·21	11	17	0	3·9	+0·7	0	0	18	2	0	0	5	1	4	0	0	11	6	1	0	7	0	5	Darjeeling.
8·5	+1·6	8·0	13·36	+2·04	2·56	11	19	+6·3	4·8	—0·8	1	0	0	0	0	0	0	7	22	0	0	0	16	2	0	0	0	12	Kalimpong.
8·0	+0·5	7·5	9·88	+2·72	1·82	6	21	+7·7	0·9	+0·1	0	2	11	1	2	1	0	0	13	5	3	1	0	1	0	0	1	19	Katmandu.
4·8	—0·6	6·8	5·30	—2·63	1·05	27	11	+0·9	5·8	+0·8	0	7	7	2	1	2	2	2	6	1	0	2	1	0	12	14	0	0	Mukteswar.
6·3	+0·3	8·9	13·79	+3·84	2·29	8	16	+3·2	1·9	—1·9	3	3	1	5	4	1	1	1	11	0	1	1	6	14	6	0	0	2	Mussoorie.
4·5	0	6·4	4·71	—1·97	1·50	9	9	—0·5	0·7	—1·8	0	1	0	1	1	1	1	1	24	2	3	3	0	1	8	1	1	11	Simla.
3·3	—2·2	3·9	3·14	—6·23	1·50	28	3	—4·6	5·1	—0·3	0	4	0	0	1	8	2	2	13	0	5	0	0	4	3	2	1	15	Abu.
7·6	+1·1	7·3	18·69	+4·50	3·29	4	16	+2·9	3·8	—0·6	2	2	1	1	1	0	16	6	1	3	2	2	0	0	1	13	8	1	Pachmarhi.
9·9	+1·2	10·0	19·57	—9·17	1·89	22	27	+4·4	8·2	+0·4	3	0	0	0	0	16	4	7	0	2	0	0	0	0	18	4	6	0	Mahabaleshwar.
8·5	+0·5	8·5	13·04	+1·96	1·95	21	21	+2·8	8·0	+2·8	2	0	0	0	0	3	14	11	0	1	0	0	0	0	3	14	12	0	Mercara.
5·7	—1·4	7·8	2·26	—2·57	0·74	15	5	—7·0	4·5	+1·8	0	0	0	1	0	4	12	5	8	3	1	0	0	0	3	12	4	7	Ootacamund.
4·9	—1·4	..	1·38	—2·18	0·37	15	4	—3·0	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Coonoor.
5·4	—0·2	7·3	3·98	+3·30	1·24	13	6	—5·9	8·9	+1·6	0	0	0	3	1	0	13	11	2	2	0	0	5	4	0	9	9	1	Kodaikanal.
																													CEYLON—
6·9	—0·4	7·2	2·15	—3·52	0·47	20	7	—1·8	..	..	0	0	0	3	1	9	14	1	2	0	0	0	0	0	13	16	1	0	Colombo.
5·5	+1·0	6·7	2·16	—1·73	2·04	1	1	—4·4	..	..	0	0	0	1	3	26	0	0	0	2	3	6	3	0	12	2	2	0	Trincomalee.
7·6	+2·9	7·7	2·54	—0·12	1·73	22	4	—0·8	..	..	0	0	0	0	0	30	0	0	0	0	0	0	0	0	30	0	0	0	Hambantota.
6·6	..	6·8	0	..	0	..	0	..	..	..	0	0	0	0	15	15	0	0	0	0	0	0	0	16	14	0	0	0	Mannar.

Table III—Abstract of Observations Recorded at 8 hrs. (I. S. T.) / (2-30 hrs. G. M. T.) at 4th Class Stations—September 1948.

STATION.	Maximum temperature °F				Minimum temperature °F				Mean Dry bulb temperature 8 hrs. I.S.T. °F	Mean Wet bulb temperature 8 hrs. I.S.T. °F	Vapour pressure, millibars.		Relative humidity, %		Mean cloud amount 8 hrs. I.S.T.	Rainfall, inches.				Number of rainy days, (0·10" or more)		Wind	
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I.S.T.	Departure from normal.	Mean 8 hrs. I.S.T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction 8 hrs. I.S.T.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Assam—																							
Lumding ..	90·8	+2·2	96	4	75·1	—0·1	72	11, 30	83·8	78·5	30·8	+0·3	77	—11	..	15·29	+7·91	2·34	7	13	+2·2	..	
Kashmir—																							
Jammu ..	92·4	+0·5	97	4 days	75·5	+0·4	65	25	78·6	72·9	24·4	+1·3	75	+4	3·3	5·80	+1·29	2·03	12	5	+0·9	N25E	
Kargil (R)																							
Mysore—																							
Belebonnur ..	75·5	—0·9	79	4 days	64·7	+0·2	63	6 days	67·3	66·1	21·7	+0·1	94	—2	..	6·43	—1·25	1·10	21	18	+2·0	..	
Tibet—																							
Yatung (Chumbi)	62·2	—0·5	67	2, 6, 9	46·7	—0·4	40	18	52·0	51·5	12·7	+0·3	95	+7	7·2	2·03	—2·32	0·35	14	8	—3·0	..	

R.—Register not received.

Table IV—Abstract of Observations Recorded at 8 hrs. I. S. T. / (2-30 hrs. G. M. T.) at 5th Class Stations—September 1948.

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days, (0·10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8
Assam	Mawsynram ..	75·13	..	15·05	6	18	..
West Bengal ..	Bankura ..	9·46	+1·59	4·00	29	12	+1·0
	Cooch Behar ..	8·91	—14·61	2·24	12	10	—7·1
Bihar	Muzaffarpur ..	8·48	—0·17	2·50	27	10	+0·5
	Chapra ..	13·84	+6·36	3·54	13	11	+2·3
	Arrah ..	13·38	+5·19	3·47	13	13	+3·5
United Provinces, West.	Meerut ..	3·47	—2·39	1·17	7	5	—0·1
East Punjab ..	Dharampore ..	3·62	—3·49	0·70	2	11	+3·5
	Kyelang ..	0·79	—0·82	0·48	26	2	—0·6
	Dalhousie ..	7·62	+0·77	3·00	6	9	+0·7

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days, (0·10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours	Date.	Total in the month.	D
1	2	3	4	5	6	7	
Kashmir ..	Sonamarg ..	1·61	—1·44	0·73	12	5	—
	Gurez ..	0·60	—1·26	0·15	11, 24	4	—
Bombay, Deccan ..	Khandala ..	21·20	—6·15	2·50	11	26	+
Madras, Southeast	Palamcottah ..	0	—1·23	0	..	0	—
Sikkim	Lachung ..	7·08	—0·61	0·70	27	21	+

Monthly Means of Upper Winds

NOTE.—Data up to 9·0 kms. a. s. l. are given under Table A, and data above 9·0 kms. under Table B. In Tables A & B,

n represents the number of observations,

V represents the mean wind speed in m/second irrespective of direction,

v represents the resultant mean velocity in m/second, and

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

For the co-ordinates of the stations for which data have been published in these tables and other particulars, please refer to the Monthly Weather Report January 1948 and other subsequent issues.

The data of Minicoy for July, August 1948 and of Port Blair for August 1948 have been included in this issue.

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	AHMEDABAD												ALLAHABAD										
	0100				0700				1600				0100				0700				1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	2·7	1·7	239	30	2·2	1·3	270	30	2·3	1·0	241	30	0·5	0·5	84	30	0·7	0·1	57	30	1·6	0·5
0·15 a.g. ..	30	8·2	5·3	242	30	7·7	5·1	273	30	4·4	2·1	238	28	4·7	2·0	104	27	4·4	1·5	77	28	4·5	1·6
0·6 a. s. l. ..	30	9·4	6·3	253	29	9·7	6·3	290	30	4·8	2·9	247	26	6·0	2·7	108	25	5·3	2·5	96	27	4·5	2·5
1·0 „ ..	30	8·0	4·7	261	27	7·9	4·2	283	30	5·2	2·9	252	25	5·9	2·3	100	19	5·5	2·7	79	26	4·7	2·0
1·5 „ ..	29	5·1	1·4	270	26	6·0	2·1	233	29	5·3	2·6	272	21	4·9	1·7	96	19	6·2	3·1	73	26	5·2	2·1
2·0 „ ..	28	4·3	0·7	57	26	6·0	1·6	177	28	5·8	1·9	263	13	3·1	2·1	162	18	6·5	3·3	82	22	5·4	1·6
2·5 „ ..	25	4·4	2·7	74	22	6·2	3·3	112	17	5·1	1·2	341	11	2·9	1·7	159	16	6·0	2·6	81	17	4·6	1·8
3·0 „ ..	25	5·4	4·0	68	19	7·4	4·7	80	12	3·7	0·4	346	9	2·6	1·0	176	14	4·9	2·8	97	17	4·8	1·5
4·0 „ ..	11	5·7	4·5	21	17	7·6	5·6	75	11	3·5	1·1	9					9	3·7	2·4	159	13	3·9	1·1
5·0 „ ..	8	4·3	3·7	360	14	6·1	4·0	76	9	15·8	2·1	59					8	3·8	1·9	176	9	4·9	0·2 1
6·0 „ ..					11	5·5	4·0	59	8	4·7	3·6	54					7	3·8	1·8	168	6	4·3	2·6 2
7·5 „ ..					5	4·5	3·1	65	4	5·7	4·7	62					5	3·6	0·6	201	6	3·5	2·0 2
9·0 „ ..					1	7·0	7·0	5	1	7·0	7·0	30					5	3·9	1·4	242	3	6·8	4·6 2

Height in km.	AMBALA												ANANTAPUR								ASANSOL		
	0100				0700				1600				0700				1600				0100		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	1·7	0·7	108	30	1·7	0·8	82	30	2·3	0·9	314	30	3·5	3·5	257	30	4·5	3·8	281	30	1·3	0·9 1
0·15 a.g. ..	30	5·7	1·5	80	30	4·8	2·4	92	30	4·9	2·1	314	30	7·1	7·0	257	30	7·2	6·5	278	29	4·3	3·3 1
0·6 a. s. l. ..	30	6·3	1·0	59	30	5·7	1·0	110	30	5·1	2·3	314	30	8·7	8·5	262	30	7·5	6·9	277	29	5·4	4·2 1
1·0 „ ..	29	5·8	2·3	332	26	5·9	2·2	321	30	5·4	3·3	315	30	11·0	10·5	289	30	8·0	7·6	276	18	5·5	3·9 1
1·5 „ ..	29	5·9	3·7	327	25	7·1	4·6	333	29	6·1	4·8	317	30	9·9	9·1	296	29	7·8	7·6	276	14	5·1	3·5 1
2·0 „ ..	27	6·4	5·0	320	22	7·9	5·5	338	28	7·6	6·4	320	26	7·5	6·7	286	29	8·0	7·8	280	6	4·7	3·5 1
2·5 „ ..	18	5·0	4·0	293	22	7·8	5·5	344	27	7·4	6·0	320	25	6·6	5·6	279	27	8·3	7·9	285	3	3·2	1·7 1
3·0 „ ..	11	3·8	1·8	283	21	6·8	4·7	351	26	6·4	4·8	324	24	6·1	5·2	285	22	7·9	7·4	282	1	1·5	1·5
4·0 „ ..	3	2·3	1·5	178	16	5·3	2·3	34	19	4·0	1·2	340	18	6·1	5·3	284	14	7·3	6·5	284			
5·0 „ ..					13	4·9	1·9	212	16	5·3	3·1	307	16	6·1	4·2	289	8	6·9	6·2	272			
6·0 „ ..					13	5·7	4·1	270	14	6·0	4·8	290	12	3·7	3·0	323	5	6·3	5·8	295			
7·5 „ ..					8	10·6	11·9	263	6	10·1	9·9	269	6	4·5	2·2	52	1	4·0	4·0	355			
9·0 „ ..					5	13·2	13·1	255	4	11·5	10·8	265	5	6·0	5·8	80							

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	ASANSOL												BANGALORE											
	0700				1600								0100				0700				1600			
	n	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	0·8	119	30	2·6	2·2	128					16	3·6	3·5	270	30	3·8	3·5	265	30	3·9	3·5	273
0·15 a.g. ..	29	3·5	2·1	120	30	5·4	4·5	128					16	7·3	6·9	261	30	7·6	7·5	263	29	7·1	6·9	266
0·6 a. s. l. ..	29	4·0	2·1	133	28	5·7	4·5	128																
1·0 „ ..	16	4·4	2·2	133	24	5·0	3·5	127					16	5·8	5·6	261	30	6·1	5·8	261	29	6·4	6·1	265
1·5 „ ..	10	5·3	2·5	112	12	5·2	3·7	139					15	8·6	8·4	280	21	11·4	10·8	290	29	7·5	7·1	275
2·0 „ ..	6	5·9	1·6	156	7	4·7	3·9	142					8	4·3	3·7	293	13	9·0	8·6	294	28	8·2	7·9	281
2·5 „ ..	4	5·0	3·9	115	6	5·3	4·5	126					1	2·0	2·0	35	8	7·7	7·0	297	16	8·5	8·0	285
3·0 „ ..	3	3·3	2·6	105	3	6·2	5·7	105					1	2·0	2·0	85	7	6·6	5·4	275	7	7·4	6·9	285
4·0 „ ..					1	11·5	11·5	90									5	4·6	3·9	255	3	5·3	5·3	243
5·0 „ ..																	3	3·5	2·7	334	1	7·5	7·5	260
6·0 „ ..																	3	2·8	1·6	32				
7·5 „ ..																	1	3·0	3·0	85				
9·0 „ ..																								

Height in km.	BAREILLY								BHOPAL												BHUJ			
	0700				1600				0100				0700				1600				0100			
	n	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	1·0	78	30	2·1	0·3	33	30	3·5	2·2	281	30	3·5	2·8	299	30	4·7	3·1	304	30	3·4	1·8	215
0·15 a.g. ..	30	4·1	2·1	90	28	4·4	0·6	37	25	8·1	4·3	306	27	8·2	5·9	299	27	6·5	4·1	304	30	7·7	4·6	228
0·6 a. s. l. ..	29	5·0	2·2	116	28	4·3	0·6	43	25	7·3	3·9	304	27	7·1	5·1	296	27	6·1	3·7	302	30	9·9	6·2	240
1·0 „ ..	28	5·2	1·4	98	27	3·9	0·8	311	22	8·7	4·0	328	21	9·3	5·4	325	26	7·1	5·0	325	29	9·1	4·8	226
1·5 „ ..	28	5·9	1·0	81	24	5·1	1·4	309	21	7·9	3·4	344	20	2·8	5·0	341	25	7·4	4·8	336	23	6·7	2·6	177
2·0 „ ..	27	7·5	2·9	5	23	4·8	1·2	332	18	6·5	2·0	28	14	7·1	5·2	24	22	6·5	3·7	347	17	5·2	2·1	162
2·5 „ ..	26	6·3	2·7	13	23	3·8	0·7	336	11	6·2	2·8	36	14	7·5	6·1	28	16	6·3	4·0	351	12	4·9	1·9	187
3·0 „ ..	23	5·8	2·9	360	22	3·3	0·9	1	6	5·3	3·1	5	13	5·9	4·6	38	14	5·9	3·3	352	9	3·9	0·9	160
4·0 „ ..	16	3·5	1·7	98	21	3·2	1·4	25	1	5·0	5·0	360	8	2·4	1·4	49	7	6·1	3·1	33	1	2·5	2·5	105
5·0 „ ..	9	3·8	2·1	210	21	5·1	3·0	310					6	3·6	2·1	110	5	5·2	3·2	84				
6·0 „ ..	8	5·1	1·8	252	17	6·8	3·4	317					5	3·8	2·2	114	5	4·9	3·6	107				
7·5 „ ..	6	5·3	2·5	253	13	8·4	5·5	273					3	6·3	3·7	116	4	5·5	5·3	98				
9·0 „ ..	5	8·2	6·7	264	12	9·7	8·4	253					2	5·5	5·5	122	1	1·5	1·5	185				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	BHUJ								BIKANER								BOMBAY							
	0700				1600				0700				1600				0100				0700			
	n	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	1·5	229	30	5·4	3·5	241	30	2·7	2·3	243	30	2·5	0·8	232	30	3·0	1·2	213	30	2·9	0·7	21
0·15 a. g. ..	30	6·7	4·1	240	30	8·1	4·8	233	30	8·5	6·8	252	30	3·8	1·1	249	25	4·4	3·2	245	30	4·7	2·0	22
0·6 a. s. l. ..	30	10·5	6·5	248	30	9·1	4·6	245	30	9·7	7·4	265	30	4·1	1·8	258	24	5·2	4·3	260	27	5·7	4·3	26
1·0 " ..	28	9·6	6·5	244	29	7·5	3·7	240	30	7·2	4·8	272	30	4·5	2·2	261	22	5·8	4·4	269	23	5·9	4·5	26
1·5 " ..	26	8·1	4·1	221	24	5·9	3·0	242	30	4·2	1·3	283	30	3·6	1·6	269	18	5·5	3·7	291	15	5·7	3·9	25
2·0 " ..	22	6·9	2·3	165	17	5·2	0·6	179	30	4·1	1·1	73	30	3·4	0·8	299	12	5·0	3·3	339	13	5·2	2·7	25
2·5 " ..	17	7·3	3·1	131	10	5·9	1·6	79	30	4·3	2·3	51	30	3·7	2·1	347	7	4·7	1·7	353	8	5·0	3·9	25
3·0 " ..	16	7·4	4·0	105	9	7·1	2·9	88	29	5·3	4·2	44	29	4·4	3·2	15	5	5·5	2·8	2	6	5·0	4·1	27
4·0 " ..	10	6·0	4·3	100	6	9·1	3·3	95	29	6·9	5·5	38	24	5·5	3·7	3	1	2·0	2·0	360	4	7·0	5·6	26
5·0 " ..	8	6·0	3·3	85	4	11·9	6·6	97	24	3·9	1·8	53	23	5·9	3·8	319					3	3·5	3·0	29
6·0 " ..	5	5·3	2·9	82	3	6·5	1·6	149	22	4·3	1·3	302	20	6·3	3·1	319					3	3·5	2·5	31
7·5 " ..	2	1·3	1·2	83					15	5·1	2·5	260	14	5·1	3·3	291					1	4·0	4·0	4
9·0 " ..	2	3·3	3·0	159					12	6·7	4·8	251	9	8·8	6·2	284					1	5·0	5·0	9

Height in km.	BOMBAY				CALCUTTA												COCHIN							
	1600				0100				0700				1600				0100				0700			
	n	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	3·8	257	30	1·4	1·1	152	30	1·7	1·3	130	30	2·8	2·5	158	30	1·2	0·5	346	30	0·8	0·1	33
0·15 a.g. ..	30	6·6	4·6	260	30	5·4	4·1	160	29	4·4	3·3	132	30	4·8	4·1	159	29	3·1	2·3	314	29	2·8	1·2	36
0·6 a. s. l. ..	27	7·5	6·0	270	30	7·1	5·4	187	27	5·3	3·8	151	29	7·0	5·8	162	29	6·3	6·0	306	29	6·4	5·9	30
1·0 " ..	25	6·6	5·9	275	29	6·9	5·2	186	26	5·4	3·6	151	29	7·1	5·4	161	27	7·6	7·3	304	29	7·5	7·1	30
1·5 " ..	18	5·9	4·9	271	27	6·3	4·1	170	25	5·8	3·9	149	26	6·9	4·2	161	23	7·9	7·6	302	26	8·3	8·0	29
2·0 " ..	11	4·5	3·7	277	26	6·6	4·7	165	24	6·2	4·4	144	24	7·4	4·6	159	20	8·6	8·3	296	26	8·4	8·1	29
2·5 " ..	11	5·2	3·5	278	20	7·0	4·7	170	21	6·1	4·3	143	19	6·8	2·9	152	12	8·0	7·3	288	23	8·5	7·7	29
3·0 " ..	9	4·1	2·4	261	15	6·3	4·3	154	9	6·0	3·9	152	18	6·8	3·3	143	9	6·7	5·9	281	21	7·9	7·3	30
4·0 " ..	7	4·1	2·3	253	6	6·4	4·7	139	6	4·6	4·3	139	10	3·5	2·9	135	2	1·3	0·5	210	13	4·8	3·5	29
5·0 " ..	5	2·9	1·3	93					3	3·7	3·7	154	7	4·3	3·1	117					12	3·2	0·9	28
6·0 " ..	5	3·7	3·4	61					2	4·0	4·0	149	6	4·4	3·4	135					10	3·7	1·8	6
7·5 " ..	3	6·0	5·6	88					1	4·5	4·5	25	6	4·2	4·0	141					7	6·8	5·6	10
9·0 " ..									1	5·0	5·0	150	3	6·3	5·1	119					4	10·6	10·5	9

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	COCHIN				COOCH BEHAR								CUTTACK											
	1600				0700				1600				0100				0700				1600			
	n	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	3·8	296	30	1·5	1·2	73	30	1·6	1·0	169	30	0·6	0·1	80	30	0·8	0·3	360	30	1·5	0·5	153
0·15 a. g. ..	30	4·9	4·5	292	26	3·4	2·9	95	28	3·4	2·4	159	30	4·5	1·0	253	30	3·8	0·6	294	28	4·9	2·1	159
0·6 a. s. l. ..	30	7·5	7·3	303	26	4·4	3·3	114	28	3·8	2·9	157	26	6·3	3·6	247	29	4·9	2·3	246	28	5·6	2·7	170
1·0 „ ..	28	8·5	8·2	305	24	4·3	3·5	111	26	3·9	2·7	157	25	6·8	3·6	263	29	5·8	2·5	259	27	5·7	1·9	162
1·5 „ ..	27	8·0	7·7	304	21	4·8	4·0	100	26	4·5	2·7	151	22	6·4	2·8	274	29	6·3	2·3	238	21	5·6	0·7	148
2·0 „ ..	24	7·8	7·4	303	19	4·8	3·8	105	24	4·3	2·3	143	18	5·7	1·9	242	25	6·0	2·0	232	21	5·7	0·7	131
2·5 „ ..	23	7·6	6·8	294	18	4·3	3·0	115	21	4·1	1·9	139	16	5·3	1·8	197	20	6·3	1·7	205	18	6·0	1·0	103
3·0 „ ..	21	7·5	6·6	294	16	4·3	2·9	124	16	3·8	1·6	129	11	5·9	2·6	161	16	6·8	2·6	218	15	6·3	0·7	43
4·0 „ ..	15	5·2	4·2	273	13	3·6	1·3	152	15	4·5	1·4	211	3	4·0	2·6	174	13	5·6	2·8	180	11	6·5	0·7	13
5·0 „ ..	10	3·7	2·4	276	9	3·7	1·6	148	12	3·5	1·0	221					9	4·9	1·0	151	7	4·2	0·6	211
6·0 „ ..	10	3·9	1·0	316	4	3·6	2·7	246	9	4·1	0·4	214					6	4·1	1·1	190	4	4·1	3·3	107
7·5 „ ..	6	5·7	2·5	82	2	2·0	1·1	130	5	7·1	3·2	227					3	4·8	4·7	111	3	3·0	2·3	79
9·0 „ ..	4	13·3	12·9	93	1	7·5	7·5	90	2	7·0	6·9	98					1	6·0	6·0	90	1	4·0	4·0	135

Height in km.	DEOLALI				DIBRUGARH								GADAG								GAYA			
	0830				0700				1600				0700				1600				0100			
	n	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	1·9	1·7	243	30	1·3	0·7	23	30	1·5	0·3	12	30	3·9	3·6	251	30	5·2	4·9	253	30	3·1	1·5	114
0·15 a.g. ..	24	5·7	5·4	250	25	2·4	1·3	57	30	2·3	0·7	31	30	8·0	7·6	255	29	9·0	8·4	256	26	4·7	3·5	127
0·6 a. s. l. ..	24	3·6	3·4	252	23	2·7	1·3	49	30	2·5	0·6	87									26	5·4	4·2	141
1·0 „ ..	23	7·2	6·5	266	18	3·5	1·3	36	30	2·8	0·2	114	30	9·5	8·7	284	29	9·9	9·3	261	25	4·8	3·9	131
1·5 „ ..	22	7·2	6·1	271	17	3·2	0·4	98	30	2·6	0·8	200	28	9·7	8·6	293	29	8·5	8·2	271	24	4·5	3·8	112
2·0 „ ..	14	5·4	2·6	292	15	2·5	0·9	168	29	3·1	1·7	189	22	6·7	6·1	298	24	6·8	6·2	283	21	3·8	3·1	119
2·5 „ ..	11	4·4	2·0	4	14	2·8	1·6	198	29	3·5	2·5	200	21	6·3	4·8	292	18	6·8	5·9	286	13	3·8	2·9	120
3·0 „ ..	7	4·5	2·5	46	15	3·7	2·3	192	29	4·0	3·0	205	21	5·5	4·4	299	12	5·4	4·8	298	9	3·3	2·9	112
4·0 „ ..	6	5·3	3·5	54	11	4·5	2·9	208	27	4·1	3·1	212	17	4·8	4·2	307	6	6·5	5·7	298	1	2·5	2·5	35
5·0 „ ..	3	3·5	2·5	44	6	3·7	2·1	214	22	4·3	3·1	223	14	4·7	3·4	313	5	5·9	5·6	280				
6·0 „ ..	2	3·0	2·9	66	5	4·0	3·2	241	20	4·3	2·9	240	12	3·3	2·4	313	2	3·5	2·1	253				
7·5 „ ..	1	2·5	2·5	60	4	4·6	2·6	229	15	4·9	2·5	274	9	4·1	3·0	61	1	1·5	1·5	175				
9·0 „ ..					4	3·5	0·8	339	12	4·9	2·5	298	8	6·6	6·3	87	1	5·0	5·0	101				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	GAYA								GOPALPUR								GORAKHPUR							
	0700				1600				0700				1600				0700				1600			
	n	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	1·5	99	30	3·8	2·5	61	30	2·6	0·4	206	30	5·7	4·0	[illegible]	[illegible]	2·4	2·2	71	30	2·1	1·2	[illegible]
0·15 a. g. ..	27	4·3	3·2	114	29	5·4	3·9	74	29	4·6	1·2	244	28	6·4	4·6	184	[illegible]	5·6	5·0	88	30	4·5	2·7	[illegible]
0·6 a. s. l. ..	27	4·8	3·8	138	29	5·3	4·2	86	30	4·8	1·7	268	28	5·7	2·2	190	24	6·4	5·9	107	30	4·8	3·9	[illegible]
1·0 „ ..	25	5·3	4·4	123	28	5·5	4·4	104	30	5·4	2·2	274	28	5·3	1·0	231	22	6·0	5·4	97	28	4·6	4·2	[illegible]
1·5 „ ..	23	5·8	5·1	110	27	5·9	5·0	120	28	6·1	3·5	288	27	6·0	2·2	271	20	5·8	5·1	96	23	4·5	4·0	[illegible]
2·0 „ ..	21	5·6	5·0	106	22	5·7	5·3	117	25	5·9	3·0	286	26	6·0	1·9	273	19	5·9	5·0	99	19	4·5	3·9	[illegible]
2·5 „ ..	18	5·4	4·9	104	19	5·9	5·4	112	19	5·4	2·0	281	21	5·5	2·5	275	16	4·2	3·2	99	15	3·6	2·7	[illegible]
3·0 „ ..	17	5·0	4·2	104	14	5·5	4·9	109	18	5·9	1·5	277	17	5·0	2·2	269	16	3·9	2·9	102	15	3·9	2·7	[illegible]
4·0 „ ..	13	4·0	3·5	118	8	5·7	4·7	101	11	6·0	1·5	231	14	3·9	1·1	290	10	2·9	1·6	193	8	3·3	0·3	[illegible]
5·0 „ ..	11	4·1	3·4	136	2	3·3	2·7	176	7	4·4	0·8	304	10	3·8	0·9	36	8	3·7	2·6	187	6	5·2	1·2	[illegible]
6·0 „ ..	10	3·7	3·0	130	1	4·0	4·0	180	4	3·9	2·9	103	9	4·6	1·1	75	8	4·2	2·7	230	5	5·3	2·9	[illegible]
7·5 „ ..	3	5·3	3·5	139	1	6·0	5·0	160	3	4·0	3·4	101	8	4·4	1·7	56	5	6·0	5·4	233	4	5·4	3·6	[illegible]
9·0 „ ..	2	5·5	5·5	153					3	8·5	8·2	118	6	6·4	6·0	84	5	5·5	3·8	229	2	7·0	5·5	[illegible]

Height in km.	JAGDALPUR								JAMSHEDPUR								JAMNAGAR						
	0700				1600				0700				1600				0700				1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	1·9	1·4	236	30	3·1	1·4	249	30	1·4	0·5	76	30	2·6	1·5	111	15	4·0	2·1	210	15	10·8	7·9
0·15 a. g. ..	28	4·7	2·7	256	23	5·6	2·9	254	30	2·9	0·5	95	29	4·8	2·9	112	14	6·2	4·8	248	15	9·4	6·3
0·6 a. s. l. ..	28	3·4	2·1	255	23	4·7	2·3	257	28	4·4	0·8	124	29	5·2	2·5	136	14	8·5	6·1	259	15	9·3	6·3
1·0 „ ..	22	7·3	4·4	281	21	6·1	3·0	269	28	4·8	1·5	128	28	5·9	2·9	133	14	8·1	5·8	251	15	9·5	6·1
1·5 „ ..	17	9·0	6·2	274	17	7·0	2·4	312	18	5·5	2·0	126	21	5·3	1·8	140	13	6·7	3·0	222	10	7·5	5·3
2·0 „ ..	12	9·7	5·5	287	12	7·5	1·9	324	15	6·5	2·8	131	18	5·4	2·6	143	12	6·1	1·6	210	9	4·9	1·4
2·5 „ ..	8	8·2	3·7	291	9	7·0	2·9	314	13	5·8	3·1	109	16	4·9	2·0	152	11	5·5	0·4	71	8	4·4	1·4
3·0 „ ..	4	7·0	1·2	345	4	8·0	4·9	283	12	5·0	2·9	119	14	4·5	1·5	166	10	4·6	1·9	45	7	3·6	0·7
4·0 „ ..	2	1·5	1·5	60	2	3·3	1·7	214	8	5·5	4·1	124	10	3·6	1·5	117	7	4·3	3·6	99	6	3·3	0·6
5·0 „ ..	1	2·0	2·0	90	1	2·5	2·5	85	6	4·7	4·4	126	7	3·9	1·7	133	7	4·9	3·6	89	4	4·0	0·6
6·0 „ ..	1	3·0	3·0	117	1	5·0	5·0	65	5	8·1	8·0	116	6	4·4	2·9	105	5	5·3	4·7	79	4	3·1	1·2
7·5 „ ..	1	4·0	4·0	155					1	8·0	8·0	110	2	3·5	2·1	202	4	7·0	5·7	84	2	4·5	4·5
9·0 „ ..													1	11·0	11·0	180	4	9·0	8·2	105	1	7·0	7·0

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	JHARSUGUDA												JODHPUR											
	0100				0700				1600				0100				0700				1600			
	n	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	0·6	186	30	1·2	0·2	175	30	1·4	0·6	203	30	1·9	1·5	241	30	2·0	1·4	244	30	2·1	1·8	235
0·15 a. g. ..	29	5·1	2·1	215	30	4·5	1·1	207	26	4·5	1·4	197	30	8·7	7·1	236	30	7·1	5·4	251	30	4·5	3·0	237
0·6 a. s. l. ..	29	6·5	3·1	225	27	5·5	1·4	223	26	5·2	1·2	232	30	9·1	7·3	242	30	8·2	6·3	251	30	4·3	2·3	242
1·0 „ ..	24	7·1	2·1	212	19	5·1	0·4	197	26	6·0	0·8	245	29	8·0	5·4	243	30	7·1	5·2	248	29	4·9	2·3	241
1·5 „ ..	17	6·1	1·0	181	14	5·5	2·5	99	21	5·7	0·6	42	26	5·0	2·1	216	30	4·4	2·0	250	29	4·1	0·3	187
2·0 „ ..	15	5·8	0·5	215	13	6·2	3·9	77	19	6·6	0·4	12	19	4·3	1·4	101	29	4·5	2·1	79	27	4·6	1·2	102
2·5 „ ..	14	5·7	0·6	143	11	5·4	4·4	98	19	6·6	0·3	25	13	5·1	2·8	61	27	4·9	3·2	74	24	5·6	2·6	81
3·0 „ ..	10	5·7	0·6	293	6	5·8	5·6	90	18	5·9	0·7	95	5	4·0	2·3	39	25	5·3	3·7	56	24	5·1	2·4	46
4·0 „ ..	7	4·0	0·8	118	4	5·5	3·3	125	11	3·9	2·0	90					18	4·8	1·3	50	20	4·5	2·6	26
5·0 „ ..					4	6·5	6·0	111	8	3·2	2·2	107					14	3·7	1·5	336	16	5·6	3·2	1
6·0 „ ..									7	3·5	2·1	121					11	4·7	2·5	263	13	5·4	3·7	16
7·5 „ ..									6	3·3	1·6	81					2	6·0	3·0	293	6	5·8	4·9	358
9·0 „ ..									3	3·0	2·6	87					1	5·0	5·0	280				

Height in km.	JUBBULPORE												MADHOSAGAR								MADRAS			
	0100				0700				1600				0700				1600				0100			
	n	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	1·9	1·0	264	30	1·2	0·8	250	30	2·4	1·2	300	30	2·2	1·3	283	30	2·9	1·4	339	30	3·8	3·5	210
0·15 a. g. ..	26	5·4	2·6	271	25	3·8	2·1	256	29	5·2	2·6	314	30	4·5	2·4	306	29	4·8	3·2	338	30	7·3	6·7	212
0·6 a. s. l. ..	26	6·4	3·3	284	25	5·2	2·7	270	29	6·2	3·0	317	27	5·8	3·5	337	29	5·2	3·6	344	29	7·4	6·3	236
1·0 „ ..	20	7·3	3·1	337	19	7·7	3·4	338	25	6·4	3·9	329	25	6·2	4·2	342	29	5·4	3·9	349	29	7·2	6·4	261
1·5 „ ..	19	7·2	3·7	344	17	8·3	4·4	353	22	6·1	3·6	350	22	6·8	5·5	347	27	6·6	4·7	357	29	7·9	7·1	278
2·0 „ ..	17	6·8	3·6	9	16	7·0	4·5	7	17	7·0	4·1	7	20	7·5	6·7	355	24	7·0	4·6	7	25	7·3	6·8	291
2·5 „ ..	12	5·9	2·1	359	13	7·3	4·7	10	14	7·0	4·7	20	16	8·2	7·1	359	20	6·5	4·4	10	16	7·0	6·6	292
3·0 „ ..	9	4·5	0·9	15	13	6·2	3·2	23	11	5·5	4·0	11	16	6·8	5·7	10	16	5·9	3·6	15	11	5·9	5·6	286
4·0 „ ..					8	3·7	2·0	118	5	2·9	0·9	41	12	3·7	2·8	337	13	6·6	3·7	359	2	3·5	1·7	317
5·0 „ ..					4	4·4	3·4	114	4	2·6	1·6	16	10	4·5	3·0	293	13	6·0	2·7	334				
6·0 „ ..					4	5·8	4·0	97	2	4·2	4·2	16	9	5·6	2·9	271	13	6·2	2·2	266				
7·5 „ ..					4	5·0	4·0	127	2	5·0	4·9	34	9	5·9	1·5	335	11	6·4	3·5	267				
9·0 „ ..					1	1·0	1·0	320					7	6·9	3·9	312	11	6·3	3·2	265				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	MADRAS								MALEGAON												MANGALORE			
	0700				1600				0100				0700				1600				0100			
	n	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	251	30	4·8	0·8	247	30	3·1	2·6	271	30	3·1	2·4	267	30	4·7	2·9	302	30	1·4	0·5	320
0·15 a. g. ..	30	7·3	6·6	255	30	5·3	1·5	280	28	7·5	6·1	273	30	7·2	6·0	278	28	6·8	4·5	303	27	4·0	2·7	300
0·6 a. s. l. ..	30	8·6	7·7	280	30	4·9	2·9	271	28	7·5	6·1	273	30	7·2	6·0	278	28	6·8	4·5	303	27	6·7	5·8	295
1·0 „ ..	30	8·5	7·7	288	30	5·5	4·9	275	28	8·4	6·0	288	29	8·8	7·1	286	28	6·9	4·9	301	21	8·2	7·0	298
1·5 „ ..	30	7·5	7·2	289	30	7·3	7·1	276	26	6·9	4·5	321	28	7·0	4·4	312	26	7·0	4·5	292	12	7·5	7·1	301
2·0 „ ..	30	7·2	6·5	281	27	9·1	8·9	273	24	5·6	3·0	332	27	5·2	2·8	348	18	6·8	3·5	307	7	7·4	6·7	306
2·5 „ ..	29	7·5	6·8	281	25	9·5	9·2	274	15	5·2	1·7	319	21	5·5	1·5	339	11	5·7	2·2	326	4	7·0	5·7	312
3·0 „ ..	26	7·7	6·6	278	21	8·9	8·5	272	13	5·5	3·3	286	16	5·4	1·9	339	5	5·3	2·7	268	2	6·7	6·7	304
4·0 „ ..	21	7·3	6·0	264	17	7·4	6·0	276	7	4·0	2·5	343	11	3·6	0·6	93	2	5·5	5·3	241				
5·0 „ ..	20	7·1	4·9	272	12	6·5	5·6	279					10	3·4	1·5	61	1	3·0	3·0	245				
6·0 „ ..	18	6·3	2·7	270	7	3·0	1·5	232					9	3·6	2·2	108	1	1·0	1·0	50				
7·5 „ ..	16	4·8	1·0	39	3	6·0	3·6	50					9	3·9	2·4	50	1	4·0	4·0	135				
9·0 „ ..	12	6·8	6·1	98	2	5·5	5·3	104					7	5·7	4·9	83	1	2·5	2·5	45				

Height in km.	MANGALORE								MASULIPATAM												NAGERCOIL			
	0700				1600				0100				0700				1600				0100			
	n	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	0·8	83	30	2·8	2·2	282	30	1·9	1·3	242	30	2·1	1·7	272	30	2·0	1·3	282	30	4·2	3·9	285
0·15 a. g. ..	30	2·8	0·4	314	29	5·4	4·5	285	30	7·1	5·3	252	27	7·3	6·4	266	30	4·3	2·9	279	30	9·1	9·1	298
0·6 a. s. l. ..	28	6·1	5·2	298	29	7·4	6·8	294	30	8·0	7·1	278	26	10·2	9·1	277	29	6·6	5·5	286	30	16·3	16·0	304
1·0 „ ..	22	7·5	6·7	300	27	8·3	7·7	296	30	8·1	7·5	282	25	8·9	8·1	288	29	7·5	6·8	289	30	16·5	16·3	302
1·5 „ ..	12	8·4	7·9	291	22	7·6	7·0	296	27	9·7	9·2	287	21	8·6	8·0	294	27	9·2	8·5	287	30	11·4	11·0	292
2·0 „ ..	8	7·4	7·1	294	18	7·3	6·6	295	24	10·2	9·6	285	19	7·7	6·9	294	26	10·2	9·4	282	30	11·2	10·4	291
2·5 „ ..	5	6·2	6·0	304	11	5·8	5·3	285	20	9·4	8·7	287	17	7·2	6·5	299	26	9·9	8·9	279	29	6·7	5·9	299
3·0 „ ..	3	3·2	2·7	314	8	4·6	3·4	284	17	7·6	7·1	289	15	6·2	5·5	299	24	8·2	7·2	279	29	6·3	5·2	290
4·0 „ ..	3	2·3	1·8	259	5	4·1	3·9	322	5	6·1	5·8	295	9	5·8	5·4	304	17	7·2	5·3	264	16	5·1	3·5	287
5·0 „ ..	2	2·0	1·9	265	3	3·0	1·0	227					7	5·1	4·4	309	11	6·5	4·4	262	10	3·9	1·4	342
6·0 „ ..	1	3·5	3·5	295	3	3·0	1·3	116					6	3·9	2·0	333	8	5·5	3·2	281				
7·5 „ ..	1	2·0	2·0	280									1	6·0	6·0	45	4	2·1	1·3	327				
9·0 „ ..	1	2·0	2·0	125									1	7·5	7·5	70	3	5·0	4·6	99				

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	NAGERCOIL								NAGPUR												NEW DELHI			
	0700				1600				0100				0700				1600				0100			
	n	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	3·5	281	30	7·1	7·0	272	30	2·4	1·4	285	30	2·4	1·6	300	30	3·1	1·8	315	30	1·4	0·6	155
0·15 a. g. ..	30	8·3	8·2	298	30	11·3	11·1	273	29	6·1	3·9	303	28	7·0	4·8	310	29	5·6	3·2	310	29	4·5	2·0	172
0·6 a. s. l. ..	30	14·2	13·9	303	30	11·7	11·6	292	29	7·1	4·5	308	28	8·9	5·7	337	29	6·0	3·9	313	29	4·8	1·5	125
1·0 „ ..	30	15·2	14·9	300	30	12·1	11·8	303	29	7·9	4·5	325	25	8·3	5·3	337	28	7·3	5·1	320	29	4·5	1·0	25
1·5 „ ..	30	12·1	11·8	294	30	11·6	11·0	304	24	7·3	4·1	334	23	7·4	3·7	349	24	7·2	4·9	330	24	6·1	3·9	341
2·0 „ ..	29	9·4	8·9	293	30	10·8	10·3	299	17	6·4	3·7	339	17	6·9	4·6	351	20	7·3	4·7	333	17	6·9	5·5	342
2·5 „ ..	29	8·8	7·8	294	30	9·8	9·3	291	12	6·5	4·1	338	15	6·6	4·8	18	12	7·2	5·8	341	13	5·2	4·4	357
3·0 „ ..	29	6·4	5·2	290	30	8·2	7·5	288	9	7·9	4·7	345	12	5·8	4·4	20	8	5·1	4·3	343	7	6·3	5·7	353
4·0 „ ..	28	5·4	4·0	282	28	6·0	5·2	288	1	22·0	22·0	355	10	5·8	3·5	58	5	4·9	3·8	360	1	3·0	3·0	45
5·0 „ ..	26	5·1	2·8	271	27	5·7	3·9	270					7	7·7	3·6	48	4	4·3	2·4	352				
6·0 „ ..	24	4·5	0·6	5	25	4·9	1·6	288					5	8·8	7·2	76								
7·5 „ ..	20	6·2	4·4	74	21	6·0	1·9	66					5	8·7	8·0	76								
9·0 „ ..	16	10·0	8·8	96	17	6·8	4·3	87																

Height in km.	NEW DELHI								POONA												RAIPUR			
	0700				1600				0100				0700				1600				0100			
	n	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	1·5	0·9	271	30	2·5	1·3	324	30	1·4	1·4	266	30	1·1	1·1	270	30	3·4	3·2	274	30	3·1	1·8	244
0·15 a. g. ..	28	5·5	3·2	276	28	3·9	1·8	349	29	5·2	4·9	257	29	4·8	4·3	260	30	6·8	6·4	271	25	7·3	4·0	255
0·6 a. s. l. ..	27	5·7	2·6	295	28	3·9	2·2	346	29	3·5	3·4	256	29	2·7	2·3	262	30	4·9	4·6	272	25	8·2	4·3	262
1·0 „ ..	27	5·5	2·7	338	28	4·7	2·8	336	28	7·0	6·5	276	28	6·4	5·9	272	30	8·5	7·8	271	23	7·8	3·0	298
1·5 „ ..	25	6·4	4·1	342	26	6·0	4·1	332	25	8·5	7·9	285	28	7·8	6·7	280	26	8·3	7·4	267	19	7·4	2·3	325
2·0 „ ..	22	6·5	4·6	350	25	6·5	5·2	337	21	5·9	4·6	296	21	4·4	3·6	299	18	8·2	6·3	265	14	6·5	2·2	310
2·5 „ ..	22	6·4	3·2	347	23	6·3	5·0	336	17	3·5	2·6	317	20	3·5	2·3	277	16	7·6	4·3	274	8	4·4	1·1	355
3·0 „ ..	20	5·2	3·9	359	22	5·4	4·1	342	10	3·5	3·1	307	19	3·9	2·9	284	13	7·0	3·6	257	6	4·3	1·1	27
4·0 „ ..	17	3·8	1·1	314	21	5·1	3·3	338	2	3·5	3·1	297	18	4·4	3·2	315	6	6·2	3·3	233	3	3·7	2·5	92
5·0 „ ..	16	4·6	1·3	264	20	4·5	2·7	304					13	3·5	2·8	340	3	5·8	4·5	304	3	6·2	5·3	111
6·0 „ ..	14	5·7	2·7	260	17	5·3	3·7	297					10	3·7	2·5	5	2	2·3	1·1	70	1	10·5	10·5	100
7·5 „ ..	10	7·4	6·1	281	12	8·3	7·1	271					8	4·0	3·7	57	2	4·5	4·1	35				
9·0 „ ..	10	9·2	8·6	267	12	10·0	9·1	265					7	5·4	5·1	83								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in km.	RAIPUR 0700				RAIPUR 1600				SAHARSA 0700				SAHARSA 1600				TEZPUR 0100				TEZPUR 0700			
	n	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	1·1	234	30	2·5	0·7	255	30	1·5	1·4	89	30	2·0	1·8	99	30	0·8	0·3	68	30	0·7	0·3	116
0·15 a. g. ..	29	6·6	3·7	259	27	6·3	2·3	264	27	5·0	4·7	91	29	4·7	4·1	107	27	3·3	1·3	39	30	2·5	1·1	95
0·6 a. s. l. ..	27	7·5	3·3	265	28	6·1	2·3	278	24	4·9	4·5	108	29	5·8	5·4	109	26	3·2	0·1	328	27	3·4	1·2	91
1·0 „ ..	24	7·3	3·7	318	26	6·9	2·5	306	20	4·7	4·4	106	26	5·8	5·5	116	26	3·5	0·6	199	26	3·6	0·9	100
1·5 „ ..	21	6·0	2·9	343	21	7·3	2·2	10	15	4·6	4·2	101	15	5·1	4·5	128	24	3·7	1·2	237	26	4·4	0·6	156
2·0 „ ..	17	6·5	3·3	352	12	6·4	4·6	66	15	4·0	3·9	103	9	5·4	4·1	117	22	4·0	1·7	214	23	4·2	1·3	208
2·5 „ ..	11	6·4	3·3	35	9	7·2	4·2	57	8	3·1	2·5	113	6	4·0	2·7	116	18	4·5	2·2	206	22	4·6	2·2	208
3·0 „ ..	9	7·9	4·3	20	8	8·8	4·2	61	8	3·2	2·7	123	6	3·4	2·4	112	17	4·9	3·1	205	18	4·3	2·9	223
4·0 „ ..	8	6·1	2·9	29	5	7·9	4·6	67					1	3·5	3·5	150	12	5·4	3·7	228	12	4·9	3·5	230
5·0 „ ..	6	5·9	1·2	337	5	7·4	4·6	107													7	3·1	0·7	186
6·0 „ ..	6	2·8	1·7	95	4	7·7	7·0	123													5	4·0	2·5	236
7·5 „ ..	3	3·5	2·7	125																	4	3·4	1·5	208
9·0 „ ..	2	3·0	2·9	138																	3	2·0	1·2	53

Height in km.	TEZPUR 1600				TRICHINOPOLY 0100				TRICHINOPOLY 0700				TRICHINOPOLY 1600				TRIVANDRUM 0700				UDAIPUR 0100			
	n	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	0·7	0·1	108	30	3·0	2·8	267	30	2·9	2·7	264	30	3·4	3·0	294	30	2·4	2·3	351	30	0·8	0·5	28
0·15 a. g. ..	29	8·6	0·6	60	30	8·5	8·3	266	30	8·2	8·0	277	30	6·7	6·1	289	30	7·1	6·8	336	29	4·1	2·8	26
0·6 a. s. l. ..	28	2·9	1·2	90	30	11·7	11·4	266	30	11·8	11·6	278	30	7·5	7·3	276	30	9·1	8·8	318				
1·0 „ ..	28	3·6	1·6	124	30	10·3	10·2	272	30	10·0	9·7	281	30	7·9	7·7	267	30	10·4	10·1	308	29	5·9	3·7	26
1·5 „ ..	28	3·8	1·7	178	30	7·6	7·4	269	30	7·7	7·3	274	30	8·2	7·9	262	29	10·5	10·2	300	30	5·1	1·1	28
2·0 „ ..	27	4·0	1·9	202	28	5·6	4·9	286	30	5·6	5·0	266	30	8·1	7·9	266	27	9·7	9·3	297	29	4·1	1·7	8
2·5 „ ..	26	4·5	2·3	211	22	5·0	4·5	297	29	5·9	5·2	278	30	7·4	7·0	270	26	6·1	7·3	296	26	4·8	3·3	6
3·0 „ ..	26	4·8	2·6	234	19	4·8	4·4	299	29	6·8	6·0	281	28	8·0	7·5	270	26	6·6	5·9	290	23	5·9	4·5	5
4·0 „ ..	23	5·0	2·8	230	1	4·0	4·0	270	26	6·8	6·0	278	24	7·7	7·0	280	24	4·0	2·3	286	5	5·4	4·8	6
5·0 „ ..	22	4·5	1·9	238					18	5·0	3·8	262	19	5·7	4·6	282	22	4·4	0·9	299	1	4·5	4·5	
6·0 „ ..	20	3·8	0·9	198					16	4·9	2·0	258	18	5·5	2·2	274	18	4·6	1·1	55				
7·5 „ ..	13	4·0	1·7	210					10	4·7	3·5	87	12	5·5	1·0	77	16	7·6	4·3	76				
9·0 „ ..	8	4·4	0·6	273					7	9·9	8·9	118	5	9·5	5·7	60	9	13·4	11·9	64				

Table A — Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

SEPTEMBER 1948

Height in Km.	UDAIPUR								VENGURLA												VERAVAL			
	0700				1600				0100				0700				1600				0100			
	n	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	0·8	305	30	1·2	1·0	265	30	0·5	0·3	244	30	0·4	0·3	207	30	3·1	2·7	253	30	5·9	3·3	245
0·15 a. g. ..	30	3·9	3·1	298	29	4·1	2·0	274	28	4·3	2·9	290	28	3·1	0·7	260	28	5·4	4·6	269	28	7·1	5·5	262
0·6 a. s. l ..									25	6·8	5·0	295	25	6·0	5·1	290	26	7·8	6·9	281	27	8·5	6·8	269
1·0 „ ..	29	5·1	3·0	297	29	4·0	1·6	278	22	7·4	6·9	298	18	7·0	6·5	297	23	8·4	7·8	287	27	7·7	5·5	258
1·5 „ ..	30	4·0	0·4	22	29	3·9	1·2	296	18	7·2	6·8	296	16	7·5	7·3	298	20	7·7	7·4	291	25	5·2	2·0	220
2·0 „ ..	30	4·6	3·1	77	25	4·0	1·8	46	14	6·2	5·4	296	14	6·9	6·3	300	18	8·9	6·7	290	22	4·4	1·7	83
2·5 „ ..	27	5·7	4·2	86	24	4·6	2·5	84	12	5·6	5·0	307	12	4·7	4·3	291	14	6·6	6·4	287	14	3·5	0·5	294
3·0 „ ..	25	5·9	4·5	75	19	5·4	3·0	91	12	4·2	3·6	311	10	3·5	2·9	292	10	5·7	5·5	276	14	3·6	1·7	285
4·0 „ ..	24	5·0	3·1	60	15	4·1	2·6	88	2	3·5	3·0	290	8	4·1	2·9	282	9	4·7	4·1	275	4	4·0	1·6	109
5·0 „ ..	15	4·0	1·6	74	15	3·7	1·6	86					6	3·4	2·9	327	7	4·3	3·1	273				
6·0 „ ..	11	4·1	2·5	61	14	5·0	2·7	41					5	3·4	2·2	325	7	3·1	2·5	280				
7·5 „ ..	6	4·7	4·2	80	8	3·5	4·4	57					2	3·5	2·5	53	6	2·8	1·1	337				
9·0 „ ..	2	5·5	5·1	136	5	6·4	3·8	81					2	8·0	7·3	49	5	4·5	3·6	27				

Height in km.	VERAVAL								VIZAGAPATAM															
	0700				1600				0100				0700				1600							
	n	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	2·6	243	30	6·2	3·6	256	30	1·5	1·1	257	30	1·5	1·1	263	30	2·8	2·4	205				
0·15 a.g. ..	28	6·7	4·0	271	30	8·6	5·6	245	28	5·3	4·2	256	30	4·7	3·5	256	28	6·5	5·0	216				
0·6 a. s. l. ..	27	8·2	6·4	269	27	7·7	7·0	265	26	6·1	4·9	258	28	6·3	4·4	252	28	6·2	4·6	242				
1·0 „ ..	26	8·0	5·2	262	25	6·8	5·6	268	26	6·8	5·7	277	25	6·6	5·4	270	27	6·2	4·6	271				
1·5 „ ..	25	6·5	3·0	228	25	5·8	3·9	264	21	7·6	6·7	284	23	8·2	6·7	281	25	7·0	5·4	279				
2·0 „ ..	23	6·0	0·7	267	24	5·1	2·4	270	20	7·7	6·8	278	21	8·5	6·9	284	24	7·4	5·6	282				
2·5 „ ..	21	5·7	0·9	40	21	5·1	2·0	281	19	7·1	6·3	282	19	7·3	6·0	285	20	7·0	4·7	283				
3·0 „ ..	20	5·4	1·4	2	20	4·9	1·8	280	17	6·1	4·9	278	17	5·7	4·1	281	15	6·5	3·3	295				
4·0 „ ..	16	4·3	0·9	77	18	4·9	1·3	276	7	6·4	3·5	273	7	4·4	3·3	259	7	5·8	2·2	275				
5·0 „ ..	14	4·7	1·3	58	16	5·3	0·6	335					6	4·0	2·5	287	5	4·7	0·5	252				
6·0 „ ..	14	4·6	2·6	69	14	6·2	1·7	24					3	5·3	1·8	149	2	2·3	1·5	300				
7·5 „ ..	12	5·6	4·3	60	10	4·1	2·5	63					3	3·7	2·0	155	2	4·5	4·5	16				
9·0 „ ..	10	5·3	3·9	70	7	4·7	3·7	74					1	7·0	7·0	85	1	6·5	6·5	15				

Table A——Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

MINICOY 1948

Station	JULY								SEPTEMBER															
Time in I.S.T.	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	5·4	5·2	280	31	5·4	5·1	282	30	3·5	3·3	300	30	3·8	3·6	302								
0·15 a. g. ..	31	9·3	8·9	284	31	10·0	9·6	279	30	6·7	6·3	297	30	6·9	6·5	298								
0·6 a. s. l ..	30	12·5	12·2	284	30	12·8	12·5	283	30	7·6	7·3	297	29	7·6	7·3	296								
1·0 „ ..	30	14·5	13·9	287	29	14·7	14·4	286	30	8·5	7·8	300	29	8·5	7·9	299								
1·5 „ ..	29	14·9	14·7	292	26	14·8	14·6	289	30	8·3	7·8	300	27	8·1	7·8	299								
2·0 „ ..	27	14·7	14·5	295	20	14·3	14·1	289	30	8·4	8·2	297	27	8·4	8·2	298								
2·5 „ ..	25	12·7	12·6	290	17	12·8	12·7	283	29	8·5	8·0	293	24	8·3	8·0	292								
3·0 „ ..	13	10·4	9·5	284	8	9·5	9·1	280	26	7·0	6·2	284	21	8·1	7·9	281								
4·0 „ ..	3	7·7	7·5	277	1	11·0	11·0	245	19	4·2	3·2	288	11	5·3	4·9	284								
5·0 „ ..	1	2·0	2·0	325	1	7·0	7·0	270	13	2·9	1·6	106	8	4·4	2·7	308								
6·0 „ ..	1	1·0	1·0	85	1	7·5	7·5	255	11	4·0	2·8	94	4	5·0	2·2	17								
7·5 „ ..	1	7·0	7·0	105					9	7·6	7·1	83	3	4·2	3·5	60								
9·0 „ ..	1	9·0	9·0	125					7	10·6	10·3	96	1	9·0	9·0	95								

Stattion																								
Time in I.S.T.	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 ..																								
0·15 a. g. ..																								
0·6 a. s. l ..																								
1·0 „ ..																								
1·5 „ ..																								
2·0 „ ..																								
2·5 „ ..																								
3·0 „ ..																								
4·0 „ ..																								
5·0 „ ..																								
6·0 „ ..																								
7·5 „ ..																								
9·0 „ ..																								

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

AUGUST 1948

Height in km.	PORT BLAIR												MINICOY											
	0100				0700				1600				0730				1430							
	n	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	5·8	241	31	5·8	5·5	243	31	6·4	6·2	242	31	5·0	4·6	285	31	5·0	4·7	286				
0·15 a.g. ..	23	8·7	8·5	235	26	8·9	8·4	231	30	9·3	9·1	237	31	9·5	8·9	284	31	9·3	8·8	284				
0·6 a. s. l. ..	22	11·8	11·3	237	26	12·8	12·2	237	28	12·2	12·0	239	31	11·7	11·2	285	31	11·4	10·9	285				
1·0 „ ..	14	11·3	10·5	240	24	12·8	12·3	240	20	12·8	12·4	245	28	14·8	14·5	288	29	13·6	13·8	290				
1·5 „ ..	5	7·5	6·2	224	19	10·8	10·1	241	11	11·6	10·5	248	26	16·0	15·8	294	27	14·4	13·9	294				
2·0 „ ..	5	6·2	4·5	213	13	8·7	7·8	235	4	9·4	7·1	229	26	15·2	15·1	294	18	13·5	13·3	295				
2·5 „ ..	5	5·2	3·6	211	9	7·2	6·1	241	3	6·0	5·4	201	19	13·8	13·6	288	11	11·9	11·7	288				
3·0 „ ..	3	13·0	3·2	178	8	7·0	5·4	264	3	5·5	4·5	196	14	11·3	11·1	286	5	8·6	8·4	291				
4·0 „ ..					5	5·8	5·0	276	2	2·5	0·5	90	7	8·6	8·1	281	2	12·3	12·0	286				
5·0 „ ..					3	3·2	1·7	232	1	2·7	2·2	69	3	6·8	6·5	291								
6·0 „ ..					3	4·3	1·9	170	1	7·0	7·0	75												
7·5 „ ..									1	14·5	14·5	75												
9·0 „ ..																								

Height in km.																								
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
Surface ..																								
0·15 a. g. ..																								
0·6 a. s. l. ..																								
1·0 „ ..																								
1·5 „ ..																								
2·0 „ ..																								
2·5 „ ..																								
3·0 „ ..																								
4·0 „ ..																								
5·0 „ ..																								
6·0 „ ..																								
7·5 „ ..																								
9·0 „ ..																								

Table B—Monthly mean directions and velocities of upper winds

Winds at and above 10·0 km. above sea level

SEPTEMBER 1948

Height (Km)	n	V	v	D
AHMEDABAD				
10·0	2	6·3	5·6	67
ALLAHABAD				
10·0	6	5·9	2·7	236
11·0	6	6·9	3·4	236
12·0	4	7·4	2·7	255
13·0	2	5·7	2·9	250
14·0	2	7·5	4·1	25
15·0	2	5·7	5·7	67
16·0	1	5·0	5·0	50
17·0	1	16·0	16·0	85
AMBALA				
10·0	2	10·5	10·5	99
ANANTAPUR				
10·0	2	10·5	10·5	99
BAREILLY				
10·0	9	10·8	8·9	253
11·0	7	9·1	8·2	228
12·0	4	9·7	9·4	211
13·0	3	9·5	8·5	212
14·0	3	7·8	6·4	226
15·0	2	11·3	9·0	210
BHOPAL				
10·0	2	3·9	2·4	136
11·0	2	4·7	4·5	106
12·0	1	3·0	3·0	140
BHUJ				
10·0	1	3·0	3·0	255
BIKANER				
10·0	15	5·5	2·8	276
11·0	2	8·5	0·5	246
12·0	1	10·0	10·0	225
13·0	1	12·0	12·0	220
14·0	1	11·5	11·5	210
BOMBAY				
10·0	1	9·0	9·0	80
CALCUTTA				
10·0	1	6·0	6·0	190
COCHIN				
10·0	7	15·8	15·3	98
11·0	1	8·0	8·0	95
12·0	1	15·0	15·0	95
13·0	1	23·0	23·0	95
14·0	1	32·0	32·0	90

Height (Km)	n	V	v	D
CUTTACK				
10·0	1	5·0	5·0	110
11·0	1	7·0	7·0	105
DIBRUGARH				
10·0	11	5·5	2·4	329
11·0	4	8·6	5·4	298
12·0	2	7·7	7·3	313
13·0	2	12·7	11·2	297
14·0	1	10·5	10·5	340
15·0	1	6·5	6·5	65
16·0	1	8·5	8·5	20
17·0	1	17·0	17·0	355
18·0	1	22·0	22·0	345
GAYA				
10·0	2	9·0	8·5	148
11·0	2	13·0	12·5	148
GORAKHPUR				
10·0	6	7·3	4·4	197
JAMNAGAR				
10·0	4	9·5	9·1	73
11·0	4	12·5	11·2	81
12·0	4	15·1	13·7	89
13·0	2	13·3	11·3	81
14·0	2	13·5	6·5	85
15·0	1	18·0	18·0	220
16·0	1	45·0	45·0	240
17·0	1	47·0	47·0	250
JUBBULPORE				
10·0	1	2·0	2·0	40
MADHOSAGAR				
10·0	18	7·6	2·8	277
11·0	13	8·1	3·9	260
12·0	13	7·8	4·0	253
13·0	13	8·2	3·8	258
14·0	13	9·3	5·5	261
15·0	12	10·5	6·2	275
16·0	10	8·5	3·6	255
17·0	9	8·4	0·7	309
18·0	9	8·7	0·7	314
MADRAS				
10·0	12	10·6	10·1	81
11·0	10	13·9	13·5	77

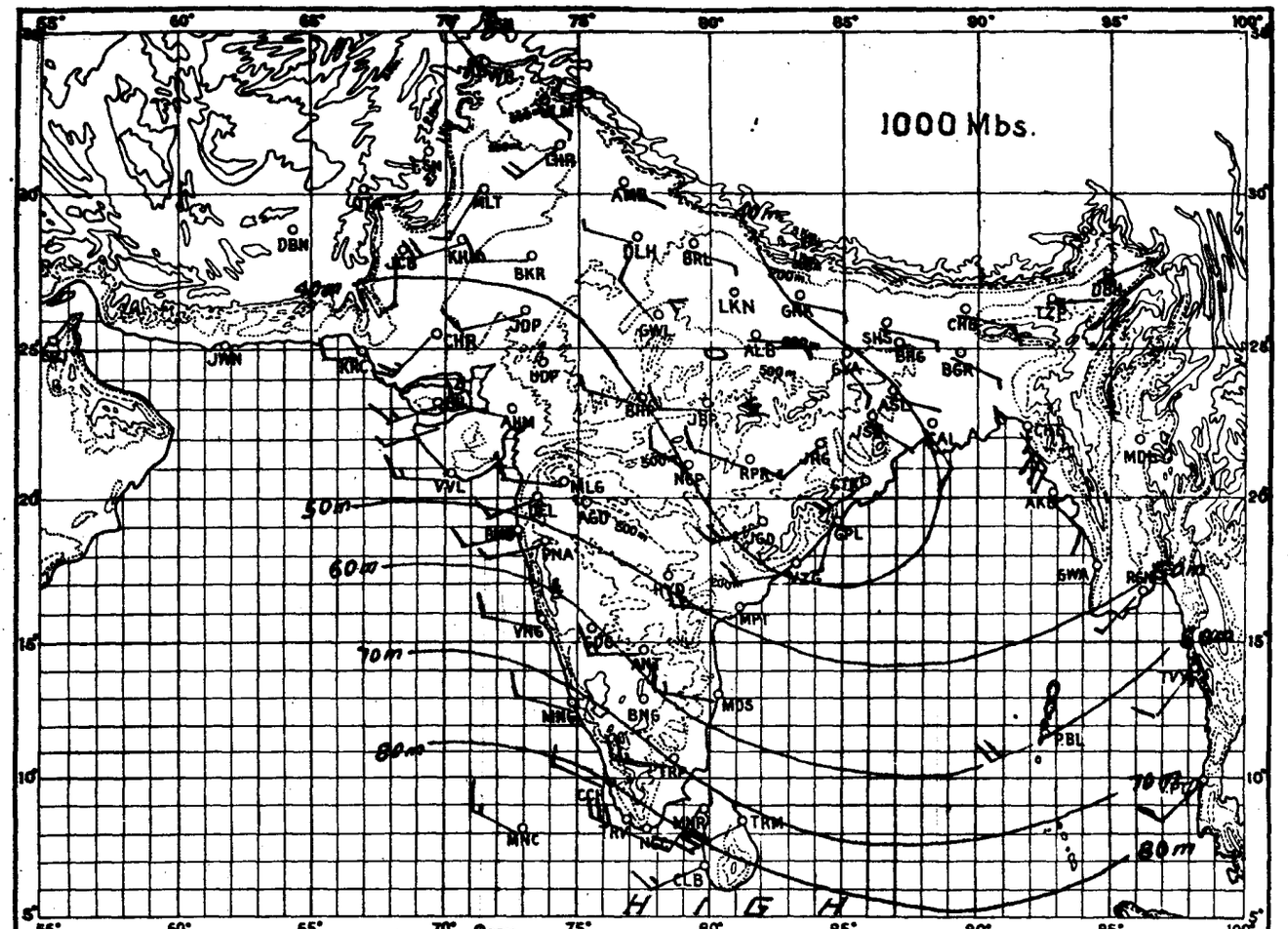
Height (Km)	n	V	v	D
MADRAS—contd.				
12·0	7	18·9	18·6	80
13·0	6	23·3	23·0	86
14·0	6	24·2	23·9	84
15·0	6	26·4	26·0	84
16·0	5	26·4	26·3	89
17·0	4	23·1	22·5	100
18·0	4	18·3	17·7	93
19·0	4	12·6	12·6	89
MALEGAON				
10·0	6	5·9	3·4	98
MASULIPATAM				
10·0	4	7·6	6·7	76
NAGERCOIL				
10·0	29	11·4	10·4	100
11·0	9	10·7	9·4	97
12·0	7	14·4	13·6	103
13·0	3	24·0	23·3	102
14·0	3	25·3	25·3	92
15·0	3	30·2	30·1	88
16·0	1	45·0	45·0	85
NAGPUR				
10·0	5	8·8	8·5	78
11·0	5	10·5	10·0	77
12·0	5	13·7	13·2	84
13·0	5	16·1	15·9	91
14·0	5	21·8	21·6	85
15·0	4	23·5	23·3	92
16·0	3	18·2	17·9	98
17·0	2	23·0	23·0	78
18·0	2	18·3	18·2	92
NEW DELHI				
10·0	18	10·8	9·8	256
11·0	16	11·3	10·5	249
12·0	15	12·9	11·7	247
13·0	13	11·6	10·5	247
14·0	6	12·8	12·7	260
15·0	3	9·0	5·6	279
16·0	3	7·0	3·5	306
17·0	3	11·2	7·4	253
18·0	2	9·0	6·8	253
19·0	1	14·0	14·0	285

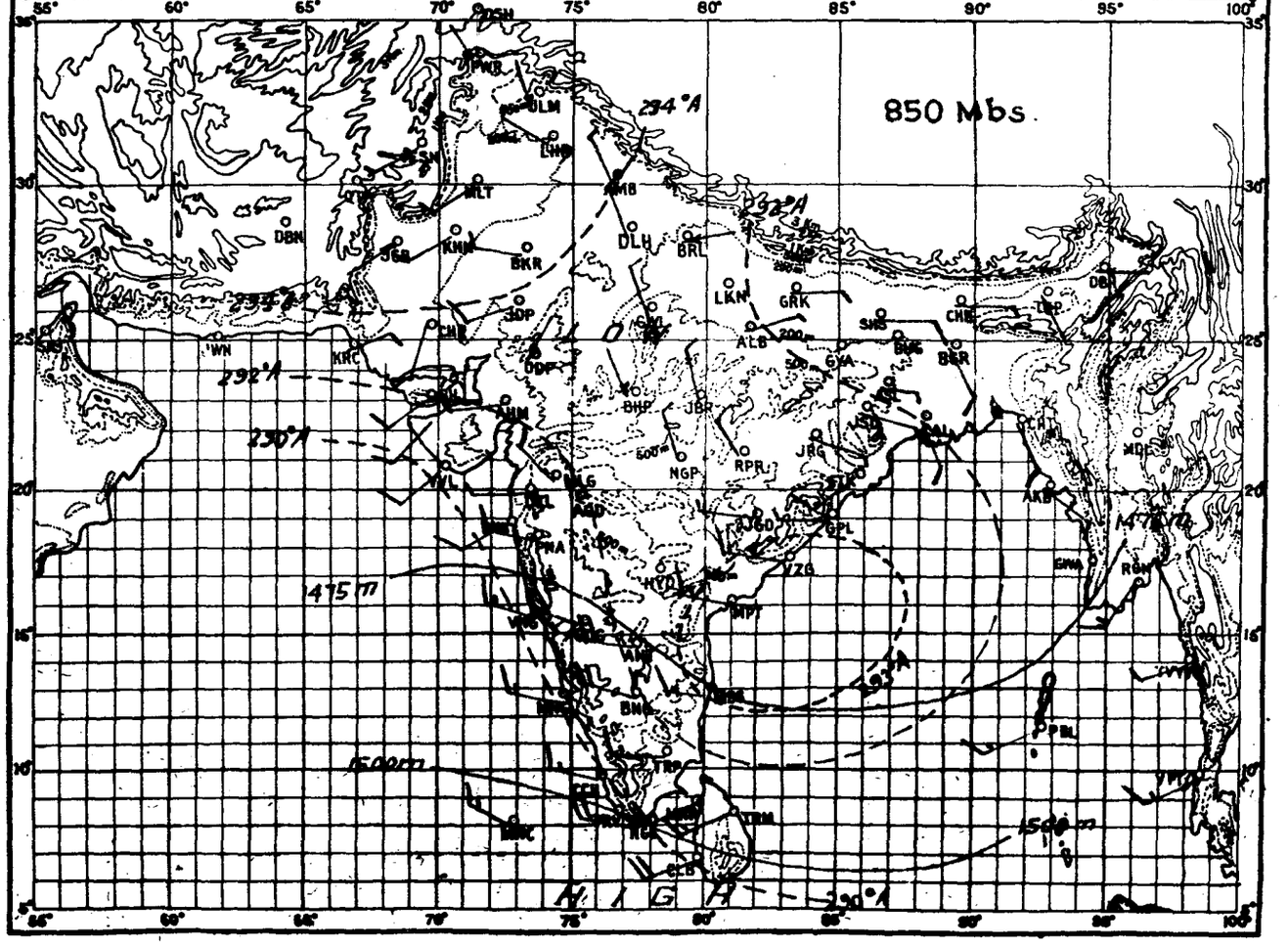
Height (Km)	n	V	v	D
POONA				
10·0	7	7·9	7·5	100
11·0	7	10·3	10·0	99
12·0	6	12·0	11·6	105
13·0	6	12·8	12·5	96
14·0	5	14·0	13·3	93
15·0	5	21·5	21·3	96
16·0	3	14·3	14·0	106
17·0	3	13·8	13·4	64
18·0	2	14·5	14·1	85
RAIPUR				
10·0	2	5·7	5.7	70
TEZPUR				
10·0	8	4·9	1·0	32
11·0	4	6·0	2·2	314
12·0	3	7·0	4·5	329
13·0	3	9·7	4·4	353
14·0	1	17·5	17·5	5
TRICHINOPOLY				
10·0	9	21·3	13·2	92
11·0	2	13·3	13·0	102
12·0	1	31·0	31·0	95
TRIVANDRUM				
10·0	4	14·6	13·4	88
11·0	3	13·7	13·5	95
12·0	3	21·6	21·5	88
13·0	3	23·7	23·5	88
UDAIPUR				
10·0	2	10·5	9·7	162
VENGURLA				
10·0	5	6·2	3·9	71
11·0	2	9·0	9·0	96
12·0	1	11·0	11·0	100
13·0	1	17·0	17·0	95
14·0	1	21·0	21·0	90
15·0	1	22·0	22·0	85
16·0	1	24·0	24·0	105
VIZAGAPATAM				
10·0	1	7·5	7·5	80
MINICOY				
10·0	4	28·7	14·9	102

Height (Km)	n	V	v
GOPALPUR			
10·0	7	9·9	9·4
11·0	3	9·5	8·9
12·0	3	10·8	10·4
13·0	3	13·0	12·7
14·0	3	16·2	15·9
15·0	2	15·3	14·9
16·0	2	17·5	17·1
17·0	2	20·5	20·5
18·0	2	17·0	17·0
19·0	2	20·3	20·3
20·0	2	22·5	22·5
21·0	2	25·5	25·5
22·0	2	24·3	24·3
23·0	2	30·3	30·2
24·0	2	36·3	35·8
25·0	2	32·3	32·2
26·0	2	40·0	39·8
27·0	2	39·0	38·5
28·0	2	43·7	43·3
29·0	1	35·0	35·0
30·0	1	42·5	42·5
31·0	1	44·0	44·0
32·0	1	48·0	48·0

MONTHLY MEAN CONSTANT PRESSURE CHARTS

SEPTEMBER 1948. *Plate I*





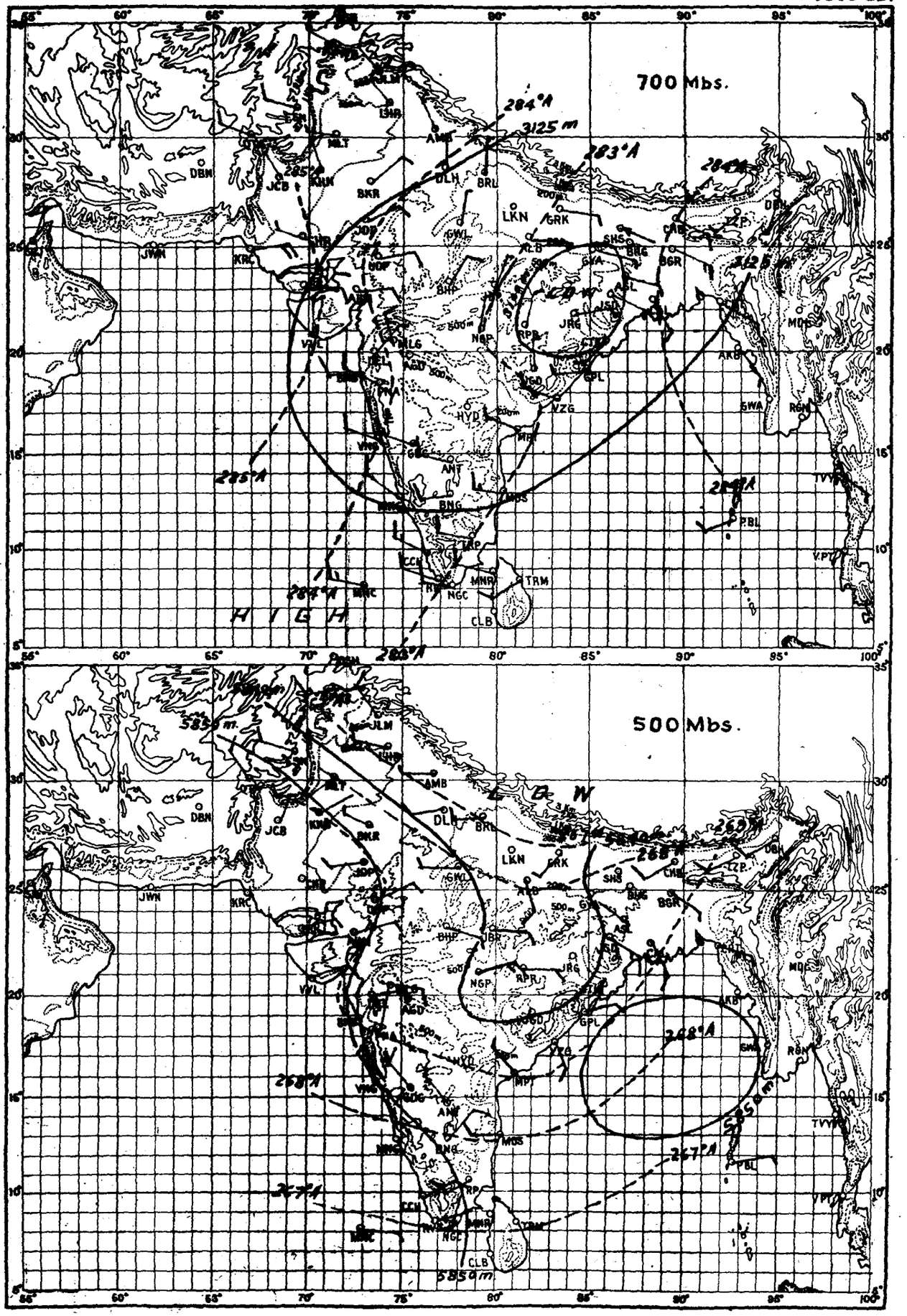
RESULTANT WIND ——— = 5 Knots, ——— = 10 Knots, ——— = 50 Knots. G.P.Z.P. POONA, 1951.

- - - - - *Isotherms in degrees Absolute* ——— *Contours in geopotential Metres*

MONTHLY MEAN CONSTANT PRESSURE CHARTS

SEPTEMBER 1948

Plate II.



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

- - - - - - Isotherms in degrees Absolute ——— Contours in geopotential Metres.

G.P.I. POONA, 1951.

Registered No. B-3097

INDIA WEATHER REVIEW, 1948

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Monthly Weather Report

October

Published by the authority of the Government of India.

Chief features :—(1) Withdrawal of the southwest monsoon from the country and setting in of the northeast monsoon in the Madras Presidency ; (2) Development of one cyclonic storm and one depression in the Bay of Bengal and one cyclonic storm in the Arabian Sea and (3) Comparatively feeble western disturbances.

A depression formed in the northeast Bay of Bengal by the morning of the 2nd with its centre near Lat. 20½°N., Long. 90°E., moved into Eastern Pakistan by the next morning and filled up there by the 4th. It caused fairly widespread rain on the first four days of the month in northeast India with locally heavy falls in Assam and West Bengal.

The monsoon withdrew from the Peninsula on the 3rd and from northeast India on the 5th.

A trough of low pressure appeared over Mysore and the adjoining parts of the Madras Presidency on the 9th. It moved into the southeast Arabian Sea on the 11th and persisted there till the 13th It was responsible for widespread thunder-rain in and around the south Bombay Deccan and local thunder-rain over the rest of the Peninsula between the 9th and 13th. According to newspaper reports the heavy rains in the Bijapur District resulted in floods in the canals and streams in that district, a few persons losing their lives in the floods.

Conditions became unsettled in north Bay of Bengal on the 11th and there was fairly widespread thunderstorm activity in northeast India on the 11th and 12th. The unsettled conditions moved inland into the Gangetic West Bengal on the 12th and became unimportant on the following day without any further development.

The northeast monsoon set in along the Coromandel coast on the 16th and was active in the south of the Peninsula till the 23rd. It became vigorous on the 19th when rainfall was widespread over the Peninsula south of latitude of 15°N with locally very heavy falls along the Coromandel coast.

In association with a low pressure wave from the east, a depression formed in the east Arabian Sea with its centre within a degree of Lat. 8°N, Long. 76°E., on the 20th. Intensifying as it moved northwestwards, it became a storm by the morning of 23rd when it was centred within a degree of Lat. 13°N., Long. 63°E. Continuing to move in a northwesterly direction during the next two days and curving to the north later, it weakened into a depression by the evening of the 25th. It entered south Arabia across the Kuria Muria coast on the same night and became unimportant on the 27th. This storm, in its earlier stages, was responsible for fairly widespread thundershowers in the southern half of the Peninsula and in the Konkan and the south Bombay Deccan between the 20th and 23rd.

A depression formed in the southeast Bay of Bengal by the morning of the 29th. Moving northwestwards and intensifying at the same time, it lay as a cyclonic storm with its centre near Lat. 12°N., Long. 88°E., on the last day of the month.

Of the four western disturbances which affected northwest India and Western Pakistan during the month, only the second and the third were fairly active. The second disturbance moved from north Baluchistan to the East Punjab and caused local thundershowers in and around the hills of the East Punjab and the west United Provinces on the 8th. It induced a secondary over north Rajputana which moved eastwards and filled up over Bihar by the 17th after causing local thundershowers in the United Provinces between the 10th and 17th and in northeast India on the 14th and 15th. The third western disturbance which moved from north Baluchistan to Kashmir caused local showers in the northwest Punjab on the 19th.

Night temperatures were appreciably above normal in Western Pakistan, northwest India and the United Provinces on most of the days during the month and in the central parts of the country during the last three weeks. They were also appreciably above normal in the west Deccan between the 28th and 31st.

(*Price* : *Re. 1/-*)

The month's rainfall was in large excess in Assam, West Bengal and the United Provinces, in moderate excess in Bihar and in slight excess in the Bay Islands, Chota Nagpur and Gujarat. It was normal in the Bombay Deccan and north Hyderabad, in slight defect in east Rajputana and west Central India, in moderate defect in Orissa, the west Central Provinces, Mysore, southeast Madras and the north Madras coast and in large defect elsewhere. Averaged over the plains of India the rainfall during the month was 18 per cent. in defect.

The mean maximum temperature was generally normal except in the east United Provinces where it was below normal.

The mean minimum temperature was above normal in the United Provinces, the East Punjab, Rajputana, Gujarat, Central India, Bihar, the west Central Provinces and north Hyderabad.

The mean relative humidity was in excess in Chota Nagpur, the United Provinces, the East Punjab, east Rajputana, Gujarat, Central India, Berar, the west Central Provinces, the Bombay Deccan and north Hyderabad.

The mean cloud amount was in excess in Bihar to the United Provinces, west Rajputana and in defect in east Central India and the Central Provinces.

Data from Kashmir are absent.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amounts for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N.B.—The Indian Standard time used in this publication is 5 hrs. 30 mins. in advance of Greenwich Mean Time.

POONA-5,
3rd March, 1949.

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

TABLE I.—DIVISIONAL AND SUB-DIVISIONAL MEANS—OCTOBER 1948.

	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION—	"	"	"		°	°	mb.	%	
1. Assam ..	7·42	4·10	+3·32	+81	+0·2	—1·3	—1·2	—2	+0·3
2. West Bengal ..	7·17	4·49	+2·68	+60	—0·4	+0·2	+0·3	+3	+0·3
3. Orissa ..	3·69	5·45	—1·76	—32	+0·4	+0·4	+1·2	+1	+0·3
4. Bihar ..	3·31	2·62	+0·69	+26	—0·6	+0·3	+1·4	+5	+0·5
5. United Provinces	2·48	1·34	+1·14	+85	—1·7	+3·1	+4·0	+11	+0·9
6. East Punjab ..	0·20	0·58	—0·38	—66	+0·7	+2·8	+4·5	+11	0
7. Rajputana ..	0·24	0·34	—0·10	—29	+1·0	+4·2	+3·8	+8	+0·1
8. Bombay ..	2·29	2·61	—0·32	—12	—0·3	+3·3	+3·6	+9	—0·2
SUB-DIVISION									
1. Bay Islands	15·28	12·51	+2·77	+22	+1·1	+0·4	+0·2	—1	+0·3
2. Assam	7·42	4·10	+3·32	+81	—0·2	—1·3	—1·2	—2	+0·3
3. West Bengal	7·17	4·49	+2·68	+60	—0·4	+0·2	+0·3	+3	+0·3
4. Orissa ..	3·69	5·45	—1·76	—32	+0·4	+0·4	+1·2	+1	+0·3
5. Chota Nagpur	3·19	2·75	+0·44	+16	—0·6	+0·3	+1·8	+6	+0·1
6 Bihar ..	3·37	2·56	+0·81	+32	—0·7	+0·3	+1·1	+4	+0·9
7. United Provinces, East.	3·21	1·79	+1·42	+79	—2·3	+2·9	+3·0	+9	+0·7
8 Do. West	1·75	0·89	+0·86	+97	—1·2	+3·4	+5·1	+14	+1·0
9. East Punjab	0·20	0·58	—0·38	—66	+0·7	+2·8	+4·5	+11	0
10. Kashmir ..	Data incomplete.								
11. Rajputana, West.	0·03	0·16	—0·13	—81	+1·6	+4·8	+3·2	+5	+0·3
12. Do. East	0·46	0·53	—0·07	—13	+0·5	+3·8	+4·3	+11	—0·1
13. Gujarat ..	0·81	0·68	+0·13	+19	—1·1	+5·1	+4·5	+11	+0·3
14. Central India, West.	0·89	1·13	—0·24	—21	+1·3	+3·5	+3·7	+12	+0·3

	Rainfall.				Departure from normal of				
							8 hrs I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
DIVISION —contd.	"	"	"		°	°	mb.	%	
9. Central India	0·81	1·44	—0·63	—44	+0·9	+3·4	+3·8	+12	—0·2
10. Central Provinces and Berar.	1·04	2·30	—1·26	—55	+1·1	+2·4	+2·3	+6	—0·8
11. Hyderabad ..	1·57	2·36	—0·79	—33	—0·1	+1·7	+2·6	+7	—0·1
12. Mysore ..	4·50	6·08	—1·58	—26	0	+0·3	+0·5	+4	+0·8
13. Madras ..	4·34	7·95	—3·61	—45	+0·5	+0·9	+0·7	0	+0·2
Mean of India ..	2·47	3·01	—0·54	—18	+0·2	+2·1	+2·5	+6	+0·1
SUB-DIVISION— contd.									
15. Central India, East. ..	0·71	1·84	—1·13	—61	+0·4	+3·3	+3·8	+11	—0·9
16. Berar ..	0·41	1·87	—1·46	—78	+0·9	+2·8	+2·9	+9	—0·6
17. Central Provinces, West.	1·03	1·68	—0·65	—39	+1·4	+3·2	+2·8	+7	—0·5
18. Do. East	1·36	3·46	—2·10	—61	+0·8	+1·3	+1·4	+4	—1·3
19. Konkan ..	2·18	5·32	—3·14	—59	—0·7	+1·5	+2·1	+4	—0·5
20. Bombay Deccan.	3·82	3·46	+0·36	+10	+0·7	+1·7	+3·1	+8	—0·7
21. Hyderabad, North.	1·91	2·02	—0·11	—5	—0·2	+2·0	+3·1	+9	+0·3
22. Do. South	1·23	2·70	—1·47	—54	+0·1	+1·5	+2·2	+5	—0·4
23. Mysore ..	4·50	6·08	—1·58	—26	0	+0·3	+0·5	+4	+0·8
24. Malabar ..	4·81	10·63	—5·82	—55	+1·6	+0·8	+0·9	+1	—0·1
25. Madras, South-east.	5·54	8·52	—2·98	—35	+0·7	+1·1	+0·3	—1	+0·8
26. Do. Deccan ..	1·76	4·23	—2·47	—58	—0·8	+0·9	+1·2	0	—0·1
27. Madras Coast, North	4·40	8·48	—4·08	—48	+0·4	+0·7	+1·0	+1	—0·2

STATION	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %	
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
BAY ISLANDS—																					
Port Blair ..	259	1002·6	+0·6	999·7	85·0	+1·1	87	18	74·2	+0·4	72	5 days	81·2	78·5	77·3	75·7	30·2	+0·2	29·0	83	—1
ASSAM—																					
Dibrugarh ..	348	1001·5	+0·5	997·9	84·3	0	90	4 days	68·3	—1·2	60	30	74·7	78·0	70·9	73·3	24·0	—1·7	25·9	83	—2
Sibsagar ..	317	1002·4	+0·6	998·3	83·2	—1·1	90	10	74·5	+3·9	63	27	75·4	78·1	72·5	74·4	25·9	—1·5	27·7	87	—4
Tezpur ..	258	1004·7	+0·6	999·9	85·3	—1·0	90	7	70·0	—1·2	62	27	75·5	81·4	72·2	76·1	25·4	—0·9	28·3	86	+1
Gauhati ..	182	1006·7	+0·7	1002·4	84·2	—2·8	89	20, 21	70·3	—0·7	63	28	76·2	79·2	73·0	73·2	26·4	—0·5	25·2	86	0
Dhubri (R) ..	115																				
Silchar ..	96	1009·1	+0·1	1005·4	87·9	—0·4	94	7	71·3	—0·9	61	28	78·8	82·0	74·3	75·8	26·9	—1·4	27·7	80	—5
WEST BENGAL																					
Dum Dum ..	33	1010·1	..	1006·8	88·5	..	92	4 days	74·4	..	66	27	81·0	84·1	75·3	75·2	27·5	..	25·8	76	..
Calcutta ..	21	1010·6	0	1007·1	89·7	+0·5	94	9, 25	74·7	+0·9	66	27	78·3	82·6	76·1	76·8	29·4	+0·9	29·3	90	+5
Saugor Island ..	10	1010·6	—0·1	1007·5	86·7	—0·1	90	9	77·0	+0·7	70	30, 31	81·8	83·3	77·1	76·7	29·7	+0·1	28·4	80	—1
Sandheads (R)	28																				
Midnapore ..	149	1006·1	0	1002·8	89·3	+0·2	93	7, 26	73·4	0	65	27	79·0	83·5	75·0	75·9	27·8	+1·1	27·1	82	+4
Contai ..	35	1009·8	..	1006·4	88·4	..	91	7 days	75·4	..	70	30, 31	80·6	83·1	76·8	77·3	29·7	...	29·3	84	..
Burdwan ..	106	1007·8	0	1004·1	88·6	—0·5	92	19, 21	73·9	—0·3	66	27	78·9	85·1	75·2	77·4	28·3	+1·0	28·7	84	+4
Krishnagar ..	48	1009·5	—0·3	1006·1	90·2	+0·7	94	25	73·2	+0·2	66	27, 28, 30	79·4	84·2	76·3	76·7	29·6	+1·6	28·0	86	+10
Asansol ..	414	997·3	+0·1	993·8	87·5	—1·5	92	9	71·5	+0·7	63	27	77·9	82·1	74·0	75·5	26·9	+1·2	27·2	82	+3
Berhampore ..	62	1009·4	0	1006·0	89·8	+1·4	95	10	73·8	—0·1	66	27	80·1	82·4	75·4	75·9	28·0	0	27·6	79	—2
Malda ..	103	1008·2	+0·2	1004·8	85·8	—2·3	90	8, 9, 10	72·4	+0·1	62	30	79·2	81·6	74·5	75·1	27·1	—0·6	26·8	79	+1
Jalpaiguri ..	271	1003·1	+0·5	999·3	84·5	—2·2	92	8	69·6	—0·7	63	4 days	73·3	80·9	70·2	73·5	23·9	—2·2	24·8	85	—1
ORISSA—																					
Balasore ..	65	1009·4	+0·5	1006·0	88·2	—0·2	92	8	73·7	+0·4	67	29, 31	80·8	82·4	75·8	77·1	28·2	+0·7	29·3	79	—2
Chandbali ..	20	1010·8	+0·4	1007·6	88·6	+0·7	93	10,11,25	74·6	0	68	29	79·5	82·7	76·3	77·1	29·6	+0·7	29·3	86	+2
Puri ..	20	1010·9	+0·7	1007·7	89·2	+0·6	92	23	76·9	—0·1	72	31	81·6	84·4	77·0	77·2	29·6	+0·6	28·7	80	0
Gopalpur	56	1009·5	+0·5	1006·3	88·4	+0·2	92	3	75·9	+1·3	69	29	79·7	83·9	76·4	78·9	29·5	+1·6	31·5	85	+4
Cuttack ..	87	1008·1	—0·2	1005·0	89·7	0	93	10, 11	75·5	+1·1	69	29	79·3	84·8	76·4	76·6	29·7	+2·3	27·6	82	+1
Angul ..	455	996·0	+0·6	992·4	89·0	+0·5	92	9, 10	72·0	+0·4	65	28,29,31	79·2	84·2	73·6	74·3	26·7	+0·9	24·4	84	+4
Sambalpur ..	486	994·9	+0·1	991·3	89·8	+1·0	92	20, 25	71·9	+0·4	63	27, 28	77·8	85·1	74·1	75·1	27·2	+1·8	25·2	83	+4
CHOTA NAGPUR																					
Jamshedpur ..	423	997·0	+0·1	993·3	88·2	—1·5	92	8	71·7	+0·6	61	28	77·0	83·6	72·7	74·6	25·4	+0·9	25·2	80	+2
Chaibasa ..	742	986·0	+0·3	982·4	88·5	+0·3	92	8, 10	70·7	+0·6	61	28	75·2	83·1	72·0	74·7	25·4	+1·0	25·5	85	+6
Ranchi ..	2,150	938·7	+0·1	935·9	83·9	+0·8	87	14	66·3	—0·9	57	28	73·2	76·8	68·9	69·8	22·3	+2·0	21·6	83	+11
Hazaribagh ..	2,006	943·7	—0·2	941·0	82·6	—1·0	86	7, 10,18	65·5	—1·0	56	28	74·2	74·9	69·3	69·1	22·1	+2·7	21·5	78	+10
Daltonganj ..	725	986·9	+0·2	983·5	87·6	—1·5	92	18	68·8	+2·3	58	26, 28	75·5	81·1	71·5	72·7	24·5	+2·6	23·6	81	+2
Dhanbad ..	839	983·2	..	..	87·6	..	92	7, 8	69·3	..	61	26, 28	77·8	..	72·3	..	24·6	..	..	76	..
BIHAR—																					
Purnea ..	124	1007·8	+0·4	1004·1	87·4	—0·5	93	28	70·5	—0·3	61	26, 30	77·6	82·2	73·7	75·9	26·6	—0·1	27·6	83	0
Saharsa ..	156	1006·7	..	1003·0	86·9	..	..	..	71·9	..	65	26	78·1	82·6	74·1	75·8	26·9	..	27·3	83	..
Darbhanga ..	161	1006·7	+0·7	1002·7	87·7	—0·5	93	10	71·7	+0·1	63	26	78·3	83·5	74·1	77·8	26·9	+1·0	30·0	82	+8
Motihari ..	218	1004·6	+0·6	1000·9	86·7	—1·4	92	10	70·0	+0·7	62	25, 26	78·9	81·0	74·2	76·4	27·0	—1·0	29·1	79	—1
Patna ..	173	1005·7	+0·2	1002·4	87·4	—1·2	91	7, 10,20	73·2	+0·4	66	26	78·9	83·3	73·8	74·2	26·2	+1·0	24·8	78	+6
Dehri ..	352	999·5	..	995·8	87·4	..	90	18,20,24	71·9	..	64	27, 31	77·7	81·9	73·4	74·2	26·1	..	25·5	81	..
Gaya ..	365	998·8	+0·1	995·4	87·5	—1·1	91	4 days	71·9	+1·9	62	28	76·4	82·7	72·4	74·2	25·4	+2·7	25·7	82	+11
Naya Dumka ..	489	995·1	+0·3	991·2	87·8	—0·3	92	9	71·0	+0·3	62	26, 27	80·4	82·1	74·1	73·8	25·8	+0·5	24·6	72	—3
Sabour ..	122	1007·4	0	1003·8	87·6	—0·5	93	10	70·6	—0·4	61	29, 30	79·5	81·3	75·1	76·3	27·7	+1·3	28·0	81	+2

R—Register not received.

Cloud amount (tenths of sky). Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Rainfalls, inches. Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Number of rainy days (0·10″ or more). Total in the month.	Departure from normal.	Wind velocity, miles per hour. Mean.	Departure from normal.	Wind direction—Number of winds from :— 8 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I. S. T. N	NE	E	SE	S	SW	W	NW	Calm	STATION.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													BAY ISLANDS—
6·8	+0·3	7·5	15·28	+2·77	5·07	4	16	—0·7	6·0	—1·6	3	3	7	2	1	5	7	2	1	1	3	6	0	2	6	8	2	3	Port Blair.
																													ASSAM—
6·5	+1·3	3·9	5·10	—0·89	2·12	2	8	—0·6	1.0	+0·3	5	8	8	1	1	0	1	5	2	3	3	3	0	0	0	0	0	22	Dibrugarh.
7·0	—0·4	4·7	3·20	—1·97	1·00	2	8	+0·1	2·0	+0·6	7	10	3	1	3	1	0	4	2	3	9	1	0	2	1	0	0	15	Sibsagar.
4·5	—0·1	3·3	8·74	+4·64	1·92	22	9	+2·7	1·1	—0·4	0	8	18	1	1	0	0	0	3	0	4	8	2	0	0	0	0	17	Tezpur.
5·0	—0·3	5·3	7·05	+4·27	2·21	2	8	+3·8	2·4	+1·2	2	7	10	3	3	0	0	0	6	0	10	5	4	4	3	0	0	5	Gauhati.
																													Dhubri (R).
3·5	—1·5	2·3	3·98	—3·27	1·32	4	4	—3·9	1·0	0	2	1	12	6	0	0	0	0	10	1	1	2	0	0	1	0	0	26	Silchar.
																													WEST BENGAL—
3·4	..	4·5	3·13	..	0·93	3	8	..	2·8	..	3	0	1	2	1	0	1	3	20	2	1	1	5	3	2	1	6	10	Dum Dum.
3·4	—0·4	4·8	7·00	+2·52	2·50	3	8	+1·8	1·1	—1·0	4	3	3	1	2	0	0	1	17	1	0	0	3	3	3	1	1	19	Calcutta.
4·8	—0·3	5·4	6·28	—1·79	3·09	3	5	—2·5	5·7	—0·1	4	7	1	0	2	8	5	3	1	4	2	0	1	3	12	2	5	2	Saugor Island.
																													Sandheads (R).
3·2	0	5·1	8·88	+5·28	3·90	10	5	—0·6	1·7	+0·3	5	4	3	1	0	0	3	1	14	3	6	1	1	4	4	0	0	12	Midnapore.
3·3	..	4·2	3·23	..	1·38	1	4	..	2·3	..	12	2	0	0	3	1	0	3	10	1	0	1	4	12	1	2	1	9	Contai.
3·1	—0·6	4·4	2·58	—0·72	0·65	4	8	+3·6	2·2	+0·9	7	5	4	0	1	2	3	3	6	6	4	2	2	4	2	3	0	8	Burdwan.
3·1	—0·5	3·7	9·04	+4·80	3·75	2	8	+3·0	1·5	—0·3	4	4	1	1	4	1	4	5	7	1	3	2	4	3	0	1	4	13	Krishnagar.
3·6	0	4·8	8·08	+3·74	2·52	1	9	+3·5	2·5	—0·5	5	2	2	1	0	0	3	5	13	2	3	1	1	0	0	0	2	22	Asansol.
4·1	+0·5	4·7	8·39	+4·75	2·44	1	10	+5·5	1·2	—0·2	3	2	5	0	3	0	0	0	18	3	0	7	1	1	1	0	0	18	Berhampore.
4·3	+3·1	3·2	11·63	+7·28	5·15	3	8	+3·7	2·7	—0·1	5	9	5	2	1	1	0	3	5	1	5	4	2	0	0	0	1	18	Malda.
4·7	+1·8	4·8	5·85	+0·29	1·83	2	9	+3·5	3·2	+2·0	11	11	3	1	0	0	0	1	4	3	3	7	4	1	1	3	0	9	Jalpaiguri.
																													ORISSA—
5·2	+1·3	6·8	4·28	—2·15	1·89	2	6	—0·4	1·7	—0·1	9	4	0	0	0	2	1	3	12	0	0	0	5	4	2	0	1	19	Balasore.
3·1	—1·2	4·5	5·95	—1·68	2·51	12	8	—0·3	2·5	—1·2	8	0	0	0	1	3	8	4	7	1	5	2	9	5	1	2	2	4	Chandbali.
4·8	+1·1	6·0	4·51	—2·70	3·08	1	8	+0·7	5·8	—0·6	7	8	1	1	1	6	3	3	1	2	6	1	7	3	10	1	1	0	Puri.
4·8	+1·3	6·6	3·83	—4·77	1·88	11	5	—1·9	5·1	—0·6	17	0	0	0	0	1	0	5	8	3	0	6	5	10	5	0	0	2	Gopalpur.
4·0	0	5·1	2·86	—2·48	1·12	11	6	—0·3	2·0	+0·7	0	1	0	0	0	1	3	2	24	0	4	0	1	1	0	0	0	25	Cuttack.
4·7	+0·3	5·2 (a)	1·88	—2·06	0·72	2	5	—0·7	3·3	+0·2	2	1	1	1	1	1	9	10	5	5	4	4	2	2	2	5	3	3	Angul.
5·6	+0·2	4·5	2·66	+0·52	0·76	2	4	+0·5	2·2	—0·1	0	12	5	1	2	3	2	0	6	2	6	3	2	1	4	6	3	4	Sambalpur.
																													CHOTA NAGPUR—
3·6	—0·3	4·7	1·74	—0·92	0·64	16	6	+1·8	2·1	0	0	0	2	1	0	0	11	6	11	0	3	7	2	0	1	2	3	13	Jamshedpur.
4·3	+0·8	5·6	2·94	+0·01	0·70	11	6	+1·6	1·1	—0·1	0	3	0	1	1	4	2	1	19	0	3	0	2	0	4	1	0	21	Chaibasa.
1·6	—1·9	2·0	6·70	+3·57	2·32	8	7	+2·2	1·5	—1·4	3	0	2	1	2	4	1	2	16	1	0	0	1	1	2	0	0	26	Ranchi.
3·2	+0·1	5·2	2·83	—0·27	0·72	12	8	+3·4	3·7	—0·6	3	3	2	6	4	3	1	4	5	9	5	1	0	1	1	0	9	5	Hazaribagh.
3·9	+1·7	4·7	1·75	—0·18	0·71	1	4	+0·8	1·5	—0·5	1	0	3	2	2	1	3	3	16	2	3	5	1	1	1	6	4	8	Daltonganj.
..	..	..	2·28	..	0·46	2	7	..	3·7	..	6	5	7	2	0	2	3	0	6	..	..	..	..	..	..	..	..	..	Dhanbad.
																													BIHAR—
4·0	+1·2	3·5	1·06	—2·16	0·49	5	3	—0·4	1·8	+0·5	1	3	13	0	0	0	2	2	10	0	1	6	1	0	0	2	0	21	Purnea.
4·4	..	3·8	3·65	..	1·39	3	6	..	..	..	0	10	8	1	0	1	0	0	11	0	0	3	0	0	0	0	0	28	Saharsa.
3·4	+1·0	2·8	2·81	+0·51	0·81	10	6	+3·5	1·8	+0·3	0	9	11	1	0	0	1	0	9	0	6	5	1	0	1	1	1	16	Darbhanga.
3·9	+2·0	2·6	7·10	+4·79	5·20	1	5	+2·5	1·2	—0·5	0	0	13	0	0	0	1	0	17	0	0	5	0	0	0	0	0	26	Motihari.
3·2	+0·8	3·1	4·39	+2·09	1·59	1	7	+4·1	2·9	+0·9	1	8	3	4	0	4	2	0	9	0	6	1	2	1	2	3	0	16	Patna.
3·6	..	4·5	1·72	—0·23	0·71	3	3	+0·4	1·8	..	0	4	1	9	8	2	1	1	5	0	10	0	0	0	0	0	7	14	Dehri.
3·3	+0·9	4·4	2·71	+0·79	1·13	11	4	+1·1	3·3	+0·3	2	3	5	6	7	1	1	0	6	9	5	4	1	0	0	1	3	8	Gaya.
3·3	+0·7	5·1	5·02	+1·21	2·00	12	6	+1·4	1·8	+0·6	1	7	6	4	0	2	3	0	8	2	2	4	7	2	1	3	3	7	Naya Dumka.
4·3	+1·0	4·9	1·52	—1·62	0·73	14	4	+1·1	3·0	+0·5	3	2	13	3	3	4	1	0	2	4	3	11	1	1	0	1	4	6	Sabour.

(a)—Mean of 30 days.

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.M.T.)

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
U. P., EAST—																						
Gonda ..	360	999·3	..	996·1	87·1	—3·7	91	3, 4, 9	69·9	+2·4	60	25, 27, 28	74·1	80·8	71·8	74·5	25·5	+2·4	26·7	87	+8	73
Gorakhpur ..	254	1003·0	+0·4	999·4	87·2	—1·9	91	9, 10	71·3	+1·9	63	26, 27	76·9	83·9	72·6	74·7	25·4	+0·9	25·2	81	+3	64
Banaras ..	250	1002·8	+0·1	999·5	88·1	—2·4	92	5	71·5	+3·5	63	28	76·6	83·2	73·8	74·5	27·2	+4·2	25·2	87	+15	66
Allahabad (Bamrauli.)	322	1000·2	0	997·0	89·3	—1·1	93	23	71·2	+4·1	62	26	76·9	85·6	73·1	73·9	26·1	+4·9	23·5	82	+12	56
Fatehpur ..	375	998·7	..	995·1	90·1	—2·4	94	24	70·6	+4·1	62	25, 26, 27	77·7	85·9	72·7	75·5	25·2	+3·8	24·8	78	+7	60
Kanpur ..	413	997·1	+0·2	994·1	89·7	—1·5	95	24	69·4	+3·4	59	26, 27	75·1	85·6	71·3	73·3	24·5	+3·8	22·4	82	+11	55
Lucknow ..	371	999·0	+0·6	996·1	89·0	—2·4	92	2, 24	70·0	+3·5	59	26, 27	75·4	82·2	72·2	75·4	25·9	+4·2	26·9	83	—11	72
Bahraich ..	407	998·1	+1·1	994·8	87·5	—2·6	92	7, 10	68·9	+0·5	60	25, 26, 27	76·0	81·8	71·7	72·8	24·9	+1·8	23·7	80	—4	65
U. P., WEST—																						
Jhansi ..	823	981·6	—1·8	979·8	93·0	—0·1	96	28, 30	69·5	+2·8	57	27	74.8	88·2	70·7	74·2	23·9	+6·3	22·3	79	+21	50
Agra ..	553	992·0	—0·1	990·3	92·3	—0·5	97	12	69·4	+4·3	59	26, 27	72·9	87·4	69·3	73·8	23·1	+8·1	22.4	83	+28	53
Mainpuri ..	516	993·5	+0·4	990·4	92·2	—1·0	95	12	69·5	+4·5	53	26	76·5	86·8	71·7	76·4	24·6	+6·1	26·2	78	+13	59
Aligarh ..	615	989·8	..	986·2	91·5	—1·6	96	2	68·9	+3·0	57	26	74·4	87·2	69·6	72·1	22·1	+6·4	20·1	76	+22	47
Bareilly ..	568	991·8	+0·3	988·6	87·8	—1·9	93	1, 2	69·7	+3·9	59	26	75·9	83·6	70·8	72·5	23·5	+2·6	22·2	77	+1	57
Meerut * ..	762	986·1	..	..	89·1	..	96	2	67·0	..	52	27	72·3	..	67·9	..	21·3	..	..	79	..	..
Roorkee ..	899	980·4	0	977·2	86·9	—1·3	92	7	65·5	+4·0	51	25	70·6	83·1	67·2	76·1	21·2	+3·4	27·6	83	+8	72
Dehra Dun ..	2,239	936·0	—0·4	933·6	81·1	—1·8	85	4 days	61·9	+1·6	53	23, 25, 26	67·7	77·3	63·3	69·3	18·0	+2·9	20·9	78	+7	66
EAST PUNJAB—																						
New Delhi ..	714	986·0	—0·6	983·2	92·2	—0·3	97	1	68·7	+4·4	57	20	74·4	81·0	67·9	71·1	20·4	+5·2	18·8	70	+12	43
Hissar ..	725	986·0	—0·2	983·0	94·6	0	99	4 days	66·2	+3·0	53	26	72·3	90·3	65·6	71·3	18·2	+4·1	17·8	69	+12	36
Ambala ..	892	980·1	—0·2	977·2	92·9	+1·1	97	5 days	67·7	+5·6	53	28	71·9	88·5	67·2	71·3	20·9	+4·9	18·7	76	+13	41
Ludhiana ..	812	982·9	—0·2	980·0	94·5	+2·2	99	2, 4	..	..	..	..	71·2	89·7	65·3	71·2	18·6	+3·6	17·7	72	+8	37
KASHMIR—																						
Srinagar ..	5,205	844·1	—0·6	840·7	75·0	+1·2	84	5, 7, 8	44·3	+3·7	33	25, 26	48·7	67·6	46·8	55·6	10·0	+0·5	10·7	87	—2	48
Gulmarg ..	8,569	(Closed during winter months)																				
Dras (R) ..	10,059																					
Leh ..	11,529	670·3	+1·1	666·6	58·6	+0·3	70	9	31·5	+0·9	21		37·1	56·3	29·2	37·9	3·0	—0·9	2·0	39	—10	15
Skardu (R) ..	7,505																					
Gilgit (R) ..	4,890																					
Misgar (R) ..	10,190																					
RAJPUTANA, WEST—																						
Sri Ganganagar	580	990·1	..	987·6	95·5	+0·4	102	1	64·7	+5·0	55	25, 26	70·5	92·4	63·5	69·3	16·9	+4·7	14·0	66	+13	27
Bikaner ..	734	984·8	—0·9	982·2	98·0	..	101	4 days	69·0	..	56	25	73·4	96·2	65·6	73·8	18·0	..	25·7	64	..	44
Phalodi ..	783	983·6	..	981·6	97·0	..	101	8, 9	68·1	..	57	31	73·3	95·2	64·6	73·6	16·8	..	18·4	60	..	34
Jaisalmer ..	793	982·7	..	980·3	98·0	..	102	18, 19	70·8	..	55	31	76·5	95·4	67·1	73·4	18·3	..	17·7	60	..	33
Jodhpur ..	736	985·6	+0·8	982·8	97·6	+2·1	101	17, 23	70·2	+4·8	59	31	74·4	95·0	64·1	69·4	15·8	+1·6	13·0	54	0	23
Barmer ..	638	988·7	—0·4	986·1	99·4	+2·3	103	7,19	74·8	+4·5	65	31	78·9	95·9	69·5	74·2	20·2	+3·4	19·0	61	+2	33
RAJPUTANA, EAST—																						
Sikar ..	1,406	962·5	..	959·8	96·5	..	100	7,8	67·7	..	56	25	72·8	92·2	64·5	67·9	17·0	..	16·2	62	..	24
Jaipur ..	1,431	962·5	—0·8	959·7	93·6	—0·5	97	14	68·2	+3·9	57	26	76·5	89·0	67·1	69·1	18·4	+4·5	15·3	59	+10	3
Ajmer ..	1,593	957·0	—0·8	954·3	93·2	+1·7	96	8,16,23	69·0	+4·4	56	25,26	73·5	90·1	64·1	66·2	16·5	+1·8	12·2	59	+9	2
Kotah ..	843	982·4	—0·3	979·1	94·7	+0·1	98	12	72·4	+2·1	63	26	76·8	90·9	69·1	71·7	20·8	+4·9	17·8	56	+14	3
Jhalawar ..	1,053	974·5	—1·1	971·8	92·7	+0·8	95	5 days	69·0	+4·9	56	26	74·2	89·5	68·7	71·6	21·3	+4·2	18·3	74	+10	4
Rajsamand ..	1,850	948·3	..	..	90·7	..	94	23	70·6	..	63	26	74·9	..	68·8	..	21·6	..	..	70	..	..
Udaipur. ..	1,910	943·8	..	940·2	91·0	....	94	24	65·8	..	56	25, 26	72·7	84·3	65·7	68·4	18·7	....	17·1	68	..	4

* Converted into class II observatory from October 1948.

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days, (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST—
2·2	+0·4	2·5	3·17	+1·38	1·67	15	5	+3·3	1·8	−0·2	0	2	18	0	0	2	1	4	4	1	0	3	0	0	0	1	0	26	Gonda.
2·5	+1·0	2·6	7·85	+4·88	1·97	1	4	+1·7	1·8	+0·8	1	5	12	2	1	0	4	0	6	1	0	3	1	0	1	6	1	18	Gorakhpur.
3·3	+1·2	3·6	6·71	+4·53	2·87	8	9	+6·8	..	..	4	3	9	3	2	5	0	0	5	4	8	3	3	2	2	1	4	4	Banaras.
2·5	+0·4	3·1	1·30	−1·04	1·23	11	1	−1·5	2·1	−0·2	2	0	8	1	0	1	4	1	14	2	3	1	0	0	0	6	7	12	Allahabad (Bamrauli)
2·1	+0·5	2·4	0·59	−0·30	0·39	13	2	+0·8	1·2	−0·4	0	3	4	3	0	2	2	3	14	0	1	0	0	1	0	0	1	28	Fatehpur.
2·4	+1·5	2·3	0·14	−1·16	0·10	5	1	−0·5	3·5	0	1	3	6	1	1	4	2	1	12	5	8	1	1	0	1	3	3	9	Kanpur.
1·5	+0·2	2·4	0·54	−0·74	0·29		1	−0·7	0·9	−0·2	0	2	7	1	1	1	3	2	14	2	1	7	0	1	0	0	1	19	Lucknow.
1·9	+0·7	2·1	5·39	+3·81	1·45	10	6	+4·3	2·3	+0·9	0	1	6	4	1	0	1	1	17	0	2	2	0	0	2	1	1	23	Bahraich.
																													U. P., WEST—
1·1	−0·2	2·7	0·96	−0·03	0·44	6	3	+1·9	2·6	+0·2	0	3	1	0	0	1	0	2	15	1	4	2	0	0	0	12	1	11	Jhansi.
1·5	+0·5	1·7	1·09	+0·38	0·65	3	3	+2·2	1·8	−0·6	0	2	2	2	3	1	2	0	19	2	2	2	0	0	2	0	2	21	Agra.
2·0	+0·8	2·2	0·01	−0·94	0·01	10	0	−1·0	1·2	+0·1	0	0	5	5	1	0	1	2	17	1	2	3	3	1	1	3	2	15	Mainpuri.
1·2	+0·6	2·7	1·63	+1·32	1·33	8	2	+1·9	1·6	−1·5	0	0	6	1	0	0	2	1	21	1	3	9	1	1	0	3	3	10	Aligarh.
2·7	+1·6	2·5	0·83	−0·44	0·51	10	2	+1·1	1·5	+0·5	2	0	5	3	1	2	1	2	15	6	1	1	1	1	2	1	3	15	Bareilly.
1·2	..	..	0·15	−0·66	0·15	10	1	+0·1	3·1	..	1	3	9	6	2	0	4	2	4	..	..	..	..	..	..	..	..	..	Meerut.
2·5	+1·7	2·0	1·06	+0·22	1·02	13	1	+0·1	1·9	+0·7	0	1	0	20	0	0	0	2	8	0	0	0	6	0	0	0	9	16	Roorkee.
3·5	+2·2	2·7	8·31	+7·25	2·16	16	9	+7·4	1·9	0	3	2	0	0	0	0	0	0	26	0	1	0	0	0	0	3	5	22	Dehra Dun.
																													EAST PUNJAB—
2·3	+1·4	2·7	0·48	+0·08	0·47	31	1	+0·4	2·7	..	0	0	11	4	2	3	7	0	4	4	2	5	3	1	0	0	5	11	New Delhi.
0·4	−0·3	0·3	0	−0·61	0	..	0	−0·6	4·2	+1·0	3	1	5	8	2	6	3	1	2	1	5	3	2	1	1	3	5	10	Hissar.
0·3	−0·6	1·2	0·32	−0·55	0·24	10	1	+0·1	..	..	0	1	0	7	0	0	0	16	7	0	0	0	2	0	0	0	21	8	Ambala.
0·2	−0·61	1·2	0	−0·43	0	..	0	−0·7	0·8	−0·2	0	0	3	5	0	0	1	0	22	0	1	0	1	0	0	0	0	29	Ludhiana.
																													KASHMIR—
2·0	+0·4	2·5	0·06	−1·11	0·05	20	0	−2·8	1·7	−0·3	0	0	1	8	2	0	0	4	16	1	4	1	3	1	0	8	3	10	Srinagar.
																													Gulmarg.
																													Dras (R).
1·2	−1·5	2·1	0	−0·10	0	..	0	−0·3	2·9	+1·0	0	10	4	0	0	0	0	1	16	0	2	0	1	2	15	5	0	6	Leh.
																													Skardu (R).
																													Gilgit (R).
																													Misgar (R).
																													RAJPUTANA, WEST—
0·5	+0·2	0·6	0·15	+0·05	0·15	20	1	+0·7	2·8	−1·6	1	6	9	4	1	0	3	1	6	4	5	1	0	2	6	3	5	5	Sri Ganganagar.
0·4	−0·4	0·8	0	−0·21	0	..	0	−0·4	3·0	−0·8	0	1	0	10	0	9	0	4	7	0	12	0	0	0	7	0	11	1	Bikaner.
1·8	..	3·4	0	−0·07	0	..	0	−0·1	7·1	..	1	0	0	2	6	12	7	0	3	5	0	1	1	0	9	7	7	1	Phalodi.
1·4	..	2·3	0	..	0	..	0	..	6·9	..	0	2	1	1	0	19	0	2	6	0	4	0	0	2	14	0	11	0	Jaisalmer.
1·5	+0·2	3·1	0	−0·32	0	..	0	−0·5	2·0	−2·8	1	5	0	2	0	4	4	1	14	7	5	1	0	0	8	4	3	3	Jodhpur.
1·9	+1·0	2·9	0	−0·10	0	..	0	−0·5	4·7	0	1	1	2	0	2	6	6	6	7	2	0	1	0	2	8	8	4	6	Barmer.
																													RAJPUTANA, EAST—
1·6	..	3·5	0·07	..	0·04	2	..	..	2·1	..	0	0	4	0	0	2	3	0	22	0	0	1	0	0	1	16	3	10	Sikar.
1·5	+0·3	4·6	0·13	−0·35	0·10	18	1	+0·3	3·3	+0·1	5	0	4	5	1	0	1	3	12	4	2	2	2	0	0	1	10	10	Jaipur.
1·3	+0·2	2·6	0	−0·38	0	..	0	−0·7	3·3	+1·2	0	0	0	0	0	4	5	0	22	2	3	1	0	0	3	8	4	10	Ajmer.
0·9	−0·7	2·4	0·43	−0·22	0·22	2	2	+1·0	2·2	+0·7	2	0	0	0	1	1	2	2	23	1	2	0	0	0	1	6	4	17	Kotah.
1·5	−0·2	3·2	0·24	−0·31	0·12	12	1	−0·5	1·6	0	0	0	0	0	0	1	1	0	29	2	3	2	0	0	1	3	3	17	Jhalawar.
2·5	..	..	0·29	..	0·16	31	1	..	5·0	..	1	0	0	0	1	3	11	11	4	..	..	..	..	..	..	..	..	..	Rajsamand.
2·7	..	5·5	1·19	+0·62	0·69	16	3	+1·9	1·8	..	1	0	0	0	1	2	5	3	19	0	1	2	0	1	4	9	7	7	Udaipur.

(R)—Register not received.

TABLE II—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G.T.)

STATION.	Height of bar, cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature °F		Vapour pressure, millibars.			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
GUJARAT—																						
Deesa* ..	466																					
Bhuj ..	343	999·4	—0·3	996·9	94·6	—1·5	102	20, 21, 22	75·4	+4·9	71	16	77·8	91·1	73·7	72·7	26·6	+6·2	14·1	82	+20	41
Dwarka ..	37	1010·7	—0·2	1008·0	85·2	—2·1	89	20	77·5	+2·0	73	10	79·3	82·8	75·8	76·9	28·9	+3·1	29·0	85	+3	76
Jamnagar ..	60	1009·8	+0·3	..	89·8	—3·8	98	20	73·5	+2·7	69	18, 31	77·9	..	75·0	..	28·3	+3·3	..	86	+7	..
Rajkot ..	432	996·5	—0·1	993·4	94·2	—1·6	101	20, 21, 22	73·5	+4·8	71	10, 28	75·9	89·3	73·8	75·4	27·6	+6·5	23·7	91	—17	53
Veraval ..	26	1010·1	—0·1	1008·0	84·5	..	98	19	73·4	..	70	10, 11	76·7	83·9	71·6	78·7	24·2	..	31·2	92	+23	79
Surat ..	39	1009·8	—0·2	1007·0	95·2	+1·1	102	4 days	75·2	+3·1	71	7	78·5	91·2	74·8	78·2	27·8	+4·1	27·0	83	+12	56
Bhavnagar ..	55	1009·7	+0·1	1006·4	96·0	+0·2	101	19, 20,21	75·2	+4·5	72	8	77·8	92·4	72·9	74·9	25·4	+5·3	21·6	78	+16	43
Ahmedabad ..	163	1006·1	—0·1	1002·4	98·3	+1·1	103	20, 21	76·7	+4·0	71	31	79·1	95·3	72·5	75·7	24·3	+4·8	21·5	72	+7	39
Dohad ..	1,093	974·8	..	970·7	93·7	+0·8	98	21	70·3	+3·4	66	25	75·4	90·3	70·5	73·1	23·3	+3·2	20·0	77	+3	43
Baroda ..	115	1007·8	..	1003·8	98·5	+3·1	103	19, 20,21	73·5	+7·4	70	17, 19, 26	79·1	94·4	74·1	76·3	26·5	+4·7	22·7	78	+3	41
CENTRAL INDIA, WEST—																						
Neemuch ..	1,626	956·5	—0·3	954·0	91·5	+0·5	94	18, 23	68·2	+3·6	57	26	73·0	87·1	67·1	69·6	20·3	+4·4	17·6	73	+15	41
Indore ..	1,823	949·5	—0·2	946·7	89·9	+1·2	94	23	66·7	+3·4	59	26	72·0	85·3	67·2	69·2	20·8	+2·9	17·8	77	+14	44
Bhopal ..	1,643	955·6	—0·4	952·7	91·5	+2·8	94	13, 23	68·4	+3·2	59	26	76·1	86·7	68·3	69·9	20·4	+3·2	18·2	66	+5	42
Guna ..	1,571	958·0	—0·3	955·2	90·4	+0·8	93	23	65·8	+3·6	54	26	72·2	85·4	67·8	71·0	21·5	+4·4	19·6	79	+14	47
Gwalior ..	681	987·7	..	984·7	91·7	..	96	12	67·8 (a)	..	55	26	77·5	85·5	71·2	73·8	23·2	..	23·2	72	..	56
Madhosagar ..	757	985·0	..	982·0	92·6	..	97	12	71·0	..	64	26, 27	76·7	87·3	70·6	71·7	22·8	..	19·5	73	..	46
CENTRAL INDIA, EAST—																						
Nowgong ..	750	985·5	—0·2	982·3	91·2	+0·5	94	4 days	67·2	+2·4	55	27	73·0	87·6	69·6	72·5	23·2	+3·7	20·4	83	+11	47
Satna ..	1,041	975·3	—0·3	972·1	88·6	+0·2	91	4 days	68·9	+3·0	59	27	74·3	84·4	71·8	74·3	25·5	+5·3	24·3	86	+16	60
Umaria ..	1,506	959·8	..	957·1	87·4	+0·6	90	10	67·5	+4·4	54	26, 27	73·9	83·3	68·8	72·1	22·0	+2·4	22·3	76	+6	58
BERAR—																						
Buldana ..	2,133	940·2	..	937·1	87·6	..	90	4 days	69·6	..	66	26, 27, 28	74·2	84·4	67·9	70·2	20·7	..	19·5	71	..	47
Akola ..	925	979·5	—0·4	975·8	93·9	+1·3	96	4 days	70·5	+3·6	62	27	75·1	90·3	69·1	71·9	21·6	+2·8	18·4	73	+9	37
Amraoti ..	1,213	969·8	—0·3	966·3	91·4	+0·5	94	24, 31	70·7	+2·0	62	26	76·2	87·7	69·3	71·1	21·4	+3·1	18·5	69	+8	42
C.P., WEST—																						
Khandwa ..	1,044	975·6	—0·3	971·9	94·2	+1·7	97	6 days	69·9	+3·8	61	27	76·7	90·0	69·9	72·9	21·9	+3·5	19·9	70	+5	42
Hoshangabad ..	992	977·0	—1·3	973·7	91·5	+1·8	94	14	69·5	+2·8	61	26, 27	73·4	86·8	69·0	74·0	22·2	+2·5	22·9	80	+9	54
Saugor ..	1,808	949·9	—0·3	947·2	87·5	—0·7	90	4	69·0	+2·7	65	25, 27	74·4	83·7	67·5	68·7	20·1	+4·0	17·9	70	+13	46
Jubbulpore ..	1,289	967·5	+0·1	964·2	91·2	+3·4	93	4 days	67·6	+4·1	57	27	74·5	85·9	69·2	72·4	22·0	+1·8	21·0	75	+1	50
Seoni ..	2,027	943·0	0	940·4	87·3	+0·9	90	24	66·7	+2·6	60	25, 26, 27	72·6	81·6	66·8	69·3	20·1	+2·2	19·4	73	+9	58
Betul ..	2,144	940·9	..	938·0	86·5	..	90	24	64·8	..	55	26	73·4	82·4	67·9	70·1	21·1	..	20·9	76	..	57
Nagpur	1,010	976·9	—0·1	973·4	92·6	+2·0	95	25, 30	69·0	+2·5	61	26, 28	76·4	86·9	70·2	71·9	22·4	+3·8	20·0	72	+10	46
C. P., EAST—																						
Gondia ..	1,026	976·5	..	973·2	90·0	..	92	24	71·0	..	62	27, 28	75·9	85·9	71·9	73·1	24·9	..	22·0	81	..	53
Pendra ..	2,040	942·6	0	939·7	84·5	+1·4	88	25	65·4	+1·3	58	27	73·5	78·6	68·7	70·3	22·0	+2·8	22·0	78	+8	66
Champa ..	805	984·0	..	980·6	90·0	..	92	9, 25	71·8	..	63	28, 31	74·9	86·5	72·2	73·9	25·8	..	22·9	87	..	53
Raipur ..	970	977·9	—0·2	974·8	86·2	—2·3	92	25	71·9	+2·2	64	27	78·5	84·8	70·8	70·8	22·3	+0·5	19·5	68	—6	4[illegible]
Titlagarh ..	691	987·5	..	983·8	89·9	..	92	5 days	72·1	..	64	27, 28	77·1	85·5	72·6	74·4	25·3	..	24·1	80	..	5[illegible]
Kanker ..	1,318	966·8	+0·6	963·6	87·2	+0·7	90	10	68·3	+1·1	58	28	74·9	83·2	70·6	72·9	23·7	+0·7	23·0	80	—2	6[illegible]
Chanda ..	634	989·6	—0·1	986·2	89·6	—0·2	93	26	70·1	+1·9	61	28	76·6	86·2	72·3	79·3	25·2	+1·8	31·1	80	+4	7[illegible]
Jagdalpur ..	1,815	949·9	+0·6	946·7	86·1	+1·2	89	5, 9	67·1	+1·0	56	28	73·1	82·0	70·3	71·5	24·2	+0·4	22·1	87	+5	5[illegible]

*Data not reliable.

(a) Mean of 20 days.

Cloud amount (tenths of sky)			Rainfall, inches.				Number of rainy days (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
											8 hrs. I S. T.									17 hrs. I. S. T.									
Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													GUJARAT—
																													Deesa*.
1·8	+0·4	2·9	0·97	+0·64	0·74	9	2	+1·5	5·1	+0·6	0	0	1	0	0	4	4	3	19	0	4	3	0	4	9	10	1	0	Bhuj.
4·3	+1·9	4·3	0·54	+0·29	0·45	6	1	+0·7	8·9	+2·0	4	1	0	0	1	3	13	6	3	0	0	0	0	1	5	12	13	0	Dwarka.
3·2	+2·1	..	1·08	+0·77	0·46	5	3	+2·5	1·2	—5·1	0	0	0	0	0	0	0	0	31	..	..	..	..	..	..	..	..	..	Jamnagar.
2·8	+0·5	5·3	2·58	+2·01	1·13	9	5	+3·9	7·2	+3·0	4	0	0	2	3	5	8	6	3	4	2	1	1	3	4	7	7	2	Rajkot.
3·2	+0·9	2·7	0·94	+0·32	0·88	4	1	..	9·5	..	7	2	0	0	0	4	0	17	1	0	0	0	0	5	3	8	15	0	Veraval.
2·3	—0·4	3·2	2·36	+1·31	2·83	7	1	—2·0	3·4	+0·8	0	2	3	11	0	0	3	2	10	2	0	1	1	1	9	12	5	0	Surat.
2·2	—0·5	6·1	0·72	—0·18	0·61	9	2	+1·1	3·2	—0·2	0	0	0	1	2	2	15	2	9	0	1	3	5	6	5	3	0	8	Bhavnagar.
1·8	+0·2	2·7	0·77	+0·42	0·48	21	2	+1·3	2·7	—0·3	2	2	3	6	2	2	5	6	3	3	1	0	1	2	4	9	7	4	Ahmedabad.
1·6	—1·0	2·9	0·26	—1·14	0·22	16	1	—1·0	6·6	+3·7	0	3	0	0	3	7	7	1	10	8	3	2	1	1	5	8	2	1	Dohad.
1·2	—0·5	2·6	0·17	—1·59	0·08	8	0	+1·3	1·5	—0·4	0	0	0	1	4	2	0	0	24	3	2	1	1	0	3	5	4	12	Baroda.
																													CENTRAL INDIA, WEST—
2·9	+1·4	6·2	2·92	+2·30	1·70	1	6	+5·1	3·8	—0·1	0	2	0	2	0	8	7	4	8	3	10	0	0	0	5	6	3	4	Neemuch.
2·3	+0·3	5·9	0·48	—0·73	0·13	1	2	0	2·1	+0·3	0	0	1	2	2	7	3	4	12	5	4	0	7	3	1	2	5	4	Indore.
1·4	—0·8	4·6	0·14	—1·52	0·14	15	1	—1·4	2·9	+0·6	1	1	0	1	2	2	6	3	15	2	1	0	0	0	3	6	7	12	Bhopal.
1·8	+0·3	3·6	0	—1·05	0	..	0	—1·6	3·6	+1·9	0	1	0	8	1	0	1	0	20	0	5	0	2	0	0	3	20	1	Guna.
2·1	..	4·0	1·06	..	0·60	3	3	..	1·6	..	1	0	1	2	3	2	3	4	15	3	2	2	1	0	1	1	5	16	Gwalior.
2·6	..	4·6	1·18	..	0·87	8	3	..	3·9	..	1	1	1	0	0	11	4	1	12	3	7	4	2	1	2	1	7	4	Madhosagar.
																													CENTRAL INDIA, EAST—
2·3	+0·2	3·8	0·30	—0·83	0·22	5	1	—0·5	1·9	+0·7	1	5	0	1	11	9	1	2	1	12	8	1	0	0	1	1	8	0	Nowgong.
1·4	—0·8	3·2	1·46	—0·47	0·57	15	3	+0·8	—0·5	—0·6	0	1	2	1	0	3	3	1	20	2	4	4	0	0	3	2	7	9	Satna.
1·0	—2·0	3·2	0·37	—2·10	0·28	11	1	—1·7	1·8	0	3	3	1	2	1	2	4	2	13	7	4	3	1	1	1	5	5	4	Umaria.
																													BERAR—
4·0	..	5·6	0·04	..	0·04	21	0	..	4·1	..	2	0	1	2	3	3	12	8	0	7	4	4	1	3	2	6	4	0	Buldana.
1·9	—1·1	4·5	0·04	—1·78	0·04	4	0	—2·5	2·8	+0·1	0	1	5	1	4	1	7	6	6	2	7	2	2	0	0	2	10	6	Akola.
2·9	—0·1	4·8	0·79	—1·12	0·54	4	2	—0·6	4·2	+1·0	0	9	0	0	0	11	0	11	0	2	8	0	6	1	2	0	12	0	Amraoti.
																													C.P., WEST—
1·4	—0·9	4·4	1·14	—0·25	0·61	17	4	+2·0	3·5	+0·9	0	1	1	1	5	3	10	4	6	5	3	3	1	2	4	4	9	0	Khandwa.
2·7	+0·4	6·0	0·91	—0·37	0·89	3	1	—1·0	0·9	—0·4	2	1	0	0	1	1	1	2	23	2	2	0	0	3	2	1	3	18	Hoshangabad
1·6	—0·6	5·2	0·85	—0·24	0·39	19	3	+1·1	7·0	—0·7	0	1	0	9	3	6	5	2	5	9	2	3	2	0	0	3	11	1	Saugor.
1·7	—0·4	3·6	0·67	—1·21	0·30	5	3	+0·7	2·4	+1·0	0	0	1	12	6	0	4	0	8	7	6	3	2	0	1	2	4	6	Jubbulpore.
1·6	—0·8	4·5	1·58	—0·69	0·36	20	6	+2·9	2·3	—0·1	2	1	0	0	0	3	5	2	18	7	3	2	3	4	2	2	5	3	Seoni.
2·0	..	3·5	0·80	..	0·63	10	1	..	2·1	..	0	0	12	6	0	1	4	0	8	4	10	7	2	0	0	2	4	2	Betul.
2·0	—1·0	5·5	1·01	+1·16	0·59	10	3	—0·1	2·9	..	2	1	0	0	1	1	1	2	23	2	2	0	0	3	2	1	3	18	Nagpur.
																													C.P., EAST—
1·8	..	2·5	0·21	..	0·18	11	1	..	1·5	..	4	3	2	3	2	1	1	2	13	2	7	0	1	1	5	0	9	6	Gondia.
0·8	—2·2	4·4	0·44	—2·55	0·25	15	1	—3·1	2·4	+0·3	7	3	1	0	2	1	2	5	10	5	2	1	3	8	2	3	6	1	Pendra.
2·6	..	4·4	1·65	..	1·10	10	2	..	2·7	..	10	4	2	1	0	1	2	4	7	6	2	3	1	0	0	8	8	3	Champa.
2·7	+2·0	5·0	1·07	—1·10	0·62	6	2	—1·3	2·8	+0·4	2	3	0	2	2	4	4	1	12	7	6	2	2	1	2	1	4	6	Raipur.
2·1	..	3·5	2·05	..	0·77	2	4	..	1·1	..	1	2	2	4	5	4	1	0	12	7	5	1	1	2	1	2	4	8	Titilagarh.
2·4	—1·7	5·2	1·49	—2·95	0·86	21	4	—1·3	1·1	—1·2	0	0	0	0	0	2	1	1	27	2	1	0	0	0	0	1	1	26	Kanker.
2·7	—0·2	3·9	1·45	—0·59	0·78	11	3	+0·1	1·4	—0·3	0	0	0	2	0	0	1	5	23	0	5	0	6	1	0	0	3	15	Chanda.
3·0	—1·0	5·6	2·06	—2·30	1·53	1	3	—2·7	2·2	+0·4	0	4	0	0	0	3	0	7	17	0	8	0	0	0	6	0	11	6	Jagdalpur.

STATION.	Height of bar, cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, Millibars.			Relative humidity. %		
		Mean 8 hrs I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
KONKAN—																						
Dahanu ..	15	1011·1	..	1008·5	87·5	..	95	20	75·3	..	73	17	78·8	85·3	76·1	80·3	29·5	..	33·1	89	..	80
Bombay ..	35	1010·6	+0·7	1007·8	88·7	—0·1	95	20	77·2	+1·6	75	5 days	80·2	84·8	76·9	79·0	30·1	+1·9	31·3	85	+1	77
Alibag ..	23	1011·5	+1·3	..	86·7	—1·8	90	4 days	75·9	+1·4	73	4, 21	78·6	..	76·2	..	29·5	+2·9	..	89	+10	..
Harnai ..	66	1008·1	..	1006·5	86·9	..	90	8 days	75·4	..	74	7 days	79·1	82·2	75·5	78·6	28·5	..	31·7	83	..	82
Devgad ..	110	1007·4	..	1004·5	86·8	..	94	17	76·2	..	74	4, 5	79·0	82·6	76·0	78·2	29·3	..	31·0	86	..	71
Vengurla ..	29	1010·4	..	1007·3	89·1	..	95	19	75·0	..	72	20, 24	77·9	84·5	75·9	78·1	29·6	..	29·9	91	..	74
Marmagao ..	202	1004·5	+0·6	1001·4	85·6	—0·3	92	18, 19	..	..	..	..	79·1	82·5	75·9	77·6	29·1	+1·4	30·1	86	+1	7
Honavar ..	85	1009·2	..	1006·2	88·6	..	95	18, 19	74·5	..	72	3, 4, 16	78·0	84·4	76·1	78·8	29·9	..	31·1	90	..	7
BOMBAY, DECCAN—																						
Jalgaon ..	660	988·3	..	984·5	95·4	..	98	24, 29	71·2	..	62	22	76·4	92·7	70·6	73·8	23·0	..	19·9	73	..	3
Malegaon ..	1,432	963·2	+0·1	958·8	93·1	+1·4	97	26	69·5	+3·6	65	26	78·0	87·2	71·1	71·1	22·8	+3 9	18·8	70	+4	4
Ahmednagar ..	2,154	935·6	—0·2	935·5	89·8	+1·2	94	26	68·2	+2·6	65	4	73·4	86·3	68·9	70·3	22·3	+3·8	18·8	79	+12	4
Poona ..	1,834	950·0	+0·5	946·8	89·9	+0·5	94	27	68·8	+2·5	63	31	72·4	84·2	69·9	72·5	24·0	+3·2	22·5	88	+8	8
Sholapur ..	1,570	958·7	+0·7	954·7	91·2	+0·6	94	9, 26,31	70·7	+1·9	65	17	74·7	88·9	69·9	72·5	23·0	+3·4	20·5	78	+11	4
Miraj ..	1,817	950·0	+0·2	946·3	88·6	+1·7	91	4 days	69·0	+0·7	64	3	71·7	83·9	69·7	71·6	24·0	+3·1	21·0	91	+16	8
Kolhapur ..	1,885	948·1	..	944 6	87·4	..	90	4 days	68·4	..	64	3, 4	71·6	83·1	69·8	72·0	24·1	..	22·3	92	..	8
Bijapur ..	1,950	946·0	+0·6	942·0	87·4	—1·3	91	27	69·8	+1·0	66	28	74·9	84·8	69·8	71·3	22·8	+2·3	20·7	75	+4	8
Belgaum ..	2,562	925·9	+0·6	922·7	82·8	—0·6	86	26, 27,29	65·8	+0·4	61	4	70·2	80·0	68·5	70·2	23·2	+2·4	21·2	92	+9	6
Gadag ..	2,131	940·0	+0·8	936·3	83·7	+1·9	94	27	69·5	+0·5	65	3	74·2	83·9	69·9	71·2	24·5	+3·1	21·0	81	+3	1
HYDERABAD, NORTH—																						
Aurangabad ..	1,905	947·8	+0·3	944·4	90·6	+0·9	98	20	69·5	+2·6	66	27, 28	75·7	86·0	70·6	72·2	23·5	+5·6	21·4	77	+16	1
Parbhani ..	1,350	964·5	..	960·7	91·2	..	94	4 days	65·2	..	63	27,28,29	75·5	87·0	70·3	72·1	23·0	..	20·1	75	..	.
Bidar ..	2,178	938·5	..	934·6	84·4	—1·9	89	24, 27,31	69·9	+1·6	66	29	74·7	81·7	69·2	69·7	22·2	+1·0	19·9	76	+3	1
Nizamabad ..	1,250	969·1	+0·5	964·9	89·6	+0·3	98	29	69·7	+1·7	63	28, 29	76·1	84·9	71·9	72·7	24·8	+2·7	21·9	81	+8	(1
Ramakundam ..	527	(j) 994·2	..	(k) 990·2	(j) 92·2	..	96	25	(j) 72·3	..	67	27	(j) 77·6	(k) 86·9	(j) 73·3	(k) 73·3	(j) 26·1	..	(k) 21·9	(j) 80	..	
HYDERABAD, SOUTH—																						
Gulbarga ..	1,503	960·3	+0·2	956·5	89·0	—1·5	93	25	70·9	+1·9	65	29	76·0	85·5	70·9	73·0	23·8	+3·3	22·7	78	+9	
Raichur ..	1,311	966·9	+0·5	963·2	89·0	—0·9	93	26	73·2	+1·0	68	29	76·5	86·1	71·3	72·4	23·8	+1·1	21·0	75	+2	
Hyderabad (Begumpet)	1,778	951·3	+0·7	948·1	89·8	+1·6	94	25	68·9	+1·2	58	29	75·5	84·9	71·0	72·5	24·1	+2·0	22·2	80	+5	
Hanamkonda ..	881	981·2	+0·2	977·8	90·5	+1·0	94	10	72·7	+1·8	65	28, 29	77·8	86·3	73·7	74·0	26·6	+2·3	23·1	81	+5	
Khammameth (R)	367																					
MYSORE—																						
Chitaldrug ..	2,405	931·1	+0·9	927·3	84·8	—0·4	88	26, 31	67·8	—0·4	61	29	72·2	82·2	69·0	69·7	22·9	+1·5	19·7	85	+7	
Hassan ..	3,149	907·0	..	903·9	81·8	—0·4	84	4 days	65·0	+0·3	59	30	68·5	77·4	66·3	68·5	21·2	+0·2	20·1	89	+6	
Bangalore ..	3,021	911·0	+0·6	907·7	82·3	+0·6	86	6, 7	65·8	+0·9	60	30	70·0	78·2	67·0	67·7	21·4	+0·3	18·9	86	+2	
Mysore ..	2,518	927·3	+0·5	923·8	84·1	—0·1	87	6	67·0	0	59	30	70·4	82·6	67·8	69·3	22·2	+0·2	19·0	87	+3	
MALABAR—																						
Mangalore ..	73	1009·2	+0·6	1006·1	86·5	+0·6	92	19, 20	75·4	+0·8	73	22	78·9	83·1	76·2	77·8	29·6	+1·2	30·1	88	+1	
Calicut ..	27	1010·6	+0·4	1007·1	89·3	+3·0	92	16,19,21	75·9	+1·1	73	5, 22	78·5	86·6	75·9	79·8	29·4	+0·7	31·7	89	0	
Palghat ..	319	1000·8	..	996·8	88·8	..	93	26	74·3	..	72	14, 21, 24	78·0	84·9	74·7	76·9	27·9	..	28·0	85	..	
Cochin ..	10	1011·4	+0·1	1007·9	85·6	+1·3	89	18	75·7	+0·4	73	16, 22	80·0	83·5	76·2	77·6	29·1	+0·6	29·7	83	—2	
Alleppey ..	12	1011·2	..	1007·9	87·2	..	90	12, 31	75·5	..	73	18, 22	80·4	84·4	77·6	78·0	31·0	..	29·8	88	..	
Trivandrum ..	211	1004·6	+0·5	1001·3	86·4	..	89	26	74·2	..	71	22	77·1	82·7	75·1	76·9	28·8	+0·9	29·0	91	+3	
Nagercoil ..	195	1004·8	..	1001·4	89·9	..	93	10	75·6	..	72	22	79·9	83·6	74·8	76·1	27·2	..	27·4	78	..	

R—Register not received.

Cloud amount, (tenths of sky)			Rainfall, inches.				Number of rainy days (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION
											8 hrs I. S. T.									17 hrs. I. S. T.										
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52		53
																														KONKAN—
5·1	..	2·9	0·32	..	0·14	3	1	..	6·5	..	0	1	17	10	2	0	0	1	0	4	0	0	0	1	1	14	11	0		Dahanu.
4·2	+0·3	2·5	2·11	—0·43	1·05	12	2	—1·1	6·8	+0·7	2	7	8	7	1	0	0	2	4	2	1	0	0	0	0	6	22	0		Bombay.
3·5	—1·4	..	4·25	—0·78	3·06	11	3	—2·1	3·2	—2·0	1	5	6	3	0	0	0	0	16	..	..	..	..	..	..	..	..	..		Alibag.
..	..	..	0·65	..	0·40	22	2	..	8·1	..	2	11	3	4	0	0	1	10	0	0	0	1	2	0	3	12	13	0		Harnai.
5·6	..	6·3	0·38	..	0·14	20	2	..	8·1	..	7	5	12	2	0	0	0	2	3	0	0	0	0	1	3	1	26	0		Devgad.
4·3	..	5·5	..	..	..	..	..	..	..	..	0	0	1	0	0	0	0	0	30	0	0	0	0	0	4	15	5	7		Vengurla.
4·9	—0·4	5·8	0·49	—5·99	0·36	22	2	—5·9	5·7	+1·0	6	10	10	3	1	0	0	1	0	0	1	1	1	2	2	12	12	0		Marmagao.
6·1	..	6·8	1·87	—5·35	0·65	19	6	—1·9	1·6	..	0	1	11	2	0	0	0	1	16	1	0	0	1	1	1	13	11	3		Honavar.
																														BOMBAY, DECCAN—
2·2	..	3·4	0	—1·44	0	..	..	—1·8	3·6	..	1	0	7	4	0	4	13	1	1	7	9	3	1	1	0	6	4	0		Jalgaon.
0·9	—2·3	5·9	0·11	—1·60	0·11	3	1	—1·7	2·6	—1·3	0	0	0	0	0	2	2	2	25	1	10	4	3	0	2	2	9	0		Malegaon.
4·0	+0·9	5·0	0·90	—1·27	0·30	1	4	+0·6	3·7	+1·1	3	4	0	3	0	0	1	9	11	4	9	2	3	1	3	1	5	3		Ahmednagar.
3·4	—0·6	5·4	4·91	+1·37	1·89	11	5	—0·1	2·2	—1·8	0	0	0	0	1	0	5	1	24	0	0	4	0	0	1	8	5	13		Poona.
4·4	+0·5	4·9	3·71	+0·67	1·17	21	5	+0·7	4·8	—1·1	3	3	3	6	0	1	0	7	8	4	6	3	5	0	4	2	4	3		Sholapur.
4·0	—1·0	6·6	3·71	—0·41	1·10	23	7	+0·6	3·6	—1·8	1	0	7	0	0	0	5	6	12	5	6	8	1	0	2	4	2	3		Miraj.
2·2	..	4·3	5·48	..	1·31	22	10	..	4·9	..	0	2	5	0	0	0	3	1	20	2	5	5	1	1	1	12	2	2		Kolhapur.
3·8	+0·2	6·3	4·03	+1·14	1·50	14	7	+2·9	3·0	—0·3	5	2	2	6	0	2	2	7	5	4	12	4	3	1	2	1	3	1		Bijapur.
3·5	—1·4	5·8	4·06	—0·71	2·01	8	10	+2·5	2·8	—0·3	2	15	4	0	0	2	7	1	0	0	12	3	1	3	1	10	1	0		Belgaum.
7·4	—2·3	8·2	7·96	+4·15	2·05	5	8	+0·7	4·1	—1·0	0	3	3	1	0	3	8	4	9	0	7	7	2	1	5	6	1	2		Gadag.
																														HYDERABAD, NORTH—
2·8	—0·9	4·7	1·16	—0·63	0·35	10	5	+2·2	3·8	—1·1	1	5	6	1	3	2	7	1	5	8	4	10	2	1	1	0	4	1		Aurangabad.
2·7	..	4·2	1·36	—0·73	0·29	1	5	+2·0	..	..	2	7	9	0	0	0	7	3	3	1	5	5	1	1	0	7	2	9		Parbhani.
4·6	+0·8	6·1	1·79	—0·42	1·20	12	3	—0·7	5·1	—0·4	1	4	3	4	5	5	4	5	0	5	16	6	2	1	0	0	1	0		Bidar.
4·3	+1·1	3·9	3·32	+1·32	1·65	4	4	+1·0	1·8	—0·5	1	0	4	0	0	8	2	0	16	0	16	0	2	0	0	0	11	2		Nizamabad.
(j) 2·9	..	(k) 5·3	1·51	..	1·05	15	3	..	(j) 1·6	..	0	3	0	3	1	0	0	5	9	2	12	1	0	0	0	0	2	3		Ramakundam.
																														HYDERABAD, SOUTH—
2·7	—0·6	3·9	1·82	—0·87	0·70	4	6	+2·0	5·4	—0·2	4	10	7	2	0	0	4	4	0	4	10	5	3	1	3	3	2	0		Gulbarga.
3·8	+0·4	6·0	0·77	—2·28	0·30	4	3	—1·3	4·9	—0·8	0	7	7	3	1	6	5	1	1	0	10	7	5	0	4	3	2	0		Raichur.
3·9	—0·4	4·7	0·07	—2·38	0·06	1	0	—4·3	3·8	0	1	1	4	2	0	0	0	5	18	5	1	8	13	0	0	0	0	4		Hyderabad (Begumpet).
3·2	—0·9	3·7	2·26	—0·35	1·32	12	5	+0·9	3·1	+0·1	2	0	0	15	10	3	1	4	6	11	9	4	0	0	1	0	3	3		Hanamkonda.
																														Khammameth. (R)
																														MYSORE—
6·3	+0·5	8·0	3·35	—1·41	2·15	7	4	—2·4	4·0	+0·3	0	0	4	4	0	4	9	2	8	0	6	9	2	1	3	5	3	2		Chitaldrug.
6·8	+0·7	6·8	5·22	—0·85	2·08	14	9	—0·1	4·5	+1·2	2	1	8	2	1	2	7	2	6	1	3	11	0	0	4	9	3	0		Hassan.
7·1	+0·5	7·3	5·37	—0·50	1·73	7	8	—0·5	4·9	+0·8	1	2	7	5	4	1	4	3	4	1	9	8	2	1	1	4	4	1		Bangalore.
8·4	+1·6	7·5	2·22	—3·66	1·36	11	5	—3·6	5·2	+0·6	1	3	7	0	0	3	7	0	10	4	7	6	1	3	2	7	1	0		Mysore.
																														MALABAR—
3·3	+0·3	8·1	2·78	—5·37	0·66	16	9	—1·4	4·5	+0·4	1	4	17	5	0	1	0	0	3	4	1	0	2	0	3	5	16	0		Mangalore.
6·4	—0·1	7·8	3·73	—6·54	1·73	22	6	—5·2	6·1	+1·7	2	11	12	3	0	0	0	2	1	0	1	0	0	1	8	14	7	0		Calicut.
5·8	..	6·1	4·10	..	1·05	21	9	..	4·4	..	0	0	12	1	0	1	11	1	5	0	0	6	0	0	3	19	1	2		Palghat.
6·4	+0·4	7·6	4·59	—8·78	0·75	22	9	—5·2	5·1	+1·4	0	8	12	7	0	0	0	0	4	0	0	0	1	0	3	17	8	2		Cochin.
7·0	..	7·3	9·30	..	1·98	12	17	..	5·2	..	0	10	8	7	1	0	0	2	3	0	0	1	2	0	5	15	8	0		Alleppey.
6·0	—0·9	6·6	8·16	—2·57	2·01	10	13	+0·8	4·5	+0·8	12	11	0	3	0	1	0	3	1	3	0	1	0	3	4	10	9	1		Trivandrum.
6·9	..	7·8	6·76	..	1·92	16	9	..	6·5	..	2	9	3	0	0	1	7	9	0	0	1	3	2	0	5	19	1	0		Nagercoil.

STATION	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature. °F				Minimum temperature. °F				Dry bulb temperature. °F		Wet bulb temperature. °F		Vapour pressure. Millibars.			Relative humidity. %		
		Mean 8 hrs., I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date	Mean 8 hrs., I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs, I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
MADRAS, SOUTH EAST—																						
Pamban ..	37	1009·7	+0·5	1006·7	88·9	+1·0	91	6 days	78·6	+0·9	75	17,20,21	82·6	83·4	77·6	78·0	30·1	+0·3	30·3	79	—4	77
Madura ..	437	996·2	+0·4	991·9	91·9	+1·7	97	5 days	75·8	+1·2	72	21	81·0	86·9	74·9	76·0	26·8	+0·1	25·7	76	—1	61
Negapatam ..	31	1010·3	+0·8	1006·9	88·5	—0·2	96	1	78·0	+1·5	75	4 days	81·9	84·4	77·0	78·0	29·5	+2·1	29·9	79	—3	74
Trichinopoly ..	295	1001·4	+0·7	997·2	92·2	+1·8	99	1	76·5	+2·5	73	22	79·9	88·5	74·7	76·1	27·0	—0·7	25·1	79	0	56
Coimbatore ..	1,341	965·8	+0·4	961·9	88·6	+0·1	92	11	71·5	+0·8	69	5, 6	75·5	84·9	71·6	74·5	24·7	—0·7	24·4	82	—2	60
Salem ..	913	980·2	+0·4	975·7	91·1	+1·3	98	6	73·2	+1·3	68	25,26,30	76·2	85·6	72·2	73·6	25·2	—0·6	22·8	82	+1	57
Cuddalore ..	39	1010·0	+0·8	1006·4	88·2	—0·3	95	3	76·5	+1·3	72	30	79·8	84·4	76·1	77·4	29·1	—0·1	28·9	83	—1	72
Vellore ..	703	987·5	+1·5	983·5	90·4	+1·5	96	5	73·5	+0·7	67	26, 30	77·2	86·3	73·5	75·2	26·5	—0·1	25·8	83	0	59
Madras ..	51	1009·7	+0·9	1006·1	89·7	—0·4	95	1,3	75·8	+0·8	72	30	80·0	84·5	76·5	76·8	29·6	+1·1	28·0	85	+2	70
Arogyavaram ..	2,299	934·7	..	931·2	84·2	..	91	3	68·2	..	62	30	73·5	79·7	68·9	69·5	22·3	..	20·5	79	..	61
MADRAS, DECCAN—																						
Cuddapah ..	428	997·1	+0·9	993·0	92·7	+0·7	96	12,26,27	76·1	+1·6	71	29, 30	83·2	86·7	74·7	77·9	25·5	—0·7	28·7	66	—10	67
Bellary ..	1,473	961·3	+0·4	957·5	88·5	—1·3	92	5 days	72·0	+0·7	68	28, 29	75·8	86·0	70·5	71·7	23·1	+1·2	20·1	76	+4	49
Kurnool ..	923	980·1	+0·8	976·3	90·0	—0·6	94	25,26,31	72·4	+0·7	63	29	77·8	86·1	73·1	73·9	25·7	+2·2	23·0	79	+4	57
Rentichintala ..	348	999·6	..	995·8	89·6	—1·9	94	25, 26	74·3	+0·5	66	29	79·4	87·0	74·8	74·7	27·4	+2·0	23·8	80	+3	57
Anantapur ..	1,148	972·1	..	967·6	90·5	..	95	26	(a) 73·0	..	65	30	77·7	88·0	72·4	75·2	24·8	..	24·0	76	..	53
MADRAS COAST, NORTH—																						
Nellore ..	66	1008·9	+0·7	1005·5	91·7	+1·0	98	3	76·0	+0·1	72	5, 30	80·8	85·9	76·6	78·0	29·3	+0·4	29·1	82	0	69
Ongole ..	38	1009·8	..	1006·3	90·5	..	97	3, 4	76·6	..	73	12, 29, 30	80·6	85·6	76·6	78·1	29·5	..	29·5	83	..	71
Masulipatam ..	10	1011·1	+0·7	1007·3	88·3	—0·3	91	5 days	77·3	+1·3	73	29	81·3	84·9	77·5	78·1	30·5	+1·0	29·8	84	+1	73
Cocanada ..	26	1010·2	+0·4	1007·2	88·4	+0·5	93	25	76·5	+0·6	72	29	82·3	85·3	77·2	78·1	29·6	+1·3	29·6	79	—1	71
Vizagapatam ..	126	1006·9	+0·5	1003·8	87·9	+0·3	93	5	77·1	+0·6	72	29	81·6	84·3	76·7	77·7	29·2	+1·9	29·4	79	+3	74
Calingapatam ..	19	1010·3	+0·2	1007·3	88·7	+0·6	92	23, 2526	76·8	+1·1	70	29	79·4	85·5	76·2	78·6	29·4	+0·5	30·3	86	+2	72
HILL STATIONS EXCLUDING KASHMIR—																						
Shillong ..	4,921	852·0	0	849·4	68·8	—2·3	75	7, 8	53·5	—1·3	45	26, 28, 30	65·2	63·1	59·8	60·8	15·4	—0·6	17·2	73	—2	88
Cherrapunji ..	4,309	870·9	+0·3	868·3	71·1	—0·8	78	6, 7, 8	59·0	—1·5	51	26, 28	67·2	64·9	62·0	62·5	17·0	—0·5	18·3	75	—1	87
Aijal ..	3,599	891·4	..	889·1	75·5	..	81	6, 10	62·1	..	55	27	69·0	69·3	66·4	66·7	21·2	..	21·4	87	..	87
Darjiling ..	7,432	778·4	—0·2	775·6	61·6	—0·1	68	8, 10	49·5	—0·7	42	26	55·3	53·8	53·2	52·5	13·0	—0·1	12·8	88	+4	92
Kalimpong ..	3,965	881·5	—0·1	879·0	73·0	+1·0	80	10, 11	60·8	+0·5	58	28, 30	64·1	68·1	61·8	65·4	17·9	+0·2	20·4	87	+5	86
Katmandu ..	4,388	869·3	..	865·9	78·1	—2·0	84	1, 5	56·9	+0·5	44	28	62·2	69·3	60·1	63·4	17·0	+1·4	17·6	89	+2	72
Muktesar ..	7,592	773·7	—0·8	772·0	62·9	—2·1	68	4	49·6	—0·1	44	4 days	53·6	57·7	48·7	53·3	9·9	+1·1	12·3	71	+11	76
Mussoorie (R) ..	6,699																					
Simla ..	7,224	783·9	+0·2	783·0	63·1	—1·2	69	1	50·6	—0·8	42	24	55·5	58·3	48·1	52·6	8·8	+1·8	11·4	61	+14	70
Abu ..	3,945	883·9	+1·7	880·4	80·0	+0·9	84	4 days	65·9	+1·5	62	4, 12	69·4	75·2	61·5	62·9	15·4	+4·0	14·4	64	+13	50
Pachmarhi ..	3,528	895·4	0	893·1	80·8	+1·5	83	4 days	60·6	+1·7	50	27	69·0	78·0	64·9	67·3	19·5	—2·6	18·5	80	+17	57
Mahabaleshwar	4,534	864·1	+0·6	862·2	75·9	+1·7	79	6 days	62·4	+1·1	59	4 days	64·4	70·1	61·7	66·5	17·7	+1·8	20·8	85	+5	83
Mercara ..	3,781	885·8	0	883·4	71·4	—3·9	77	4 days	62·5	0	51	30	66·4	71·5	64·1	67·3	19·6	+0·2	21·2	88	—2	82
Gotacamund ..	7,364	780·9	+0·8	779·1	66·1	+1·5	70	4 days	50·0	—0·5	43	30	54·7	60·7	52·6	56·7	12·7	—1·1	14·3	88	+6	80
Coonoor ..	5,730	826·2	..	..	67·7	—2·0	72	31	55·3	—0·8	51	4 days	63·1	..	58·1	..	14·8	—0·4	..	76	—2	..
Kodaikanal ..	7,688	772·3	+1·2	770·4	62·7	+0·6	67	12, 14	51·2	0	48	25, 26, 30	54·3	57·2	52·7	54·8	13·0	+0·3	13·8	91	+8	87
CEYLON—																						
Colombo ..	24	1011·1	+0·3	1007·9	86·3	+0·6	88	18, 17	74·3	—0·7	70	22	77·3	82·4	74·8	76·1	28·3	—0·5	27·9	88	—2	74
Trincomalee ..	24	1010·5	+1·3	1006·9	88·6	—0·6	96	1, 2	75·5	0	71	6	79·3	82·6	75·6	77·1	28·6	+0·7	29·3	83	—2	77
Hambantota ..	61	1009·0	+0·1	1005·7	86·3	+0·1	89	4	75·5	+0·4	71	22	79·1	82·7	77·6	77·7	28·7	+0·9	30·2	84	—3	79
Mannar ..	12	1010·9	..	1007·4	88·0	..	90	11	78·0	..	75	21	81·1	84·0	76·6	77·5	29·2	..	29·3	80	..	73

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

Cloud amount (tenths of sky)			Rainfall, inches				Number of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																			STATION
											8 hrs. I. S. T.									17 hrs. I. S. T.										
8 hrs. I.S.T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal	Heaviest fall in 24 hours	Date	Total in the month	Departure from normal	Mean	Departure from normal	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	40	51	52		53
																														MADRAS, SOUTH-EAST—
·8	+2·3	5·2	3·02	—5·51	1·05	21	6	—3·4	8·0	+0·8	3	4	2	1	9	5	4	4	0	7	5	0	6	10	1	0	2	0		Pamban.
·2	—0·2	7·9	8·65	+1·23	3·26	22	8	—2·2	3·0	+0·3	4	7	3	0	0	0	2	9	6	1	6	10	3	1	1	1	2	6		Madura.
·7	+1·4	6·8	4·73	—5·85	1·48	18	6	—4·8	6·3	+2·0	1	2	2	1	2	6	6	5	6	1	13	4	8	4	0	0	0	1		Negapatam.
·5	+0·9	7·6	5·77	—1·44	2·13	22	6	—3·5	6·5	+0·8	3	3	2	3	2	0	7	11	0	1	8	14	3	1	1	1	2	0		Trichinopoly.
·6	+0·2	6·4	3·10	—3·21	0·61	14	9	—0·7	5·1	+2·4	7	8	1	0	6	6	1	1	1	6	8	2	1	6	7	1	0	0		Coimbatore.
·8	0	7·1	5·81	—0·63	1·91	10	10	+0·3	3·9	+1·5	0	4	6	0	0	4	4	0	13	2	2	7	1	1	2	4	1	11		Salem.
·2	+0·5	6·0	4·55	—6·98	1·90	17	6	—4·8	5·0	+1·9	5	0	0	0	5	6	2	11	2	0	7	10	12	1	0	0	0	1		Cuddalore.
·9	+1·1	7·3	4·72	—2·08	1·20	9	9	—0·2	3·0	+1·0	0	1	1	1	0	6	1	0	21	0	2	14	5	2	6	0	0	2		Vellore.
·3	+0·6	6·8	9·21	—2·83	3·62	18	8	—2·7	8·6	—0·1	0	2	1	0	2	11	5	10	0	1	11	5	13	1	0	0	0	0		Madras.
·6	..	8·3	4·04	..	0·95	8	6	..	3·1	..	0	0	1	7	3	1	1	5	13	5	8	6	3	0	2	1	5	1		Arogyavaram
																														MADRAS, DECCAN—
·4	—0·8	6·4	1·51	—3·35	0·50	17	4	—2·8	3·4	—0·3	0	0	2	2	0	0	1	2	24	0	1	11	5	0	0	5	1	8		Cuddapah.
·0	+0·9	6·7	2·38	—1·78	1·06	5	6	+0·1	3·3	+0·2	0	0	6	0	1	0	4	1	19	0	3	15	1	0	0	4	2	6		Bellary.
·3	—0·3	6·4	2·81	—0·39	1·15	10	6	+1·1	0·9	—2·2	0	0	0	0	0	0	2	2	27	0	2	6	2	1	0	0	1	19		Kurnool.
·0	—1·4	7·2	1·38	—3·06	0·68	15	4	—3·6	3·0	—1·2	1	2	0	2	0	2	1	1	22	4	7	2	3	2	3	2	0	8		Rentichintala.
·2	..	6·4	0·73	—3·21	0·65	9	1	—4·5	5·7	..	1	2	6	2	0	3	3	5	9	1	16	6	1	0	2	1	4	0		Anantapur.
																														MADRAS COAST, NORTH—
·6	—0·6	6·4	7·62	—1·94	2·42	19	9	+0·1	2·3	—0·6	0	0	0	0	3	0	1	2	25	0	1	19	3	1	0	2	1	4		Nellore.
·8	..	7·2	8·15	..	5·13	12	9	..	3·2	..	2	2	1	2	3	0	5	1	15	0	0	11	11	0	0	1	0	8		Ongole.
·4	+0·6	6·0	5·96	—2·64	2·67	13	4	—4·5	3·8	+0·2	4	3	1	1	2	1	1	14	4	1	0	1	9	5	1	0	2	12		Masulipatam.
·1	—1·0	5·8	4·53	—3·99	2·30	8	3	—5·6	5·6	+0·7	2	6	0	1	0	13	9	6	3	0	3	2	11	0	12	0	3	0		Cocanada.
·5	—1·9	5·7	3·61	—4·21	2·17	12	5	—3·3	3·9	+0·7	3	3	0	1	0	0	9	7	8	0	1	10	5	7	4	4	0	0		Vizagapatam.
·4	+2·1	6·3	0·30	—7·57	0·20	2	1	—6·3	4·9	+0·2	9	0	0	0	0	0	7	15	0	1	2	8	10	6	3	0	1	0		Calingapatam.
																														HILL STATIONS EXCLUDING KASHMIR—
·0	—1·3	8·3	12·56	+5·84	3·64	1	17	+7·0	2·0	+0·8	0	0	5	5	2	3	0	0	16	0	3	1	1	2	3	1	2	18		Shilleng.
·0	—0·8	5·3	25·67	+6·25	8·42	1	9	—0·3	2·0	—1·1	0	15	6	4	1	0	3	0	2	3	3	1	1	1	5	3	1	13		Cherrapunji.
·5	..	5·1	2·73	..	1·45	11	7	..	4·0	..	0	1	16	5	0	1	2	0	6	0	0	2	0	1	3	9	11	5		Aijal.
·2	+0·8	7·1	8·39	+2·98	2·55	5	12	+7·2	3·7	+1·1	0	0	20	4	0	0	1	0	6	0	1	9	3	0	3	11	0	4		Darjiling.
·7	+1·8	6·1	4·85	—0·16	2·31	5	8	+3·2	5·5	—0·9	1	0	0	2	1	0	0	15	12	0	0	0	19	2	0	0	2	8		Kalimpong.
·5	+0·8	5·0	2·89	+1·45	0·80	2	11	+7·8	1·0	+0·2	0	1	6	1	1	0	0	0	22	4	0	1	0	2	1	0	0	23		Katmandu.
·7	+0·9	3·8	1·70	—0·18	0·51	15	4	+1·7	6·6	+1·9	1	3	3	0	0	6	7	5	6	0	1	0	0	0	9	17	3	1		Muktesar.
																														Mussooree (R)
·1	+0·7	4·2	0·90	—0·28	0·48	10	3	+1·1	1·1	—1·7	5	3	1	2	1	0	0	3	16	5	0	0	3	3	3	1	6	11		Simla.
·4	0	3·4	0·47	—0·29	0·18	11	2	+1·1	2·4	—1·0	1	0	0	0	1	1	6	4	18	4	1	1	0	0	3	6	1	15		Abu.
·4	—0·2	4·0	0·79	—1·51	0·34	13	3	0	1·4	—0·9	2	2	0	0	1	4	5	3	14	7	6	1	0	0	0	5	8	4		Pachmarhi.
·7	—1·0	6·7	4·79	—1·56	1·02	13	11	+3·1	5·7	—1·9	1	10	12	3	1	0	2	2	0	1	4	6	1	2	4	7	6	0		Mahabaleshwar.
·2	—0·5	7·5	8·06	—0·23	1·88	23	12	—0·9	5·0	+1·6	7	7	4	1	1	0	4	5	2	5	6	3	0	3	2	6	4	2		Mercara.
·1	+0·1	6·9	7·76	—1·22	1·58	23	8	—5·8	2·8	0	0	10	5	2	1	0	1	0	12	3	10	5	2	3	0	2	2	4		Ootacamund.
..	..	..	14·66	+4·53	4·25	14	13	—1·1	..	..	1	0	4	7	4	0	0	0	15	..	..	..	..	..	..	..	..	..		Coonoor.
·7	+0·7	8·6	12·25	+2·06	2·54	19	13	+0·2	8·6	+1·8	6	3	3	8	2	1	2	4	2	6	3	3	11	3	0	1	3	1		Kodaikanal.
																														CEYLON—
..	..	8·3	8·97	—5·48	2·25	22	10	—6·1	..	..	2	3	6	9	2	3	3	1	2	2	0	1	1	3	10	6	8	0		Colombo.
·8	+0·9	6·5	7·71	—0·60	1·43	22	12	+1·1	..	..	1	1	2	1	5	12	7	0	2	8	9	6	1	1	2	1	1	2		Trincomalee.
·5	+1·8	6·9	10·77	+6·49	2·33	16	8	+0·1	..	..	5	2	0	0	1	10	7	5	1	0	0	1	1	8	17	1	1	2		Hambantota.
·7	..	7·7	1·98	..	0·68	21	5	..	..	..	2	1	4	2	11	6	1	3	1	7	3	0	0	5	12	3	1	0		Mannar.

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T.) AT 4TH CLASS STATION—OCTOBER 1948

Station	Maximum temperature °F.				Minimum temperature °F				Mean Dry bulb temperature 8 hrs. I. S. T. °F.	Mean Wet bulb temperature 8 hrs. I. S. T. °F.	Vapour pressure, mb.		Relative Humidity%		Mean Cloud amount 8 hrs. I.S.T.	Rainfall,—inches.				Number of rainy days (0·10" or more)		Wind.	
	Mean.	Departure from normal	Heighest.	Date.	Mean.	Departure from normal	Lowest.	Date.			Mean 8 hrs. I. S. T.	Departure from normal	Mean 8 hrs. I. S. T.	Departure from normal		Total in the month.	Departure from normal	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal	Resultant direction 8 hrs. I. S. T.	Velocity in miles per
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
ASSAM—																							
Lumding ..	87·8	+2·9	91	6 days	67·8	—2·1	59	31	76·6	72·6	25·5	—1·6	82	—8	..	8·78	+5·24	2·52	4	7	+1·1	..	.
KASHMIR—																							
Jammu ..	90·1	+2·0	95	4	69·6	+2·4	61	5 days	72·6	63·9	16·3	+2·8	60	+4	0·9	0	—0·76	0	..	0	—1·1	N26E	.
Kargil (R) ..																							
MYSORE—																							
Raichonnur ..	79·5	+0·5	83	26	64·9	+0·5	61	3, 30	67·3	66·5	21·8	+0·1	95	0	..	6·33	—1·50	2·27	14	9	—2·4	..	.
TIBET—																							
Yatung (Chumbi)	55·5	—3·2	60	24	37·1	+0·2	28	20	41·9	41·2	8·6	—0·1	94	+8	7·5	3·22	+1·28	0·71	5	9	+5·6	..	.

R—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M.T.) AT 5TH CLASS STATION—OCTOBER 1948

DIVISION.	STATION.	Rainfall,—inches.				Number of rainy days (0·10 or more)		DIVISION	STATION	Rainfall,—inches.				Number o rainy day (0·10 or mor	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours	Date	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	
Assam	Mawsynram ..	17·80	..	5·30	4	7	..	Bombay, Deccan ..	Khandala ..	8·81	+1·72	3·20	7	15	+
West Bengal ..	Bankura ..	(a) 3·92	..	1·35	21	(a) 7	..	Madras, Southeast	Palamcottah ..	6·03	—1·02	2·54	16	7	—
	Cooch Behar ..	10·22	+2·91	4·19	3	7	+0·8	Sikkim	Lachung ..	3 59	—0·30	1·03	1	8	—
Bihar	Muzaffarpur ..	4·49	+2·08	2·50	16	5	+2·5								
	Chapra	4·77	+2·66	2·84	16	5	+2·5								
	Arrah	5·26	+2·84	1·06	7	7	+4·0								
East Punjab ..	Dharampore ..	0·12	—0·92	0·12	10	1	—0·3								
	Kyelang	0	—0·78	0		0	—1·3								
	Dalhousie ..	0·25	—1·09	0·15	10	1	—1·1								
Kashmir ..	Sonamarg ..	1·30	—1·23	0·92	20	2	—3·2								
	Gurez (R) ..														

(a) Total for 30 days. R—Register not received.

MONTHLY MEANS OF UPPER WINDS

Note :—Data upto 9·0 Km. a.s.l. are given under Table A and data above 9·0. Km. under Table B.

In Tables A & B :—

n—represents the number of observations,

V—represents the mean wind speed in m/second irrespective of direction,

v—represents the resultant mean velocity in m/second,

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

For the coordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report January 1948, and subsequent issues. The data for Hyderabad (Dn.) are not available.

The data for Port Blair for September 1948 have been included in this issue.

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level.

OCTOBER 1948

Height in Km.	AHMEDABAD												ALLAHABAD											
	0100				0700				1600				0100				0700				1600			
	n	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	1·3	256	31	1·0	0·4	305	31	2·0	1·1	293	31	0·2	0·1	237	31	0·3	0·1	271	31	1·5	0·8	35
0·15 a. g. ..	31	6·8	4·2	264	31	5·6	2·9	297	31	3·8	1·7	283	31	4·1	1·3	122	31	3·2	0·3	121	31	2·8	1·5	35
0·6 a.s.l. ..	31	6·1	3·6	276	31	6·3	3·9	311	31	4·3	2·0	289	31	3·6	0·4	93	30	3·2	0·6	284	31	3·3	1·8	33
1·0 „ ..	30	4·2	1·6	292	31	4·5	2·5	302	31	3·2	1·3	297	31	3·8	1·3	329	30	3·3	2·0	310	31	3·4	2·2	32
1·5 „ ..	29	3·2	0·6	360	31	4·0	0·4	252	31	4·1	1·9	298	31	5·2	4·1	306	30	4·4	3·3	317	31	4·4	3·2	31
2·0 „ ..	27	3·7	0·8	71	31	4·5	1·0	181	31	3·8	1·4	305	30	6·3	5·0	310	30	5·9	4·7	315	30	5·8	4·4	31
2·5 „ ..	27	4·5	0·9	63	31	5·1	0·7	152	29	4·3	1·3	310	27	6·0	4·7	314	30	6·9	5·1	313	30	6·0	4·7	30
3·0 „ ..	25	5·0	1·1	340	31	5·6	0·9	88	27	5·0	1·8	310	23	6·3	4·6	313	30	7·3	5·4	310	27	7·1	5·7	30
4·0 „ ..	7	6·8	1·9	25	28	4·9	1·6	345	25	5·7	3·6	310	2	6·0	6·0	221	27	7·7	5·7	295	25	9·6	7·8	29
5·0 „ ..	3	6·7	4·9	263	26	6·5	4·0	317	20	7·6	5·7	298					26	8·4	6·5	284	21	11·3	9·2	28
6·0 „ ..					22	7·7	5·0	299	18	8·8	6·4	298					26	9·8	7·8	282	14	14.5	12·6	27
7·5 „ ..					16	10·0	8·1	300	14	12·2	11·3	288					23	15·0	13·6	282	6	15·8	14·9	27
9·0 „ ..					12	12·0	9·8	289	11	15·0	13·8	289					20	13·8	13·3	265	2	12·5	11·5	24

Height in Km.	AMBALA												ANANTAPUR								ASANSOL			
	0100				0700				1600				0700				1600				0100			
	n	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	1·1	83	31	2·0	1·5	95	31	1·6	1·1	314	31	1·5	0·4	258	31	2·6	1·4	39	31	1·2	0·7	35
0·15 a.g. ..	31	5·6	1·7	55	31	6·5	3·9	109	31	3·3	2·3	305	31	3·2	0·7	224	31	4·5	2·6	48	30	3·7	1·9	
0·6 a. s. l. ..	31	5·1	1·7	356	31	5·7	1·9	137	31	3·7	2·8	308	31	4·2	0·9	197	31	4·4	2·3	50	30	4·2	1·7	34
1·0 „ ..	31	4·5	3·3	341	31	4·8	1·2	313	31	3·7	3·0	309	31	5·4	1·5	97	31	3·8	1·8	50	26	4·0	2·2	3
1·5 „ ..	30	5·3	5·1	323	31	4·9	3·9	323	31	4·5	4·0	310	31	5·7	3·4	74	31	4·0	1·5	50	20	4·5	3·6	3
2·0 „ ..	29	6·3	6·4	316	31	6·6	6·0	321	31	6·1	5·7	314	31	5·5	3·9	57	30	4·4	2·2	58	17	5·6	5·2	3
2·5 „ ..	24	6·9	6·6	310	30	6·8	6·1	320	31	7·7	7·4	313	29	6·0	4·4	45	30	4·9	2·9	64	7	5·4	4·4	3
3·0 „ ..	19	6·7	5·9	312	29	6·7	5·9	319	31	7·9	7·2	315	29	6·1	4·6	49	30	5·5	3·6	63	7	5·9	4·5	3
4·0 „ ..	4	5·9	2·3	278	26	6·3	4·6	317	27	6·9	5·2	309	28	5·5	4·3	55	27	5·2	3·0	64	2	4·3	2·9	
5·0 „ ..					23	5·5	2·7	335	24	7·2	4·7	294	26	4·8	3·3	70	24	5·2	2·1	47				
6·0 „ ..					20	6·0	1·4	336	20	11·2	8·7	294	25	5·2	3·2	79	23	5·2	3·0	64				
7·5 „ ..					10	12·1	6·9	317	11	15·9	10·4	314	17	5·1	1·6	90	17	5·8	3·8	74				
9·0 „ ..					2	8·7	7·7	10	5	13·6	10·4	312	15	5·9	0·6	85	10	6·5	4·9	77				

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	ASANSOL								BANGALORE												BAREILLY			
	0700				1600				0100				0700				1600				0700			
	n	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	0·4	355	31	0·9	0·2	358	31	2·0	0·4	92	31	1·6	0·2	89	31	2·4	0·9	73	31	1·2	0·8	79
0·15 a. g. ..	31	3·0	1·2	354	31	2·6	0·7	30	29	6·1	2·4	106	31	5·0	1·4	130	31	5·1	2·5	53	31	4·4	0·8	144
0·6 a.s.l. ..	31	3·6	0·9	20	31	3·0	1·0	5													31	4·4	0·7	201
1·0 „ ..	26	3·9	1·5	340	31	3·0	1·2	335	29	5·3	2·1	108	31	3·9	1·1	129	31	4·5	2·1	53	30	4·5	1·2	286
1·5 „ ..	24	4·3	2·7	326	27	3·8	2·8	324	25	6·0	2·0	29	29	7·0	3·5	83	31	4·7	2·0	50	30	5·1	3·1	302
2·0 „ ..	20	4·9	3·5	331	23	5·4	3·6	319	18	4·7	2·5	4	21	5·8	3·5	32	30	4·9	1·9	54	30	6·9	5·1	317
2·5 „ ..	18	5·6	3·9	324	19	7·3	4·5	319	11	5·5	3·1	8	16	7·0	5·7	34	24	5·5	3·0	53	28	8·0	6·0	317
3·0 „ ..	17	6·4	4·5	319	16	8·5	5·2	313	5	5·9	5·6	40	15	7·6	6·0	27	21	6·4	4·3	56	26	7·6	5·6	324
4·0 „ ..	11	6·6	3·3	294	11	11·7	10·3	302					14	6·3	4·2	51	8	6·1	4·1	54	22	6·8	4·2	335
5·0 „ ..	7	6·5	4·3	259	7	10·7	9·7	290					11	6·1	3·6	68	5	8·0	7·4	52	17	6·6	2·2	351
6·0 „ ..	4	5·7	3·9	250	6	12·5	11·1	297					8	6·4	4·4	82	5	7·8	7·0	77	12	8·1	2·7	303
7·5 „ ..					1	6·5	6·5	280					3	6·7	5·5	112	1	12·0	12·0	75	10	5·9	3·6	311
9·0 „ ..													2	3·3	3·1	48					8	6·0	4·8	293

Height in Km.	BAREILLY				BAIRAGARH												BHUJ							
	1600				0100				0700				1600				0100				0700			
	n	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	0·5	1	8	2·6	1·9	295	31	0·9	0·3	259	31	2·3	0·9	332	31	1·7	1·4	241	31	1·2	0·8	246
0·15 a. g. ..	31	3·3	1·2	324	8	6·4	3·7	297	31	4·6	1·5	264	31	3·9	2·0	328	31	5·8	4·4	271	31	5·0	3·2	285
0·6 a. s. l. ..	31	3·2	1·4	304	8	5·7	3·2	298	31	4·0	1·5	260	31	3·7	1·7	319	30	5·9	3·7	267	30	6·7	3·7	292
1·0 „ ..	31	3·5	2·1	292	8	6·9	3·7	306	31	4·8	2·8	299	31	4·0	3·1	334	29	4·3	1·3	236	28	5·6	1·1	259
1·5 „ ..	30	4·9	4·1	299	8	5·2	3·7	326	31	4·4	3·0	307	31	4·0	3·4	335	28	4·3	1·3	166	28	4·9	2·1	158
2·0 „ ..	30	6·5	5·6	303	7	4·9	3·4	345	31	4·7	3·9	338	31	3·8	3·2	334	27	5·0	2·2	153	27	4·9	2·7	154
2·5 „ ..	30	7·2	6·2	311	6	5·7	4·4	348	31	5·6	4·3	348	31	4·0	3·2	329	22	5·1	0·8	114	25	4·6	2·2	152
3·0 „ ..	30	7·5	6·1	313	5	6·5	4·7	328	30	6·0	4·4	356	29	5·1	4·0	317	22	5·7	0·2	15	25	4·9	2·0	143
4·0 „ ..	29	9·5	7·1	309	2	5·0	4·9	343	29	6·2	4·5	321	25	7·6	6·5	303	7	6·1	3·1	290	20	5·3	1·0	257
5·0 „ ..	29	9·6	6·5	304	2	1·5	1·1	114	24	6·6	5·3	307	22	9·3	7·9	295					18	6·4	2·4	286
6·0 „ ..	26	12·3	10·0	291					21	8·2	6·1	285	19	11·6	11·0	285					17	7·6	4·8	289
7·5 „ ..	18	12·0	9·6	286					16	8·9	6·6	273	14	15·8	14·5	282					14	10·6	7·3	285
9·0 „ ..	15	11·1	6·7	301					11	11·2	7·4	281	7	14·2	13·0	277					10	9·1	6·6	291

Table A— Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	BHUJ				BIKANER								BOMBAY											
	1600				0700				1600				0100				0700				1600			
	n	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	1·4	231	31	2·3	1·2	221	31	2·2	1·6	278	31	1·1	0·6	12	31	1·4	0·9	79	31	5·5	4·8	301
0·15 a. g. ..	31	4·7	2·4	234	31	6·0	3·1	230	31	3·9	2·4	288	29	4·1	2·8	340	30	3·3	1·9	25	31	5·2	4·6	311
0·6 a.s.l. ..	31	4·4	2·2	234	31	6·7	3·3	263	31	4·5	3·2	283	30	3·7	2·4	8	31	3·9	2·1	7	29	3·6	2·2	334
1·0 „ ..	31	4·4	1·7	224	31	5·5	3·5	277	31	4·4	3·1	284	28	4·1	1·8	35	28	4·2	2·2	56	28	3·1	0·6	78
1·5 „ ..	28	3·8	1·0	179	31	4·3	3·2	291	31	4·2	3·2	279	27	4·4	2·3	69	26	4·9	3·1	88	26	3·9	2·5	101
2·0 „ ..	24	3·8	1·4	146	31	4·7	3·8	301	31	4·7	3·7	279	24	4·6	3·6	97	25	4·1	3·0	100	26	4·2	2·0	96
2·5 „ ..	18	4·3	0·5	203	31	4·5	3·7	302	31	5·5	4·5	280	20	4·5	3·8	104	24	3·7	2·6	101	26	4·4	1·9	82
3·0 „ ..	16	4·5	0·8	223	31	5·5	4·0	306	30	6·2	5·2	278	18	3·6	2·8	64	20	3·8	1·8	43	26	4·7	1·6	49
4·0 „ ..	12	5·6	1·9	277	30	6·4	3·0	317	28	7·0	5·5	289	4	4·7	0·7	329	17	4·3	2·6	5	25	3·6	1·2	342
5·0 „ ..					26	8·5	3·4	311	25	8·8	6·2	307	1	1·5	1·5	114	15	4·6	1·8	340	24	4·9	2·2	295
6·0 „ ..					22	11·4	6·6	309	21	13·3	8·7	309					14	3·8	1·9	307	24	4·5	2·5	302
7·5 „ ..					9	10·1	5·2	329	13	11·5	8·3	322					6	5·8	5·3	279	16	4·3	3·0	301
9·0 „ ..					5	11·3	6·9	281	4	10·5	10·1	340					5	5·2	3·7	288	8	4·6	2·4	298

Height in Km.	CALCUTTA												COCHIN											
	0100				0700				1600				0100				0700				1600			
	n	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	0·1	58	31	0·5	0·1	320	31	1·5	0·2	185	31	1·9	0·9	18	31	0·9	0·8	90	31	3·9	3·2	26
0·15 a. g. ..	30	4·9	0·7	215	31	3·3	1·1	15	31	2·9	0·2	196	26	3·2	1·3	16	31	2·9	1·9	86	31	4·1	3·6	26
0.6 a.s.l. ..	31	4·6	1·9	266	30	3·3	1·1	354	31	3·4	0·5	255	26	3·9	1·7	316	31	3·5	1·0	316	31	4·4	3·2	28
1·0 „ ..	31	4·5	2·0	290	30	3·6	1·5	348	30	3·3	0·9	304	25	4·2	0·8	313	31	3·9	0·6	314	30	4·1	1·7	30
1·5 „ ..	29	5·0	3·0	312	30	4·4	2·2	337	29	3·7	1·4	306	23	4·8	1·1	56	29	4·6	1·5	55	30	4·8	1·9	[illegible]
2·0 „ ..	28	5·7	3·3	303	30	4·6	2·8	333	29	4·5	2·2	305	22	6·0	2·5	55	29	5·8	3·4	69	29	5·8	3·4	[illegible]
2·5 „ ..	26	6·1	3·8	306	30	5·3	3·0	315	29	5·5	3·3	296	19	6·3	4·2	60	27	6·5	3·8	70	26	6·3	3·7	[illegible]
3·0 „ ..	25	6·7	4·5	303	29	6·6	3·9	300	28	6·5	4·1	294	17	5·5	3·1	56	27	5·9	3·3	86	25	6·1	2·9	[illegible]
4·0 „ ..	2	5·3	1·7	172	21	7·0	4·7	280	20	8·5	6·6	290	4	7·7	4·0	75	23	5·6	3·0	76	23	5·0	1·9	[illegible]
5·0 „ ..					17	7·3	4·9	270	14	8·9	7·6	282	1	3·5	3·5	305	20	6·0	4·4	77	19	5·7	2·3	[illegible]
6·0 „ ..					15	7·8	6·7	268	13	9·6	8·5	280					15	6·6	5·2	80	16	6·1	4·2	[illegible]
7·5 „ ..					9	8·8	7·5	261	7	8·6	4·8	273					7	7·4	6·6	78	13	6·6	4·8	[illegible]
9·0 „ ..					4	10·4	9·5	255	4	9·9	6·8	292					2	12·5	10·7	47	6	9·0	8·1	[illegible]

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	COOCH BEHAR								CUTTACK												DEOLALI			
	0700				1600				0100				0700				1600				0830			
	n	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	2·3	71	31	1·4	0·8	80	31	0·5	0·4	273	31	0·6	0·3	314	31	1·0	0·3	85	22	0·4	0·1	357
0·15 a. g. ..	29	5·1	5·0	76	29	2·7	1·6	89	30	3·6	1·6	259	31	3·3	1·9	314	29	3·6	1·0	70	22	2·6	0·4	196
0·6 a. s. l. ..	28	6·2	5·8	85	29	3·9	2·6	81	30	3·9	1·8	249	31	4·0	1·4	305	29	3·1	0·9	68	22	1·2	0·1	151
1·0 „ ..	27	6·0	5·4	80	28	3·4	1·8	84	30	3·8	1·6	298	30	4·3	2·0	347	28	3·4	1·2	355	22	3·8	2·1	89
1·5 „ ..	26	6·0	5·0	88	27	3·5	1·6	97	29	3·9	2·5	341	30	4·3	2·9	1	27	4·4	2·7	354	21	5·0	3·8	94
2·0 „ ..	26	6·2	5·0	88	28	3·9	2·2	105	26	4·2	2·9	340	30	4·7	3·4	355	27	5·2	3·5	340	21	4·9	3·8	93
2·5 „ ..	24	4·9	3·8	92	25	4·2	2·5	98	19	4·3	2·8	336	29	4·7	3·2	338	25	5·9	4·0	330	21	4·5	2·5	93
3·0 „ ..	22	3·9	3·1	95	24	4·2	1·4	95	12	5·2	3·4	304	27	5·0	3·2	323	24	6·1	4·1	317	21	3·9	1·7	45
4·0 „ ..	19	4·4	1·2	247	19	5·8	1·3	290	4	6·0	5·0	306	26	5·1	3·4	287	20	5·5	4·5	283	19	4·7	2·4	339
5·0 „ ..	12	8·0	6·1	264	14	6·8	5·0	276					21	6·5	5·3	284	19	6·6	5·8	277	16	6·3	3·5	286
6·0 „ ..	7	3·6	2·8	267	12	7·1	4·9	260					18	7·2	6·7	278	16	8·4	7·7	281	12	5·3	2·9	272
7·5 „ ..	6	6·8	4·4	272	7	12·9	11·7	268					10	8·3	6·4	285	11	10·5	9·0	280	10	4·4	3·7	290
9·0 „ ..	5	8·9	7·1	283	1	6·5	6·5	280					6	9·0	6·8	286	7	12·3	11·2	284	5	6·0	5·6	279

Height in Km.	DIBRUGARH								GADAG								GAYA							
	0700				1600				0700				1600				0100				0700			
	n	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	1·7	1·2	48	31	1·5	1·4	56	31	2·5	0·4	227	31	3·2	1·1	94	31	1·7	0·9	141	31	1·9	0·5	134
0·15 a. g. ..	28	3·8	3·2	52	29	2·7	2·2	67	31	5·1	0·4	14	31	4·5	1·7	95	31	2·8	0·9	136	31	3·2	1·1	159
0·6 a.s.l. ..	27	4·4	4·0	51	30	3·1	2·7	71									31	3·2	0·5	78	30	3·4	0·7	94
1·0 „ ..	26	3·9	3·3	56	29	3·2	2·7	75	31	5·6	1·5	71	31	4·6	1·8	81	30	3·1	0·8	311	30	2·9	0·5	359
1·5 „ ..	26	3·5	2·4	75	28	2·4	1·0	112	31	5·2	3·5	77	31	4·7	2·2	70	28	3·9	2·4	294	29	4·3	1·9	323
2·0 „ ..	25	3·4	2·0	102	28	2·8	1·7	180	30	5·3	4·4	75	30	4·9	2·6	64	24	5·1	4·3	295	29	5·5	3·3	317
2·5 „ ..	24	3·7	1·5	136	28	3·5	2·8	197	30	5·9	4·4	63	29	4·4	2·4	48	9	3·5	2·4	269	24	6·0	4·2	308
3·0 „ ..	23	3·8	0·7	194	26	4·1	3·1	204	30	5·5	4·4	62	26	4·7	2·1	36	5	2·3	1·3	236	22	7·0	5·1	305
4·0 „ ..	16	4·7	0·9	132	25	5·9	3·9	233	29	5·5	3·9	57	20	5·5	2·9	33					13	5·6	3·8	272
5·0 „ ..	12	5·5	4·1	264	23	7·4	5·5	256	27	4·2	1·9	68	11	5·9	2·3	32					8	5·3	4·5	254
6·0 „ ..	12	8·3	7·7	252	22	10·1	9·6	258	26	4·5	2·3	66	7	5·5	4·3	26					8	7·2	5·5	255
7·5 „ ..	7	12·9	11·4	275	21	16·4	15·2	269	22	5·7	2·2	92	6	5·9	3·3	43					4	10·1	9·9	263
9·0 „ ..	4	19·6	18·8	277	14	20·0	18·1	276	20	6·5	2·0	86	5	8·3	4·8	39					1	12·5	12·5	285

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	GAYA				GOPALPUR								GORAKHPUR								HYDERABAD (Dn)			
	1600				0700				1600				0700				1600							
	n	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	1·3	13	31	2·5	2·2	340	31	3·4	2·0	135	31	1·9	0·9	295	31	1·2	0·2	296				
0·15 a.g. ..	31	3·5	1·7	12	30	3·9	2·5	330	31	4·5	2·4	151	31	4·3	1·9	91	30	2·3	0·3	296				
0·6 a. s. l. ..	31	3·5	2·0	4	30	4·1	0·9	309	31	3·5	0·7	16	30	3·8	0·9	109	30	2·5	0·3	254				
1·0 „ ..	30	3·2	1·7	329	30	4·1	1·9	4	31	3·8	1·9	357	28	4·1	0·4	330	30	2·8	0·6	264				
1·5 „ ..	29	4·0	2·6	302	30	4·3	2·7	17	31	4·4	2·8	1	26	5·4	1·3	308	29	3·9	1·6	285				
2·0 „ ..	27	5·1	3·6	296	29	4·3	2·5	19	30	4·7	3·0	350	25	6·2	2·1	314	28	5·7	2·7	297				
2·5 „ ..	22	6·9	5·3	307	28	4·4	3·2	6	29	4·8	2·7	345	24	6·6	3·0	311	28	6·2	3·4	292				
3·0 „ ..	17	9·3	7·8	311	27	4·7	3·1	341	28	4·7	2·3	333	22	6·7	2·9	309	26	7·6	4·2	297				
4·0 „ ..	15	11·2	10·4	299	22	5·4	2·5	297	22	4·7	3·2	300	19	6·1	3·2	303	24	7·8	4·7	298				
5·0 „ ..	11	13·7	13·2	284	16	4·8	2·3	294	20	5·1	3·8	277	16	7·3	2·9	285	22	9·3	5·7	296				
6·0 „ ..	8	17·2	16·6	280	15	4·4	2·3	291	20	6·7	5·3	270	15	7·3	2·9	260	20	11·3	8·3	287				
7·5 „ ..	3	24·7	24·3	267	12	5·9	4·1	333	18	9·7	8·3	283	8	10·8	8·2	273	13	13·4	11·6	274				
9·0 „ ..					10	4·9	3·0	317	10	10·4	8·0	291	4	10·2	8·5	269	6	11·6	6·8	260				

Height in Km.	HYDERABAD (Dn)								JAGDALPUR								JAMNAGAR							
									0700				1600				0700				1600			
	n	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	0·1	204	31	1·3	0·7	349	16	2·5	2·3	216	15	6·8	4·9	290
0·15 a.g. ..									30	2·3	0·4	265	29	3·4	2·2	5	16	4·7	3·6	273	14	5·0	3·2	276
0·6 a.s.l. ..									30	1·4	0·2	229	29	2·7	1·7	6	15	5·6	3·4	294	13	4·3	2·9	265
1·0 „ ..									28	3·4	1·5	354	29	3·4	2·6	2	15	5·0	1·3	261	13	4·7	2·0	220
1·5 „ ..									27	4·3	3·3	15	28	3·6	2·8	6	13	5·0	2·2	170	13	4·5	2·0	168
2·0 „ ..									27	4·9	3·9	8	28	4·0	2·8	12	13	4·9	2·4	156	13	5·0	2·5	149
2·5 „ ..									23	5·5	4·6	4	27	5·2	4·3	4	12	5·1	1·8	136	12	5·2	2·1	138
3·0 „ ..									22	6·0	4·8	4	26	5·5	4·3	359	12	4·9	1·3	162	12	5·7	1·3	140
4·0 „ ..									16	6·2	4·0	347	21	5·1	2·4	312	11	5·3	2·5	307	11	5·8	2·1	247
5·0 „ ..									13	5·4	3·5	309	17	6·5	3·9	282	11	5·5	3·9	296	11	7·5	3·7	287
6·0 „ ..									8	4·4	1·8	255	12	7·1	3·7	309	11	6·4	4·8	274	9	7·9	4·6	309
7·5 „ ..									2	9·0	8·9	260	9	5·9	3·0	303	8	10·5	6·9	282	9	7·5	6·3	278
9·0 „ ..									1	7·5	7·5	295	6	7·3	2·5	274	6	10·3	7·0	285	5	9·3	6·6	295

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	JAMESHEDPUR								JHARSUGUDA												JODHPUR			
	0700				1600				0100				0700				1600				0100			
	n	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	0·6	299	31	1·6	0·4	360	31	0·5	0·1	17	31	0·5	0·2	5	31	0·9	calm		31	1·7	0·6	297
0·15 a.g. ..	31	2·0	0·8	290	31	2·3	0·8	15	30	3·3	0·5	82	30	3·1	1·9	50	31	3·0	0·1	309	31	7·2	3·3	246
0·6 a. s. l. ..	31	2·7	0·6	321	31	2·5	0·8	349	30	3·4	0·5	244	30	3·4	0·2	13	31	2·9	0·5	307	31	6·9	3·9	258
1·0 „ ..	28	3·7	1·6	307	31	3·0	1·2	350	30	3·6	1·4	305	30	3·8	1·4	342	31	3·0	1·2	318	31	6·0	3·0	258
1·5 „ ..	26	4·5	3·1	316	31	4·3	2·3	322	30	3·5	2·0	316	29	3·9	2·4	337	30	3·3	2·2	320	30	4·4	2·0	277
2·0 „ ..	23	5·5	3·9	320	29	5·3	3·4	322	26	4·6	3·2	318	29	4·5	3·5	337	29	4·9	3·3	335	26	4·4	1·8	277
2·5 „ ..	22	6·0	4·0	317	27	6·1	4·4	312	25	5·1	3·7	322	29	5·5	4·4	335	29	5·7	4·2	329	16	4·9	3·8	255
3·0 „ ..	21	6·7	5·1	309	27	6·8	5·1	305	21	6·3	4·7	315	29	6·2	4·8	328	29	6·4	4·9	320	12	5·7	4·0	245
4·0 „ ..	19	8·0	6·2	281	27	8·4	6·5	284	15	6·0	4·2	273	27	6·1	4·4	285	29	7·2	5·7	298	4	9·4	7·5	323
5·0 „ ..	14	9·9	9·1	271	20	10·0	8·4	277					24	7·5	5·9	267	28	8·8	7·9	279	2	10·0	7·9	299
6·0 „ ..	11	10·5	9·6	271	18	10·3	9·3	276					24	8·5	7·3	261	25	10·3	9·3	279				
7·5 „ ..	2	11·7	11·7	252	10	11·5	8·7	285					16	9·2	7·7	279	15	14·3	12·3	283				
9·0 „ ..					4	11·0	10·0	248					7	8·3	6·0	285	11	15·7	14·0	278				

Height in Km.	JODHPUR								JUBBULPURE												MADHOSAGAR			
	0700				1600				0100				0700				1600				0700			
	n	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	0·9	0·3	263	31	1·8	1·1	259	31	1·2	0·8	179	31	1·0	0·7	180	31	1·3	0·7	1	31	1·7	1·7	223
0·15 a.g. ..	31	5·4	2·6	277	31	3·9	2·8	265	31	3·8	1·6	183	31	3·6	2·3	209	31	3·2	2·1	352	31	4·1	1·9	238
0·6 a.s.l. ..	31	5·4	3·4	272	31	3·6	2·6	276	30	4·0	1·3	191	30	3·8	2·3	224	31	3·4	2·3	357	31	5·3	2·4	250
1·0 „ ..	31	4·9	3·0	271	31	3·9	2·8	280	30	3·5	0·8	303	31	4·0	1·7	289	31	3·6	3·0	350	31	5·3	2·2	278
1·5 „ ..	31	4·3	2·4	269	31	3·5	2·4	288	31	4·5	2·9	323	31	4·8	3·7	323	31	4·0	3·3	336	31	5·0	2·8	308
2·0 „ ..	30	3·6	1·5	297	31	3·7	2·6	294	31	5·5	4·3	321	31	6·2	5·7	333	31	5·2	4·4	330	31	6·2	4·5	318
2·5 „ ..	30	4·4	2·0	293	31	4·3	2·6	295	27	6·0	5·0	319	31	6·9	6·2	339	29	5·9	5·2	323	31	7·5	5·6	325
3·0 „ ..	30	5·7	2·6	294	30	5·3	3·4	290	22	5·5	4·0	324	31	7·3	6·6	338	27	6·8	6·0	316	29	8·4	6·3	332
4·0 „ ..	28	7·0	3·9	303	28	7·5	5·0	298	1	4·0	4·0	340	28	7·2	5·4	316	22	8·3	6·8	289	26	8·4	6·3	331
5·0 „ ..	26	9·0	5·4	306	23	9·5	6·3	298					20	8·9	6·8	282	20	9·7	8·0	289	24	9·0	5·9	312
6·0 „ ..	23	11·7	7·6	297	18	11·4	7·3	317					17	9·1	6·5	278	10	10·3	8·2	276	21	9·7	6·2	294
7·5 „ ..	15	16·8	14·1	287	8	7·4	6·1	308					8	8·7	6·5	240	7	11·3	9·8	271	18	13·3	10·7	291
9·0 „ ..	13	19·0	17·4	282	2	5·5	3·7	329					3	8·0	7·8	260	5	11·5	9·6	273	12	10·4	8·2	283

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	MADHOSAGAR				MADRAS												MALEGAON							
	1600				0100				0700				1600				0100				0700			
	n	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	1·1	10	31	1·7	0·7	246	31	1·3	1·1	275	31	4·1	2·6	100	31	2·4	2·1	289	31	1·7	1·5	283
0·15 a.g. ..	31	3·2	1·3	17	31	4·0	1·6	138	31	3·9	1·5	247	31	5·6	3·8	97	31	5·1	3·3	319	31	3·5	2·2	301
0·6 a. s. l. ..	31	3·4	1·3	8	31	4·5	2·0	116	31	4·6	0·7	101	31	5·2	2·4	87	31	5·1	3·3	319	31	3·5	2·2	301
1·0 „	31	3·6	1·6	329	29	4·4	1·6	66	31	5·1	1·7	62	30	4·8	1·7	37	31	4·9	2·6	8	31	3·9	1·3	22
1·5 „ ..	31	4·2	2·7	314	28	4·9	2·1	21	31	5·1	2·9	35	30	5·2	2·6	10	31	4·0	2·3	56	31	3·7	2·7	67
2·0 „ ..	30	5·2	4·1	310	27	5·2	2·9	22	30	5·0	3·4	32	30	5·4	3·3	9	28	3·4	2·0	69	31	3·7	2·3	80
2·5 „ ..	28	6·4	5·3	313	25	5·1	3·1	26	29	5·0	3·4	38	30	5·4	3·5	21	20	3·1	0·9	88	31	3·8	1·1	58
3·0 „ ..	28	7·5	6·1	315	21	3·7	2·5	51	30	5·0	3·1	55	30	5·6	3·5	34	17	2·9	0·6	357	31	3·5	1·8	350
4·0 „ ..	25	8·2	6·5	308	8	2·1	1·7	70	30	5·0	3·6	68	28	4·8	2·2	52	9	4·3	4·2	338	28	4·9	3·2	318
5·0 „ ..	22	11·5	9·5	299	1	2·0	2·0	75	29	6·0	4·3	70	27	5·1	2·3	70					24	6·2	4·2	277
6·0 „ ..	20	12·5	10·3	296					27	6·3	4·4	85	23	5·7	3·2	80					23	6·5	5·1	284
7·5 „ ..	18	15·0	13·3	297					23	7·0	4·7	83	12	7·4	4·9	82					20	5·1	3·9	288
9·0 „ ..	15	18·2	16·1	295					19	8·1	5·6	82	4	8·3	5·5	63					15	6·3	4·3	282

Height in Km.	MALEGAON				MANGALORE												MASULIPATAM							
	1600				0100				0700				1600				0100				0700			
	n	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	359	31	1·9	1·3	53	31	2·0	1·6	91	31	3·6	2·9	287	31	1·0	0·2	307	31	0·8	0·4	324
0·15 a.g. ..	31	4·5	2·1	37	30	4·0	2·5	15	31	3·7	2·2	72	30	5·4	4·7	287	31	4·1	0·8	165	31	4·1	1·5	331
0·6 a.s.l. ..	31	4·5	2·1	37	29	4·8	2·4	344	31	4·7	1·3	18	29	4·6	3·2	311	31	4·2	1·0	102	31	3·9	0·2	184
1·0 „ ..	31	3·7	2·2	39	27	4·2	1·5	4	29	4·7	1·5	16	26	3·9	1·4	358	31	3·8	1·9	34	31	3·9	1·0	45
1·5 „ ..	31	3·9	2·0	34	21	4·7	2·1	64	28	5·2	3·1	83	25	4·1	1·3	63	31	4·6	2·6	41	30	4·7	2·9	42
2·0 „ ..	30	3·9	2·0	37	21	6·5	4·2	81	28	5·5	3·9	88	24	5·5	3·1	91	30	4·9	3·2	34	30	5·0	3·3	42
2·5 „ ..	28	3·7	1·7	44	13	5·3	3·3	75	24	5·5	3·9	80	24	6·0	3·1	77	24	4·9	3·2	28	31	5·5	3·7	34
3·0 „ ..	24	4·0	1·7	20	9	4·7	2·4	64	20	6·1	4·9	67	23	6·4	3·6	77	22	5·1	3·3	19	30	5·9	4·5	29
4·0 „ ..	16	5·1	3·5	317	1	2·5	2·5	310	17	6·0	5·1	66	19	6·9	3·5	74	12	3·9	2·4	30	30	5·1	3·4	21
5·0 „ ..	9	5·8	4·2	294					13	5·3	3·9	70	14	7·9	4·1	70					20	4·7	2·9	62
6·0 „ ..	6	7·9	6·6	289					11	6·0	4·7	80	11	9·7	7·3	71					18	4·9	2·7	68
7·5 „ ..	1	4·0	4·0	280					3	5·5	3·5	83	4	10·5	10·3	99					12	4·8	2·7	91
9·0 „ ..	1	7·0	7·0	290					2	3·0	3·0	80	2	12·5	10·8	134					9	4·8	1·7	115

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9 Km. above sea level

OCTOBER 1948

Height in Km.	MASULIPATAM				NAGERCOIL												NAGPUR							
	1600				0100				0700				1600				0100				0700			
	n	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	0·8	136	31	2·8	1·8	303	31	2·3	1·0	330	31	4·1	3·1	260	31	0·9	0·5	303	31	0·7	0·6	332
0·15 a.g. ..	30	4·0	1·8	133	29	6·7	5·4	305	31	5·7	3·7	318	31	7·6	4·2	261	30	3·7	1·6	10	30	2·7	1·9	357
0·6 a.s.l. ..	30	3·8	0·8	107	29	9·0	7·1	304	31	7·4	4·6	318	31	7·4	4·4	288	31	3·9	0·6	60	30	2·9	1·3	355
1·0 „ ..	30	4·1	2·1	32	29	8·2	5·0	311	31	7·5	3·6	320	31	6·8	3·8	310	31	3·1	0·9	20	30	3·4	1·8	351
1·5 „ ..	30	5·3	4·0	34	28	7·2	3·0	334	31	7·3	2·6	354	31	6·4	3·1	359	31	3·6	2·2	5	31	3·6	2·8	354
2·0 „ ..	30	6·1	4·9	38	28	6·5	3·3	21	31	6·8	3·9	27	31	6·5	3·5	347	30	3·8	2·8	358	31	4·2	3·8	354
2·5 „ ..	28	6·5	5·1	31	28	5·2	3·0	40	31	5·6	2·5	45	30	6·2	2·8	17	29	4·1	3·4	349	31	4·8	4·1	349
3·0 „ ..	28	6·8	4·8	39	27	5·3	1·9	14	31	5·5	1·3	51	30	6·5	2·1	11	25	4·6	3·7	344	31	5·3	4·2	343
4·0 „ ..	26	4·8	2·3	44	18	6·2	1·2	297	27	6·1	0·6	93	23	6·5	0·8	355	4	4·0	3·8	359	29	6·2	4·9	317
5·0 „ ..	21	5·3	1·0	347	11	5·0	1·3	355	24	5·8	1·7	44	23	7·1	1·5	79					28	7·5	5·8	292
6·0 „ ..	16	5·6	2·1	29	9	5·2	3·1	63	23	5·4	2·9	67	19	6·1	2·4	85					26	7·5	6·2	280
7·5 „ ..	10	6·3	2·5	15	5	3·5	1·4	60	20	5·6	3·7	72	12	5·4	2·3	120					26	8·6	7·1	279
9·0 „ ..	6	9·4	1·7	40	3	4·8	3·1	121	18	6·1	4·9	81	8	6·4	5·0	123					25	10·0	8·5	280

Height in Km.	NAGPUR				NEW DELHI												POONA							
	1600				0100				0700				1600				0100				0700			
	n	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	0·7	19	31	1·5	0·6	170	31	1·7	1·0	254	31	2·1	1·0	352	31	0·7	0·4	257	31	0·1	Calm	
0·15 a.g. ..	31	2·6	1·3	18	31	5·4	2·6	163	31	5·7	1·6	221	31	3·9	1·4	1	31	3·3	1·7	272	31	2·2	0·6	334
0·6 a.s.l. ..	31	2·7	1·4	11	31	4·7	2·0	162	31	5·1	1·6	226	31	4·4	1·7	11	31	2·0	1·2	253	31	1·0	0·2	341
1·0 „ ..	31	2·9	1·7	6	31	3·0	0·1	297	31	3·5	1·3	307	30	3·8	1·9	343	31	4·5	1·5	335	30	4·1	1·9	65
1·5 „ ..	31	3·4	2·3	2	31	4·4	3·5	312	31	4·1	2·9	323	30	4·5	3·1	317	29	4·9	3·0	77	29	5·1	3·9	86
2·0 „ ..	31	4·0	3·2	356	21	5·7	5·1	321	31	5·6	4·5	318	29	6·0	5·2	312	29	4·9	4·0	94	30	4·4	3·8	89
2· „ ..	30	4·4	3·9	354	11	6·2	6·0	325	31	6·5	5·7	317	29	7·2	6·4	313	27	4·2	3·4	99	29	3·7	2·8	82
3·0 ..	29	5·3	4·4	343	6	5·6	4·8	330	29	6·9	6·0	318	28	7·8	6·9	307	22	3·7	2·7	91	29	3·5	2·2	56
4·0 „ ..	24	6·6	5·5	310	1	8·0	8·0	315	27	6·9	4·0	312	26	8·0	6·4	309	10	4·5	2·8	7	26	4·1	1·9	359
5·0 „ ..	21	8·1	5·8	293					22	8·1	3·4	341	26	10·0	7·3	310					24	4·4	0·8	312
6·0 „ ..	16	10·3	7·9	280					17	6·8	2·3	348	23	11·2	7·6	291					24	4·3	1·0	308
7·5 „ ..	17	10·4	9·3	275					11	9·0	6·3	345	13	9·8	5·5	339					23	4·3	1·8	335
9·0 „ ..	8	11·3	9·5	273					9	15·3	12·7	329	9	9·0	5·7	327					17	6·0	2·8	208

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9 Km. above sea level

OCTOBER 1948

Height in Km.	POONA 1600				PORT BLAIR 0100				PORT BLAIR 0700				PORT BLAIR 1600				RAIPUR 0100				RAIPUR 0700			
	n	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	1·3	0·5	300	31	2·6	0·7	234	31	2·4	0·3	168	31	2·7	0·5	165	31	1·4	1·0	262	31	0·8	0·3	29
0·15 a.g. ..	31	3·5	1·3	291	27	4·9	0·9	90	30	4·8	0·2	181	27	4·4	0·8	131	29	4·5	1·7	269	31	3·5	1·1	31
0·6 a. s. l. ..	31	2·5	0·9	291	26	5·0	0·9	62	30	6·1	0·5	155	26	4·6	0·5	80	30	3·7	0·8	290	31	4·1	1·0	33
1·0 „ ..	31	4·0	0·8	304	25	4·3	0·9	75	29	5·9	0·9	74	25	4·7	0·8	77	30	3·1	1·4	325	31	3·7	1·8	34
1·5 „ ..	31	3·3	0·9	94	23	4·2	0·6	63	24	5·1	1·6	65	24	4·4	1·0	37	29	3·6	2·5	347	31	4·0	2·8	35
2·0 „ ..	31	3·9	1·9	90	19	3·7	1·0	103	22	4·9	1·7	70	17	3·9	1·5	80	28	4·0	3·1	342	29	5·0	4·0	34
2·5 „ ..	29	4·4	2·8	79	16	4·4	1·9	91	21	4·8	1·5	73	14	5·1	2·7	91	27	5·0	4·0	329	30	6·1	5·3	34
3·0 „ ..	29	3·9	2·5	70	14	4·2	1·5	85	21	4·7	2·0	65	12	5·4	3·9	75	24	6·0	5·0	327	30	6·7	6·0	34
4·0 „ ..	22	3·8	1·6	14	7	5·3	1·5	87	17	5·7	3·9	77	10	6·7	6·1	62	8	5·4	3·4	262	29	7·7	6·4	32
5·0 „ ..	16	4·7	1·5	312					14	5·0	4·0	81	8	6·6	5·5	63	3	7·2	6·6	261	26	8·4	5·4	29
6·0 „ ..	12	4·5	3·3	326					13	4·0	2·8	84	4	3·7	3·4	76	1	5·5	5·5	290	25	10·1	7·3	27
7·5 „ ..	6	5·3	3·5	293					11	4·3	2·8	84	2	2·3	0·9	354					18	9·6	7·3	26
9·0 „ ..									8	6·8	5·6	97									8	10·0	9·7	26

Height in Km.	RAIPUR 1600				SAHARSA 0700				SAHARSA 1600				TEZPUR 0100				TEZPUR 0700				TEZPUR 1600			
	n	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	3	31	0·7	0·4	56	31	0·5	0·4	821	31	1·2	1·1	51	31	1·2	1·2	62	31	1·1	1·0	4
0·15 a.g. ..	31	3·5	2·0	350	30	3·3	1·8	76	30	2·5	0·6	51	27	4·0	3·3	57	29	4·3	4·2	71	31	3·9	3·6	5
0·6 a.s.l. ..	31	3·4	2·1	342	28	3·3	1·5	83	30	3·0	0·6	64	27	4·5	4·1	84	27	4·9	4·7	77	31	4·1	3·7	7
1·0 „ ..	31	3·3	2·3	342	26	3·5	1·0	58	29	3·1	0·6	96	27	4·1	3·5	88	25	5·8	5·5	81	30	3·9	2·8	10
1·5 „ ..	31	3·5	2·5	331	24	4·2	0·8	64	25	3·8	0·3	321	27	4·0	2·3	92	25	5·3	4·9	80	30	3·9	2·2	13
2·0 „ ..	31	4·1	3·1	342	21	4·6	0·9	331	16	5·5	1·9	298	26	3·5	1·2	110	23	4·1	3·2	82	30	4·3	2·0	16
2·5 „ ..	26	6·3	5·2	345	13	2·8	0·8	50	15	6·6	2·5	294	25	3·9	1·2	161	22	3·5	2·6	86	29	5·0	2·2	18
3·0 „ ..	21	6·8	5·5	338	11	2·4	1·0	20	14	6·3	3·4	303	24	4·9	1·5	168	22	4·2	1·9	112	28	4·8	1·9	20
4·0 „ ..	16	8·4	7·3	307	6	5·3	41	304	13	8·9	7·9	296	16	4·6	1·9	164	20	4·1	0·5	170	25	4·9	1·7	24
5·0 „ ..	12	8·9	7·6	300	4	12·9	12·3	286	13	12·0	11·2	293					16	4·7	2·5	260	24	7·2	5·1	26
6·0 „ ..	11	9·7	7·9	297	3	14·5	14·1	280	10	15·1	14·2	285					14	8·2	7·3	255	21	10·4	9·5	26
7·5 „ ..	5	9·2	6·7	260					2	36·5	36·3	297					11	15·6	14·9	265	19	16·0	14·8	26
9·0 „ ..	3	10·3	7·8	254													5	19·6	18·8	285	10	19·7	18·9	26

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9 Km. above sea level.

OCTOBER 1948

Height in Km.	TRICHINOPOLY												TRIVANDRUM				UDAIPUR							
	0100				0700				1600				0700				0100				0700			
	n	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	0·4	33	31	1·4	0·7	329	31	2·1	1·3	53	31	1·4	1·0	6	31	0·7	0·5	283	31	0·3	0·2	312
0·15 a.g. ..	31	4·7	0·7	46	31	5·0	2·2	318	31	4·2	2·3	49	31	4·2	3·0	350	31	3·6	2·5	280	31	3·1	2·6	293
0·6 a.s.l. ..	31	5·9	0·9	82	31	6·0	3·0	338	31	4·5	2·3	62	31	4·8	2·8	325								
1·0 „ ..	31	5·5	1·0	98	31	5·4	1·4	14	30	4·8	1·9	64	31	5·5	2·4	329	31	4·7	2·6	279	31	4·8	2·7	298
1·5 „ ..	30	5·6	1·5	69	31	5·4	2·8	47	30	5·3	2·1	62	31	5·5	1·8	355	31	3·7	1·6	288	30	3·7	1·7	298
2·0 „ ..	29	5·7	2·9	39	31	5·8	3·8	46	29	5·6	1·9	37	30	5·4	1·5	17	31	3·4	1·1	332	31	3·3	0·9	322
2·5 „ ..	23	6·5	4·3	35	29	5·8	3·7	48	29	5·9	2·6	29	29	5·2	1·5	42	30	3·8	1·3	343	31	4·2	1·5	352
3·0 „ ..	22	6·0	3·4	37	28	5·5	2·9	51	26	5·9	2·6	25	27	4·9	1·3	7	28	5·7	1·8	338	31	5·0	1·8	3
4·0 „ ..	3	4·0	4·0	320	28	5·5	2·9	71	25	5·7	1·7	19	25	5·4	1·3	51	3	3·7	2·8	25	30	6·5	2·8	339
5·0 „ ..					26	5·0	3·1	72	23	5·5	2·5	76	20	4·8	3·3	66	1	9·0	9·0	305	22	6·7	3·4	314
6·0 „ ..					25	6·0	5·0	76	24	6·0	3·5	72	17	4·7	2·9	54					13	7·4	4·3	345
7·5 „ ..					23	6·5	5·3	83	11	6·4	5·1	80	14	7·5	5·8	81					4	8·7	6·1	303
9·0 „ ..					18	7·7	5·5	83	5	7·1	5·7	80	8	9·5	9·0	91								

Height in Km.	UDAIPUR				VENGURLA												VERAVAL							
	1600				0100				0700				1600				0100				0700			
	n	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	1·0	302	31	0·3	0·2	336	31	0·3	0·2	19	31	3·6	3·2	278	31	3·5	2·6	289	31	2·9	1·9	301
0·15 a.g. ..	31	4·4	1·5	307	31	3·8	2·7	3	31	3·1	2·4	27	31	5·5	4·7	289	31	6·0	4·9	301	30	5·1	3·9	303
0·6 a.s.l. ..					30	5·0	3·1	356	30	5·3	3·0	15	31	4·0	2·4	313	30	4·7	2·8	285	29	4·9	2·4	271
1·0 „ ..	30	4·3	1·5	294	30	4·8	1·9	10	29	5·5	2·8	27	30	3·6	1·1	45	29	3·3	1·1	150	29	4·2	1·2	212
1·5 „ ..	30	3·5	1·9	297	27	5·4	2·7	72	28	5·3	3·6	78	29	4·4	2·3	75	28	4·8	3·4	113	29	4·3	2·5	130
2·0 „ ..	31	3·4	2·0	320	25	6·1	4·3	85	27	5·6	4·0	83	29	5·6	3·2	79	26	5·5	3·1	122	25	4·4	2·6	118
2·5 „ ..	30	3·7	1·6	330	20	5·4	4·2	83	25	6·0	4·5	78	27	5·9	3·1	74	22	3·3	1·9	123	25	4·7	2·1	113
3·0 „ ..	28	4·1	2·0	324	16	5·2	3·5	79	24	6·2	4·7	77	23	5·9	3.4	47	20	5·7	1·7	125	25	4·7	0·9	127
4·0 „ ..	22	6·1	4·1	304	7	4·7	3·1	48	20	5·9	4·5	50	19	5·2	2·7	31	7	4·8	1·9	275	24	4·3	0·9	305
5·0 „ ..	19	7·5	6·0	300					17	5·1	2·1	39	16	4·5	1·3	14					23	4·9	2·3	293
6·0 „ ..	18	10·6	8·7	301					16	4·5	2·0	83	16	4·5	0·8	319					22	5·3	2·8	287
7·5 „ ..	13	13·9	12·9	294					10	6·5	4·4	81	12	4·2	1·8	309					21	6·3	4·4	284
9·0 „ ..	8	15·1	14·1	297					8	5·3	2·3	87	11	6·0	0·9	240					21	6·4	4·4	278

Table A —Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

OCTOBER 1948

Height in Km.	VERAVAL				VIZAGAPATAM												MINICOY							
	1600				0100				0700				1600				0730				1430			
	n	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	4·3	297	31	0·8	0·5	317	31	0·8	0·4	327	31	2·9	2·1	127	31	3·1	1·2	317	31	3·5	1·7	305
0·15 a.g. ..	31	6·1	5·3	260	31	3·0	1·6	271	30	2·8	1·7	329	31	4·4	2·4	122	31	5·6	2·6	317	29	6·1	3·4	304
0·6 a.s.l. ..	30	3·5	1·2	273	31	3·4	0·9	236	30	3·3	0·7	9	31	3·8	1·3	98	31	6·3	2·5	305	29	6·4	3·1	306
1·0 „ ..	30	3·6	0·4	118	31	3·1	1·0	42	30	3·6	1·9	41	30	3·9	1·7	28	30	6·0	2·3	300	26	5·9	3·0	314
1·5 „ ..	30	4·5	1·8	43	30	3·8	2·4	47	30	4·3	3·1	39	30	5·1	3·4	13	28	5·4	0·6	340	23	5·0	1·6	2
2·0 „ ..	29	5·3	1·7	158	28	4·5	2·5	28	30	4·3	3·8	35	30	5·9	4·4	15	25	5·2	1·5	48	22	5·7	3·0	42
2·5 „ ..	28	5·5	1·3	129	21	4·5	3·4	18	30	5·0	4·1	30	29	6·0	4·4	16	25	5·6	2·1	64	22	6·1	3·8	48
3·0 „ ..	28	5·7	0·2	200	15	5·4	3·3	14	29	5·2	3·6	19	29	5·2	3·4	12	20	5·8	2·0	32	18	5·3	2·4	15
4·0 „ ..	28	5·4	0·5	273	5	3·2	2·1	305	27	4·4	2·2	350	25	5·1	2·1	356	13	5·5	2·5	9	17	4·7	3·4	40
5·0 „ ..	27	5·5	2·8	282	2	4·0	3·9	40	26	3·8	1·2	313	22	5·3	1·7	276	12	4·3	1·0	59	14	5·4	3·1	36
6·0 „ ..	27	6·2	3·7	284	1	3·0	3·0	45	25	4·5	0·3	255	18	5·9	2·9	288	10	6·1	3·9	77	10	4·1	3·5	57
7·5 „ ..	24	7·0	5·1	250	1	3·0	3·0	45	16	4·8	0·5	268	9	4·9	2·1	269	6	7·7	6·9	77	7	5·3	4·2	95
9·0 „ ..	21	7·6	5·7	293	1	4·0	4·0	55	6	4·8	1·3	256	4	4·7	1·7	258	4	9·0	8·8	93	5	9·6	9·3	93

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9 Km. above sea level

SEPTEMBER 1948

Height in Km.	PORT BLAIR											
	0100				0700				1600			
	n	V	v	D	n	V	v	D	n	V	v	D
Surface ..	30	4·3	4·0	248	30	3·9	3·6	244	30	4·7	4·5	250
0·15 a.g. ..	25	7·7	7·6	243	29	7·8	7·5	243	24	7·1	6·9	244
0·6 a. s. l. ..	25	10·0	9·8	247	29	11·2	11·0	246	23	10·1	9·9	247
1·0 „ ..	18	8·6	5·5	250	26	10·2	9·9	247	18	10·7	10·4	250
1·5 „ ..	15	6·6	6·4	253	24	8·4	8·0	248	13	7·9	7·3	256
2·0 „ ..	9	4·1	3·6	266	22	7·3	6·3	253	8	7·5	6·8	261
2·5 „ ..	5	3·4	3·1	274	18	6·7	6·0	256	8	6·9	6·1	269
3·0 „ ..	1	1·0	1·0	340	15	4·9	4·0	254	6	8·2	7·7	267
4·0 „ ..					9	5·3	3·8	255	6	6·8	6·5	256
5·0 „ ..					3	3·5	1·1	124	2	10·3	10·1	263
6·0 „ ..					1	6·0	6·0	80	1	9·5	9·5	255
7·5 „ ..					1	7·0	7·0	105				
9·0 „ ..												

Table B—Monthly mean directions and velocities of upper winds

Winds above 9 Km. above sea level

OCTOBER 1948

Height (Km)	n	V	v	D
	AHMEDABAD			
10·0	19	12·7	3·5	332
11·0	6	15·3	13·7	299
12·0	2	19·8	18·3	302
13·0	1	22·0	22·0	320
	ALLAHABAD			
10·0	19	12·8	12·4	272
11·0	14	9·5	8·0	258
12·0	13	10·3	6·9	263
13·0	12	9·4	6·7	254
14·0	8	7·8	2·6	337
15·0	3	8·5	5·4	49
16·0	2	7·0	4·6	57
17·0	2	10·0	10·0	61
18·0	2	9·0	9·0	80
19·0	2	7·0	6·9	69
20·0	1	9·5	9·5	95
21·0	1	10·0	10·0	125
22·0	1	8·0	8·0	75
	AMBALA			
10·0	2	13·3	10·7	298
11·0	2	15·5	12·3	284
	ANANTAPUR			
10·0	16	7·3	4·2	81
11·0	6	10·2	3·9	91
12·0	3	11·3	8·3	70
13·0	1	15·0	15·0	70
14·0	1	14·0	14·0	70
15·0	1	11·5	11·5	80
16·0	1	9·5	9·5	110
17·0	1	8·0	8·0	135
18·0	1	9·5	9·5	80
19·0	1	15·0	15·0	100
	BANGALORE			
10·0	9	10·9	8·1	298
11·0	6	11·5	9·6	301
12·0	5	11·2	10·4	287
13·0	2	12·3	11·7	388
14·0	1	11·0	11·0	305
15·0	1	6·5	6·5	294
16·0	1	7·0	7·0	300
17·0	1	9·5	9·5	321
18·0	1	13·0	13·0	330
19·0	1	10·0	10·0	330
	BAIRAGARH			
10·0	18	12·2	9·9	279
11·0	11	11·1	8·3	283
12·0	9	11·7	8·8	289
13·0	6	8·1	4·3	297
14·0	6	7·8	3·3	295
15·0	4	11·1	2·9	242
16·0	2	9·5	8·9	84
17·0	2	11·0	10·5	76
18·0	2	10·3	10·2	100
19·0	2	12·7	12·5	113
20·0	1	15·0	15·0	154
	BHUJ			
10·0	9	10·1	7·2	281
	BIKANER			
10·0	7	10·2	5·7	295
11·0	1	17·5	17·5	360
	BOMBAY			
10·0	7	5·9	2·0	339
11·0	1	11·0	11·0	335
	CALCUTTA			
10·0	1	11·0	11·0	285
	COCHIN			
10·0	2	17·0	12·0	61
11·0	1	7·0	7·0	105
12·0	1	9·5	9·5	65
13·0	1	7·0	7·0	15
	COOCH-BEHAR			
10·0	2	11·0	10·9	261
11·0	1	14·5	14·5	280
12·0	1	9·0	9·0	295
	CUTTACK			
10·0	6	12·5	11·0	287
11·0	1	7·5	7·5	300
	DEOLALI			
10·0	5	7·0	6·1	270
11·0	5	7·1	6·9	279
12·0	1	3·5	3·5	345
13·0	1	8·0	8·0	65
14·0	1	5·0	5·0	75
	DIBRUGARH			
10·0	13	23·4	21·5	279
11·0	8	26·4	25·6	278
12·0	5	30·3	28·6	285
13·0	1	28·0	28·0	105
	GADAG			
10·0	21	6·2	1·2	72
11·0	1	6·5	6·5	70
12·0	1	7·0	7·0	100
13·0	1	13·0	13·0	145
	GOPALPUR			
10·0	15	9·2	7·1	292
11·0	6	11·5	11·4	268
12·0	5	12·5	11·9	257
13·0	4	10·0	8·5	275
14·0	4	8·7	6·6	272
15·0	3	8·7	5·5	219
16·0	3	11·2	8·2	216
	GOPALPUR—*contd.*			
18·0	3	12·2	6·1	199
19·0	3	11·2	4·8	200
20·0	3	13·2	3·0	228
21·0	3	14·7	3·5	261
22·0	3	15·0	4·4	230
23·0	3	15·3	4·8	242
24·0	3	16·8	6·1	250
25·0	3	17·2	8·1	254
26·0	3	18·3	9·8	264
27·0	2	16·5	12·1	211
28·0	1	12·0	12·0	145
29·0	1	10·5	10·5	135
30·0	1	12·0	12·0	140
31·0	1	10·0	10·0	145
32·0	1	12·0	12·0	140
33·0	1	13·5	13·5	155
34·0	1	10·5	10·5	135
35·0	1	16·0	16·0	140
36·0	1	20·0	20·0	145
	GORAKHPUR			
10·0	7	9·6	6·2	257
11·0	3	15·2	15·2	264
12·0	3	14·0	14·0	263
13·0	2	5·3	4·7	279
	JAGDALPUR			
10·0	1	14·5	14·5	32[illegible]
	JAMNAGAR			
10·0	5	11·8	8·0	30[illegible]
11·0	2	16·5	14·9	30[illegible]
12·0	2	19·7	17·7	29[illegible]
13·0	1	6·0	6·0	22[illegible]
14·0	1	2·5	2·5	9[illegible]
15·0	1	5·5	5·5	12[illegible]
16·0	1	3·5	3·5	19[illegible]

Table B—Monthly mean directions and velocities of upper winds

Winds above 9·0 Km. above sea level

OCTOBER 1948

Height (Km)	n	V	v	D
		JAMSHEDPUR		
10·0	2	9·0	7·7	250
11·0	1	7·5	7·5	220
		JHARSUGUDA		
10·0	15	13·5	11·5	271
11·0	8	17·9	16·1	276
12·0	4	22·4	19·1	269
13·0	1	24·5	24·5	245
		JODHPUR		
10·0	9	19·1	17·1	281
11·0	5	19·8	16·9	281
12·0	5	16·8	13·0	287
13·0	3	14·7	12·5	286
14·0	3	14·8	14·0	288
15·0	2	6·0	4·1	278
16·0	2	8·5	4·7	288
17·0	2	7·0	6·9	286
18·0	2	6·5	6·4	296
19·0	1	10·5	10·5	280
		JUBBULPORE		
10·0	5	10·8	10·4	279
11·0	3	10·5	10·4	271
12·0	1	6·0	6·0	220
13·0	1	9·5	9·5	220
14·0	1	15·0	15·0	240
15·0	1	16·0	16·0	245
		MADHOSAGAR		
10·0	24	14·1	2·3	276
11·0	19	11·0	8·8	286
12·0	15	14·8	12·4	292
13·0	14	13·9	11·5	300
14·0	12	8·5	5·7	306
15·0	8	8·8	6·0	311
16·0	8	7·8	3·0	7
17·0	6	8·5	5·2	24

Height (Km)	n	V	v	D
		MADHOSAGAR—*contd.*		
19·0	3	6·7	4·1	356
20·0	3	4·8	1·2	101
21·0	3	11·0	4·6	34
22·0	3	13·1	3·3	245
23·0	3	20·8	5·5	249
24·0	2	3·7	3·7	195
25·0	1	4·0	4·0	175
26·0	1	5·0	5·0	145
27·0	1	7·0	7·0	135
28·0	1	5·5	5·5	130
29·0	1	4·0	4·0	115
30·0	1	6·5	6·5	115
31·0	1	4·0	4·0	115
32·0	1	3·0	3·0	215
33·0	1	13·0	13·0	280
34·0	1	18·0	18·0	280
35·0	1	22·0	22·0	285
		MADRAS		
10·0	20	9·9	5·5	81
11·0	19	10·7	7·0	87
12·0	16	12·0	9·2	89
13·0	15	13·5	10·7	95
14·0	11	14·1	10·8	100
15·0	8	14·4	12·6	98
16·0	6	10·7	9·7	88
17·0	4	8·9	6·8	93
18·0	2	12·7	12·7	76
19·0	2	11·5	10·9	63
20·0	1	5·5	5·5	45
21·0	1	7·0	7·0	60
22·0	1	7·0	7·0	90
		MALEGAON		
10·0	14	7·3	5·6	291
11·0	1	11·5	11·5	275
		MANGALORE		

Height (Km)	n	V	v	D
		MASULIPATAM		
10·0	12	8·3	1·4	3
11·0	3	6·2	4·8	95
12·0	2	7·7	7·1	102
		NAGERCOIL		
10·0	27	7·9	6·6	100
11·0	5	10·0	10·0	103
12·0	4	11·3	11·0	103
13·0	3	16·7	16·5	101
14·0	3	20·8	20·8	100
15·0	3	25·7	24·5	104
		NAGPUR		
10·0	30	10·5	8·8	285
11·0	28	9·8	7·8	280
12·0	25	10·4	7·6	283
13·0	25	10·7	6·8	282
14·0	21	12·6	7·3	295
15·0	19	15·0	8·5	310
16·0	15	15·1	4·9	335
17·0	11	15·0	6·1	354
18·0	9	14·3	5·3	5
19·0	8	13·3	5·6	8
20·0	5	13·9	6·8	38
21·0	4	16·3	3·8	34
22·0	4	18·6	4·0	42
23·0	3	21·5	7·7	171
24·0	3	21·8	9·6	180
25·0	1	26·5	26·5	65
26·0	1	28·0	28·0	75
27·0	1	30·5	30·5	90
		NEW DELHI		
10·0	11	11·3	9·6	311
11·0	8	11·3	9·9	314
12·0	7	10·8	9·5	311
13·0	4	15·9	13·5	311
14·0	2	9·5	9·3	339

Height (Km)	n	V	v	D
		NEW DELHI—*contd.*		
16·0	1	11·0	11·0	360
17·0	1	5·5	5·5	210
18·0	1	3·0	3·0	355
19·0	1	11·0	11·0	80
		POONA		
10·0	14	6·3	2·4	262
11·0	13	6·6	2·3	178
12·0	13	7·3	1·9	131
13·0	12	6·7	4·1	114
14·0	10	7·5	4·9	96
15·0	5	6·2	5·9	88
16·0	3	3·8	2·8	143
		RAIPUR		
10·0	8	11·9	10·4	265
		TEZPUR		
10·0	11	21·3	20·3	278
11·0	4	16·1	15·4	269
12·0	3	12·7	12·6	279
13·0	3	13·8	13·7	279
14·0	3	11·8	11·6	299
15·0	2	8·3	6·7	334
16·0	2	6·5	4·7	340
17·0	2	9·0	7·3	41
		TRICHINOPOLY		
10·0	17	8·2	6·3	96
		TRIVANDRUM		
10·0	5	10·3	10·2	114
11·0	5	14·0	13·2	108
12·0	3	16·5	16·4	88
13·0	2	16·7	16·7	91
14·0	1	21·5	21·5	80
		UDAIPUR		
10·0	5	14·1	13·2	300
11·0	1	16·0	16·0	260
12·0	1	14·0	14·0	265

Table B—Monthly mean directions and velocities of upper winds

Winds above 9 Km. above sea level

OCTOBER 1948

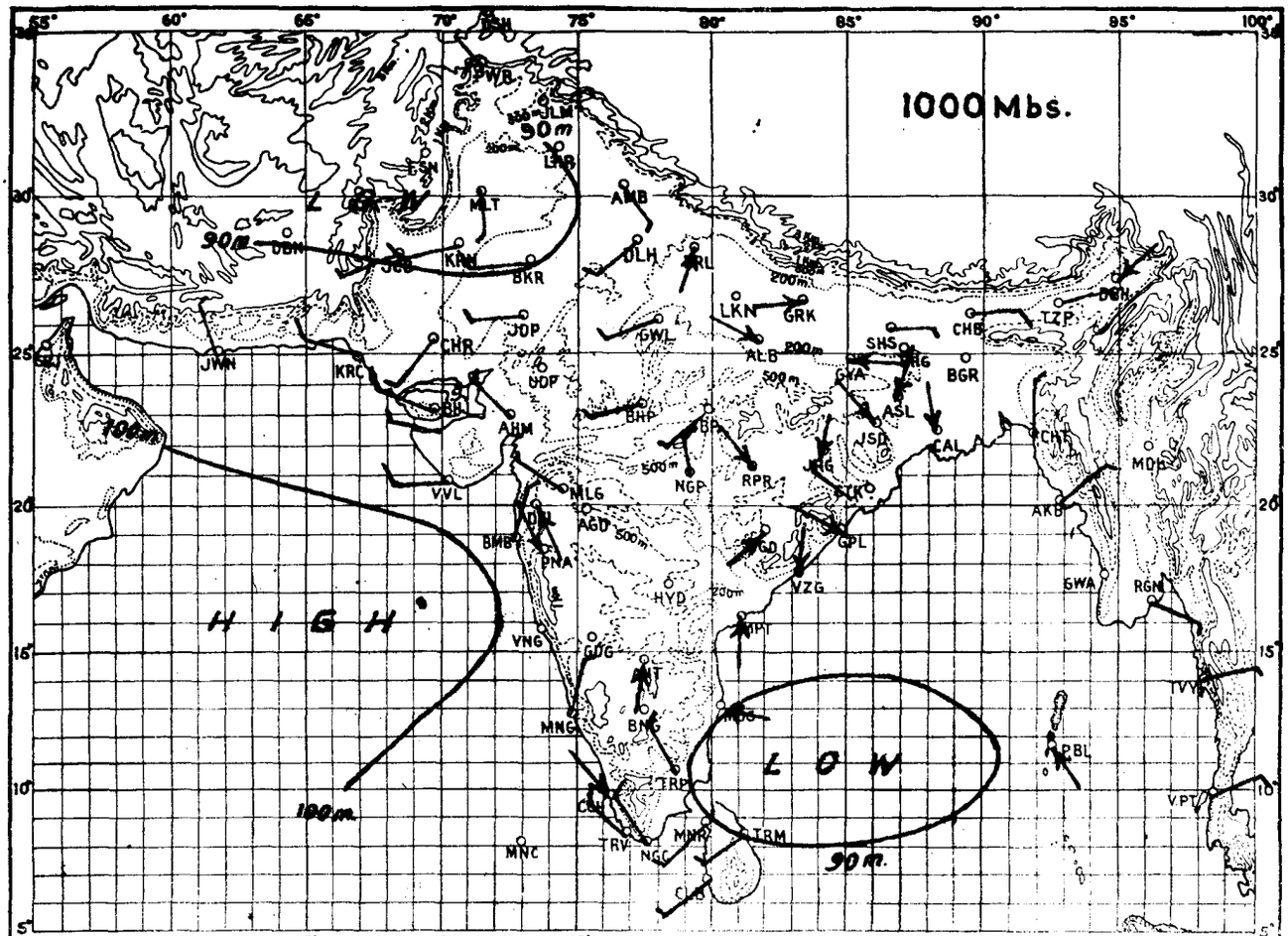
Height (Km)	n	V	v	D	Height (Km)	n	V	v	D	Height (Km)	n	V	v	D	Height (Km)	n	V	v	D
		VENGURLA					VERAVAL					MINICOY							
10·0	11	5·1	0·5	93	10·0	33	7·7	5·6	280	10·0	7	11·1	10·3	101					
11·0	6	8·7	1·0	95	11·0	23	8·3	5·6	267	11·0	4	19·7	18·9	120					
12·0	6	9·3	1·3	73	12·0	16	9·3	6·6	268	12·0	1	18·0	18·0	105					
13·0	5	10·8	5·1	99	13·0	11	7·6	3·5	267										
14·0	4	10·9	9·1	92	14·0	5	3·7	3·3	254										
15·0	3	11·3	10·6	101	15·0	1	4·0	4·0	270										
16·0	3	12·5	12·4	92			VIZAGAPATAM												
17·0	3	16·5	16·5	94	10·0	6	5·7	3·3	250										
18·0	3	21·0	20·6	107	11·0	1	9·5	9·5	305										
19·0	1	13·5	13·5	95	12·0	1	14·5	14·5	330										
20·0	1	17·5	17·5	95	13·0	1	15·0	15·0	320										
21·0	1	22·0	22·0	95	14·0	1	22·0	22·0	315										

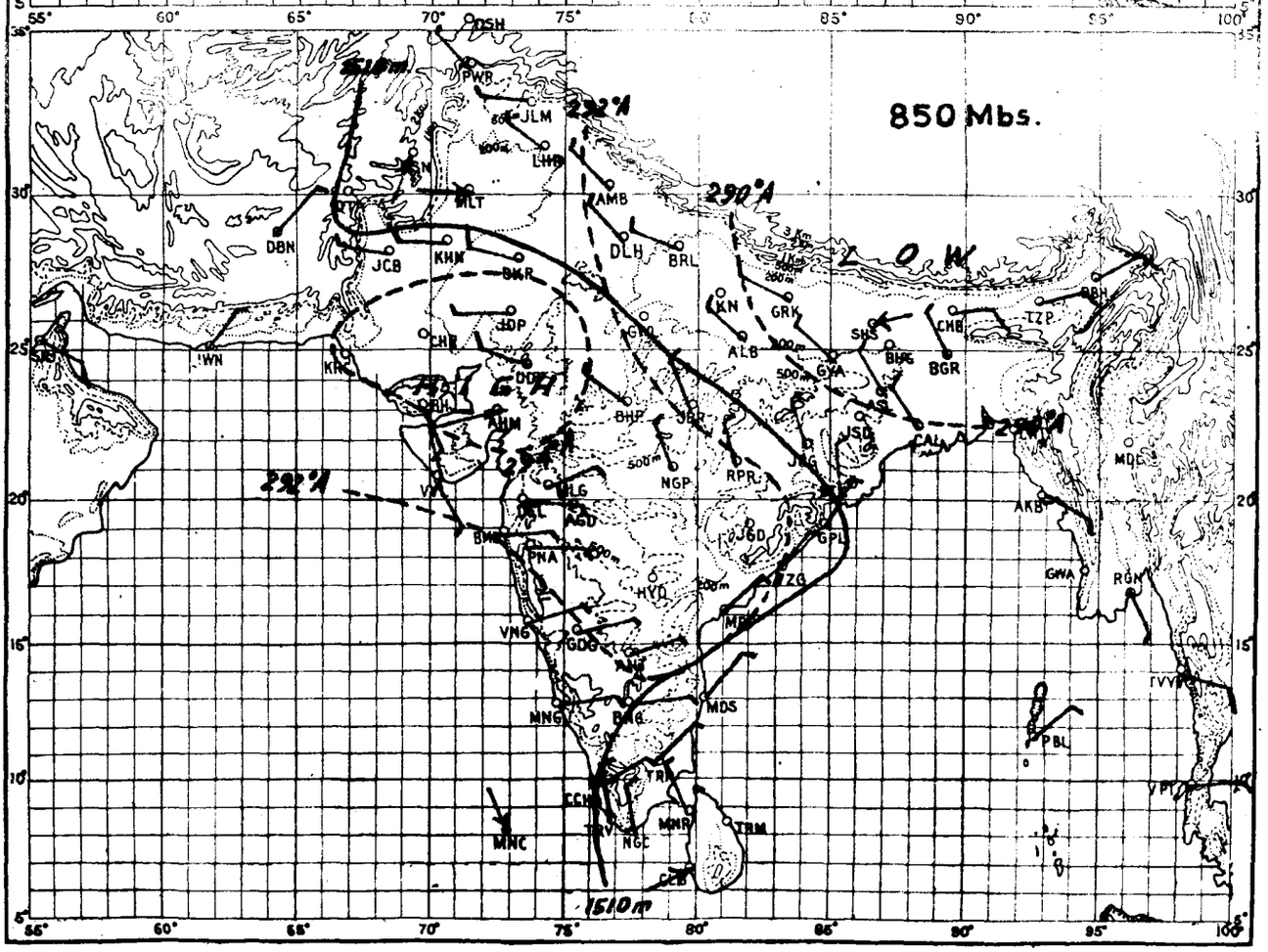
HARDGOB—325—1.4.53—GIPS

MONTHLY MEAN CONSTANT PRESSURE CHARTS

OCTOBER 1948

Plate I.





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

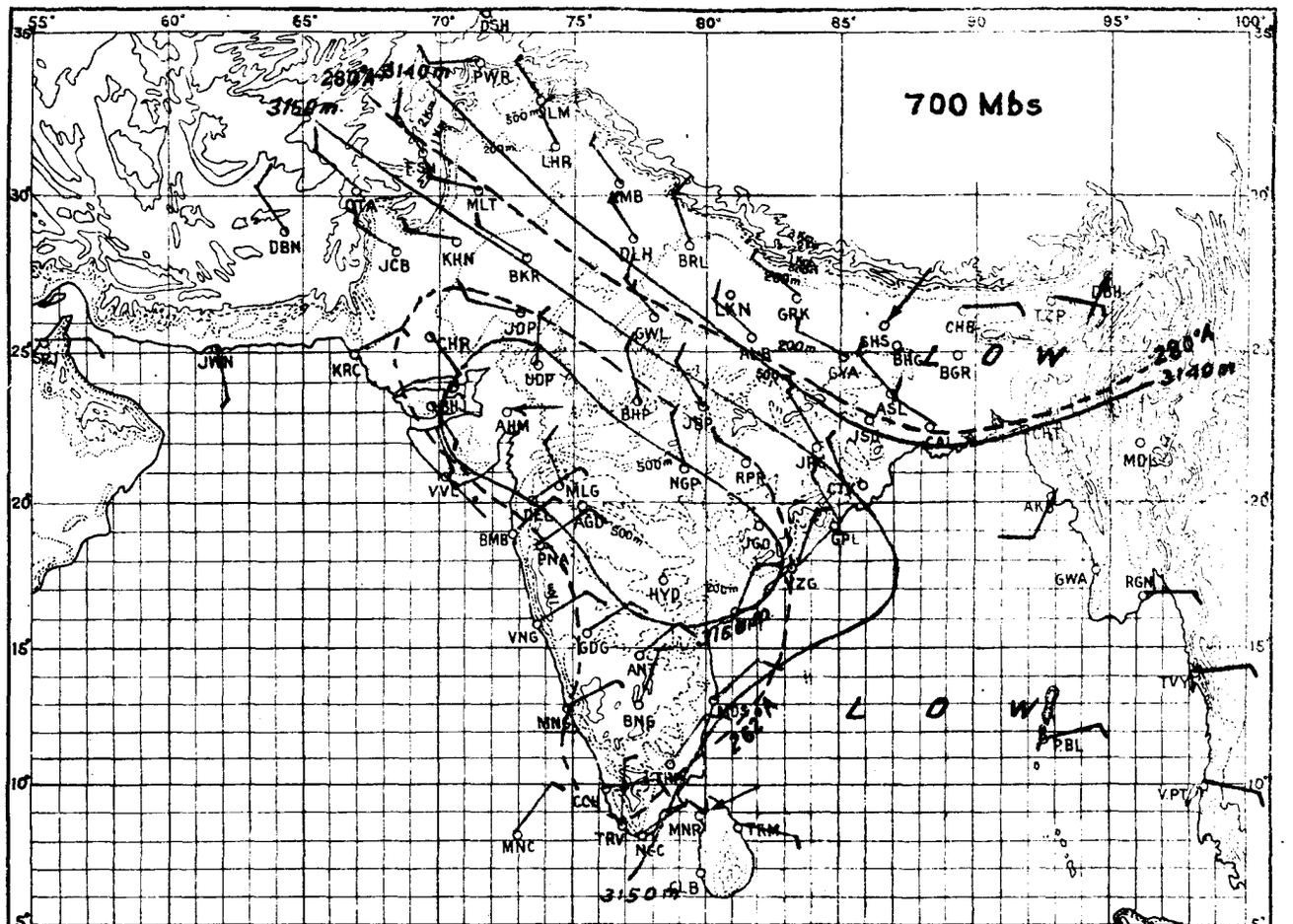
G.P.E.P. POONA, 1951.

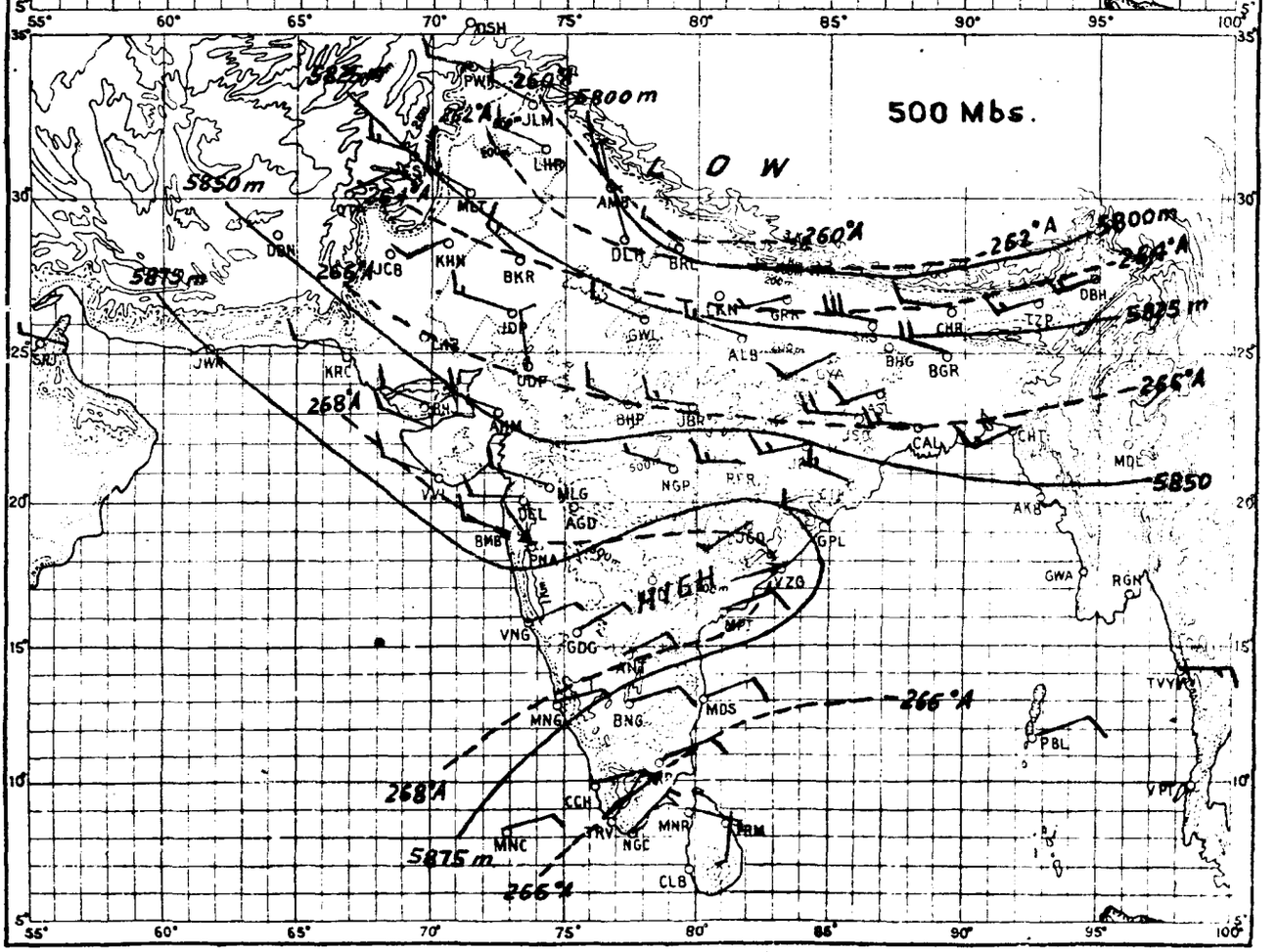
- - - - - - *Isotherms in degrees Absolute* ——— *Contours in geopotential Metres.*

MONTHLY MEAN CONSTANT PRESSURE CHARTS

OCTOBER 1948

Plate II





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

- - - - - - - *Isotherms in degrees Absolute* ——— *Contours in geopotential Metres.*

Registered No. B-3097

INDIA WEATHER REVIEW, 1948

MONTHLY WEATHER REPORT

NOVEMBER

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WEATHER BUREAU

Published by authority of the Government of India.

Chief features :—(*i*) A severe cyclone in the Arabian Sea which hit the Konkan coast near Bombay ; (*ii*) active northeast monsoon in the Madras Presidency during the first three weeks of the month ; (*iii*) prolonged spell of thundershowers in the Deccan during the first fortnight ; (*iv*) general feebleness of the western disturbances resulting in dry weather over most parts of northwest India.

The Bay cyclonic storm which was centred near Lat. 12°N., Long. 88°E., on the last day of October moved northwestwards and crossed the coast just south of Masulipatam on the night of the 2nd—3rd. It then weakened rapidly into a shallow depression and became unimportant over the northwest Deccan by the 6th. Associated with this storm, there was widespread rainfall along the Orissa coast during the first three days of the month, in the Madras Presidency, Hyderabad and Berar from the 4th to 7th and over the region from the north Bombay Deccan to Chota Nagpur on the 6th and 7th. Thundershowers continued in the Deccan during the next week also.

A well marked trough of low pressure appeared over the southwest Bay of Bengal on the 7th and persisted till the 9th. It was responsible for strong northeast monsoon over the south of the Peninsula between the 8th and the 10th when some locally very heavy downpours occurred along the Circars coast.

Weather became unsettled in the southwest Bay of Bengal, east of Ceylon, on the 14th evening. The unsettled conditions moved westwards across Ceylon into southeast Arabian Sea and a well marked trough of low pressure lay off the Malabar coast on the morning of the 17th. During this period, the northeast monsoon became vigorous in southeast Madras and locally very heavy rain occurred there. The trough of low pressure concentrated into a depression by the 18th morning centred about 400 miles west of Cochin. Moving northwestwards initially and northeast later, it intensified into a cyclonic storm by the 20th morning when its centre was near Lat. 18°N., Long 66½°E. The storm continued to move northeastwards till the evening of the 21st and then, moving eastnortheastwards it became a severe cyclone during the night of the 21st and hit the coast about 45 miles north of Bombay on the morning of the 22nd. It weakened rapidly after passing inland, lay as a depression over the west Central Provinces and Berar on the 24th and became unimportant by the 26th.

The cyclone caused great havoc and heavy loss of life and property in Bombay where all means of traffic and communication were completely paralysed for two days. Bombay experienced a record wind speed of 94 m.p.h. (in gust) at about 10 hrs. on the 22nd, while winds exceeding 50 m.p.h. blew over the city from 6 a.m. to 11 a.m. on that day. A number of sailing vessels and smaller craft capsized the waters of the Bombay harbour. 47 men manning S. S. Dipavathi were drowned in the sea. The storm left a trail of destruction throughout the city of Bombay and its suburbs. Besides the damage to the docks and sailing craft, hundreds of buildings and hutments were rendered uninhabitable causing great hardship to the refugees in their camps. Thousands of big trees were also uprooted.

Associated with the formation and movement of the cyclone widespread rain fell in southeast Madras, Mysore and Malabar from the 18th to 20th and from Kathiawar and south Konkan to west Central Provinces and west Central India from the 21st to the 24th. The rainfall also extended to southeast Rajputana, east Central India, the northeast Central Provinces, Chota Nagpur and the southern districts of the east United Provinces on the 24th and 25th. Rainfall was locally heavy in the north Konkan, the north Deccan, west Central India and the west Central Provinces.

The moist air feed into the country stimulated by the Bombay cyclone persisted even after the storm had become unimportant and a ' low ' developed over Orissa on the 28th. This ' low ' emerged into the northwest angle of the Bay on the next morning and moving eastnortheastwards became unimportant by the 30th. It was responsible for well distributed rainfall in Eastern Pakistan and northeast India outside north Bihar and south Orissa on the last three days of the month. Some heavy falls were recorded in Gangetic West Bengal on the 28th and 29th.

All the five western disturbances of the month were feeble and did not cause any precipitation.

Night temperatures were markedly above normal in the north Deccan and central parts of the country during most days and in the southern districts of the United Provinces, Chota Nagpur and Gangetic West Bengal during the last week.

The total rainfall during the month was in moderate to large excess in northeast India, the United Provinces, east Rajputana, Gujarat, the central parts of the country and the Peninsula outside southeast Madras where it was normal. It was in large defect in the Bay Islands. No rain fell in the East Punjab and west Rajputana. Averaged over the plains of India, the month's rainfall was 152% in excess.

The mean maximum temperature was below normal in east Rajputana, Central India, Berar and the west Central Provinces and normal elsewhere. The mean minimum temperature was above normal in northeast India, the east United Provinces, Gujarat, the central parts of the country and the Peninsula outside Malabar and below normal in the East Punjab.

Relative humidity was in excess in West Bengal, Orissa, Chota Nagpur, Bihar, the United Provinces, the East Punjab, east Rajputana, the central parts of the country and the Peninsula outside Malabar and southeast Madras and normal elsewhere.

Cloud amount was in excess in northeast India, the United Provinces, east Rajputana, Gujarat, the central parts of the country and the Peninsula outside Malabar and southeast Madras and in defect in the East Punjab and west Rajputana.

Data from Kashmir are not available.

Table I contains the divisional and sub-divisional means of rainfall, temperature and humidity and cloud amounts for the 13 chief political divisions and the 26 sub-divisions. The stations whose observations are used for preparing these means are given in the subsequent tables.

N.B.—The Indian Standard Time used in this publication is 5 hrs. 30 mins. in advance of Greenwich Mean Time.

POONA 5,
The 3rd March 1949.

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

—	Rainfall.				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division	"	"	"		°	°	mb.	%	
1. Assam ..	1·80	0·86	+0·94	+109	+0·7	+2·5	+1·4	—2	+2·5
2. West Bengal ..	4·50	0·76	+3·74	+492	—0·8	+4·2	+2·8	+8	+3·1
3. Orissa ..	3·39	1·68	+1·71	+102	+0·8	+4·8	+4·1	+8	+1·2
4. Bihar ..	1·98	0·43	+1·55	+360	—1·0	+4·7	+3·6	+11	+3·3
5. United Provinces	0·43	0·22	+0·21	+95	—1·6	+1·3	+1·3	+9	+1·2
6. East Punjab ..	0	0·12	—0·12	—100	+0·5	—2·5	+0·3	+6	—0·7
7. Rajputana ..	0·51	0·16	+0·35	+219	—1·8	+0·7	+0·7	+6	+0·1
8. Bombay ..	3·57	0·85	+2·72	+320	—0·3	+4·5	+3·9	+11	+1·9
Sub-division									
1. Bay Island ..	3·66	10·52	—6·86	—65	+0·8	+1·1	—1·2	—2	+0·5
2. Assam ..	1·80	0·86	+0·94	+109	+0·7	+2·5	+1·4	—2	+2·5
3. West Bengal ..	4·50	0·76	+3·74	+492	—0·8	+4·2	+2·8	+8	+3·1
4. Orissa ..	3·39	1·68	+1·71	+102	+0·8	+4·8	+4·1	+8	+1·2
5. Chota Nagpur	3·66	0·56	+3·10	+554	—1·7	+5·8	+4·5	+14	+3·5
6. Bihar ..	1·21	0·37	+0·84	+227	—0·5	+3·9	+2·9	+8	+3·2
7. United Provinces, East.	0·61	0·25	+0·36	+144	—1·9	+2·3	+1·6	+10	+1·9
8. Do. Do. West	0·24	0·19	+0·05	+26	—1·2	+0·2	+1·0	+7	+0·3
9. East Punjab ..	0	0·12	—0·12	—100	+0·5	—2·5	+0·3	+6	—0·7
10. Kashmir ..	Data incomplete								
11. Rajputana, West	0	0·04	—0·04	—100	—1·5	—0·1	—0·6	—1	—0·7
12. Do. East	1·02	0·28	+0·74	+264	—2·1	+1·3	+1·6	+12	+0·8
13. Gujarat ..	1·37	0·28	+1·09	+389	+0·1	+2·7	+0·6	+4	+0·6
14. Central India, West.	1·99	0·70	+1·29	+184	—3·1	+4·1	+3·1	+17	+3·1

—	Rainfall				Departure from normal of				
							8 hrs. I.S.T.		
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	Maximum temperature.	Minimum temperature.	Vapour pressure.	Relative humidity.	Cloud.
1	2	3	4	5	6	7	8	9	10
Division—contd.	"	"	"		°	°	mb.	%	
9. Central India ..	2·85	0·60	+2·25	+375	—3·5	+4·1	+3·4	+19	+3·3
10. Central Provinces and Berar.	4·44	0·67	+3·77	+563	—2·2	+7·0	+5·1	+14	+4·1
11. Hyderabad ..	7·09	1·05	+6·04	+575	—1·6	+7·0	+7·2	+21	+3·6
12. Mysore ..	3·83	2·73	+1·10	+40	+0·2	+3·3	+2·8	+9	+2·1
13. Madras ..	9·06	6·59	+2·47	+37	+0·3	+2·8	+3·1	+4	+1·1
Mean of India ..	3·58	1·42	+2·16	+152	—1·0	+3·6	+3·2	+10	+2·0
Sub-division—contd.									
15. Central India, East.	4·01	0·47	+3·54	+753	—3·9	+4·1	+3·9	+21	+3·5
16. Berar ..	6·11	0·69	+5·42	+786	—3·6	+7·5	+7·6	+23	+4·5
17. Central Provinces, West.	4·33	0·66	+3·67	+556	—3·6	+6·1	+4·8	+17	+4·1
18. Do. Do. East	3·90	0·69	+3·21	+465	—0·1	+7·6	+4·4	+8	+4·0
19. Konkan ..	4·99	1·29	+3·70	+287	—0·9	+4·0	+4·6	+8	+2·3
20. Bombay Deccan	5·20	1·23	+3·97	+323	—0·5	+6·7	+7·3	+20	+3·3
21. Hyderabad, North	7·99	0·97	+7·02	+724	—1·8	+7·4	+7·3	+23	+4·0
22. Do. South ..	6·19	1·13	+5·06	+448	—1·4	+6·7	+7·1	+19	+3·3
23. Mysore ..	3·83	2·73	+1·10	+40	+0·2	+3·3	+2·8	+9	+2·1
24. Malabar ..	9·93	5·49	+4·44	+81	+1·0	+1·2	+1·9	+3	+0·5
25. Madras, South-east.	10·13	9·71	+0·42	+4	+1·3	+2·4	+1·9	0	+0·3
26. Do. Deccan	4·29	2·19	+2·10	+96	—1·5	+4·7	+5·3	+9	+1·9
27. Do. Coast, North	11·22	6·23	+4·99	+80	—0·2	+2·9	+4·2	+7	+1·3

TABLE II.—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I. S. T. (2-30 HRS. G. M. T

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humid °/o		
		Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
Bay Islands—																						
Port Blair	259	1004·8	+1·8	1002·0	84·7	+0·8	86	7 days	74·6	+1·1	68	24	81·4	78·1	75·8	73·8	27·9	—1·2	26·4	77	—2	
Assam—																						
Dibrugarh	348	1005·8	+1·3	1002·0	80·4	+0·8	88	1	62·3	+2·3	57	19,26	68·9	73·1	65·9	68·1	20·4	+0·7	21·2	84	—1	
Sibsagar	317	1006·2	+0·7	1002·8	79·2	+1·1	86	10, 13	63·2	+3·4	58	27	68·8	72·1	66·9	68·8	21·5	+0·8	22·3	90	—2	
Tezpur	258	1008·5	+0·7	1004·6	81·3	+0·4	87	13	63·8	+2·2	60	19,26,30	69·4	75·1	66·7	69·9	21·2	+1·3	22·4	87	+3	
Gauhati	182	1010·6	+1·0	1007·1	80·1	—1·2	89	12	64·4	+3·0	60	27,30	69·5	74·7	67·3	69·4	21·9	+1·2	22·0	89	0	
Dhubri	115	1012·1	+0·3	1009·1	79·7	+0·3	86	8	66·8	+2·8	60	30	69·1	75·5	67·0	70·2	21·9	+1·5	22·7	90	+8	
Silchar	96	1013·6	+1·4	1010·2	84·1	—0·8	91	1	66·2	+2·7	60	4 days	71·7	77·0	68·9	71·8	23·3	+1·7	24·4	85	+2	
West Bengal—																						
Dum Dum	33	1014·7	..	1011·8	83·3	..	89	4, 7, 11	68·9	..	62	20	73·9	78·2	69·2	71·3	22·3	..	23·0	78	..	
Calcutta	21	1015·2	+0·8	1012·2	84·7	+0·5	91	4 days	69·1	+5·4	63	13,21	72·8	77·2	69·7	71·5	23·6	+3·5	23·6	85	+6	
Saugor Island ..	10	1014·9	+0·5	1012·1	82·4	+0·1	87	11	71·0	+3·6	65	20,21	76·2	77·9	72·4	72·2	25·4	+2·9	24·5	83	+5	
Sandheads	28	1014·2	+0·8	1011·9	..	..	..	..	..	..	..	..	80·2	81·1	73·2	73·9	24·7	+1·8	25·4	72	+7	
Midnapore	149	1010·3	+0·4	1007·5	83·8	—0·6	90	7,8	67·7	+4·4	60	17,21	71·3	78·3	68·8	71·8	22·9	+5·0	23·7	87	+18	
Contai	35	1014·3	..	1011·3	83·6	..	88	5 days	70·3	..	65	17,21	74·7	77·8	71·6	72·1	25·1	..	24·4	85	..	
Burdwan	106	1012·3	+0·7	1008·8	82·6	—1·3	89	11	67·9	+4 0	61	30	72·2	77·9	68·4	71·3	21·9	+3·2	23·2	82	+10	
Krishnagar	48	1014·3	+0·7	1011·5	83·6	—0·7	91	11	67·1	+4·8	60	20	72·0	78·0	69·1	71·6	23·0	+3·3	23·5	86	+14	
Asansol	414	1001·6	+0·7	998·7	81·4	—2·5	88	10	66·1	+6·1	57	30	70·8	75·6	67·3	69·6	21·3	+4·5	22·0	83	+11	
Berhampore ..	62	1014·1	+0·8	1011·1	83·1	+0·3	89	10	67·5	+3·8	61	20,21	71·9	77·0	68·1	70·2	21·6	+1·9	22·0	81	+3	
Malda	103	1013·0	+1·1	1009·6	80·0	—2·3	87	9,10	65·5	+4·4	59	5 days	71·7	75·0	67·4	69·0	20·9	+1·5	21·5	79	+4	
Jalpaiguri	271	1007·1	+0·8	1003·7	81·0	—1·0	85	7 days	62·4	+1·6	55	30	65·8	76·8	63·3	68·2	18·7	—0·2	19·7	86	+3	
Orissa—																						
Balasore	65	1013·7	+0·8	1010·7	83·7	—0·6	89	5, 9, 10	68·9	+5·7	62	21	75·0	77·1	70·7	72·6	24·5	+5·5	26·2	81	+7	
Chandbali	20	1014·7	+0·5	1012·1	84·7	+0·6	91	6	69·6	+4·1	62	20,21	74·2	78·5	71·5	73·0	25·2	+4·2	25·2	87	+7	
Puri	20	1014·7	+0·6	1011·9	85·3	+0·7	89	5,10	72·4	+3·2	65	20	76·0	80·8	71·9	73·4	24·9	+3·3	24·7	80	+5	
Gopalpur	56	1012·8	0	1010·3	84·7	+0·6	88	7	71·4	+4·1	62	22	75·5	80·7	72·6	74·5	26·0	+4·5	26·4	86	+11	
Cuttack	87	1012·0	—0·3	1009·1	85·7	+0·7	92	6	70·8	+5·0	62	21	74·2	80·8	70·7	72·5	24·1	+4·0	23·4	83	+6	
Angul	455	999·8	+0·6	996·7	84·2	+0·4	90	10	67·8	+5·5	57	20,21	71·9	79·4	69·0	70·6	22·9	+4·1	21·5	86	+11	
Sambalpur	486	998·6	0	995·4	85·5	+1·6	92	10	67·5	+6·2	55	20,21	72·3	80·7	69·1	71·2	23·0	+5·0	21·7	84	+9	
Chota Nagpur—																						
Jamshedpur ..	423	1001·2	+0·7	997·9	82·3	—2·7	90	7	67·1	+8·1	57	21	71·0	77·9	67·7	69·9	21·6	+5·3	21·4	83	+9	
Chaibasa	742	990·0	+0·5	986·7	82·4	—0·5	89	7,8	66·3	+6·6	56	21,30	69·5	78·0	67·4	70·6	22·0	+4·8	22·1	89	+12	
Ranchi	2,150	942·1	+0·5	939·6	76·3	—1·2	82	6,10	60·5	+3·3	52	19,30	65·9	71·0	61·9	64·9	17·0	+3·7	18·3	81	+20	
Hazaribagh ..	2,005	947·3	+1·0	944·8	75·8	—1·8	83	6	59·8	+2·6	51	20,30	66·4	68·6	62·5	63·5	17·4	+4·2	17·7	81	+21	
Daltonganj ..	725	991·2	+0·4	987·0	79·9	—2·5	89	9	62·6	+8·2	51	21	67·7	74·2	64·8	67·7	19·6	+4·7	20·2	85	+6	
Dhanbad	839	987·7	..	..	80·0	..	85	4 days	64·1	..	56	30	70·3	..	66·0	..	19·8	..	..	79	..	..
Bihar—																						
Purnea	124	1012·2	+0·7	1009·0	82·5	+0·1	89	9	61·0	+2·4	51	17	67·3	75·1	65·0	69·3	19·9	+1·3	21·7	88	+4	
Saharsa	156	1011·1	..	1008·0	81·5	..	87	11,26	63·2	..	55	17,18	70·0	75·8	66·6	72·5	20·6	..	25·7	81	..	
Darbhanga	161	1011·1	+1·0	1007·9	82·4	—0·5	88	8, 9, 10	62·0	+2·5	54	17,18	67·1	76·1	64·9	69·5	20·1	+1·6	21·5	88	+10	
Motihari	218	1009·1	+1·0	1005·8	80·8	—1·4	86	1	59·3	+3·3	53	18,19,21	70·5	73·4	67·1	69·5	21·1	+3·2	22·8	83	+5	
Patna	173	1010·4	+0·5	1007·4	81·9	—0·2	89	8, 9, 10	64·4	+3·4	56	17	70·4	76·2	64·7	66·9	18·4	+1·6	18·2	73	+5	
Dehri	352	1004·2	..	1000·8	80·3	..	88	8	63·0	..	56	16	69·5	75·1	65·4	66·6	19·6	..	18·4	80	..	
Gaya	365	1003·3	+0·3	1000·3	80·8	—0·5	89	10	62·9	+5·9	54	30	67·8	75·8	64·8	67·5	19·6	+5·5	19·1	84	+17	
Naya Dumka ..	489	990·7	+1·2	996·4	81·9	—0·5	87	6 days	63·2	+3·6	56	6 days	70·7	75·5	66·9	68·4	20·7	+3·6	20·5	82	+12	
Sabour	122	1012·1	+1·2	1008·8	81·5	—0·7	88	1, 8, 9	63·2	+6·3	51	17	70·3	74·3	67·0	69·4	21·0	+3·4	22·3	84	+5	

Cloud amount (tenths of sky). 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Rainfall, inches. Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Number of rainy days, (0·10" or more) Total in the month.	Departure from normal.	Wind velocity, miles per hour. Mean.	Departure from normal.	Wind directions—Number of winds from :— 8 hrs. I.S.T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I.S.T. N	NE	E	SE	S	SW	N	NW	Calm	STATION.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Bay Islands—
3	+0·5	6·4	3·66	—6·86	0·99	6	8	—5·6	9·3	+0·9	0	8	18	1	0	2	0	0	1	0	10	18	2	0	0	0	0	0	Port Blair.
																													Assam—
2	+2·9	5·7	0·92	—0·40	0·32	29	4	+1·5	0·9	+0·3	8	5	6	0	2	3	0	1	5	3	3	0	0	1	1	1	0	21	Dibrugarh.
0	+0·2	5·5	2·23	+1·01	1·02	25	5	+2·7	1·7	+0·6	3	9	3	0	3	4	0	1	7	4	7	3	1	2	0	0	1	12	Sibsagar.
6	+1·7	4·0	2·05	+1·15	1·31	30	2	+0·2	1·3	—0·2	0	7	14	1	0	0	0	0	8	0	7	8	1	0	0	2	0	12	Tezpur.
9	+2·6	4·0	2·10	+1·55	0·92	20	5	+3·8	1·7	+0·6	2	5	7	5	3	1	1	0	6	1	4	5	2	1	2	1	0	14	Gauhati.
9	+2·8	3·1	0·91	+0·51	0·42	30	2	+1·3	2·9	—1·1	6	9	13	0	0	0	1	0	1	0	14	7	0	0	2	0	1	6	Dhubri.
0	—0·1	2·8	1·32	—0·43	0·65	29	3	+0·9	0·9	—0·1	0	2	5	4	0	0	1	1	17	0	0	0	0	0	0	2	0	28	Silchar.
																													West Bengal—
3	..	5·8	3·48	..	1·21	29	5	..	2·4	..	4	6	5	1	0	0	0	1	13	7	5	4	0	0	0	0	3	11	Dum Dum.
3	+3·0	5·4	3·64	+2·83	1·75	29	4	+2·9	1·2	—0·7	1	8	4	1	0	0	0	0	16	1	1	3	1	1	0	1	0	22	Calcutta.
4	+2·1	5·6	4·73	+3·45	1·91	29	6	+4·7	5·6	+0·1	4	10	8	6	1	0	0	1	0	7	3	2	4	5	4	0	0	5	Saugor Island.
4	—1·1	(c) 3·3	(c) 2·50	..	..	..	(c) 1	..	..	..	6	8	8	3	1	2	0	2	0	4	4	3	5	3	1	2	1	7	Sandheads.
1	+2·9	6·8	13·30	+12·43	4·26	28	9	+7·9	2·2	+0·9	8	13	3	2	2	0	0	0	2	8	8	3	3	1	2	0	0	5	Midnapore.
5	..	5·1	5·32	..	1·65	2	5	..	2·7	..	12	3	3	1	0	0	0	1	10	5	2	1	6	9	0	0	0	7	Contai.
4	+3·3	4·9	3·00	+2·14	0·94	7	5	+4·0	2·6	+1·4	7	7	6	1	1	2	0	4	2	6	6	3	1	0	0	2	7	5	Burdwan.
0	+2·9	5·1	2·89	+1·91	1·07	27	3	+1·8	1·4	+0·2	3	10	6	0	2	0	0	4	5	3	5	1	1	1	1	0	1	17	Krishnagar.
5	+2·9	5·9	4·69	+4·12	1·57	7	8	+7·0	2·5	—0·6	3	2	5	1	0	1	0	9	9	3	2	4	2	0	0	2	3	14	Asansol.
0	+3·8	5·0	2·27	+1·62	1·05	28	7	+6·3	1·2	+0·2	3	2	6	0	1	0	0	0	18	2	1	4	0	0	1	0	1	21	Berhampore.
1	+4·1	4·4	3·36	+2·91	1·41	29	4	+3·3	2·2	—0·2	5	5	4	2	1	0	0	7	6	2	0	1	0	3	1	1	8	14	Malda.
1	+2·7	4·1	2·86	+2·37	2·26	30	2	+1·2	2·3	+1·3	11	12	3	0	0	0	0	0	4	1	2	4	0	1	3	7	1	11	Jalpaiguri.
																													Orissa—
5	+2·7	6·3	10·46	+8·96	5·27	2	6	+4·5	1·9	+0·3	14	4	0	0	0	0	1	6	5	1	2	0	3	1	0	1	0	22	Balasore.
2	—0·2	4·1	4·23	+2·58	1·64	2	6	+4·5	2·9	—0·3	21	0	0	1	0	0	1	5	2	4	9	4	11	0	0	0	0	2	Chandbali.
1	+1·3	5·0	2·98	—0·21	1·50	2	5	+2·6	6·3	+0·6	14	10	1	1	1	0	0	3	0	1	6	4	11	6	2	0	0	0	Puri.
1	+1·6	5·3	4·76	+0·83	2·43	2	6	+3·2	5·6	—0·6	19	1	0	1	0	0	0	6	3	3	5	6	10	5	0	0	0	1	Gopalpur.
	+0·6	5·0	2·50	+0·88	1·06	29	6	+4·4	2·7	+1·5	1	5	2	0	0	0	0	1	21	0	4	0	1	0	0	0	0	25	Cuttack.
	+2·0	5·0	5·60	+4·49	3·48	12	7	+5·6	3·3	+0·3	1	2	3	1	2	2	8	4	7	0	2	6	9	5	1	2	1	4	Angul.
	+2·1	5·6	1·64	+0·83	0·77	27	3	+2·0	2·8	+0·7	8	11	9	1	1	0	0	0	0	4	11	1	4	4	2	2	1	1	Sambalpur.
																													Chota Nagpur—
	+3·1	5·5	3·03	+2·66	0·93	27	4	+3·3	2·4	+0·8	1	2	7	1	1	1	4	1	12	1	10	11	1	0	0	2	1	4	Jamshedpur.
	+4·1	6·0	3·08	+2·38	0·80	8	6	+5·0	1·0	—0·2	1	6	0	0	1	5	1	0	16	1	7	1	0	0	0	0	3	18	Chaibasa.
	+2·5	5·1	6·09	+5·48	1·76	7	9	+8·0	0·4	—2·3	2	0	0	0	1	0	0	0	27	1	0	0	0	0	0	0	0	29	Ranchi.
	+3·8	6·4	3·97	+3·41	1·25	28	8	+7·1	3·0	—1·3	2	4	1	3	1	2	0	5	12	3	6	3	0	3	0	0	10	5	Hazaribagh.
	+4·0	5·7	2·73	+1·57	0·53	27	5	+4·2	1·6	+0·1	1	2	6	5	1	0	1	4	10	4	8	2	0	0	0	2	6	8	Daltonganj.
	..	..	1·82	..	0·51	7,29	4	..	3·5	..	0	5	7	0	0	3	1	2	12	..	..	..	..	..	..	..	..	..	Dhanbad.
																													Bihar—
	+3·3	3·4	0·77	+0·43	0·73	28	1	+0·5	1·3	+0·3	0	4	5	2	0	4	2	0	13	0	1	1	2	0	1	2	0	23	Purnea.
	..	3·4	0·81	..	0·65	28	2	..	1·4	..	0	4	3	2	0	3	0	1	17	0	0	2	0	1	2	0	0	25	Saharsa.
	+2·7	3·3	0·28	+0·01	+0·24	29	1	+0·6	0·8	—0·1	0	8	4	2	1	2	5	1	7	0	1	3	0	0	2	1	0	23	Darbhanga.
	+2·1	2·5	0·33	+0·09	0·33	29	1	+0·7	0·6	—1·0	0	1	4	0	0	0	2	0	23	0	0	2	0	0	1	1	0	26	Motihari.
	+3·1	3·8	0·41	+0·10	0·20	28	2	+1·5	2·1	+0·6	1	3	2	1	2	8	4	1	8	1	3	0	2	0	5	3	2	14	Patna.
	..	5·2	1·76	+1·30	0·45	24	5	+4·3	1·6	..	1	1	0	4	4	6	2	4	8	2	0	0	1	0	1	2	8	15	Dehri.
	+3·0	4·9	1·61	+1·12	0·97	27	4	+3·3	2·6	—0·3	0	1	2	4	7	4	1	1	10	6	3	0	0	0	1	3	5	12	Gaya.
	+4·0	5·4	5·47	+4·93	1·69	6	6	+5·2	1·5	+0·4	4	5	6	4	0	1	0	2	8	3	3	5	3	1	1	1	2	11	Nowa Dumka.
	+4·2	4·9	0·99	+0·61	0·33	27	5	+4·3	2·4	—0·1	1	3	5	3	0	4	9	0	5	1	1	1	2	1	0	2	0	13	Sabour.

STATION.	Height of bar cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative hum %	
		Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
U. P., East—																					
Gonda ..	360	1004·0	..	1001·5	82·1	—1·6	87	2, 3	56·2	+1·3	50	30	59·8	72·9	58·9	64·7	16·5	+1·7	17·5	91	+13
Gorakhpur ..	254	1007·1	+0·4	1004·6	81·6	—0·5	88	2	61·0	+3·7	55	17, 21	66·4	77·5	62·2	66·3	17·4	+0·8	17·1	77	+3
Banaras ..	250	1007·2	+0·1	1004·7	80·3	—2·7	87	9	60·7	+4·8	52	20	65·5	76·5	63·1	66·9	18·5	+3·2	18·3	87	+16
Allahabad (Bamrauli)	322	1005·1	+0·5	1002·5	80·1	—3·3	87	4, 10	59·0	+4·7	51	19	64·0	76·1	61·3	65·2	17·2	+2·9	16·1	85	+15
Fatehpur ..	375	1003·6	..	1000·5	80·7	—4·2	88	2	57·3	+2·6	49	19	64·3	77·0	60·1	64·7	15·9	+1·8	15·4	75	+12
Kanpur ..	414	1002·4	+1·4	999·5	82·3	—0·5	88	9, 10	54·6	+0·7	41	19	60·2	77·0	57·4	63·1	14·7	+1·1	13·4	83	+13
Lucknow ..	371	1004·1	+1·4	1001·7	82·3	—1·6	88	3	55·1	+1·0	49	17	60·9	73·5	57·4	64·7	14·6	+0·5	18·9	80	+7
Bahraich ..	407	1002·5	+1·4	999·6	82·6	—0·4	88	2	55·9	—0·2	50	30	64·7	76·2	60·6	64·6	16·2	+0·9	15·5	77	+1
U. P., West—																					
Jhansi ..	823	987·4	—0·2	985·0	81·5	—3·9	91	1	55·8	+0·9	49	20	60·5	77·4	57·4	65·3	14·8	+2·9	16·1	83	+29
Agra ..	553	997·1	+0·6	994·5	82·4	—2·0	89	1	54·5	+2·6	47	17, 19	58·7	79·7	53·7	61·8	11·8	+1·4	10·3	71	+14
Mainpuri ..	516	998·3	+0·7	995·9	84·4	—0·2	97	8	53·4	+0·2	47	18,19,20	60·7	77·5	55·9	63·8	13·1	+1·2	14·0	71	+7
Aligarh ..	615	994·8	..	992·4	82·8	—0·9	89	1	52·9	—1·2	47	19	58·4	78·5	52·7	60·8	10·8	+0·9	10·4	67	+14
Bareilly ..	568	996·5	+0·8	993·5	81·8	+0·2	87	2, 3, 9	54·6	+1·1	48	30	63·8	75·5	57·9	61·8	13·7	0	12·7	69	—8
Meerut ..	762	990·7	..	..	..	..	..	..	49·8	..	44	17,19,30	53·3	..	51·4	..	11·9	..	..	82	..
Roorkee ..	899	984·8	+0·6	982·0	79·0	—0·6	84	2	49·5	—0·2	44	30	54·9	73·9	51·3	60·3	11·4	—0·5	11·9	77	—2
Dehra Dun ..	2,239	939·3	+1·0	937·5	74·6	—1·2	79	3, 4, 5	49·3	—1·8	43	28	55·9	69·0	51·2	59·6	11·5	+0·8	13·5	72	—3
East Punjab—																					
New Delhi	714	991·0	+0·3	988·6	81·9	—1·3	86	5 days	51·8	0	46	19, 20	56·0	76·8	49·9	59·7	9·6	+0·7	10·0	63	+10
Hissar ..	725	991·4	+0·9	988·6	82·9	—1·4	87	1, 2	47·0	—2·8	40	18	51·7	78·2	46·9	62·1	8·9	+0·3	11·6	68	+11
Ambala ..	892	984·7	+0·7	983·0	84·2	+2·1	93	15	49·5	—0·4	44	17,26	54·1	77·3	50·6	60·6	10·9	+0·5	10·6	72	+6
Ludhiana ..	810	987·8	+0·6	986·0	83·9	+2·5	90	5	48·8	—2·2	40	8	53·5	77·9	48·5	63·8	9·4	—0·4	14·1	69	—2
Kashmir—																					
Srinagar ..	5,205	846·6	—0·2	843·4	60·1	—2·4	66	4, 7, 8	28·8	—2·1	23	30	31·5	51·5	30·0	45·2	5·1	—1·3	5·8	86	—1
Gulmarg ..	8,709									(Closed during winter months)											
Dras (R) ..	10,059																				
Leh ..	11,529	669·0	+0·1	665·7	43·7	—3·1	54	8	19·1	—1·3	12	30	22·6	42·0	17·2	29·9	1·5	—1·3	2·0	42	—17
Skardu (R) ..	7,505																				
Gilgit (R) ..	4,890																				
Misgar (R) ..	10,190																				
Rajputana, West—																					
Sri Ganganagar	580	995·8	..	993·6	82·3	—2·2	91	1	45·9	—1·9	40	14	50·7	78·9	46·5	60·0	8·9	—0·1	[illegible]	71	+13
Bikaner ..	734	990·3	+0·5	988·0	84·0	..	94	1	46·9	..	42	5 days	51·2	83·5	46·1	..	8·3	..	..	71	..
Phalodi ..	783	987·7	..	986·4	85·3	..	95	1	49·5	..	44	30	55·2	83·1	47·8	66·4	7·9	..	14·5	53	—
Jaisalmer ..	793	989·9	..	985·4	86·3	..	94	2	51·3	..	46	30	58·8	86·6	47·3	59·5	2·4	..	6·5	37	..
Jodhpur ..	736	989·9	+1·3	987·4	86·8	—0·8	94	1	58·5	+2·8	49	12	61·8	84·1	49·3	60·7	6·6	—1·1	7·5	34	—1
Barmer ..	638	993·2	+0·7	987·2	88·0	—1·4	96	1	59·6	—1·3	50	17	62·7	85·1	52·9	65·7	9·7	—0·7	14·7	48	—
Rajputana, East—																					
Sikar ..	1,406	966·9	..	964·6	84·5	..	91	1	49·0	..	42	19	52·9	80·4	47·6	60·0	9·2	..	10·1	65	..
Jaipur ..	1,431	966·8	+0·1	964·3	82·5	—2·9	88	1	54·5	+0·8	48	17, 19	61·4	78·7	53·5	60·3	10·3	+0·9	9·5	57	+
Ajmer ..	1,593	961·1	0	958·6	82·6	—1·0	91	1	52·7	0	44	30	55·1	78·8	49·0	59·5	9·4	—0·5	9·6	64	+1
Kotah ..	843	987·1	+0·5	983·7	84·4	—2·3	94	1	59·6	+0·5	54	16,18,30	63·3	80·7	57·7	63·8	13·8	+3·1	12·5	69	+1
Jhalawar ..	1,053	976·3	—2·3	975·7	82·6	—2·1	94	1	57·5	+3·7	49	17	61·9	79·1	57·6	63·2	14·4	+3·0	12·5	74	+1
Rajsamand ..	1,850	951·7	..	..	81·8	..	89	1, 2	60·5	..	54	18, 25	64·2	..	57·0	..	13·1	..	..	66	..
Udaipur ..	1,910	950·3	..	947·5	81·9	..	91	1, 2	54·6	..	47	18	61·5	78·5	55·8	63·6	12·6	..	13·9	70	..

Cloud amount (tenths of sky). 8 hrs. I.S.T.	Cloud amount (tenths of sky). Departure from normal.	Cloud amount (tenths of sky). Mean. 17 hrs. I.S.T.	Rainfall, inches. Total of the month.	Rainfall, inches. Departure from normal.	Rainfall, inches. Heaviest fall in 24 hours.	Rainfall, inches. Date.	No. of rainy days, (0·10" or more). Total in the month.	No. of rainy days, (0·10" or more). Departure from normal.	Wind velocity, miles per hour. Mean.	Wind velocity, miles per hour. Departure from normal.	Wind direction—Number of winds from :— 8 hrs. I.S.T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I.S.T. N	NE	E	SE	S	SW	W	NW	Calm	STATION.
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., East—
7	+1·6	2·5	0	—0·20	0	..	0	—0·5	1·3	—0·4	1	0	1	0	1	0	7	4	16	0	0	0	1	0	0	0	1	28	Gonda.
8	+2·0	2·5	0·63	+0·44	0·63	28	1	+0·7	1·3	+0·5	2	1	0	1	1	0	9	0	16	0	0	0	1	1	1	9	1	17	Gorakhpur.
9	+3·6	4·2	1·85	+1·48	1·08	24	4	+3·4	..	..	3	3	3	1	2	9	3	1	5	5	4	0	1	0	2	5	8	5	Banaras.
1	+2·7	4·3	1·86	+1·55	0·82	24	5	+4·5	1·8	+0·1	0	3	0	1	1	1	3	1	20	1	3	1	0	0	0	0	2	23	Allahabad (Bamrauli).
8	+1·6	2·8	0·41	+0·32	0·20	22	2	+1·6	0·9	—0·6	0	0	2	0	0	2	0	2	24	0	0	0	0	0	0	0	0	30	Fatehpur.
9	+2·3	2·6	0·16	—0·19	0·08	23	0	—0·4	2·9	+0·4	2	3	0	1	0	1	4	1	18	11	3	0	1	0	1	1	6	7	Kanpur.
0	+1·0	2·2	0	—0·22	0	..	0	—0·4	0·3	—0·6	1	0	0	0	0	1	1	0	27	0	0	1	0	1	0	0	0	28	Lucknow.
4	+0·7	1·6	0	—0·28	0	..	0	—0·5	1·4	+0·2	0	1	0	1	0	0	0	3	25	0	0	0	0	0	1	1	0	28	Bahraich.
																													U. P., West—
8	+1·8	3·0	1·72	+1·43	1·27	22	3	+2·5	2·6	+0·9	0	6	0	0	0	0	1	1	22	0	9	1	0	0	0	2	0	18	Jhansi.
3	+0·3	1·5	0·20	+0·06	0·20	28	1	+0·7	1·4	—0·7	1	2	1	1	1	0	1	1	22	0	0	2	0	1	0	0	2	25	Agra.
3	+1·3	2·0	0·02	—0·13	0·02	28	0	—0·3	1·0	+0·1	0	0	1	2	1	0	4	2	20	0	1	0	2	0	0	1	4	22	Mainpuri.
4	+0·7	0·9	0	—0·03	0	..	0	—0·1	2·5	—0·4	0	0	3	1	0	0	0	0	26	1	1	0	2	0	0	3	7	16	Aligarh.
4	—0·5	1·0	0	—0·18	0	..	0	—0·3	0·9	+0·1	1	1	1	1	0	1	1	1	23	0	0	0	0	0	0	5	5	20	Bareilly.
7	..	..	0	—0·13	0	..	0	—0·3	2·5	..	0	2	2	1	0	0	7	4	14	..	..	..	..	..	..	..	..	..	Meerut.
5	—0·4	0·4	0	—0·23	0	..	0	—0·5	1·1	+0·1	0	0	0	2	0	0	0	5	23	0	0	0	1	0	0	0	6	23	Roorkee.
5	—0·9	0·5	0	—0·35	0	..	0	—0·7	1·5	—0·3	3	3	0	0	0	0	0	0	24	0	0	0	0	0	0	0	1	29	Dehra Dun.
																													East Punjab—
5	—0·5	0·6	0	—0·10	0	..	0	—0·3	2·4	..	2	1	4	0	2	1	15	0	5	4	2	3	3	0	0	1	8	9	New Delhi.
2	—0·6	0	0	—0·06	0	..	0	—0·2	3·2	+0·5	0	3	5	3	3	6	2	2	6	5	2	2	0	0	1	0	10	10	Hissar.
3	—0·9	0·1	0	—0·19	0	..	0	—0·4	..	..	0	0	0	2	0	0	0	14	14	0	0	0	0	0	0	0	23	7	Ambala.
3	—0·9	0·3	0	—0·13	0	..	0	—0·4	1·0	+0·2	0	2	3	1	0	1	0	1	22	1	1	0	0	0	0	1	4	23	Ludhiana.
																													Kashmir—
6	—1·1	2·6	0·01	—0·43	0·01	2	0	—1·1	2·0	+0·2	0	0	0	16	2	0	2	0	10	4	6	0	0	0	1	4	6	9	Srinagar.
																													Gulmarg.
																													Dras. (R).
8	—1·0	3·0	0	—0·04	0	..	0	—0·2	3·6	—1·7	1	24	2	1	0	0	0	1	1	0	0	0	0	2	24	1	1	2	Leh.
																													Skardu. (R).
																													Gilgit. (R).
																													Misgar. (R).
																													Rajputana, West—
3	—0·5	0·3	0	—0·01	0	..	0	0	1·2	—2·3	1	1	5	0	1	1	0	0	21	4	1	1	0	0	0	1	5	18	Sri Ganganagar.
2	—1·0	0·3	0	—0·05	0	..	0	—0·1	1·8	—0·7	0	2	0	2	0	4	0	0	22	0	19	0	0	0	1	0	9	1	Bikaner.
5	..	1·3	0	—0·02	0	..	0	—0·1	4·8	..	4	5	3	8	4	1	1	0	4	10	7	0	2	0	0	4	7	0	Phalodi.
1	..	0·5	0	..	0	..	0	..	4·8	..	4	14	3	0	0	5	1	2	1	2	14	2	0	0	2	0	10	0	Jaisalmer.
8	—0·5	1·2	0	—0·11	0	..	0	—0·2	2·1	—2·4	0	21	1	0	0	0	0	1	7	3	13	4	2	0	0	0	1	7	Jodhpur.
5	—0·9	0·9	0	—0·03	0	..	0	—0·2	4·0	+0·4	6	1	0	0	0	0	1	17	5	9	13	0	0	0	0	0	2	6	Barmer.
																													Rajputana, East—
6	..	0·6	0	..	0	..	0	..	1·7	..	1	0	2	2	0	0	0	0	25	3	3	4	0	0	2	7	6	5	Sikar.
4	+0·5	1·7	0	—0·14	0	..	0	—0·3	3·1	+0·3	1	4	8	4	1	0	0	0	12	7	2	2	2	3	1	2	4	7	Jaipur.
7	—0·3	1·0	0·02	—0·17	0·02	21	0	—0·4	0·8	—0·4	0	0	1	0	0	0	0	0	29	2	4	1	0	0	0	2	3	18	Ajmer.
4	+1·1	2·1	2·47	+2·24	1·94	21	3	+2·4	1·4	+0·4	1	2	2	2	0	1	2	0	20	0	5	2	0	0	3	0	0	20	Kotah.
3	+2·0	3·0	0·62	—0·11	0·43	23	2	+0·0	1·8	+0·6	4	1	0	0	1	1	0	3	20	3	14	3	0	0	0	0	1	9	Jhalawar.
1	..	..	0·84	..	0·50	23	3	..	4·0	..	11	2	1	1	1	1	2	9	2	..	..	..	..	..	..	..	..	..	Rajsamand.
3	..	2·1	1·99	+1·88	1·50	21	2	+1·7	1·3	..	3	2	1	0	0	0	0	1	23	0	16	8	2	0	1	1	1	7	Udaipur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humid %	
		Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Gujarat—																					
Deesa* ..	466																				
Bhuj ..	343	1002·7	—0·2	1000·3	90·3	+0·5	98	1	61·4	—0·6	53	18	64·9	88·0	56·3	62·7	11·6	—2·3	8·1	54	+3
Dwarka ..	37	1012·7	—0·7	1010·1	87·3	+0·2	93	4	68·0	—0·7	63	30	70·9	81·8	64·3	68·7	17·6	—1·6	18·0	69	—1
Jamnagar ..	60	1012·6	+0·1	..	87·4	—1·6	92	2,3	63·0	+0·9	57	30	71·1	..	63·1	..	16·2	—0·1	..	63	—1
Rajkot ..	432	998·5	—0·8	995·8	91·2	+0·1	97	13	63·4	+2·8	52	13	67·2	88·1	57·7	66·7	12·0	—0·2	12·7	54	0
Veraval ..	26	1011·4	—1·5	1009·0	90·2	..	98	2, 9	64·8	..	58	2	69·6	83·1	61·3	74·2	14·8	..	24·8	62	+7
Surat ..	39	1011·4	—1·2	1008·7	94·2	+2·3	101	2	70·8	+5·9	65	29	73·5	88·6	68·3	72·9	21·3	+4·9	20·6	76	+15
Bhavnagar ..	55	1011·5	—1·0	1008·6	90·4	—0·3	99	1	64·3	+1·7	56	13	67·5	88·4	58·3	68·4	12·5	—0·5	14·7	54	+2
Ahmedabad ..	163	1008·6	—0·6	1005·4	92·6	0	100	2	68·8	+3·2	64	4 days	71·0	88·7	60·5	68·9	13·3	+1·4	15·2	52	+2
Dohad ..	1,093	976·6	..	973·6	87·7	—1·4	95	2,3	62·4	+4·1	54	17	65·7	83·7	60·3	68·9	15·4	+2·1	17·4	72	+5
Baroda ..	115	1009·6	..	1006·4	92·6	+1·1	100	1, 2	64·5	+7·2	54	12	69·1	88·0	63·1	71·0	17·1	+1·5	18·2	71	+4
Central India, West—																					
Neemuch ..	1,626	960·0	+0·1	957·3	80·5	—2·0	92	1	57·5	+2·4	50	17, 30	62·2	79·7	55·8	62·0	12·7	+2·4	11·8	67	+16
Indore ..	1,823	952·0	—0·8	949·4	80·9	—2·9	91	1	59·8	+5·2	48	17	63·7	77·9	59·9	65·3	16·1	+3·3	16·2	81	+21
Bhopal ..	1,643	958·5	—0·5	956·2	80·1	—3·5	91	1	59·3	+4·1	49	16, 18	65·7	75·9	60·4	64·5	15·8	+3·9	16·1	74	+17
Guna ..	1,571	961·5	+0·2	959·1	79·8	—4·0	90	1	55·9	+4·8	45	18	61·0	76·4	57·0	63·1	14·3	+2·8	14·3	78	+15
Gwalior ..	681	992·9	..	990·1	81·3	..	90	1	53·9	..	45	17, 18	65·2	76·0	57·9	62·6	13·1	..	13·3	63	..
Madhosagar ..	757	989·9	..	987·2	82·5	..	90	1	59·8	..	54	29	64·1	77·9	57·5	61·1	13·2	..	10·8	67	..
Central India, East—																					
Nowgong ..	750	990·3	+0·5	987·5	79·1	—3·7	90	1	55·5	+2·7	47	18,19,20	60·2	74·9	58·1	63·1	15·6	+2·6	14·4	88	+14
Sutna ..	1,041	979·6	+0·1	977·0	78·2	—3·7	87	1	57·6	+3·4	48	19	61·9	75·2	60·6	66·9	17·6	+4·8	18·8	93	+28
Umaria ..	1,506	963·6	..	961·2	77·1	—4·4	86	1	58·4	+6·2	45	19, 20	63·3	73·3	61·0	64·9	17·3	+4·2	17·2	87	+22
Berar—																					
Buldana ..	2,133	941·4	..	938·5	80·3	..	89	1	65·8	..	56	30	68·0	76·3	65·8	68·7	20·2	..	20·9	87	..
Akola ..	925	981·7	—1·3	978·8	84·5	—3·5	96	1	68·2	+9·8	57	30	70·8	81·7	67·3	71·3	21·2	+7·8	21·5	82	+22
Amraoti ..	1,213	972·1	—1·1	969·1	82·9	—3·7	93	1	67·7	+5·1	57	30	70·4	79·8	66·4	70·1	20·3	+7·4	20·6	76	+23
C. P., West—																					
Khandwa ..	1,044	978·2	—0·8	975·1	83·9	—3·9	94	1, 2	64·5	+8·0	52	30	68·6	80·0	64·8	68·9	19·2	+6·6	19·1	80	+19
Hoshangabad ..	992	980·1	—1·5	977·4	80·5	—4·1	92	1	64·6	+6·2	56	17,18,30	67·4	77·5	63·5	69·0	18·3	+4·9	20·3	80	+16
Saugor ..	1,808	953·2	0	951·0	75·3	6·3	87	1	60·7	+2·3	54	16	64·6	72·5	58·9	62·3	14·7	+4·2	15·0	72	+22
Jubbulpore ..	1,289	970·8	0	968·1	80·6	—1·6	92	1	59·8	+7·5	49	4 days	64·6	75·2	61·9	65·9	17·7	+3·9	17·6	85	+10
Seoni ..	2,027	945·8	—0·1	943·3	79·2	—2·2	85	1, 21	62·0	+6·7	51	30	66·4	75·4	62·1	65·9	17·3	+4·5	17·9	78	+18
Betal ..	2,144	941·7	..	939·3	79·1	..	90	1	62·6	..	50	30	66·4	73·4	63·1	66·4	18·5	..	19·0	83	..
Nagpur ..	1,010	979·6	—0·8	976·7	83·9	—1·6	93	1	65·9	+6·8	55	30	70·5	78·8	65·8	69·6	19·6	+5·9	21·0	77	+18
C. P., East—																					
Gondia ..	1,526	979·4	..	976·4	83·0	..	90	5	66·4	..	56	30	69·6	79·2	66·3	69·7	20·6	..	20·5	83	..
Pendra ..	2,040	945·8	+0·2	943·3	77·2	—0·4	85	1	60·0	+4·7	48	20	65·5	71·4	62·2	64·8	17·8	+4·6	18·3	83	+18
Champa ..	878	987·6	..	984·3	84·0	..	91	7, 10	66·5	..	55	20	69·5	79·7	66·1	70·0	20·4	..	20·7	82	..
Raipur ..	979	981·5	+0·1	978·1	83·1	—0·6	90	5, 6	66·7	+6·1	56	30	70·7	79·7	64·9	67·8	18·4	+2·5	17·9	72	+4
Titilagarh ..	691	990·7	..	987·2	86·1	..	91	4 days	68·8	..	56	20	73·2	82·0	68·7	71·4	22·0	..	21·5	78	..
Kanker ..	1,318	969·6	+0·2	966·5	82·8	—0·2	89	6	66·6	+9·6	56	30	70·8	78·6	67·9	70·9	22·0	+5·5	22·4	86	+7
Bastar ..	654	999·3	—0·7	996·1	84·2	—1·1	89	4 days	69·5	+9·6	56	30	72·3	80·5	69·1	72·7	22·9	+5·7	24·0	84	+11
Sambalpur ..	1,815	952·3	+0·1	949·3	82·6	+1·6	88	5,6,7	65·6	+7·7	57	21	69·9	77·6	67·4	70·8	21·9	+3·6	22·2	86	+1

*Data not reliable.

Cloud amount (tenths of sky).			Rainfall, inches.				No. of rainy days, (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I.S.T.									17 hrs. I.S.T.										
	Departure from normal.	Mean. 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25		26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													Gujarat—
																													Deesa*
	—0·1	0·7	0	—0·08	0	..	0	—0·2	3·3	—0·1	2	3	1	0	3	0	0	0	21	10	15	2	0	0	0	0	2	1	Bhuj.
	—0·1	1·5	0·68	+0·60	0·68	21	1	+0·9	8·9	+1·6	9	19	2	0	0	0	0	0	0	3	6	1	0	0	0	0	19	1	Dwarka.
	+0·3	..	1·91	+1·85	1·91	21	1	+0·8	2·3	—3·3	1	3	2	0	0	0	0	0	24	..	..	..	..	..	..	..	..	..	Jamnagar.
	+0·1	2·1	0·26	+0·03	0·26	21	1	+0·7	5·7	+2·1	3	6	7	4	1	0	0	1	8	9	14	3	0	0	1	0	2	1	Rajkot.
	+1·4	2·4	5·60	+5·43	3·52	22	2	+1·8	9·5	..	8	19	1	0	0	0	0	1	1	2	2	0	3	7	6	5	5	0	Veraval.
	+1·5	3·9	2·22	+1·90	1·90	21	2	+1·5	5·0	+2·2	2	15	8	4	0	0	0	0	1	2	10	0	1	0	2	5	8	2	Surat.
	+1·0	4·2	0·23	—0·03	0·18	22	1	+0·7	3·7	+0·7	2	2	2	0	0	0	10	1	13	3	11	10	3	1	0	0	0	2	Bhavnagar.
	+0·1	2·8	0·23	+0·09	0·23	21	1	+0·6	4·8	+1·4	3	16	11	0	0	0	0	0	0	6	10	5	1	0	1	0	3	4	Ahmedabad.
	+1·5	3·2	0·50	—0·15	0·40	21	1	+0·1	5·4	+2·8	1	9	13	4	1	0	0	0	2	5	12	5	2	2	0	0	1	3	Dohad.
	+0·7	2·8	2·07	+1·27	1·76	21	2	+0·5	2·3	+0·6	2	8	5	1	0	0	0	0	14	8	8	4	0	0	0	1	0	9	Baroda.
																													Central India, West—
	+2·3	3·6	0·75	+0·44	0·48	23	3	+2·6	3·7	+0·4	2	18	4	0	1	0	1	0	4	1	16	3	3	0	2	1	0	4	Neemuch.
	+3·8	5·6	2·34	+1·73	0·95	23	5	+4·1	2·8	+1·3	1	11	7	4	2	0	0	0	5	1	16	6	4	0	0	1	1	1	Indore.
	+3·2	4·7	3·01	+2·00	0·99	24	5	+3·8	3·1	+1·4	1	12	3	5	0	0	0	0	9	1	16	5	1	1	0	0	2	4	Bhopal.
	+3·0	4·0	1·84	+0·97	0·86	8	3	+2·2	2·7	+1·4	3	1	5	7	1	0	0	1	12	8	8	2	2	0	0	1	1	8	Guna.
	..	3·2	0·47	..	0·40	22	1	..	1·1	..	1	0	3	1	2	0	1	4	18	2	0	3	0	0	0	0	1	24	Gwalior.
	..	3·5	0·49	..	0·38	22	1	..	3·3	..	0	4	0	0	2	12	0	0	12	5	9	4	4	1	0	1	5	1	Madhosagar.
																													Central India, East—
	+3·2	5·1	1·88	+1·45	0·93	8	4	+3·3	2·0	+1·2	1	6	5	0	7	4	2	2	3	8	15	4	0	0	0	2	1	0	Nowgong.
	+3·1	4·5	6·90	+6·55	2·52	23	8	+7·3	2·2	+0·5	0	4	5	0	0	1	3	0	17	2	8	8	0	0	1	0	6	5	Sutna.
	+4·2	5·3	3·25	+2·61	0·92	8	6	+5·3	1·9	+0·4	0	2	6	9	3	0	0	1	9	9	5	5	0	0	0	0	0	11	Umaria.
																													Berar—
	..	7·5	6·47	..	1·50	7	9	..	4·5	..	2	5	6	4	10	0	1	2	0	5	13	3	1	4	0	1	3	0	Buldana
	+4·6	5·9	5·47	+4·74	2·36	22	9	+8·0	3·7	+1·1	1	6	12	4	0	1	1	0	5	1	13	5	2	0	0	0	5	4	Akola.
	+4·3	6·0	6·76	+6·10	1·39	22	11	+10·0	5·7	+2·4	0	23	0	5	0	1	0	1	0	0	17	0	7	0	2	0	4	0	Amraoti.
																													C. P., West—
	+4·4	5·7	4·03	+3·27	0·97	9	9	+8·0	3·9	+1·6	5	16	3	1	1	0	0	1	3	9	9	1	3	2	0	0	6	0	Khandwa.
	+4·2	5·8	3·35	+2·68	1·28	24	4	+3·1	1·1	—0·5	4	14	2	1	0	1	0	0	8	3	12	0	0	0	0	0	0	15	Hoshangabad.
	+3·9	5·1	6·35	+5·72	3·12	23	6	+5·1	9·1	+2·2	2	9	10	4	3	0	0	0	2	6	13	8	0	0	0	0	0	3	Saugor.
	+4·8	5·5	3·82	+3·39	1·62	5	4	+3·1	2·5	+1·3	2	7	2	4	1	1	0	0	13	3	21	0	1	1	0	0	1	3	Jubbulpore.
	+3·1	5·4	4·65	+3·97	2·40	8	6	+5·0	3·5	+1·3	7	8	2	2	2	1	1	1	6	8	5	0	5	4	1	1	3	3	Seoni.
	..	5·8	7·46	..	2·19	7	8	..	2·5	..	1	4	15	9	0	0	0	1	5	4	13	7	3	1	0	1	1	0	Betul.
	+4·1	6·5	3·80	+3·03	1·53	6	9	+7·9	3·1	..	5	9	7	2	0	0	1	0	6	1	11	7	5	0	2	0	0	4	Nagpur.
																													C. P., East—
	..	5·2	6·41	..	2·15	13	6	..	2·3	..	12	9	4	2	1	0	1	1	0	6	7	2	3	1	2	0	5	4	Gondia.
	+3·6	5·8	4·10	+3·38	1·06	27	10	+8·7	2·4	+0·4	7	3	2	2	4	0	0	6	6	13	3	1	2	5	1	0	4	1	Pendra.
	..	6·2	1·53	..	0·35	13	7	..	3·9	..	10	4	6	2	1	0	0	5	2	12	4	6	1	2	0	1	2	2	Champa.
	+4·0	6·8	2·71	+2·18	1·80	6	2	+0·9	3·7	+1·7	10	8	3	1	1	1	0	2	4	7	9	2	4	0	2	0	1	5	Raipur.
	..	4·0	0·67	..	0·49	27	1	..	1·9	..	5	5	1	5	2	1	0	0	11	4	10	4	4	1	1	0	2	4	Titilagarh.
	+4·6	7·6	4·57	+4·19	1·92	29	5	+4·2	0·7	+0·2	0	1	0	0	0	0	0	0	29	1	2	1	0	0	0	0	0	26	Kanker.
	+4·2	5·9	3·67	+3·01	1 49	11	8	+6·7	1·8	+0·4	0	8	1	2	0	2	0	3	14	0	7	0	5	0	1	0	2	15	Chanda.
	+3·5	6·7	4·44	+3·30	1·14	12	6	+4·1	2·1	+0·5	0	14	0	0	0	8	0	0	8	0	10	0	0	0	10	0	5	5	Jagdalpur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humi %		
		Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Konkan—																						
Dahanu ..	15	1011·4	..	1009·1	88·6	..	100	23	71·6	..	64	29	74·0	84·1	70·7	77·8	24·2	..	29·7	84	..	
Bombay ..	35	1010·5	—0·3	1008·4	88·7	—0·7	95	3	75·8	+3·3	71	27, 29	79·3	84·1	74·1	77·2	26·4	+3·4	28·8	78	+2	
Alibag ..	23	1011·6	—0·5	..	87·8	—0·6	93	3, 16,17	74·4	+4·7	70	29	77·3	..	73·5	..	26·5	+5·4	..	83	+13	
Harnai ..	66	1008·5	..	1006·8	89·8	..	93	6 days	(c) 76·6	..	73	29, 30	79·8	83 4	74·1	77·4	26·2	..	29·4	76	..	
Devgad ..	110	1007·9	..	1005·1	89·1	..	94	9, 10	77·3	..	73	19	79·7	85·5	75·1	77·6	27·7	..	28·8	79	..	
Vengurla ..	29	1010·8	..	1008·0	90·3	..	94	9, 16	74·9	..	72	4 days	77·4	85·6	74·8	77·3	28·3	..	28·2	88	..	
Marmagao ..	202	1004·9	+1·5	1002·2	86·9	—1·3	93	16	..	..	..	..	79·4	84·4	74·9	76·7	27·5	+5·0	27·9	80	+8	
Honavar ..	85	1009·5	..	1006·5	90·0	..	96	10	74·2	..	70	12	78·1	84·5	74·6	77·7	27·7	..	29·3	85	..	
Bombay Deccan—																						
Jalgaon ..	660	990·0	..	986·7	87·6	..	97	1	67·4	..	57	30	71·4	84·5	67·5	72·5	21·2	..	21·9	81	..	
Malegaon ..	1,432	964·9	—0·6	960·4	86·0	—1·7	95	1	66·5	+8·8	57	17	72·2	81·3	67·8	69·9	21·3	+8·0	19·8	78	+17	
Ahmednagar ..	2,154	940·1	—1·2	937·2	83·9	—1·2	93	1	66·7	+8·5	60	29,30	70·7	80·0	67·4	70·4	21·6	+7·7	21·5	84	+22	
Poona ..	1,834	950·3	—1·4	947·5	86·1	—0·4	95	1	67·4	+8·9	61	30	70·1	80·3	68·4	71·3	23·1	+8·1	22·5	91	+15	
Sholapur ..	1,570	959·7	—0·6	956·3	87·1	—0·4	94	1	69·2	+6·4	63	30	72·3	83·5	69·2	71·9	23·1	+8·4	22·1	86	+26	
Miraj ..	1,817	950·8	—1·0	947·4	85·9	+0·7	92	1, 2	68·4	+5·8	64	24, 28	71·1	81·6	68·8	71·4	23·1	+6·9	22·1	89	+24	
Kolhapur ..	1,885	948·9	..	945·6	85·7	..	92	1	68·2	..	64	28, 29	71·0	81·7	68·4	71·2	22·7	..	21·8	88	..	
Bijapur ..	1,950	946·5	—0·9	943·7	84·2	—1·5	90	1, 2	69·4	+6·7	67	25,27,29	72·1	81·5	68·9	70·6	22·9	+6·7	21·1	85	+20	
Belgaum ..	2,562	926·7	—0·1	923·5	81·6	—1·1	86	1, 2	66·1	+4·6	63	23	69·5	77·9	67·8	70·1	22·6	+6·8	22·0	91	+22	
Gadag ..	2,131	940·7	—0·2	937·5	86·7	+1·8	92	2	69·0	+4·2	66	26	72·2	82·0	68·9	70·6	22·8	+5·7	20·9	84	+16	
Hyderabad, North—																						
Aurangabad ..	1,905	948·8	—1·4	946·2	83·8	—2·3	92	1,2	67·0	+6·7	56	30	69·4	79·4	67·3	70·5	22·0	+8·6	21·9	90	+33	
Parbhani ..	1,350	965·9	..	962·9	84·0	..	93	1	67·6	..	55	30	71·6	80·6	69·0	72·1	23·1	..	23·0	88	..	
Bidar ..	2,178	939·2	..	936·5	80·4	—2·7	87	21	67·9	+4·2	61	30	70·6	76·5	68·1	70·1	22·5	+5·9	22·5	89	+23	
Nizamabad ..	1,250	970·5	—0·6	966·6	85·1	—0·5	92	20	71·8	+11·4	68	29	74·1	81·5	71·1	72·1	24·7	+7·4	22·7	85	+14	
Ramakundam ..	527	996·0	..	992·7	86·9	..	91	4 days	72·4	..	63	30	75·1	83·0	71·6	73·7	24·9	..	24·2	84	..	
Hyderabad, South—																						
Gulbarga ..	1,503	961·4	—1·2	958·5	83·5	—3·8	91	1	70·2	+7·0	64	30	70·7	81·9	70·3	73·2	25·1	+8·8	24·3	85	+21	
Raichur ..	1,311	968·1	—0·6	964·8	85·7	—0·9	91	1	71·9	+4·3	70	16, 18,28	74·4	83·2	71·1	72·0	24·6	+5·9	21·7	84	+16	
Hyderabad (Begumpet)	1,778	952·9	—0·3	950·0	83·7	—1·4	90	1	70·0	+8·4	64	30	71·4	78·4	70·1	72·1	24·3	+6·6	24·4	94	+22	
Hanamkonda ..	881	983·3	—0·8	980·2	85·8	+0·5	92	20	71·4	+7·3	63	30	74·3	81·3	71·8	73·3	25·5	+7·0	24·4	88	+16	
Khammameth (R) ..	367																					
Mysore—																						
Chitaldrug ..	2,405	931·5	+0·2	928·3	82·3	—0·9	87	1, 2	67·3	+2·4	64	26	70·9	79·5	68·6	69·7	22·9	+4·2	20·8	89	+16	
Hassan ..	3,149	907·6	..	904·8	80·8	0	84	2	65·4	+4·0	61	27	68·4	76·5	66·2	67·9	21·1	+2·3	19·8	89	+10	
Bangalore ..	3,021	911·7	+0·1	908·7	80·4	+1·1	85	6	65·9	+4·2	62	26	68·7	76·7	66·3	67·1	21·1	+2·5	18·8	88	+7	
Mysore ..	2,518	927·7	—0·1	924·6	82·9	+0·6	88	2, 3	67·6	+3·2	65	27, 29	70·6	80·7	67·9	68·6	22·3	+2·3	19·0	87	+7	
Malabar—																						
Mangalore ..	72	1009·5	—0·1	1006·6	87·8	0	91	14, 15,17	75·4	+1·8	72	2, 24	78·7	84·3	75·3	77·5	28·4	+3·2	29·1	85	+7	
Calicut ..	27	1010·7	—0·5	1007·7	89·4	+2·1	91	4 days	75·3	+1·4	73	9	78·2	86·0	75·5	78·3	28·9	+1·9	29·6	88	+3	
Palghat ..	319	1001·1	..	997·6	89·6	..	93	13, 30	74·9	..	71	28	78·2	84·5	74·3	75·7	27·2	..	26·4	83	..	
Cochin ..	10	1011·5	—0·1	1008·5	86·5	+0·8	90	30	75·6	+0·3	74	20, 27	80·0	84·2	75·8	77·5	28·5	+1·4	29·2	82	0	
Alleppey ..	12	1011·3	..	1008·4	88·0	..	90	13, 30	75·3	..	72	26	80·5	84·4	77·5	77·2	30·8	..	28·6	87	..	
Trivandrum ..	211	1004·4	0	1001·9	86·5	..	89	16	73·7	..	71	2, 3, 27	76·7	81·6	74·8	78·1	28·6	+1·3	28·3	92	+4	
Nagercoil ..	195	1005·0	..	1002·3	88·0	..	91	4 days				..	78.9	82·5	74·5	76·1	27·1	..	27·8	81	..	

(c) Mean of 28 days.

d amount hs of sky).		Rainfall, inches.				No. of rainy days, (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
										8 hrs. I.S.T.									17 hrs. I.S.T.									
Departure from normal.	Mean. 17 hrs. I.S.T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Konkan—
..	4·1	11·28	..	10·10	22	2	..	6·3 (b)	..	1	1	18	5	0	0	0	0	4	12	0	0	1	0	0	5	11	0	Dahanu.
+2·9	4·5	4·54	+4·01	3·97	22	4	+3·2	8·3	+2·0	3	11	9	5	1	1	0	0	0	7	1	1	0	1	2	3	15	0	Bombay.
+2·1	..	5·17	+3·62	4·20	22	4	+2·6	4·6	+0·1	1	7	4	2	0	1	0	1	14	..	..	..	..	..	..	..	..	..	Alibag.
..	..	3·31	..	1·80	11	5	..	8·1	..	2	11	2	10	1	1	1	2	0	0	0	0	2	1	5	10	12	0	Harnai.
..	7·1	2·46	..	1·02	22	5	..	7·7	..	1	6	14	4	3	0	0	1	1	0	1	2	0	2	4	5	16	0	Devgad.
..	6·2	..	..	..	..	..	..	..	..	1	1	1	3	0	1	0	0	23	0	3	1	1	2	7	9	0	7	Vengurla.
+2·0	5·5	5·64	+4·44	2·50	19	5	+2·6	6·5	+1·5	0	7	14	6	2	0	1	0	0	0	0	2	1	2	4	13	8	0	Marmagao.
..	6·6	4·59	+2·71	1·34	10	6	+3·2	2·6	..	0	5	18	4	0	0	1	0	2	1	1	2	0	2	0	11	8	5	Honavar.
																												Bombay Deccan—
..	4·9	1·67	+0·89	0·97	7	6	+5·1	4·8	..	0	2	21	3	0	0	1	0	3	7	8	9	3	0	1	0	2	0	Jalgaon.
+3·2	5·3	2·80	+1·93	1·60	12	6	+4·8	2·6	—0·6	0	4	0	1	0	0	0	0	25	1	13	3	3	0	1	1	3	5	Malegaon.
+4·4	6·1	8·52	+7·41	4·91	23	11	+9·6	4·3	+0·2	2	7	1	3	3	6	0	5	3	5	7	6	5	2	1	2	1	1	Ahmednagar.
+4·4	6·8	8·22	+7·14	2·90	23	11	+9·4	1·8	—1·9	0	0	5	0	0	3	3	0	19	0	5	7	3	0	0	3	1	11	Poona.
+4·3	7·2	3·46	+2·13	1·32	11	5	+3·3	6·2	+0·1	5	8	2	11	0	0	0	0	4	1	12	4	6	1	3	0	1	2	Sholapur.
+1·8	7·9	3·57	+1·75	0·60	18	8	+5·5	4·7	—0·3	4	4	8	2	1	1	1	2	7	4	3	12	1	0	2	4	1	3	Miraj.
..	5·6	2·38	..	1·44	11	4	..	5·9	..	0	10	6	0	0	2	2	0	10	1	6	9	1	0	3	4	2	4	Kolhapur.
+2·8	7·0	2·03	+0·76	0·53	22	6	+4·2	3·6	+1·2	7	4	2	6	2	3	0	0	6	3	9	3	6	1	3	0	4	1	Bijapur.
+0·3	5·3	5·51	+3·96	1·70	13	12	+9·6	3·9	+0·7	1	13	10	0	4	0	0	0	2	2	6	13	0	1	8	0	0	0	Belgaum.
+4·4	8·5	2·35	+0·57	1·49	4	5	+2·0	4·8	+0·5	0	4	7	2	1	1	2	1	12	0	8	8	2	0	2	3	2	5	Gadag.
																												Hyderabad, North—
+5·0	6·7	5·88	+4·93	1·35	8	9	+7·7	5·3	+0·7	3	8	12	2	0	1	2	0	2	4	7	8	3	0	1	2	3	2	Aurangabad.
..	6·7	10·33	+8·97	4·54	5	9	+7·2	..	..	0	8	17	1	1	0	2	0	1	4	4	13	2	1	1	2	0	3	Parbhani.
+4·4	8·2	13·85	+12·99	4·86	22	10	+8·3	5·7	+0·2	2	5	6	5	8	3	1	0	0	2	8	6	3	4	5	0	2	0	Bidar.
+2·6	5·8	1·92	+1·23	0·56	24	6	+4·9	2·7	+0·5	0	2	0	14	0	1	0	0	13	0	13	3	9	1	3	0	0	1	Nizamabad.
..	6·7	3·29	..	2·57	28	4	..	3·4	..	9	3	0	7	3	0	0	0	8	8	2	3	9	1	1	0	1	5	Ramakundam.
																												Hyderabad, South—
+2·4	5·0	8·81	+7·71	2·55	4	6	+4·3	3·7	—2·2	4	10	8	4	3	1	0	0	0	2	7	8	3	5	4	0	1	0	Gulberga.
+3·1	6·8	3·54	+2·38	1·63	22	6	+4·2	5·9	+0·5	1	2	10	15	1	0	0	1	0	0	1	9	17	1	0	2	0	0	Raichur.
+4·9	7·5	9·02	+7·88	3·14	25	8	+5·9	4·9	+1·1	1	4	6	11	0	0	0	0	8	1	3	15	7	4	0	0	0	0	Hyderabad (Begumpet).
+2·9	5·7	3·39	+2·29	1·42	15	8	+6·3	4·4	+1·5	7	1	2	9	7	0	0	2	2	5	4	4	10	4	1	0	0	2	Hanamkonda.
																												Khammameth (R)
																												Mysore—
+1·9	7·2	4·67	+2·30	2·00	25	8	+4·6	4·2	+0·5	0	0	7	8	1	1	2	1	10	1	3	15	4	2	1	1	2	1	Chitaldrug.
+2·2	6·5	2·46	—0·57	1·40	6	4	—0·6	4·5	+1·7	0	1	13	6	1	1	5	0	3	2	4	15	3	0	5	1	0	0	Hassan.
+2·5	7·0	1·49	—1·18	0·53	18	4	—0·5	6·5	+0·1	0	3	14	7	1	0	2	1	2	1	1	12	12	0	0	1	3	0	Bangalore.
+1·8	7·3	1·92	—0·82	0·81	5	4	—0·2	6·3	+1·3	1	5	14	2	0	1	4	0	3	4	5	14	2	0	0	5	0	0	Mysore.
																												Malabar—
+1·5	7·1	6·85	+4·00	1·26	23	10	+5·6	4·6	+0·6	1	4	21	3	0	0	0	0	1	4	0	1	0	2	6	5	12	0	Mangalore.
+1·3	7·6	8·09	+2·63	3·38	10	9	+2·8	5·6	+1·8	1	13	12	1	1	0	0	2	0	0	1	1	0	2	5	13	8	0	Calicut
..	6·0	4·89	..	2·59	20	6	..	4·6	..	0	0	19	1	0	0	6	0	4	0	0	17	0	0	1	7	2	3	Palghat.
+0·3	7·2	3·69	—3·00	0·79	3, 20	8	—0·4	4·6	+1·3	1	6	17	2	0	0	0	0	4	1	1	2	0	0	6	14	6	0	Cochin
..	6·7	11·01	..	1·55	5	19	..	4·7	..	0	5	14	7	0	0	0	0	4	1	0	1	2	1	4	10	11	0	Alleppey.
—1·3	7·6	21·08	+14·10	6·41	17	15	+5·5	3·2	+0·6	4	8	3	5	1	0	0	1	8	2	3	0	4	0	6	6	6	3	Trivandrum
..	8·8	14·06	..	4·60	17	12	..	5·3		3	12	4	0	0	0	4	2	5	0	8	7	3	0	3		2	0	Nagercoil.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative hum %	
		Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 17 hrs. I.S.T.	Mean. 8 hrs. I.S.T.	Departure from normal.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Madras, South east—																					
Pamban ..	37	1010·7	+0·3	1007·6	86·1	+1·0	90	3, 4	76·1	—0·1	72	5	80·7	82·3	77·3	77·9	30·5	+1·4	30·6	85	—1
Madura ..	437	997·2	0	993·8	88·1	+1·4	97	3	73·9	+0·9	71	4 days	78·9	83·3	74·5	75·8	27·1	+1·6	27·0	81	—2
Negapatam ..	31	1011·1	+0·2	1008·4	86·6	+2·3	95	3	77·5	+3·1	74	16,26,28	81·3	83·3	76·4	77·7	28·8	+1·4	29·9	79	—6
Trichinopoly ..	295	1002·4	0	999·0	87·4	+0·9	97	3	74·2	+2·3	71	26	77·6	83·4	74·5	75·4	27·8	+0·8	26·4	86	+5
Coimbatore ..	1,341	966·6	—0·2	963·2	86·1	+0·7	92	1	71·5	+2·5	68	28	74·4	82·2	71·6	72·5	25·2	+1·7	22·9	87	+2
Salem ..	913	981·1	—0·1	977·4	88·0	+1·0	96	3	72·4	+3·2	69	28	75·1	82·9	71·9	73·7	25·3	+1·7	24·2	85	+4
Cuddalore ..	39	1011·1	0	1008·1	85·4	+1·0	94	2	75·4	+2·7	73	23,27	78·4	83·0	75·5	76·5	28·8	+1·8	28·2	87	0
Vallore ..	703	988·6	+0·3	985·4	86·4	+2·1	94	4	73·0	+3·9	69	28	75·7	83·0	73·5	74·8	27·2	+2·8	25·7	90	+3
Madras ..	51	1010·9	—0·2	1008·2	86·4	+1·0	94	4	74·8	+2·9	72	18,27	78·4	82·1	75·8	76·1	29·3	+2·6	28·0	88	+2
Arogyavaram	2,299	935·7	..	932·7	80·8	..	86	6	67·5	..	63	26	71·2	76·9	68·3	69·4	22·5	..	21·5	86	..
Madras, Deccan—																					
Cuddapah ..	428	998·8	+0·2	994·8	86·9	—0·8	94	1	73·9	+4·0	70	2	80·4	83·5	74·9	76·6	27·1	+3·4	28·1	77	—2
Bellary ..	1,473	962·5	—0·5	959·1	85·1	—1·9	90	2	71·1	+4·9	69	6 days	73·5	82·6	71·0	72·6	24·7	+6·1	22·7	88	+17
Kurnool ..	923	981·5	—0·3	978·0	86·8	—1·1	92	1	71·3	+5·4	67	2	75·9	83·6	72·3	73·5	25·5	+5·8	23·4	84	+10
Rentichintala ..	348	1001·5	..	998·1	85·0	—2·1	91	12	72·0	+4·3	68	26	76·3	83·5	73·6	74·6	27·2	+6·0	25·6	87	+12
Anantapur ..	1,147	973·4	..	969·9	86·0	..	91	1	71·9	..	68	28	75·3	83·2	71·7	73·2	24·9	..	23·4	83	..
Madras Coast, North—																					
Nellore ..	66	1010·5	—0·3	1007·7	85·6	+0·3	90	5, 6, 21	74·3	+2·4	69	2	77·2	81·4	75·5	76·5	29·4	+3·0	28·9	92	+6
Ongole ..	38	1011·6	..	1008·5	84·7	..	91	1	73·8	..	71	2	76·7	80·9	74·5	75·8	28·5	..	28·2	90	..
Masulipatam ..	10	1013·0	—0·4	1010·3	83·6	—1·2	88	1	75·0	+3·8	68	2	78·7	80·8	75·7	75·8	29·0	+4·3	28·2	87	+6
Cocanada ..	26	1013·1	+0·2	1010·1	83·4	+0·3	88	1	74·3	+2·7	70	23	78·9	80·9	75·0	75·7	27·9	+4·7	28·0	83	+7
Vizagapatam ..	126	1009·8	+0·1	1007·2	83·4	—0·6	89	1	74·5	+2·1	70	23	78·3	80·6	74·0	74·4	27·7	+6·3	26·3	80	+14
Calingaratam ..	19	1013·6	+0·1	1011·0	83·6	+0·1	87	4 days	73·0	+3·7	67	22	75·7	80·9	72·7	75·2	26·1	+2·7	27·3	86	+4
Hill Stations excluding Kashmir.																					
Shillong ..	4,921	854·1	+1·1	851·9	64·4	—1·6	72	1	47·3	+1·1	42	13	58·0	57·9	53·9	56·0	12·6	+0·5	14·5	77	+6
Cherrapunji ..	4,309	873·1	+1·3	870·8	66·6	—0·9	73	16	52·8	—1·2	48	21	61·0	58·5	56·5	56·9	13·9	+1·0	15·2	76	+12
Aijal	3,599	894·1	..	892·1	72·3	..	77	14	57·5	..	52	19	63·9	64·5	60·9	62·3	17·1	..	18·4	84	..
Darjiling ..	7,432	778·7	—0·2	776·7	56·1	+0·5	62	1, 3, 12	42·7	—0·4	34	30	48·4	47·3	45·7	45·6	9·5	+0·3	9·8	83	+4
Kalimpong ..	3,965	882·8	—0·3	880·1	67·1	+0·3	70	11 days	51·4	—2·0	43	30	56·9	59·2	54·9	56·6	13·9	+0·7	14·7	88	+11
Katmandu ..	4,388	871·6	..	868·2	71·1	—1·7	78	9	46·0	+0·3	41	26	50·5	61·9	49·2	55·7	11·3	+0·7	12·8	92	+2
Muktesar ..	7,592	774·1	—0·6	772·6	58·5	—0·3	66	6, 7	41·5	—1·4	33	28	46·4	51·5	38·9	45·3	5·4	+0·3	8·3	54	+7
Mussoorie ..	6,699	799·5	..	798·9	57·9	—1·6	65	11	44·9	—0·2	37	29	50·6	51·9	41·8	46·1	6·2	+0·4	8·6	49	—1
Simla ..	7,224	784·3	+0·4	788·5	56·5	—1·8	63	7	42·8	—1·4	35	28	46·9	50·9	36·5	43·0	3·6	—0·6	6·6	36	—1
Abu	3,945	883·8	—0·1	882·0	73·7	0	81	2	56·0	—1·8	50	26	61·1	68·2	51·8	53·9	9·4	+1·1	8·4	49	+1
Pachmarhi ..	3,528	897·6	+0·1	895·3	71·8	—2·7	80	1	57·5	+6·8	44	17	62·5	68·5	59·7	62·5	16·4	+4·9	16·9	85	+25
Mahabaleshwar ..	4,536	864·3	—0·3	862·6	73·8	—0·2	80	1	60·8	+2·0	56	11, 30	62·9	67·8	61·6	65·0	18·1	+6·1	19·8	92	+33
Mercara ..	3 781	886·1	—0·6	883·8	71·6	—3·5	75	12, 13,29	62·7	+2·3	60	23	64·9	71·6	63·9	67·3	19·9	+2·4	20·1	94	+8
Ootacamund ..	7,364	780·9	+0·6	779·3	65·4	+1·7	70	10	49·6	+1·5	41	26	53·5	59·9	52·2	56·0	12·9	+1·3	13·7	92	+13
Coonoor ..	5,730	828·4	..	..	66·7	—0·3	74	3	55·5	+2·2	49	26	62·3	..	59·3	..	16·1	+1·9	..	82	+6
Kodaikanal ..	7,688	772·4	+1·0	770·8	61·4	+0·5	66	3	49·9	+0·5	45	26, 27	53·7	56·3	52·2	54·6	12·8	+1·0	13·9	91	+9
Ceylon—																					
Colombo ..	24	1010·9	0	1008·2	86·5	+0·5	88	6 days	73·5	—0·2	71	24, 25, 26	76·4	82·0	74·4	76·0	28·2	+0·5	27·9	91	+1
Trincomalee ..	24	1011·1	+1·1	1008·2	86·0	+0·9	94	4	75·6	+1·0	73	8,27,30	79·1	82·2	75·7	76·7	28·8	+0·9	28·9	85	—4
Hambantota ..	61	1009·2	+0·2	1006·7	85·2	—0·2	88	2, 4, 5	74·4	+0·5	71	26	77·9	81·8	75·0	76·8	28·3	+0·6	29·2	87	—3
Mannar ..	12	1011·7	..	1008·6	86·4	..	89	4 days	76·4	..	74	4 days	79·2	81·5	75·9	76·5	29·1	..	28·9	85	..

d amount hs of sky). Departure from normal.	Mean. 17 hrs. I.S.T.	Rainfall, inches. Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Number of rainy days (0·10 or more). Total in the month.	Departure from normal.	Wind velocity, miles per hour. Mean.	Departure from normal.	Wind direction—Number of winds from :— 8 hrs. I.S.T. N	NE	E	SE	S	SW	W	NW	Calm	17 hrs. I.S.T. N	NE	E	SE	S	SW	W	NW	Calm	STATION.
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												Madras, South east—
+2·0	5·5	15·08	+3·36	3·59	15	14	+1·0	7·7	—1·2	5	5	6	4	2	2	2	4	0	8	12	0	2	2	2	2	2	0	Pamban.
—0·6	7·7	7·05	+1·32	1·79	18	7	—1·0	2·7	—1·4	10	3	1	0	0	0	2	5	9	4	7	7	1	0	0	0	1	10	Madura.
+1·2	6·0	14·43	—3·11	5·02	16	10	—3·0	8·9	+2·8	0	9	4	5	1	3	2	4	2	0	19	6	3	1	1	0	0	0	Negapatam.
+1·1	6·3	8·04	+2·20	2·41	17	12	+3·5	5·1	+1·3	7	7	4	0	1	0	6	3	2	2	9	13	1	1	2	0	1	1	Trichinopoly.
+0·9	6·3	5·29	+1·26	1·60	17	7	+0·2	4·3	+2·1	10	11	2	0	2	4	1	0	0	9	11	2	1	2	4	1	0	0	Coimbatore.
+0·2	7·1	4·92	+1·11	1·71	5	9	+2·8	4·8	+2·2	1	7	8	1	1	1	2	1	8	2	2	12	3	2	0	0	0	9	Salem.
0	7·3	15·33	—0·19	4·81	16	13	+1·4	5·1	+1·3	12	1	2	0	1	4	0	4	6	5	11	9	4	0	0	0	0	1	Cuddalore.
+1·7	6·2	9·45	+1·77	2·08	17	8	—0·5	3·6	+1·6	0	4	4	0	0	0	0	0	22	0	3	17	4	1	1	1	0	3	Vellore.
+0·7	5·6	8·54	—5·42	3·15	18	12	+0·9	9·7	—2·6	1	6	4	5	2	1	2	9	0	1	12	7	8	0	0	0	2	0	Madras.
..	6·4	3·54	..	1·27	9	7	..	3·4	..	4	2	1	8	4	1	1	1	8	1	7	7	8	1	0	1	2	3	Arogyavaram.
																												Madras, Deccan—
+1·3	5·2	4·89	+1·36	1·86	3	10	+4·8	3·1	—0·3	0	0	5	1	0	0	0	0	24	0	0	11	3	1	0	0	1	14	Cuddapah.
+3·4	6·3	4·60	+2·63	1·45	22	7	+3·9	2·8	+0·4	1	2	4	3	0	0	0	1	19	3	1	9	8	2	0	1	0	6	Bellary.
+2·7	7·0	2·88	+1·69	0·49	24	10	+7·9	(o) 4·1	+1·7	1	2	5	6	2	0	1	0	13	0	3	8	8	1	0	1	0	9	Kurnool.
+0·4	7·4	2·50	+0·60	1·36	3	5	+1·4	3·5	+0·2	2	4	2	5	1	0	0	1	15	1	4	10	11	0	1	0	0	3	Rentichintala.
..	5·7	6·60	+4·23	3·91	5	8	+4·3	6·0	..	1	7	8	8	0	3	0	2	1	2	6	9	8	0	0	0	3	2	Anantapur.
																												Madras Coast, North—
—0·4	6·3	14·34	+2·64	6·14	8	14	+5·2	2·6	—0·4	2	1	1	1	0	0	0	5	20	1	2	18	2	0	0	0	1	6	Nellore.
...	6·9	9·92	..	2·36	10	13	..	3·5	..	1	7	1	1	0	1	0	3	16	0	9	4	8	0	0	0	1	8	Ongole.
+2·9	5·8	13·54	+7·76	5·61	8	10	+5·3	6·4	+2·8	8	6	5	2	4	0	0	0	5	0	1	8	15	1	0	0	1	4	Masulipatam.
+1·3	5·5	15·19	+9·60	6·62	9	9	+4·5	9·2	+2·2	3	22	0	2	0	0	0	2	1	0	10	5	14	0	0	0	1	0	Cocanada.
+0·6	4·6	7·22	+2·55	1·57	4	10	+6·1	4·8	+1·0	6	8	2	2	0	0	1	3	8	1	5	13	9	1	0	0	0	1	Vizagapatam.
+2·6	6·2	5·83	+2·44	1·95	13	6	+3·3	7·9	+1·9	13	2	2	1	0	0	0	12	0	1	6	14	9	0	0	0	0	0	Calingapatam.
																												Hill Stations excluding Kashmir.
+2·1	8·9	3·80	+2·19	0·90	29	8	+5·3	1·6	+0·4	1	2	2	1	1	2	0	2	19	3	2	1	0	0	2	0	1	21	Shillong.
+2·1	6·4	3·52	+0·82	0·73	2	6	+4·2	1·6	—1·1	1	10	3	1	1	1	3	1	9	1	0	0	2	2	2	3	0	20	Cherrapunji.
..	5·3	1·43	..	0·50	1	4	..	2·9	..	1	1	12	0	1	2	3	2	8	1	0	1	0	1	2	10	10	5	Aijal.
+1·9	6·5	3·00	+2·19	1·66	30	3	+1·8	3·2	+1·2	1	1	14	1	0	0	4	2	7	1	0	3	1	0	1	19	0	5	Darjiling.
+2·5	6·0	2·47	+1·76	2·00	30	2	+0·6	5·9	—0·6	2	0	0	0	0	0	1	13	14	0	0	0	25	2	0	0	0	2	Kalimpong.
—0·1	2·6	1·92	+1·86	1·12	29	2	+1·8	0·9	0	1	0	2	4	0	0	0	0	23	8	1	1	0	1	0	1	0	18	Katmandu.
—1·2	0·6	0	—0·42	0	..	0	—0·7	4·7	+0·1	0	7	9	2	2	2	2	2	4	0	1	1	0	1	12	13	0	2	Muktesar.
—0·5	1·7	0	—0·17	0	..	0	—0·9	2·4	—2·1	4	5	0	5	5	1	0	0	10	0	0	0	8	16	3	1	0	1	Mussooree.
—0·9	1·1	0	—0·52	0	..	0	—1·1	1·4	—1·3	3	1	1	4	8	0	0	2	11	3	0	1	3	9	6	0	1	7	Simla.
—0·2	1·0	1·32	+1·10	1·14	22	2	+1·6	1·7	—1·2	4	0	3	0	0	1	1	0	21	18	1	0	0	0	0	3	3	5	Abu.
+4·0	5·5	7·68	+6·94	2·06	24	10	+8·8	1·8	—0·1	0	2	5	4	4	0	0	0	15	4	8	1	0	2	0	2	2	11	Pachmarhi.
+2·6	6·9	12·84	+11·28	5·85	23	12	+9·6	7·1	—0·4	2	10	6	6	2	2	1	0	1	3	7	2	0	3	7	1	4	3	Mahabaleshwar.
+0·6	7·1	6·36	+3·36	2·20	10	9	+3·7	5·1	+1·0	2	12	10	0	1	0	1	3	1	1	9	9	0	0	2	4	3	2	Mercara.
—0·1	6·7	11·34	+5·01	2·88	20	13	+2·5	2·8	+0·1	0	7	3	1	1	0	0	0	18	4	5	7	2	3	0	0	1	8	Ootacamund.
..	..	29·00	+17·77	6·42	17	20	+7·3	..	..	0	0	5	11	9	0	1	3	1	..	..	..	..	..	..	..	..	..	Coonoor.
0	8·7	18·05	+7·86	7·76	17	17	+4·2	9·8	+2·3	2	9	5	10	1	0	0	2	1	6	6	3	7	3	1	0	2	2	Kodaikanal.
																												Ceylon—
—0·3	7·5	8·74	—4·11	3·19	24	14	+0·4	..	..	0	5	12	5	0	0	0	0	8	1	2	0	1	1	9	10	4	2	Colombo.
0	5·7	7·34	—6·32	1·26	16	13	—0·9	..	..	1	3	4	3	4	10	3	0	2	4	11	9	3	0	1	2	0	0	Trincomalee.
—0·2	6·1	8·62	+1·61	3·20	16	7	—3·0	..	..	20	1	0	0	0	4	2	3	0	3	5	6	5	3	6	2	0	0	Hambantota.

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M.T.) AT 4TH CLASS STATIONS—NOVEMBER, 1948.

STATION.	Maximum temperature, °F.				Minimum temperature, °F				Mean dry bulb temperature 8 hrs. I.S.T. °F.	Mean wet bulb temperature 8 hrs. I.S.T. °F.	Vapour pressure, millibars.		Relative Humidity, %		Mean cloud amount, 8 hrs. I.S.T.	Rainfall, inches.				Number rainy days (0·10" or more)		Wind.	
	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean. 8 hrs. I.S.T.	Departure from normal.	Mean. 8 hrs. I.S.T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction, 8 hrs. I.S.T.	Velocity in
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	2
Assam—																							
Lumding ..	82·2	+3·1	87	6 days	61·9	+2·2	58	28	75·1	69·7	22·3	+2·1	74	—18	..	3·03	+1·88	1·76	29	7	+5·1	..	
Kashmir—																							
Jammu ..	80·4	+2·4	86	1	55·4	—0·8	51	31	56·8	49·7	9·1	—0·2	57	—2	1·3	0	—0·28	0	..	0	—0·6	N20E	
Kargil (R) ..																							
Mysore—																							
Balehonnur ..	79·1	+0·2	82	2	64·1	+2·6	60	26,30	67·7	66·4	21·6	+2·5	94	+6	..	8·59	+5·75	3·91	10	6	+1·3	..	
Tibet—																							
Yatung (Chumbi) ..	52·4	+0·2	59	1, 3	20·8	—6·9	14	30	26·6	25·7	4·4	—1·4	92	+9	3·0	1·79	+1·35	1·06	30	2	+1·1	..	

R—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M.T.) AT 5TH CLASS STATIONS—NOVEMBER 1948.

DIVISION.	STATION.	Rainfall, inches.				Number of rainy days (0·10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8
Assam	Mawsynram ..	0	..	0	..	0	..
West Bengal ..	Bankura ..	4·22	+3·57	1·24	7	7	+5·9
	Cooch Behar ..	0·30	—0·15	0·13	30	2	+1·2
Bihar	Muzaffarpur ..	0·47	+1·8	0·35	29	2	+1·5
	Chapra ..	0·33	—0·03	0·18	27	2	+1·5
	Arrah	0·86	+0·49	0·24	17	4	+3·4
East Punjab ..	Dharampore ..	0	—0·32	0	..	0	—0·8
	Kyelang ..	0	—0·35	0	..	0	—0·8
	Dalhousie ..	0	—0·76	0	..	0	—0·9
Kashmir	Sonamarg ..	0·02	—1·53	0·02	2	0	—2·9
	Gurez	0·50	—0·53	0·35	20	2	—0·9
Bombay, Deccan ..	Khandala ..	12·91	+13·15	7·43	22	8	+6·3

DIVISION.	STATION.	Rainfall, inches.				Number rainy da (0·1" or m	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from
1	2	3	4	5	6	7	
Madras, Southeast	Palamcottah ..	11·07	+3·64	2·51	17	17	+
Sikkim	Lachung ..	2·39	+0·33	1·03	29	3	—

MONTHLY MEANS OF UPPER WINDS

NOTE.—Data upto 9·0 Km. a.s.l. are given under table A, and data above 9.0 Km. under Table B.

In Tables A & B,

n—represents the number of observations,

V—represents the mean wind speed in m/second irrespective of direction,

v—represents the resultant mean velocity in m/second,

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

For the co-ordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report for January 1948, and subsequent issues.

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	AHMEDABAD												ALLAHABAD										
	0100				0700				1600				0100				0700				1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	2·1	1·7	47	30	2·3	2·1	56	30	2·3	1·8	38	30	0·6	0·3	13	30	3·1	0·1	292	30	1·6	1·1
0·15 a. g. ..	30	9·1	7·0	54	30	8·9	8·3	82	30	4·1	2·9	40	30	3·6	1·3	26	28	3·3	0·7	31	29	3·2	2·2
0·6 a.s. l. ..	30	9·3	6·4	64	30	8·7	8·3	87	30	4·1	3·1	45	30	3·7	1·6	37	26	3·7	1·4	23	28	3·4	2·1
1·0 " ..	30	6·9	5·0	73	30	7·1	5·4	84	30	3·8	2·9	43	30	4·2	1·5	354	26	4·3	1·7	8	27	3·1	1·8
1·5 " ..	30	4·9	2·4	72	30	5·3	2·7	66	30	3·8	2·4	42	30	4·8	2·3	314	23	5·3	3·4	42	27	4·0	2·7
2·0 " ..	29	4·2	1·2	62	30	4·5	1·5	46	29	3·8	1·5	32	27	5·3	3·6	307	24	6·1	4·7	295	25	5·0	3·8
2·5 " ..	26	4·4	1·3	259	29	5·2	1·7	331	28	4·2	0·9	313	22	6·9	5·6	294	24	7·3	5·7	291	24	6·5	5·5
3·0 " ..	25	6·1	2·9	280	29	6·3	2·6	288	28	5·3	2·7	287	21	7·9	7·0	284	23	8·6	6·5	286	24	7·8	6·6
4·0 " ..	6	8·3	7·8	252	28	7·6	4·2	294	28	7·4	5·4	280	3	12·2	12·2	271	21	12·2	11·0	280	22	12·1	10·8
5·0 " ..	2	14·0	13·9	280	26	9·7	6·9	290	27	9·7	7·4	281					21	14·3	13·1	282	19	13·5	12·5
6·0 " ..					26	13·2	9·9	290	25	13·4	10·6	290					20	16·9	15·3	278	18	17·6	15·6
7·5 " ..					25	17·0	13·5	281	24	15·7	12·6	274					19	22·6	20·2	270	15	25·6	22·8
9·0 " ..					20	18·9	18·0	277	17	18·2	15·1	273					17	26·1	23·1	267	8	31·4	29·5

Height in km.	AMBALA												ANANTAPUR								ASANSOL		
	0100				0700				1600				0700				1600				0100		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	1·7	0·8	5	30	1·1	0·4	35	30	1·9	1·1	298	30	2·0	1·0	99	30	2·6	1·5	75	30	1·1	0·7
0·15 a.g. ..	30	7·1	4·9	347	30	5·1	2·5	5	30	3·9	2·5	293	30	4·6	2·3	106	30	4·4	3·1	71	29	3·7	2·0
0·6 a.s.l. ..	30	6·8	4·7	337	30	5·8	3·5	337	30	3·4	2·2	304	30	5·1	2·7	116	30	4·4	3·1	28	28	3·6	1·4
1·0 " ..	30	4·8	3·3	332	30	4·8	2·7	335	30	3·1	1·9	320	28	6·5	3·6	125	29	5·0	3·4	85	24	3·0	0·7
1·5 " ..	30	3·3	1·8	331	30	4·1	1·8	323	30	3·4	2·0	327	26	4·2	4·0	106	29	5·6	3·4	86	23	3·7	2·0
2·0 " ..	30	4·6	2·1	316	30	4·3	1·3	341	30	4·1	1·9	323	25	6·2	3·7	85	27	5·6	3·2	87	19	4·1	2·6
2·5 " ..	21	5·4	2·3	288	30	5·1	1·6	319	29	5·3	2·1	317	22	6·1	3·0	71	23	5·3	2·9	76	16	5·6	4·7
3·0 " ..	16	5·8	3·9	288	30	5·6	2·3	301	29	5·4	2·8	297	20	5·7	2·3	52	21	5·4	2·4	99	14	6·6	6·1
4·0 " ..	7	5·9	4·0	293	28	7·1	5·7	295	29	6·9	4·9	289	18	6·6	3·5	90	20	5·1	2·6	87	2	12·7	12·7
5·0 " ..					27	12·8	10·8	283	29	11·4	9·5	283	16	5·9	4·3	98	19	4·9	2·0	81			
6·0 " ..					23	17·8	15·8	284	29	18·7	17·3	278	15	5·9	3·3	81	16	5·8	1·8	48			
7·5 " ..					15	29·4	26·5	287	20	27·2	24·5	279	13	6·2	1·5	34	14	7·0	1·7	23			
9·0 " ..					9	38·6	35·7	287	13	33·2	31·0	288	11	6·7	2·8	352	12	7·5	2·3	348			

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

ight in km.	ASANSOL 0700				ASANSOL 1600				BANGALORE 0100				BANGALORE 0700				BANGALORE 1600				BAREILLY 0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v		n	V	v	D	n	V	v	D
rface ..	30	1·1	0·6	14	30	1·1	0·5	359	27	2·8	1·8	109	30	2·4	1·7	91	30	3·7	2·5	97	30	0·9	0·4	10
15 a.g. ..	29	3·4	1·8	40	27	2·7	1·2	28	26	6·4	4·0	106	30	5·7	3·8	100	28	6·4	4·3	88	30	3·7	2·3	333
6 a.s.l. ..	29	3·8	1·7	66	26	2·8	1·2	4													30	3·9	2·5	319
0 „ ..	25	3·6	0·4	134	25	2·5	1·4	314	27	5·2	3·5	106	30	4·8	3·3	98	28	5·9	3·8	89	30	3·9	2·4	316
5 „ ..	22	3·1	1·4	298	23	3·5	2·7	303	15	7·6	3·4	107	20	6·7	3·5	83	28	5·7	3·7	87	30	4·7	3·1	316
0 „ ..	20	4·2	2·3	286	20	4·9	3·8	289	7	4·4	1·1	28	16	6·2	3·1	76	28	5·3	3·6	74	30	5·1	3·8	314
·5 „ ..	17	5·3	4·1	287	19	5·9	5·3	286	4	6·1	4·9	59	13	6·2	4·2	52	18	4·1	2·5	63	30	5·3	4·1	307
·0 „ ..	17	7·6	7·0	287	15	7·8	7·2	279					11	6·4	4·4	56	11	4·7	1·3	35	30	6·8	5·6	302
·0 „ ..	13	11·8	11·0	290	10	10·9	10·0	286					6	6·3	4·0	104	4	6·6	2·1	28	30	8·9	7·3	284
·0 „ ..	11	14·2	12·9	294	8	13·5	12·4	282					5	4·5	2·0	44	1	1·5	1·5	70	29	14·8	13·5	276
·0 „ ..	8	13·0	11·8	287	6	16·2	14·2	275					2	5·0	5·0	129					26	20·9	18·5	278
·5 „ ..	6	18·3	15·0	273	6	21·3	18·6	269					1	6·0	6·0	180					9	27·9	23·6	280
·0 „ ..	6	22·0	18·2	277	6	28·1	23·1	272					1	5·0	5·0	205					4	33·9	27·9	285

Height in km.	BAREILLY 1600				BHOPAL 0100				BHOPAL 0700				BHOPAL 1600				BHUJ 0100				BHUJ 0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
urface ..	30	1·5	1·0	307	23	2·5	1·8	82	30	2·2	1·9	91	30	3·6	1·9	47	30	0·1	0·1	95	30	0·4	0·3	66
·15 a.g. ..	27	3·4	2·9	297	19	6·8	6·0	90	24	6·7	5·9	93	28	3·9	2·6	50	30	6·1	5·3	22	30	5·1	4·6	47
·6 a.s.l. ..	27	3·3	2·9	301	20	6·7	5·9	88	26	5·4	4·6	93	28	3·9	2·7	53	30	7·8	7·1	35	30	7·7	7·0	55
·0 „ ..	28	3·7	3·0	302	18	6·2	5·0	91	21	5·9	4·2	81	25	3·6	1·9	43	29	7·1	6·1	45	30	6·9	5·8	49
·5 „ ..	29	3·5	2·8	310	17	4·6	2·4	53	21	5·0	1·9	43	25	3·9	1·1	5	27	5·4	3·6	43	29	6·0	4·6	35
·0 „ ..	29	4·2	3·3	302	16	5·4	2·7	278	21	4·9	2·3	297	23	4·9	2·0	284	25	6·0	2·4	23	29	6·8	4·7	35
·5 „ ..	30	5·5	4·6	298	14	7·6	5·9	266	20	5·6	3·3	282	22	6·3	4·1	279	19	5·4	2·2	329	29	5·5	4·1	26
·0 „ ..	30	6·3	5·4	293	12	8·3	6·3	287	19	6·6	4·9	287	20	8·1	6·6	280	16	6·7	3·5	329	27	5·2	3·4	325
·0 „ ..	30	10·3	9·2	291	3	6·7	6·7	294	18	8·1	6·7	282	20	9·8	8·6	281	1	13·0	13·0	310	25	7·2	5·4	299
·0 „ ..	30	15·7	13·5	282					17	9·5	7·7	286	20	12·0	10·1	289					23	9·0	6·6	287
·0 „ ..	28	21·3	19·9	276					16	13·2	10·8	285	17	15·1	13·4	290					22	13·4	10·2	288
·5 „ ..	25	28·0	25·4	276					14	14·5	11·6	275	16	18·5	17·1	278					19	16·5	13·4	271
·0 „ ..	6	28·8	26·2	283					13	17·1	13·6	272	13	21·4	17·8	279					13	17·8	14·2	268

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9.0 km. above sea level

NOVEMBER 1948

Height in km.	BHUJ				BIKANER								BOMBAY										
	1600				0700				1600				0100				0700				1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	2·5	2·2	26	30	2·1	1·1	104	30	1·3	0·6	1	30	0·8	0·2	53	30	2·0	0·1	125	30	4·7	3·7 2
0·15 a.g. ..	30	5·0	4·3	27	30	5·2	3·5	100	29	3·3	1·9	355	29	3·5	1·7	54	29	4·4	3·4	72	30	5·6	3·0 2
0·6 a.s.l. ..	30	5·4	4·7	30	30	4·7	2·5	71	29	3·4	1·7	1	29	5·1	2·9	53	29	4·8	2·6	95	29	4·0	0·6
1·0 „ ..	30	4·9	4·1	32	30	3·8	1·0	16	29	3·7	2·1	8	29	4·4	3·2	66	29	4·3	2·5	94	29	4·2	1·5 1
1·5 „ ..	30	4·9	4·2	37	30	4·1	2·4	358	29	3·4	1·7	358	26	4·3	1·2	113	28	4·3	1·6	133	29	4·4	1·7 1
2·0 „ ..	30	5·3	2·6	24	30	4·4	2·8	334	28	4·1	2·1	345	24	4·0	1·7	147	28	4·7	2·5	167	28	4·6	1·1 1
2·5 „ ..	30	5·3	2·3	327	30	4·8	2·9	338	28	4·8	2·7	306	22	3·8	0·8	149	27	4·5	1·7	195	28	4·8	0·9 2
3·0 „ ..	29	5·9	3·0	301	30	5·1	3·4	320	30	6·2	4·3	299	20	4·2	0·6	196	26	5·0	0·5	145	28	4·6	0·4 1
4·0 „ ..	27	6·9	5·2	293	30	9·0	7·7	290	30	10·5	8·9	286	4	5·9	5·0	327	24	5·4	1·8	17	26	6·1	1·0
5·0 „ ..	27	9·9	7·2	297	28	14·3	2·6	278	30	13·9	12·7	280	1	18·5	18·5	325	20	7·7	2·1	11	25	7·1	1·4
6·0 „ ..	26	13·0	9·8	285	23	18·1	16·4	277	28	18·6	17·3	279					18	8·3	3·0	337	25	8·4	2·7 3
7·5 „ ..	18	16·2	13·0	272	11	20·0	18·5	277	19	22·4	21·2	282					8	11·0	1·5	285	18	9·8	3·4 3
9·0 „ ..	13	19·5	14·3	261	7	22·2	20·9	281	8	25·8	24·3	291					7	15·4	5·8	232	14	13·0	8·1 2

Height in km.	CALCUTTA												COCHIN										
	0100				0700				1600				0100				0700				1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	0·7	0·6	45	30	1·3	0·9	51	30	1·6	1·2	20	30	1·5	1·0	67	30	1·1	1·0	57	30	3·2	2·5 2
0·15 a.g. ..	30	4·2	2·7	67	29	4·7	3·4	70	29	2·8	2·0	27	29	2·8	1·4	65	30	2·5	2·0	83	30	4·2	3·5 2
0·6 a.s.l. ..	30	4·0	1·4	94	26	3·9	2·0	75	29	3·1	1·3	59	29	3·5	1·0	34	30	3·1	0·9	81	30	3·3	2·0 2
1·0 „ ..	30	3·9	0·5	135	25	3·1	0·9	77	28	2·9	0·2	36	28	3·9	1·9	73	30	3·9	1·8	101	30	3·6	0·8 3
1·5 „ ..	30	4·5	1·3	268	25	3·6	0·7	315	27	3·9	1·7	279	27	4·6	3·2	81	28	4·0	2·3	99	26	4·1	2·0
2·0 „ ..	25	4·6	2·4	270	23	4·0	1·5	275	24	5·2	4·0	277	24	5·1	3·8	82	28	4·7	3·1	102	24	4·6	3·2
2·5 „ ..	21	5·1	3·4	289	23	5·0	3·2	273	23	6·2	5·5	280	16	5·7	4·2	84	24	5·0	3·7	83	23	4·8	3·7
3·0 „ ..	19	6·3	4·3	285	21	6·1	4·9	276	18	7·3	7·1	280	13	4·7	2·9	93	24	4·8	3·1	77	22	5·1	3·7
4·0 „ ..	4	6·7	6·7	261	17	9·7	8·0	282	13	9·9	9·4	289	4	2·9	1·8	108	19	4·5	2·2	91	19	4·9	3·4
5·0 „ ..					15	12·1	10·2	286	12	10·5	9·7	286	1	6·0	6·0	80	18	4·2	3·1	89	18	4·6	3·5
6·0 „ ..					13	13·8	11·7	287	10	13·6	11·6	278	1	8·5	8·5	40	16	5·9	4·6	79	14	5·6	4·6
7·5 „ ..					10	15·5	13·4	292	9	17·0	14·7	285	1	5·5	5·5	20	9	4·8	3·3	75	9	7·2	4·7
9·0 „ ..					7	21·4	18·8	291	8	21·9	17·0	289					7	4·9	3·6	105	6	7·2	5·1

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	COOCH BEHAR								CUTTACK												DEOLALI			
	0700				1600				0100				0700				1600				0830			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
urface ..	30	1·9	1·7	76	30	1·2	0·4	185	30	0·7	0·6	30	30	1·0	0·8	20	30	1·1	0·6	61	20	1·6	1·3	85
·15 a.g. ..	26	4·7	4·6	76	28	2·9	0·8	201	30	3·9	1·8	60	29	3·6	2·7	43	30	3·5	1·9	76	19	3·7	3·4	87
·6 a.s.l. ..	25	4·4	3·1	81	28	3·4	0·8	178	29	4·8	2·4	107	28	3·9	1·9	95	29	3·4	1·5	95	19	2·6	2·2	82
·0 „ ..	25	4·6	2·8	75	28	3·5	0·6	197	29	4·4	1·9	105	27	3·7	1·7	105	29	3·2	0·5	100	18	5·6	5·3	106
·5 „ ..	24	4·6	1·7	82	27	3·5	0·7	258	28	3·5	0·4	144	27	3·4	0·6	173	26	3·2	0·8	259	18	4·7	3·8	108
·0 „ ..	23	4·6	0·6	49	26	4·3	1·1	263	22	3·8	0·6	248	27	3·2	0·6	241	23	4·6	2·7	286	18	4·0	2·2	147
·5 „ ..	22	4·6	0·8	241	25	5·8	3·1	288	18	4·1	2·3	288	27	3·9	1·4	277	20	5·2	3·4	287	16	3·7	1·3	188
·0 „ ..	21	5·3	3·5	272	25	7·0	5·0	277	17	5·0	3·6	272	26	5·0	2·7	283	19	5·5	4·0	285	15	4·0	1·0	207
·0 „ ..	18	12·4	11·3	272	23	11·8	10·8	278	2	8·5	8·5	257	23	6·6	5·0	286	17	6·4	5·8	289	15	5·2	0·8	356
·0 „ ..	13	13·7	12·8	270	16	15·5	15·4	275					22	7·5	5·7	292	16	7·4	6·1	282	12	5·4	0·4	326
0 „ ..	9	17·5	16·0	275	10	18·1	17·7	270					21	10·1	7·3	278	12	11·4	9·5	273	8	9·9	5·4	332
5 „ ..	9	22·2	20·4	271	7	24·2	23·6	267					14	12·6	9·3	281	7	12·3	9·8	270	7	12·2	5·7	307
·0 „ ..	5	26·0	22·9	277	6	30·9	30·0	260					10	12·3	8·9	265	5	12·0	10·5	279	4	17·9	9·3	332

Height in km.	DIBRUGARH								GADAG								GAYA							
	0700				1600				0700				1600				0100				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
urface ..	30	1·7	1·2	56	30	1·1	0·7	49	30	2·9	1·6	112	30	3·9	2·0	91	30	1·1	0·3	125	30	1·4	0·5	149
·15 a.g. ..	30	3·3	2·9	51	29	2·0	1·1	64	30	5·5	2·8	111	30	5·4	2·5	85	30	2·7	0·7	360	30	2·5	0·1	340
·6 a.s.l. ..	29	3·7	3·2	60	29	1·9	1·3	76									30	2·8	1·1	353	29	3·1	1·0	55
·0 „ ..	29	2·7	2·0	70	29	2·0	1·1	79	30	6·5	3·7	109	30	5·8	2·7	85	29	2·9	1·3	276	28	3·2	0·6	328
·5 „ ..	28	2·7	1·0	109	28	2·1	0·9	149	23	6·8	3·9	94	30	5·9	3·0	93	28	3·6	2·4	276	25	3·7	2·1	263
·0 „ ..	27	2·8	1·5	177	28	3·2	2·1	200	22	5·7	3·2	82	26	5·6	2·2	90	20	5·1	2·9	287	25	5·5	4·1	271
·5 „ ..	21	3·3	2·2	208	27	4·2	2·9	211	11	6·4	4·0	66	22	5·4	2·7	75	4	4·7	3·3	262	23	6·7	5·2	283
·0 „ ..	21	3·8	3·0	222	25	4·4	3·5	206	16	6·5	3·7	62	19	4·3	1·5	97					21	8·5	7·3	284
·0 „ ..	19	6·0	4·6	249	24	7·8	6·5	255	13	6·7	4·6	80	12	4·2	0·6	147					16	13·3	12·[illegible]	[illegible]
·0 „ ..	14	15·3	14·7	268	15	16·2	15·2	258	11	5·4	4·0	47	8	3·9	1·1	158					11	17·9	16·5	295
·0 „ ..	13	19·4	19·0	269	12	17·6	16·8	263	10	4·9	2·9	48	6	7·5	1·5	95					10	20·6	17·6	295
·5 „ ..	10	22·5	22·1	269	10	24·8	22·7	278	10	4·5	3·1	353	5	9·3	3·7	7					8	30·1	24·8	284
·0 „ ..	9	26·1	25·4	268	8	29·1	25·6	284	9	6·7	5·4	312	3	9·3	6·8	24					7	31·3	25·1	283

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	GAYA 1600				GOPALPUR 0700				GOPALPUR 1600				GORAKHPUR 0700				GORAKHPUR 1600				HYDERABAD (D 0100		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	2·0	1·1	329	30	3·2	2·7	355	30	3·3	2·2	95	30	0·8	0·1	43	30	1·0	0·5	268	23	1·9	1·6
0·15 a. g. ..	30	3·1	1·8	340	30	4·4	3·5	6	29	4·2	2·7	92	28	2·6	0·5	309	30	2·1	1·4	268			
0·6 a. s. l. ..	30	3·0	1·6	331	30	4·5	2·6	81	29	3·6	1·4	95	28	2·6	0·6	283	30	2·3	1·4	280	23	3·9	3·0
1·0 „ ..	30	2·9	1·4	292	29	4·1	2·5	113	29	3·3	0·5	83	28	2·5	0·6	291	30	2·5	0·8	299	23	7·6	6·8
1·5 „ ..	28	3·4	2·2	275	29	4·5	2·2	129	29	3·9	0·2	199	28	3·3	0·8	296	30	2·9	1·5	308	16	5·8	4·8
2·0 „ ..	26	4·7	3·8	272	26	4·8	0·3	155	28	4·5	0·7	293	27	4·0	1·2	287	30	4·4	3·1	293	15	4·7	2·5
2·5 „ ..	23	7·0	6·3	278	24	5·0	0·7	295	26	5·3	1·6	286	27	5·4	3·3	282	29	6·1	4·6	281	9	4·4	1·8
3·0 „ ..	21	9·0	8·0	284	23	4·8	1·5	281	26	5·4	2·1	293	27	6·3	5·2	279	28	7·1	6·0	283	7	5·8	2·9
4·0 „ ..	16	12·2	11·5	290	22	5·8	2·9	303	23	5·8	3·5	284	23	10·5	9·5	289	22	11·3	10.5	285			
5·0 „ ..	14	17·4	16·4	287	18	6·3	3·6	290	19	6·7	4·5	281	18	13·3	12·5	283	20	15·1	14·2	286			
6·0 „ ..	11	21·4	18·8	292	18	8·0	4·9	300	17	8·6	4·5	282	16	16·7	14·9	285	17	18·1	16·6	288			
7·5 „ ..	10	27·5	24·8	289	16	10·5	6·0	282	12	10·2	6·6	278	8	21·7	18·4	285	14	23·6	20·6	282			
9·0 „ ..	6	34·5	27·6	290	14	11·9	9·0	273	9	8·2	5·1	269	6	27·9	22·6	276	10	31·9	27·4	278			

Height in km.	HYDERABAD (Dn) 0700				HYDERABAD (Dn) 1600				JAGDALPUR 0700				JAGDALPUR 1600				JAMNAGAR 0700				JAMNAGAR 1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	23	1·9	1·6	110	24	3·1	2·6	109	30	0·9	0·4	64	30	1·8	0·3	312	15	3·1	2·0	69	15	7·0	6·6
0·15 a. g. ..									28	3·3	2·0	74	27	3·7	0·6	31	15	7·0	6·2	40	15	6·3	5·8
0·6 a. s. l. ..	23	4·1	2·7	111	24	4·6	4·0	113	29	2·1	1·3	76	27	2·8	0·4	40	15	8·3	7·6	55	15	7·1	6·3
1·0 „ ..	23	7·0	6·2	120	24	5·0	3·9	113	25	4·3	2·9	97	27	3·8	1·5	55	15	7·1	6·2	47	15	7·4	5·4
1·5 „ ..	15	6·2	4·9	119	24	4·6	3·1	117	23	4·9	2·4	100	26	3·6	1·7	61	14	5·9	4·4	33	14	6·1	3·7
2·0 „ ..	14	4·7	2·3	99	22	4·7	2·4	114	23	5·2	1·2	94	25	5·2	2·1	66	14	5·6	3·9	13	14	5·1	2·1
2·5 „ ..	11	4·4	1·4	38	22	4·5	1·0	134	21	5·2	0·3	226	20	4·7	0·3	311	14	5·5	3·6	5	14	5·2	1·6
3·0 „ ..	10	4·8	1·2	330	19	4·7	1·4	184	18	5·3	0·3	200	19	4·7	1·7	280	14	5·3	2·1	345	14	5·6	3·3
4·0 „ ..	6	4·6	1·2	97	6	5·5	2·4	241	12	4·6	1·0	261	16	6·5	2·9	275	13	6·1	4·3	312	14	7·4	5·2
5·0 „ ..	5	7·3	2·5	50	5	6·2	4·0	219	10	6·0	1·9	297	14	7·4	3·8	273	13	7·7	6·4	292	14	9·6	5·5
6·0 „ ..	5	8·7	1·1	307	5	7·0	6·0	236	9	7·8	4·1	266	11	9·2	5·5	267	13	13·5	8·8	292	13	11·3	8·2
7·5 „ ..	2	7·7	6·2	314	3	8·8	8·8	259	7	9·6	5·4	263	11	11·2	8·7	291	11	14·7	11·6	277	9	15·7	11·1
9·0 „ ..	2	15·0	10·2	290					4	9·3	7·0	267	10	11·4	10·3	289	9	19·4	15·5	284	6	18·5	9·7

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	JAMSHEDPUR								JHARSUGUDA												JODHPUR			
	0700				1600				0100				0700				1600				0100			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
rface ..	30	1·0	0·5	45	30	2·0	1·1	54	30	1·2	1·0	42	30	1·1	0·9	35	30	0·8	0·5	30	30	2·0	1·9	40
·15 a. g. ..	30	2·1	1·0	70	30	2·8	1·5	47	30	4·5	3·3	63	30	4·4	3·7	68	30	3·1	1·3	61	30	7·3	5·9	49
·6 a. s. l. ..	29	3·1	1·2	89	30	2·5	0·8	53	30	4·7	2·7	100	30	5·1	3·4	90	30	3·1	1·1	54	30	6·5	5·2	54
·0 „ ..	27	3·1	0·8	102	29	2·7	0·5	321	30	4·3	2·4	115	29	4·4	2·5	100	30	3·0	0·6	44	30	5·1	3·4	51
·5 „ ..	25	3·3	0·7	297	27	3·9	1·9	281	27	2·9	0·7	70	29	3·4	0·3	136	29	3·2	1·0	313	29	4·0	0·4	86
·0 „ ..	23	4·3	2·4	275	25	4·9	3·8	285	21	3·9	2·1	280	29	4·5	1·9	275	27	4·9	3·0	303	25	4·2	1·7	260
·5 „ ..	20	5·6	4·6	279	24	5·5	4·8	278	19	5·2	3·9	281	28	4·7	3·2	277	26	5·4	4·4	290	21	5·3	2·7	274
·0 „ ..	20	7·3	6·0	280	22	7·5	7·0	282	17	5·9	4·5	279	26	5·8	4·6	282	25	6·6	5·8	288	17	5·9	4·1	284
·0 „ ..	16	10·5	9·5	286	19	9·8	9·4	287	9	8·3	5·7	265	24	7·6	6·1	279	24	8·6	7·5	278				
·0 „ ..	14	12·3	11·1	292	17	12·4	11·3	285					21	10·2	7·6	275	19	11·6	9·5	282				
·0 „ ..	11	15·2	13·2	292	17	14·4	12·6	286					18	12·3	8·4	272	18	14·0	11·4	284				
·5 „ ..	7	18·6	16·0	292	11	18·2	15·6	280					15	14·3	11·2	280	14	15·6	12·1	284				
·0 „ ..	7	20·1	17·2	289	6	22·9	21·3	271					14	16·5	11·6	277	12	18·0	13·6	285				

Height in km.	JODHPUR								JUBBULPORE												MADHOSAGAR			
	0700				1600				0100				0700				1600				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
rface ..	30	1·5	1·4	41	30	1·1	0·9	36	30	1·1	0·7	98	30	0·8	0·6	78	30	1·6	1·3	37	30	1·4	0·6	213
15 a. g. ..	29	4·5	3·9	66	29	3·1	1·8	20	29	4·9	4·2	81	26	3·5	2·7	87	28	3·8	3·2	36	29	3·6	1·5	113
6 a. s. l. ..	29	4·8	3·6	77	29	3·0	1·9	24	29	5·4	4·6	8	26	3·8	3·1	81	28	3·6	3·0	36	27	4·4	2·3	102
0 „ ..	29	4·5	2·5	75	29	2·9	1·7	28	29	5·2	3·2	72	23	5·5	3·6	64	25	4·1	2·4	6	26	3·2	1·4	66
5 „ ..	30	4·3	1·3	360	30	2·9	1·8	26	28	4·4	0·6	313	21	5·2	1·9	3	25	5·0	2·1	329	26	3·2	1·5	357
0 „ ..	30	4·6	2·0	319	30	3·9	1·9	25	26	5·1	3·1	290	20	5·9	2·7	301	24	5·4	3·6	294	26	4·3	3·1	322
5 „ ..	30	5·2	3·0	303	29	3·7	1·6	342	20	6·9	4·9	301	18	6·7	3·8	298	22	6·9	5·5	280	25	4·9	3·2	320
0 „ ..	30	6·6	4·7	288	29	5·0	2·5	314	12	6·7	4·8	299	18	7·7	4·8	299	20	8·3	6·6	280	25	6·0	4·0	309
0 „ ..	29	11·0	9·6	279	28	9·9	8·2	280	3	10·5	9·9	289	17	8·7	6·7	291	16	10·3	8·9	289	20	10·2	7·8	290
0 „ ..	28	14·2	12·7	278	27	13·0	11·0	281	1	19·5	19·5	285	14	12·1	9·9	297	15	12·4	9·8	296	15	14·8	13·5	289
0 „ ..	26	17·5	16·1	279	25	16·3	14·2	284					12	14·3	12·1	303	14	15·1	12·4	300	14	17·6	15·5	284
5 „ ..	22	21·3	19·3	272	17	22·2	20·5	292					9	17·7	14·4	299	10	16·5	14·3	293	12	21·9	19·0	284
0 „ ..	17	24·5	24·2	246	9	22·5	21·3	280					8	20·0	10·8	287	9	19·7	16·2	292	11	29·3	25·7	279

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	MADHOSAGAR				MADRAS												MALEGAON							
	1600				0100				0700				1600				0100				0700			
	n	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	1·3	38	30	1·7	0·4	54	30	1·5	0·8	307	30	4·4	3·1	77	30	1·6	1·0	16	30	1·0	0·2	284
0·15 a. g. ..	30	3·5	1·9	43	28	4·5	2·5	75	29	4·5	2·0	86	29	5·4	3·9	76	30	5·7	3·4	80	28	3·5	2·1	88
0·6 a. s. l. ..	30	3·2	1·8	40	28	5·7	3·6	85	29	5·2	3·1	95	27	5·8	3·8	79	30	5·7	3·4	80	28	3·5	2·1	88
1·0 „ ..	28	3·2	1·7	26	28	6·4	4·3	94	29	5·8	3·3	93	26	5·1	3·1	80	29	6·6	4·4	88	25	5·6	4·0	108
1·5 „ ..	27	3·1	1·7	354	25	6·0	3·8	84	29	6·1	3·6	85	25	5·5	2·9	73	28	5·6	3·3	100	22	5·3	2·9	118
2·0 „ ..	27	3·7	2·2	318	22	6·0	3·9	60	28	5·9	3·0	75	25	6·1	2·5	69	21	3·5	1·3	144	20	5·0	1·6	180
2·5 „ ..	26	5·1	4·1	295	17	4·5	3·1	70	28	6·1	3·3	82	22	5·9	4·1	57	16	4·1	1·8	244	16	4·7	2·5	237
3·0 „ ..	26	7·2	6·2	292	14	4·0	2·3	80	26	5·5	3·4	73	22	5·8	4·1	73	14	4·3	2·2	253	14	4·6	3·0	267
4·0 „ ..	22	11·4	10·3	291	11	4·7	2·9	118	22	6·2	4·4	86	17	5·0	3·7	91	4	5·1	2·9	19	13	6·0	3·8	311
5·0 „ ..	22	15·9	13·7	295	2	3·3	2·9	81	21	6·1	3·1	85	16	4·8	3·6	89					13	8·7	4·4	306
6·0 „ ..	21	18·2	16·5	285	1	8·0	8·0	20	20	5·4	3·1	78	16	4·7	2·5	82					12	10·0	5·4	320
7·5 „ ..	21	24·2	21·3	284	1	2·5	2·5	270	14	6·0	2·8	42	17	6·7	1·8	77					8	10·1	4·5	301
9·0 „ ..	19	28·4	25·9	281					15	6·9	2·2	52	13	5·5	1·6	76					6	15·6	5·3	305

Height in km.	MALEGAON				MANGALORE												MASULIPATAM							
	1600				0100				0700				1600				0100				0700			
	n	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	1·3	69	30	2·2	1·7	87	30	2·2	2·0	84	30	3·5	2·5	274	30	1·6	0·8	82	30	1·7	1·1	52
0·15 a. g. ..	29	3·6	2·0	76	30	3·9	1·9	60	30	3·9	2·7	79	30	5·1	3·7	270	26	5·5	4·4	93	27	5·9	4·8	64
0·6 a. s. l. ..	29	3·6	2·0	76	29	4·7	0·6	14	29	5·0	1·7	75	30	4·0	1·1	275	26	6·5	5·4	101	27	6·4	5·7	96
1·0 „ ..	29	3·6	1·7	74	26	4·3	0·4	153	30	5·0	1·9	99	27	4·4	1·9	91	25	5·5	4·4	93	26	5·6	5·2	99
1·5 „ ..	28	3·5	0·9	50	18	4·6	1·8	117	30	5·7	3·5	113	25	6·7	5·2	94	24	5·2	3·9	86	26	5·1	4·4	93
2·0 „ ..	25	3·6	0·2	353	11	6·7	4·8	93	28	5·9	3·6	105	25	7·8	6·2	94	24	4·8	3·2	81	23	4·8	3·4	85
2·5 „ ..	23	3·5	1·4	274	9	7·2	6·0	103	28	6·1	3·6	100	24	7·0	5·2	90	20	4·9	2·7	94	22	4·3	2·5	70
3·0 „ ..	19	4·4	2·3	287	6	5·1	3·9	89	27	6·5	3·2	95	23	6·0	3·8	88	18	5·2	1·8	91	21	4·9	2·3	72
4·0 „ ..	16	5·6	1·2	285					22	5·6	3·3	87	21	5·1	3·1	81	10	2·7	1·2	188	18	4·6	1·9	[illegible]
5·0 „ ..	15	7·6	2·4	271					19	5·3	3·4	83	19	5·0	3·7	77					15	6·0	1·5	85
6·0 „ ..	12	9·6	3·4	296					18	5·7	3·4	68	18	5·7	3·1	87					13	5·0	0·8	175
7·5 „ ..	10	11·3	5·2	282					10	5·1	4·0	50	12	6·4	2·3	68					10	5·7	3·3	[illegible]
9·0 „ ..	6	15·9	5·9	254					8	5·2	3·9	60	6	5·7	1·2	29					7	8·4	5·6	279

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

ight in km.	MASULIPATAM				NAGERCOIL												NAGPUR							
	1600				0100				0700				1600				0100				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
ace ..	30	2·8	2·2	102	30	2·6	1·4	22	30	2·1	1·0	28	30	3·7	0·9	61	30	2·1	1·4	50	30	1·9	1·5	50
a. g. ..	26	5·0	4·3	102	29	5·7	2·9	14	30	5·7	3·1	25	28	7·3	1·9	58	28	5·6	4·2	60	26	5·1	4·9	58
a. s. l. ..	26	5·8	4·9	98	27	7·1	3·6	9	30	7·3	4·0	32	28	7·0	3·0	51	28	6·1	4·3	78	26	5·3	4·3	79
„ ..	26	5·1	4·0	96	29	7·4	4·1	27	30	7·7	4·3	38	28	7·0	4·2	44	28	5·6	3·3	98	22	5·1	3·1	92
„ ..	24	4·4	3·0	74	28	8·1	5·3	49	30	8·3	5·1	54	28	7·4	5·5	42	27	4·3	4·3	25	22	4·8	0·7	66
„ ..	23	4·6	3·2	55	28	6·8	5·2	63	29	7·4	5·3	64	27	8·5	6·5	49	23	4·1	0·9	204	20	5·1	2·0	286
„ ..	23	4·9	3·0	54	28	6·4	4·8	64	29	6·5	4·7	66	25	7·0	5·3	56	14	4·3	1·3	257	20	5·6	3·3	287
„ ..	22	4·9	2·2	73	28	6·2	4·2	64	28	5·5	3·6	70	25	6·5	4·7	60	11	5·3	3·3	244	19	6·2	3·8	291
„ ..	21	5·1	1·8	80	20	5·3	2·6	71	28	5·6	2·3	82	20	6·5	2·7	67	2	4·7	3·5	316	18	6·7	4·4	287
„ ..	20	5·7	0·5	48	11	5·8	3·8	86	27	6·1	3·4	84	19	7·4	3·9	64					16	8·7	4·0	290
„ ..	16	5·9	0·5	320	7	5·4	3·5	97	25	7·3	4·2	78	17	7·0	4·5	86					14	8·1	4·9	305
„ ..	15	7·1	3·7	295	5	6·8	4·5	104	22	6·7	5·3	77	16	7·5	5·1	79					14	10·4	6·6	280
„ ..	14	8·4	5·7	297	4	8·3	7·4	101	18	9·1	7·6	87	16	8·0	6·1	91					13	12·2	7·1	282

ight in km.	NAGPUR				NEW DELHI												POONA							
	1600				0100				0700				1600				0100				0700			
	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	2·1	1·6	72	30	1·0	0·2	324	30	1·5	0·4	277	30	1·8	0·5	327	30	0·5	0·2	179	30	0·8	0·5	135
5 a. g. ..	28	3·6	2·5	70	30	5·2	1·9	15	29	4·6	1·2	319	29	3·5	1·4	322	30	2·9	0·7	97	28	3·0	2·1	79
a. s. l. ..	29	3·7	2·3	77	30	5·0	1·7	11	29	4·1	0·6	317	29	3·7	1·6	313	30	1·8	0·4	146	28	1·7	1·2	81
„ ..	29	3·8	1·6	73	29	4·6	2·0	338	29	3·8	1·9	282	30	4·0	1·9	306	30	5·1	2·6	85	28	4·7	3·6	96
„ ..	25	4·5	1·3	333	29	4·4	2·9	300	29	4·9	3·4	298	30	4·1	2·7	297	30	6·2	3·1	115	28	5·1	3·0	117
„ ..	25	5·5	2·2	299	29	5·8	4·6	293	29	5·7	4·1	302	29	5·1	3·7	298	26	5·6	3·3	144	27	4·2	2·0	139
„ ..	23	5·8	3·2	272	21	6·5	4·8	292	29	6·7	5·0	298	29	6·1	4·9	295	21	4·7	2·2	169	25	4·3	1·7	157
„ ..	19	4·6	2·1	295	13	6·8	5·0	287	29	7·1	5·4	291	29	6·8	5·7	298	18	4·4	1·7	178	23	4·7	0·8	188
„ ..	15	6·6	3·6	305	3	9·5	8·5	268	26	10·3	8·8	277	29	10·1	8·9	287	5	4·9	1·9	286	22	6·6	2·1	54
„ ..	14	8·1	4·7	309					24	16·0	15·1	276	28	15·1	13·8	280					19	7·5	3·2	46
„ ..	12	9·7	6·3	317					18	20·5	18·9	284	24	20·5	18·7	282					18	8·2	2·6	24
..	10	9·6	5·1	292					9	26·4	24·2	287	18	27·9	26·4	284					17	7·7	1·9	335
:	7	12·3	6·9	283					6	27·5	25·2	290	11	35·2	33·8	294					14	8·0	5·0	294

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	POONA				PORT BLAIR												RAIPUR							
	1600				0100				0700				1600				0100				0700			
	n	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	12	0·3	98	30	4·0	3·4	87	30	3·8	3·4	77	30	4·7	4·4	77	30	1·7	1·2	58	30	1·1	0·9	[illegible]
0·15 a. g. ..	30	3·1	0·6	47	30	6·7	5·9	87	30	6·3	5·7	79	30	7·3	6·9	75	30	5·7	4·4	67	30	4·7	4·0	[illegible]
0·6 a. s. l. ..	30	4·0	0·5	50	29	7·1	6·4	87	28	7·2	6·5	86	30	7·0	6·5	82	30	5·5	4·1	77	30	6·0	4·7	[illegible]
1·0 „ ..	29	3·7	0·7	70	22	7·5	6·5	99	22	7·2	6·3	93	26	7·6	6·9	81	30	4·0	2·5	94	28	4·3	2·7	[illegible]
1·5 „ ..	28	4·2	1·0	105	16	7·9	6·4	103	21	7·5	6·4	91	21	6·9	6·4	83	30	4·1	0·7	104	25	3·9	0·4	1[illegible]
2·0 „ ..	27	4·5	1·2	124	13	6·3	4·9	86	21	7·2	5·5	85	20	6·7	5·9	83	28	5·3	1·4	272	25	5·1	1·8	2[illegible]
2·5 „ ..	26	4·9	1·2	193	8	6·8	5·4	80	16	6·5	4·7	77	15	5·7	4·2	72	24	6·3	3·8	275	25	6·2	3·5	2[illegible]
3·0 „ ..	25	5·4	1·2	112	6	6·7	5·7	77	15	6·1	3·7	87	15	6·0	3·8	64	16	5·9	4·4	280	23	6·8	4·3	2[illegible]
4·0 „ ..	19	7·1	1·4	31	2	5·3	2·3	52	13	6·2	4·4	59	11	5·6	4·4	57	5	7·2	5·2	300	20	7·0	5·3	2[illegible]
5·0 „ ..	16	8·0	5·1	56					10	5·8	4·1	65	10	6·1	4·3	59	2	10·7	10·5	302	18	8·8	6·2	2[illegible]
6·0 „ ..	14	9·0	5·0	55					7	7·8	5·3	38	9	7·3	5·7	63					18	10·4	7·0	2[illegible]
7·5 „ ..	12	9·7	2·6	10					7	5·9	3·6	40	5	6·8	3·4	22					14	13·9	10·6	2[illegible]
9·0 „ ..	4	11·6	8·8	76					2	9·5	9·4	321	4	4·0	1·8	259					11	14·9	10·0	2[illegible]

Height in km.	RAIPUR				SAHARSA								TEZPUR										
	1600				0700				1600				0100				0700				1600		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	1·3	1·0	28	30	0·3	0·2	100	30	0·7	0·2	246	30	1·1	1·0	45	30	0·9	0·9	55	30	0·8	0·6
0·15 a.g. ..	30	3·6	2·5	39	28	3·3	0·5	67	30	3·2	1·8	277	28	4·2	3·9	62	29	3·5	3·3	67	29	3·3	2·4
0·6 a. s. l. ..	30	3·6	2·2	39	25	2·9	0·2	352	30	3·2	1·7	274	28	3·5	3·0	98	28	4·1	3·8	86	28	2·7	2·1
1·0 „ ..	30	3·4	1·6	41	23	2·6	0·8	290	28	3·5	2·2	277	27	2·6	1·5	105	26	3·9	3·5	86	28	2·3	1·3
1·5 „ ..	28	4·0	0·5	310	23	3·3	2·2	270	26	3·7	2·4	277	26	2·2	0·3	85	24	3·1	1·9	92	27	2·9	1·6
2·0 „ ..	24	5·2	2·2	285	21	4·7	3·8	276	25	5·1	3·9	274	22	2·8	0·9	250	21	3·5	1·4	122	26	3·8	2·3
2·5 „ ..	22	5·6	2·8	284	19	5·7	4·5	276	25	6·7	5·5	282	22	3·6	2·2	233	20	3·5	1·3	184	26	4·1	3·0
3·0 „ ..	19	6·5	3·9	285	17	6·9	6·0	283	24	7·8	7·0	289	21	4·9	3·7	250	18	4·3	2·9	239	26	5·5	4·5
4·0 „ ..	14	8·0	6·9	288	11	11·7	11·1	290	22	10·2	9·9	286	15	10·6	10·1	266	15	9·8	9·3	264	24	11·8	11·5
5·0 „ ..	12	10·4	8·4	296	11	14·8	13·8	290	17	13·9	13·7	287					13	16·8	16·5	267	19	18·1	17·8
6·0 „ ..	11	9·8	7·7	319	10	17·5	16·0	285	17	16·8	16·4	284					13	19·0	18·8	269	16	20·4	19·7
7·5 „ ..	10	11·9	8·7	297	10	21·3	18·6	283	12	21·1	19·3	278					7	21·1	20·6	263	8	25·1	22·8
9·0 „ ..	8	17·4	14·3	302	7	23·6	16·6	294	10	26·4	21·5	282					7	26·9	25·9	262	7	29·0	26·4

TABLE A—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds up to 9·0 km. above sea level

NOVEMBER 1948

eight in km.	TRICHINOPOLY												TRIVANDRUM				UDAIPUR							
	0100				0700				1600				0700				0100				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
urface ..	30	1·5	1·1	27	30	2·0	1·2	15	30	2·4	1·6	70	30	1·3	0·7	16	30	0·2	0·1	293	30	0·3	0·2	6
·15 a.g. ..	29	5·9	3·8	63	29	4·9	2·8	28	28	4·9	3·4	64	30	3·0	1·1	10	28	3·0	2·4	53	29	2·8	1·7	360
·6 a. s. l. ..	29	7·5	5·0	72	29	6·3	3·5	56	28	5·7	4·0	69	30	3·6	0·4	357								
·0 „ ..	29	7·0	4·7	76	28	6·5	3·5	56	28	5·9	4·0	67	30	4·3	1·5	65	29	5·2	4·1	76	28	4·2	3·4	96
·5 „ ..	27	6·6	4·4	71	28	6·0	4·0	65	27	6·4	4·5	59	30	4·6	2·7	68	28	4·3	2·7	89	28	4·8	3·1	94
·0 „ ..	27	6·6	4·6	68	27	6·5	4·8	63	27	6·9	5·1	59	29	4·8	3·1	70	27	3·9	0·8	96	27	4·1	1·2	10
·5 „ ..	21	5·6	4·0	65	26	6·6	5·1	62	26	6·8	5·1	54	28	4·4	2·6	72	27	4·7	1·9	261	26	4·5	1·8	330
·0 „ ..	20	5·7	3·8	69	25	6·5	4·7	61	25	6·6	4·3	52	28	4·5	2·4	79	25	6·0	4·0	283	26	6·1	3·0	291
·0 „ ..	9	5·9	3·7	73	23	5·1	3·6	76	21	5·6	2·8	70	28	5·2	2·7	82	1	10·5	10·5	270	25	8·6	6·8	278
·0 „ ..	2	4·3	2·7	180	20	5·6	3·7	92	18	4·3	2·4	84	24	4·8	2·7	92					25	11·7	9·6	284
·0 „ ..	1	6·5	6·5	140	18	5·3	4·4	81	17	6·0	3·8	82	19	5·7	4·7	72					19	12·4	10·5	271
·5 „ ..					14	6·6	4·1	74	14	6·0	3·9	59	17	6·4	5·8	68					8	14·3	11·2	284
·0 „ ..					9	7·2	6·0	91	11	6·1	4·1	82	15	6·2	5·5	87					8	18·3	15·0	273

Height in km.	UDAIPUR				VENGURLA												VERAVAL							
	1600				0100				0700				1600				0100				0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
urface ..	30	11·0	0·5	30	30	1·4	0·5	61	30	0·9	0·3	99	30	3·9	2·3	247	30	4·1	3·4	8	29	3·8	3·4	34
·15 a. g. ..	30	2·8	2·0	50	28	4·3	2·6	44	30	3·7	2·3	87	30	4·5	2·4	247	29	8·2	6·8	21	29	8·3	7·3	35
·6 a. s. l. ..					28	4·8	1·9	65	30	5·2	2·0	110	29	4·2	0·7	196	29	7·1	6·0	39	29	6·9	5·9	44
·0 „ ..	30	2·7	1·7	48	26	5·8	2·8	94	30	6·4	3·0	109	28	4·3	1·7	107	29	6·6	5·1	59	29	6·2	4·1	50
·5 „ ..	30	2·7	1·4	24	20	5·8	3·8	85	30	6·3	3·5	116	28	5·3	2·9	110	29	6·2	4·4	68	29	5·5	2·8	65
·0 „ ..	29	3·2	0·9	329	18	5·6	3·6	95	29	5·9	3·3	122	26	5·5	3·1	108	29	5·6	3·1	80	29	5·1	1·8	61
·5 „ ..	29	4·3	1·9	276	14	4·6	3·2	88	25	5·8	3·4	134	24	4·9	3·0	101	22	5·4	2·1	93	29	5·2	1·2	18
·0 „ ..	29	5·5	3·7	264	12	4·4	2·3	102	24	5·3	3·3	116	23	5·1	2·5	98	16	5·8	0·8	33	29	5·6	1·6	342
·0 „ ..	28	9·9	8·3	285	1	3·5	3·5	35	21	4·7	3·1	91	20	4·6	2·8	81	4	6·6	4·6	331	29	7·0	2·5	326
·0 „ ..	27	11·8	10·0	284	1	6·0	6·0	49	20	6·0	3·9	55	18	5·1	2·8	66					28	8·0	3·7	319
·0 „ ..	25	14·7	12·5	288	1	9·5	9·5	40	19	7·0	4·2	58	15	7·4	4·2	51					28	10·7	5·0	303
·5 „ ..	21	18·1	16·5	269					15	7·8	2·9	23	10	7·7	3·1	4					25	12·8	8·6	285
·0 „ ..	14	22·7	20·2	269					10	8·3	3·9	301	7	9·4	6·9	325					23	15·8	10·7	269

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

Winds up to 9·0 km. above sea level

NOVEMBER 1948

Height in km.	VERAVAL				VIZAGAPATAM												MINICOY						
	1600				0100				0700				1600				0730				1430		
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v
Surface ..	30	5·0	0·7	272	30	1·0	0·7	37	30	1·1	0·8	57	30	3·0	2·5	88	30	1·9	0·8	299	30	2·3	0·8 2
0·15 a.g. ..	28	5·1	1·1	243	27	3·3	2·5	67	28	3·5	2·9	48	28	4·8	4·3	86	30	4·1	1·7	314	30	4·4	1·7 3
0·6 a. s. l. ..	28	4·6	2·6	29	26	5·0	3·9	84	28	5·2	4·5	67	28	4·2	3·6	83	30	4·6	1·2	316	30	5·0	1·7 3
1·0 „ ..	28	5·1	3·7	32	24	4·4	3·1	83	27	5·6	5·0	70	26	3·2	2·3	66	30	4·8	0·8	47	29	5·2	0·8 3
1·5 „ ..	28	5·4	4·2	32	21	3·9	2·8	64	26	5·5	4·0	89	24	3·6	1·9	40	30	5·5	2·8	81	28	4·7	1·2
2·0 „ ..	28	5·3	3·1	25	17	4·3	2·8	56	24	5·8	3·2	60	23	4·9	2·2	5	28	5·2	3·1	83	25	4·5	2·2
2·5 „ ..	27	4·8	2·0	13	14	5·0	2·7	63	21	5·4	2·4	38	22	4·6	1·9	354	26	4·4	2·9	87	23	3·7	2·0
3·0 „ ..	27	5·3	2·1	354	12	5·4	2·8	100	21	4·2	0·6	37	21	4·1	0·7	218	22	4·1	2·7	90	20	3·8	1·9
4·0 „ ..	26	6·5	2·7	312	6	4·3	3·1	246	19	4·3	0·9	317	21	4·6	1·3	265	20	4·1	2·4	96	16	4·5	2·7
5·0 „ ..	25	8·7	3·5	302	1	3·0	3·0	240	18	5·7	1·8	324	20	6·1	1·4	271	17	4·4	2·5	87	12	5·4	4·4
6·0 „ ..	24	10·9	4·0	301					15	5·9	2·1	325	16	7·7	3·1	283	13	6·1	2·6	83	11	7·7	7·3
7·5 „ ..	21	13·2	7·2	259					10	7·3	3·6	279	14	8·4	5·0	269	12	5·4	3·7	84	7	7·6	7·0
9·0 „ ..	17	16·6	10·0	265					8	8·3	5·5	280	10	9·4	6·7	279	9	4·6	3·0	100	5	8·4	6·3

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds at and above 10·0 km. above sea level

NOVEMBER 1948

AHMEDABAD

Ht. in km.	n	V	v	D
10·0	34	21·1	17·6	272
11·0	24	23·6	14·9	268
12·0	19	24·8	18·4	266
13·0	15	24·4	20·7	275
14·0	13	24·3	20·9	275
15·0	12	22·9	19·4	272
16·0	10	19·9	17·6	289
17·0	10	18·5	16·0	286
18·0	8	22·4	18·1	284
19·0	7	16·1	12·1	335
20·0	7	13·7	11·4	332
21·0	7	17·3	13·9	319
22·0	7	21·1	16·8	317
23·0	7	25·8	19·2	315
24·0	7	30·6	25·1	303
25·0	7	30·6	27·0	302
26·0	5	25·4	21·1	327
27·0	3	21·7	15·0	329
28·0	3	15·5	1·0	4
29·0	3	13·7	13·3	7
30·0	3	17·0	15·7	360
31·0	2	34·3	26·3	328
32·2	2	33·7	26·1	337
33·0	1	23·5	23·5	295
34·0	1	21·0	21·0	275

ALLAHABAD

Ht. in Km.	n	V	v	D
10·0	20	23·3	12·6	257
11·0	14	28·7	27·0	266
12·0	11	28·7	25·8	269
13·0	9	28·1	24·4	268
14·0	5	25·8	23·1	268
15·0	2	27·0	26·9	236
16·0	1	22·5	22·5	235
17·0	1	16·5	16·5	255
18·0	1	7·0	7·0	40
19·0	1	4·0	4·0	250

AMBALA

Ht. in Km.	n	V	v	D
10·0	13	35·5	31·5	287
11·0	10	39·7	35·0	289
12·0	7	36·6	34·3	279
13·0	3	29·7	28·7	278
14·0	3	32·8	30·5	274
15·0	3	37·8	36·3	284
16·0	2	40·0	39·3	265
17·0	2	39·0	38·3	267
18·0	1	44·0	44·0	280

ANANTAPUR

Ht. in Km.	n	V	v	D
10·0	20	7·9	3·6	321
11·0	8	26·7	20·5	276
12·0	7	25·8	23·7	259
13·0	7	29·4	26·9	259
14·0	7	28·7	27·0	259
15·0	6	25·4	22·3	255
16·0	6	21·2	18·4	246
17·0	4	28·3	27·1	240
18·0	2	23·0	22·5	226
19·0	1	19·0	19·0	225
20·0	1	15·0	15·0	270
21·0	1	11·5	11·5	240
22·0	1	12·0	12·0	235
23·0	1	11·0	11·0	245
24·0	1	13·0	13·0	270

BANGALORE

Ht. in Km.	n	V	v	D
10·0	1	2·0	2·0	175
11·0	1	3·0	3·0	190
12·0	1	5·0	5·0	215
13·0	1	8·5	8·5	230
14·0	1	5·5	5·5	210
15·0	1	1·5	1·5	150
16·0	1	1·0	1·0	110
17·0	1	9·5	9·5	95
18·0	1	10·5	10·5	95

BAREILLY

Ht. in Km.	n	V	v	D
10·0	7	31·9	25·4	294
11·0	5	32·2	28·3	309
12·0	3	31·0	26·5	293
13·0	2	32·2	29·5	287
14·0	2	28·7	28·5	268
15·0	2	34·7	34·5	260
16·0	2	33·0	32·2	274
17·0	2	25·0	25·0	266

BHOPAL

Ht. in Km.	n	V	v	D
10·0	21	19·9	17·1	279
11·0	21	19·9	16·7	279
12·0	20	22·6	20·5	276
13·0	16	25·8	23·9	263
14·0	15	26·6	23·8	267
15·0	14	27·9	25·3	263
16·0	10	21·7	17·4	277
17·0	5	21·1	17·0	281
18·0	2	22·3	21·3	358
19·0	1	7·0	7·0	350

BHUJ

Ht. in Km.	n	V	v	D
10·0	16	19·5	8·7	257
11·0	10	17·1	11·7	270
12·0	9	14·1	11·5	268
13·0	8	16·3	13·9	277
14·0	7	12·4	10·3	296
15·0	6	12·2	10·9	311
16·0	3	10·0	6·2	328
17·0	3	8·8	7·8	348
18·0	3	10·5	9·2	356
19·0	2	14·2	13·0	357

BIKANER

Ht. in Km.	n	V	v	D
10·0	11	25·5	22·8	293
11·0	8	27·0	24·1	284
12·0	5	27·8	25·0	281
13·0	4	22·3	21·1	289
14·0	1	22·5	22·5	290
15·0	1	18·5	18·5	290

BOMBAY

Ht. in Km.	n	V	v	D
10·0	16	16·1	12·2	278
11·0	10	15·0	13·3	268
12·0	8	21·4	21·3	252
13·0	8	16·8	16·6	249
14·0	8	18·2	17·4	243
15·0	6	14·0	12·8	260

CALCUTTA

Ht. in Km.	n	V	v	D
10·0	15	23·2	19·3	290
11·0	13	23·3	19·7	294
12·0	7	23·6	20·9	292
13·0	3	17·3	14·3	272
14·0	2	20·0	16·8	298
15·0	2	23·7	17·7	290
16·0	2	19·5	10·5	275
17·0	1	19·0	19·0	230
18·0	1	19·5	19·5	225

COCHIN

Ht. in Km.	n	V	v	D
10·0	9	5·3	3·2	87
11·0	6	4·8	2·8	110
12·0	6	8·6	5·6	113
13·0	6	11·6	5·6	80
14·0	6	14·2	10·3	100
15·0	5	10.6	7·6	110
16·0	5	6·6	5·2	112
17·0	3	6·5	3·8	91
18·0	3	6·6	5·3	115
19·0	2	4·5	0·7	259
20·0	1	7·5	7·5	65
21·0	1	8·0	8·0	140
22·0	1	1·0	1·0	255
23·0	1	2·0	2·0	160
24·0	1	9·5	9·5	300

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds at and above 10·0 km. above sea level

NOVEMBER 1948

Ht. in Km.	n	V	v	D
		COOCH BEHAR		
10·0	9	34·2	31·7	263
11·0	6	33·8	28·9	273
12·0	2	40·0	39·3	252
13·0	1	63·5	63·5	255
		CUTTACK		
10·0	13	13·1	11·1	282
11·0	9	16·5	15·2	275
12·0	9	18·0	16·4	272
13·0	7	19·8	18·8	267
14·0	7	18·9	17·6	264
15·0	6	14·3	11·3	252
16·0	6	11·2	9·6	246
17·0	5	10·2	7·1	286
18·0	3	11·5	8·7	314
19·0	3	5·7	4·4	271
20·0	2	7·0	4·7	314
21·0	2	10·2	7·8	283
22·0	1	16·5	16·5	290
23·0	1	20·5	20·5	300
24·0	1	20·0	20·0	290
25·0	1	24·0	24·0	295
26·0	1	34·0	34·0	310
27·0	1	38·0	38·0	300
28·0	1	44·5	44·5	295
29·0	1	54·0	54·0	280
		DEOLALI		
10·0	4	19·9	17·5	308
11·0	2	18·3	18·2	258
12·0	1	18·0	18·0	245
13·0	1	17·0	17·0	245
14·0	1	13·5	13·5	251
15·0	1	3·0	3·0	304
16·0	1	10·0	10·0	355
17·0	1	12·0	12·0	25
18·0	1	13·0	13·0	30
19·0	1	4·5	4·5	40

Ht. in Km.	n	V	v	D
		DIBRUGARH		
10·0	16	29·0	26·7	270
11·0	13	32·0	29·7	269
12·0	12	37·8	35·1	271
13·0	9	34·8	31·3	276
14·0	8	33·8	30·9	269
15·0	5	38·8	36·5	269
16·0	3	40·6	9·4	336
17·0	2	42·5	41·0	258
18·0	1	50·0	50·0	290
		GADAG		
10·0	8	11·0	1·7	343
11·0	3	12·5	10·7	201
12·0	2	14·0	12·7	218
13·0	2	10·0	9·9	242
14·0	1	14·5	14·5	215
15·0	1	8·0	8·0	235
16·0	1	3·5	3·5	210
17·0	1	2·5	2·5	295
		GAYA		
10·0	8	11·0	1·7	343
11·0	9	36·4	27·2	290
12·0	7	42·0	29·4	298
13·0	5	44·0	34·2	287
14·0	4	41·1	3·8	280
15·0	2	45·0	44·5	318
16·0	1	47·0	47·0	310

Ht. in Km.	n	V	v	D
		GOPALPUR		
10·0	20	12·5	9·1	278
11·0	13	13·3	9·4	263
12.0	10	11·6	8·4	257
13·0	8	10·0	5·7	254
14·0	8	11·5	6·8	254
15·0	7	10·6	7·7	256
16·0	7	9·6	6·2	235
17·0	6	8·4	6·8	210
18·0	5	9·7	7·5	289
19·0	2	16·3	15·7	145
20·0	2	20·7	20·7	153
21·0	2	23·5	23·3	159
22·0	2	25·0	24·8	159
23·0	2	26·3	26·3	163
24·0	2	26·7	26·7	163
25·0	2	28·3	28·3	163
26·0	2	31·3	31·3	163
27·0	2	38·5	38·5	163
28·0	2	40·8	48·0	163
29·0	2	40·7	40·5	162
30·0	1	52·0	52·0	165
		GORAKHPUR		
10·0	10	35·4	28·3	280
11·0	7	43·4	39·2	264
12·0	4	38·2	12·6	252
13·0	1	45·2	45·0	260
		HYDERABAD (DN)		
10·0	1	15·0	15·0	210
11·0	2	13·5	12·7	243
12·0	1	13·0	13·0	260
13·0	1	10·5	10·5	315
14·0	1	9·5	9·5	340

Ht. in Km.	n	V	v
		JAGDALPUI	
10·0	10	11·6	11·0
11·0	8	14·2	12·1
12·0	6	16·6	12·6
13·0	5	20·5	16·3
14·0	4	15·9	13·0
15·0	3	9·8	8·2
16·0	3	10·2	9·9
17·0	2	12·7	12·6
18·0	2	14·6	14·6
19·0	1	13·5	13·5
20·0	1	27·0	27·0
		JAMNAGA	
10·0	10	17·7	12·9
11·0	8	17·5	13·4
12·0	7	17·7	15·7
13·0	5	14·0	12·5
14·0	4	18·4	9·2
15·0	1	14·0	14·0
		JAMSHEDPU	
10·0	13	26·0	23·9
11·0	10	26·5	23·6
12·0	7	28·0	25·0
13·0	6	25·0	22·9
14·0	4	20·9	18·3
15·0	4	24·7	20·6
16·0	2	13·0	10·7
17·0	2	8·7	8·0
18·0	1	2·5	2·5
19·0	1	23·5	23·5
20·0	1	32·5	32·5
21·0	1	53·0	53·0
22·0	1	63·0	63·0

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds at and above 10·0 km. above sea level

NOVEMBER 1948

Ht. in Km.	n	V	v	D
	JHARSUGUDA			
10·0	22	17·4	13·1	284
11·0	18	20·0	17·3	275
12·0	16	23·4	21·0	278
13·0	15	23·6	19·9	273
14·0	14	23·4	20·4	281
15·0	9	24·6	18·3	279
16·0	5	19·9	15·2	248
17·0	5	22·1	15·0	232
18·0	2	26·5	18·1	226
19·0	1	49·0	49·0	235
	JODHPUR			
10·0	20	23·6	19·1	279
11·0	16	27·0	23·3	276
12·0	15	26·3	22·9	282
13·0	12	27·5	23·0	292
14·0	7	30·9	25·4	298
15·0	4	26·4	17·3	305
16·0	3	17·7	12·8	333
17·0	2	13·7	8·3	302
18·0	1	33·0	33·0	315
	MADHOSAGAR			
10·0	25	32·1	28·5	282
11·0	20	36·6	32·1	281
12·0	18	40·5	35·5	281
13·0	15	41·7	37·2	283
14·0	15	45·6	40·8	280
15·0	12	48·0	44·0	280
16·0	12	49·9	46·7	282
17·0	7	47·7	44·2	272
18·0	5	35·0	32·4	284
19·0	5	34·6	31·4	292
20·0	3	41·3	39·7	290
21·0	2	36·0	36·0	294
22·0	2	32·0	30·1	303
23·0	1	28·0	28·0	315
24·0	1	36·5	36·5	335

Ht. in. Km.	n	V	v	D
	MADHOSAGAR —contd.			
25·0	1	32·5	32·5	345
26·0	1	16·5	16·5	345
27·0	1	28·0	28·0	350
28·0	1	26·5	26·5	350
29·0	1	34·0	34·0	345
	MADRAS			
10·0	24	7·7	1·7	18
11·0	24	7·8	1·9	348
12·0	21	8·4	2·4	9
13·0	17	8·5	1·8	73
14·0	13	9·6	2·2	80
15·0	10	12·2	6·7	63
16·0	8	8·4	6·5	88
17·0	5	8·4	7·2	82
18·0	3	4·8	1·1	102
19·0	1	4·5	4·5	295
20·0	1	3·5	3·5	270
	MALEGAON			
10·0	8	14·5	6·0	251
11·0	7	18·3	13·7	258
12·0	6	19·2	18·4	262
13·0	5	20·1	19·8	250
14·0	4	19·0	18·9	248
15·0	3	15·5	15·4	259
16·0	2	9·3	6·1	293
17·0	2	10·3	3·4	329
18·0	1	7·5	7·5	350
19·0	1	9·0	9·0	20
	MANGALORE			
10·0	14	5·0	1·5	18
11·0	9	8·2	3·0	214
12·0	8	11·2	5·7	148
13·0	6	9·2	4·7	153
14·0	3	6·5	2·8	113
15·0	2	4·5	2·1	300
16·0	1	5·5	5·5	255
17·0	1	6·5	6·5	335

Ht. in Km.	n	V	v	D
	MASULIPATAM			
10·0	20	9·7	7·6	297
11·0	15	11·7	10·1	301
12·0	13	12·8	10·4	308
13·0	13	15·2	12·4	306
14·0	10	13·4	9·6	310
15·0	9	8·6	4·7	289
16·0	8	6·5	1·3	351
17·0	8	6·9	3·0	76
18·0	5	5·5	2·8	186
19·0	4	7·0	3·6	185
20·0	4	6·9	4·1	204
21·0	4	7·7	6·2	233
22·0	2	2·5	2·0	244
	NAGERCOIL			
10·0	31	8·6	6·8	95
11·0	14	9·9	8·6	92
12·0	14	9·6	7·9	87
13·0	13	12·2	9·8	86
14·0	12	14·4	9·6	81
15·0	7	14·6	6·0	109
16·0	7	11·2	5·2	88
17·0	6	8·4	4·3	97
18·0	5	11·7	11·0	101
19·0	4	9·7	9·5	104
20·0	3	8·7	6·3	106
21·0	3	4·0	2·3	104
22·0	2	9·3	8·3	122
23·0	1	11·5	11·5	105
24·0	1	10·5	10·5	105
	NAGPUR			
10·0	18	13·4	9·4	284
11·0	16	17·8	14·2	274
12·0	14	19·5	12·6	274
13·0	9	21·3	18·3	277
14·0	8	22·6	18·1	281
15·0	5	26·8	23·7	299

Ht. in Km.	n	V	v	D
	NAGPUR—contd.			
16·0	5	26·2	22·4	312
17·0	5	26·4	23·0	308
18·0	3	19·5	14·5	317
19·0	2	12·5	5·7	269
20·0	1	21·5	21·5	230
	NEW DELHI			
10·0	11	46·5	37·5	301
11·0	10	38·9	36·2	299
12·0	7	43·6	40·9	303
13·0	4	43·3	40·7	306
14·0	3	36·2	35·8	299
15·0	3	33·8	33·2	293
16·0	2	29·5	29·5	304
	POONA			
10·0	15	12·3	8·5	268
11·0	13	13·7	8·7	264
12·0	11	16·2	9·9	259
13·0	9	16·3	11·0	244
14·0	9	13·1	9·1	257
15·0	5	12·8	11·7	282
16·0	4	11·1	9·6	290
17·0	2	9·3	8·3	11
18·0	2	7·3	7·2	26
19·0	1	2·5	2·5	195
20·0	1	5·0	5·0	265
	PORT BLAIR			
10·0	4	7·7	7·7	300
11·0	5	8·9	8·3	291
12·0	4	6·6	6·0	295
13·0	3	7·8	5·9	292
14·0	3	8·7	5·8	286
15·0	2	9·5	7·0	331
16·0	1	2·0	2·0	30

TABLE B—MONTHLY MEAN DIRECTIONS AND VELOCITIES OF UPPER WINDS

Winds at and above 10·0 km. above sea level

NOVEMBER 1948

Ht. in Km.	n	V	v	D
	RAIPUR			
10·0	17	15·1	12·5	284
11·0	11	16·2	14·1	284
12·0	11	20·3	17·4	285
13·0	10	26·6	23·9	291
14·0	9	23·8	21·2	287
15·0	9	28·1	24·8	287
16·0	7	32·2	29·2	288
17·0	5	26·5	23·4	285
18·0	5	27·9	24·7	282
19·0	3	18·7	17·0	269
20·0	3	26·0	21·7	279
21·0	1	14·0	14·0	230
22·0	1	16·0	16·0	230
23·0	1	27·0	27·0	220
	SAHARSA			
10·0	12	29·9	25·3	288
11·0	10	29·2	25·9	292
12·0	3	30·3	19·7	286
13·0	1	36·0	36·0	320
	TEZPUR			
10·0	14	31·7	30·2	263
11·0	6	31·4	28·4	264
12·0	3	26·0	26·9	268
13·0	2	35·3	32·1	279
14·0	1	30·5	30·5	260
15·0	1	20·0	20·0	235
	TRICHINOPOLY			
10·0	16	7·3	4·7	99
11·0	8	7·2	0·7	85
12·0	7	9·4	4·3	125
13·0	6	7·4	5·7	116
14·0	6	7·4	4·7	106
15·0	4	7·5	5·4	119
16·0	4	10·3	7·6	129
17·0	4	9·1	8·7	119
18·0	3	9·8	9·6	108

Ht. in Km.	n	V	v	D
	TRICHINOPOLY *—contd.*			
19·0	3	9·0	5·8	122
20·0	2	17·0	13·9	170
21·0	2	17·3	17·1	147
22·0	2	21·0	19·1	141
23·0	1	3·0	3·0	180
24·0	1	8·0	8·0	195
25·0	1	14·0	14·0	95
26·0	1	13·0	13·0	115
27·0	1	28·0	28·0	110
28·0	1	16·0	16·0	95
29·0	1	12·0	12·0	125
30·0	1	21·0	21·0	120
31·0	1	32·0	32·0	145
32·0	1	33·0	33·0	130
	TRIVANDRUM			
10·0	15	8·1	6·7	87
11·0	9	9·5	9·2	80
12·0	8	11·4	8·9	86
13·0	6	9·8	7·3	98
14·0	3	6·8	5·5	120
15·0	1	8·5	8·5	110
16·0	1	7·5	7·5	80
17·0	1	5·5	5·5	120
18·0	1	3·0	3·0	115
	UDAIPUR			
10·0	17	20·2	15·9	273
11·0	14	21·3	16·2	286
12·0	13	23·9	19·9	278
13·0	8	21·4	19·4	278
14·0	7	18·7	17·7	284
15·0	7	19·3	18·6	292
16·0	7	16·5	15·7	307
17·0	6	13·5	12·8	333
18·0	5	20·1	19·9	345
19·0	2	13·7	13·6	349
20·0	1	5·5	5·5	270

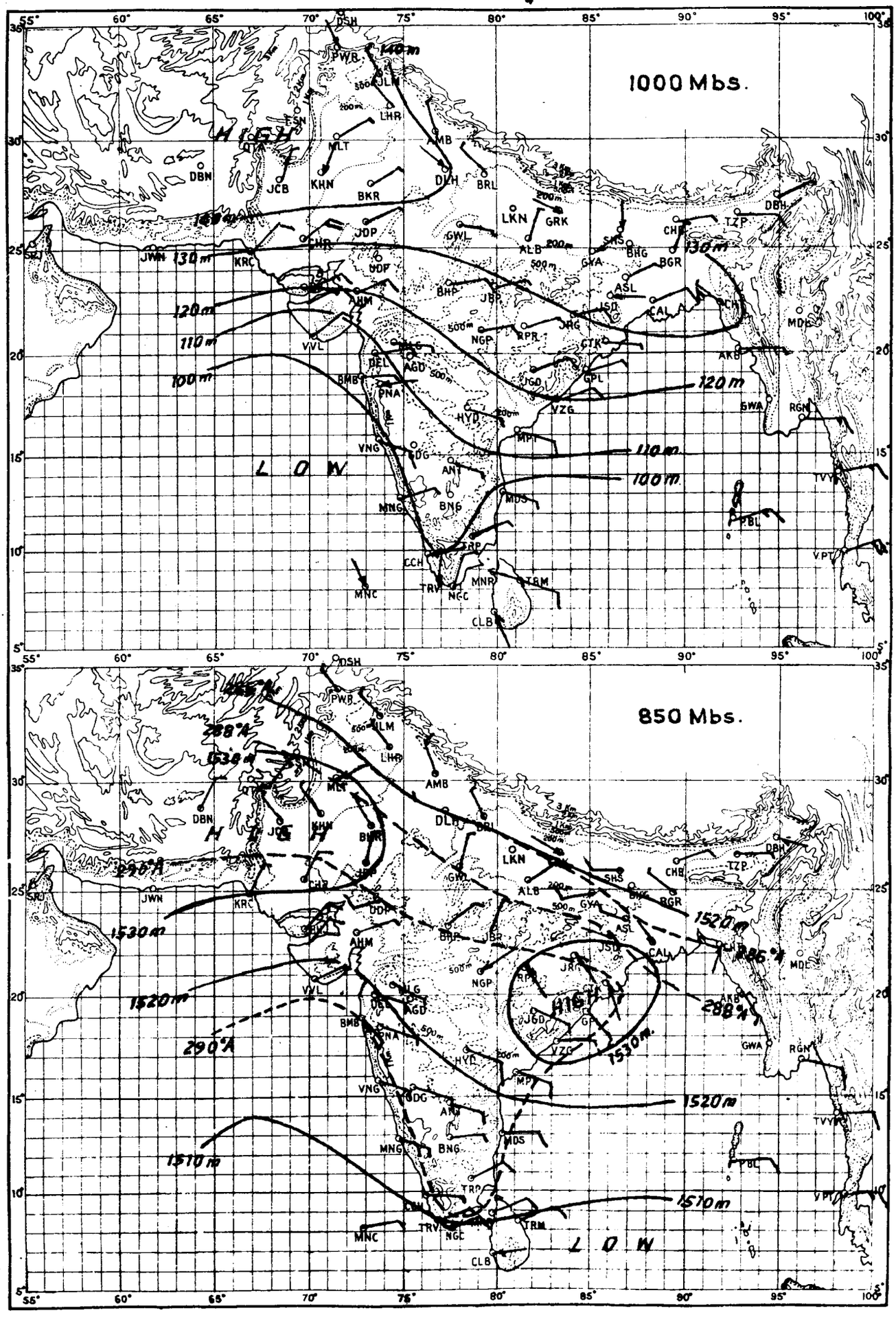
Ht. in Km.	n	V	v	D
	VENGURLA			
10·0	16	10·4	4·6	307
11·0	12	12·5	4·4	302
12·0	10	14·5	6·2	302
13·0	9	12·8	6·3	277
14·0	6	16·6	7·2	283
15·0	2	17·3	17·3	233
16·0	1	8·0	8·0	250
17·0	1	3·0	3·0	255
	VERAVAL			
10·0	35	19·0	11·6	276
11·0	28	20·4	16·1	280
12·0	22	23·5	17·3	291
13·0	16	22·5	21·9	301
14·0	12	24·2	23·3	297
15·0	5	18·3	18·1	267
16·0	5	14·1	8·8	264
17·0	5	15·1	6·5	270
18·0	5	17·0	5·3	334
19·0	1	20·0	20·0	345
20·0	1	13·0	13·0	340
21·0	1	9·0	9·0	325
	VIZAGAPATAM			
10·0	14	11·8	8·8	268
11·0	10	11·9	8·2	277
12·0	5	12·8	9·4	259
13·0	5	13·3	10·8	260
14·0	5	11·7	9·1	258
15·0	4	11·8	11·6	217
16·0	4	10·5	10·4	219
17·0	2	13·5	11·7	210
18·0	1	8·0	18·0	230
19·0	1	19·0	19·0	250

Ht. in Km.	n	V	v	D
	MINICOY			
10·0	11	6·4	5·5	9[illegible]
11·0	6	10·6	9·9	10[illegible]
12·0	4	15·0	12·0	11[illegible]
13·0	4	10·5	7·5	10[illegible]
14·0	3	4·5	1·0	2[illegible]
15·0	2	3·3	3·2	1[illegible]
16·0	2	5·3	5·0	3[illegible]
17·0	1	3·5	3·5	7[illegible]
18·0	1	4·0	4·0	3[illegible]

MONTHLY MEAN CONSTANT PRESSURE CHARTS

NOVEMBER 1948

Plate I

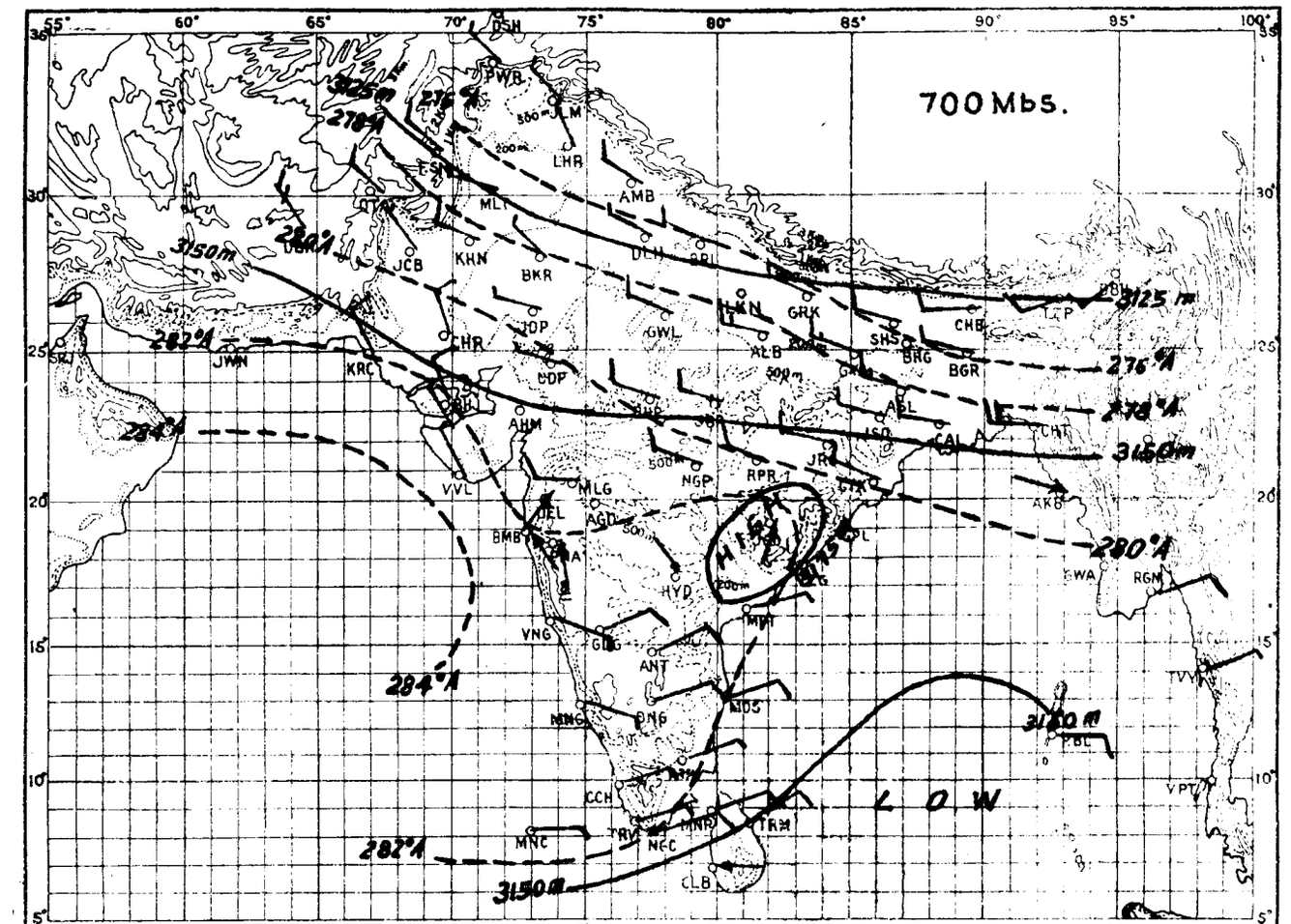


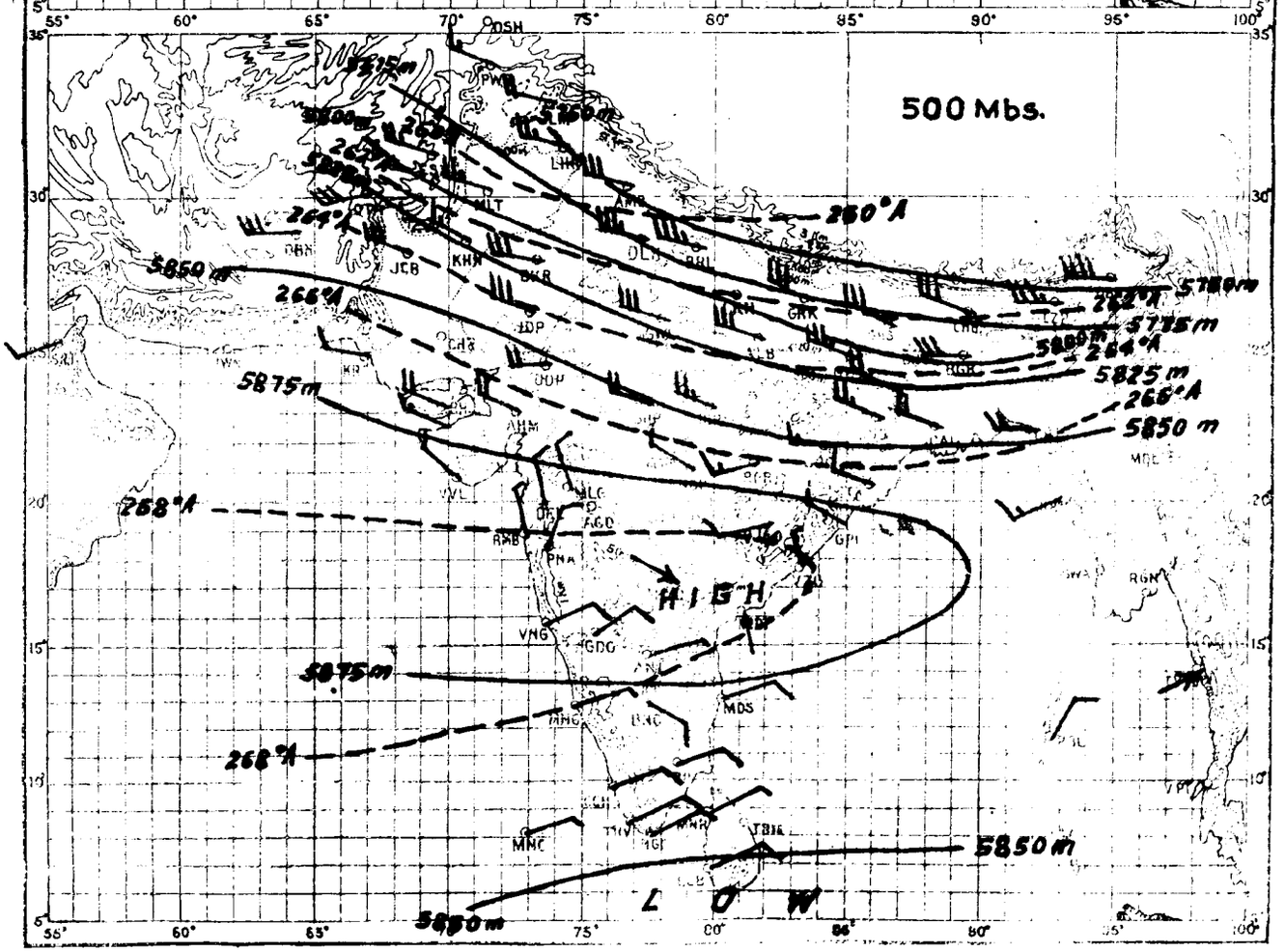
RESULTANT WIND ——— = 5 Knots, ——— = 10 Knots, ——— = 50 Knots.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

NOVEMBER 1948

Plate II





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

Registered No. B-3097.

INDIA WEATHER REVIEW, 1948

MONTHLY WEATHER REPORT

DECEMBER

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NOV 30 1953
WEATHER BUREAU

Published by Authority of the Government of India

Chief features :—(1) Scanty rainfall in northern India due to inactive western disturbances; (2) weak northeast monsoon in the Madras Presidency.

Although nine western disturbances affected the weather over the country during the month, only the first two were comparatively active. They caused excess of rainfall in the North-West Frontier Province and the southwest Punjab and some heavy falls of snow in the western Himalayas during the first week. A brief account of the movement and activity of each of the western disturbances is set out in the following table :—

S. No.	Period	Course	Region	Nature of precipitation	Period	Remarks
1	1st to 3rd ..	Northeastwards from Baluchistan to Kashmir across the south and west Punjab.	North Baluchistan ..	Scattered showers ..	2nd ..	A fairly active disturbance.
			North-West Frontier Province, northwest Punjab, Kashmir, hills of East Punjab, west United Provinces.	Local rain or snow ..	3rd.	
2	3rd to 7th ..	Northeastwards from Baluchistan to Kashmir.	Baluchistan ..	Local rain ..	3rd	Active disturbance. Induced a feeble secondary over south Rajputana and west Central India on the 6th. See 2 (a).
				A few light falls	5th	
			Sind	A few light falls of rain ..	5th	
			North-West Frontier Province.	Widespread rain ..	4th.	
			West Punjab, Kashmir, in and near hills of East Punjab and west United Provinces.	Local rain ..	4th, 5th	
				Widespread rain or snow	6th	
2a	6th to 7th	Developed as a secondary over south Rajputana and west Central India and filled up there without much movement.	West Rajputana .. West Central India ..	Isolated light showers ..	6th to 7th.	
3	13th to 14th	North-West Frontier Province to Kashmir.	..	..	..	Very feeble.
4	15th to 17th	Northeastwards from Baluchistan to Kashmir across West Punjab.	Kashmir	Scattered falls of rain	16th, 17th.	
5	18th to 21st	Northeastwards from north Baluchistan to Kashmir across north-west Punjab.	Baluchistan, North-West Frontier Province and Kashmir.	Local rain or snow ..	20th.	
5(a)	20th to 21st	Gulf of Oman to northeast Baluchistan.	Baluchistan	A few falls ..	21st ..	Secondary of fifth disturbance.
6	21st to 25th	Gulf of Oman to northeast Punjab hills across Baluchistan.	Baluchistan	A few light falls ..	24th ..	Came from Persian Gulf and gave 2" of rain at Muscat on 22nd.
7	25th to 28th	North-West Frontier Province to Kashmir.	North-West Frontier Province.	A few falls of rain or snow	28th ..	Induced a secondary over Central Provinces, See 7 (a).
7(a)	26th to 31st	Developed as a secondary over Central Provinces and moved as a feeble low pressure wave eastwards.	Chota Nagpur ..	A few showers ..	29th, 30th.	
			Assam	A few showers ..	30th.	
8	28th to 30th	North-West Frontier Province to Kashmir.	North-West Frontier Province.	A few falls of rain or snow	29th, 30th.	
9	30th	Northeastwards from Baluchistan to northwest Punjab.	Baluchistan and Sind ..	A few falls ..	30th, 31st	Continued into next month. Induced a secondary over Sind and adjoining areas.
9(a)	31st	Formed as a secondary over Sind and the adjoining areas on 31st.	..	..	..	Continued into January.

Price : Re. 1/-.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity. %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
BAY ISLANDS—																						
Port Blair ..	259	1004·3	+0·3	1001·4	86·3	+2·7	88	13, 29	74·6	+1·7	70	5	82·3	78·7	75·4	73·8	26·9	+0·4	26·2	71	—3	78
ASSAM—																						
Dibrugarh.. ..	348	1006·0	—0·2	1001·9	73·7	—0·3	79	7	49·4	—1·7	44	4 days	59·7	63·8	56·5	59·1	14·3	—0·8	15·1	82	—12	75
Sibsagar	317	1007·3	0	1003·3	72·3	+0·1	77	7	50·6	—0·3	44	19	57·2	64·0	56·3	60·1	15·0	—0·4	15·6	94	—3	77
Tezpur	258	1009·4	—0·1	1005·5	76·2	+1·0	80	9,13	53·5	—0·6	49	17, 18, 20	59·2	67·6	56·9	61·8	14·7	—0·7	16·2	86	—5	71
Gauhati	182	1011·5	0	1007·3	74·9	—0·7	77	7	53·7	+1·0	49	21	58·6	68·2	57·6	62·6	15·8	—0·1	16·9	93	+1	72
Dhubri	115	1013·0	—0·7	1009·6	73·6	—0·5	78	13,23	56·0	+0·3	50	28	59·0	68·9	57·6	62·7	15·5	—0·3	16·7	90	+4	69
Silchar	96	1013·7	—0·5	1010·2	80·1	+0·3	85	4	55·2	+0·5	48	28	60·1	71·2	58·2	63·7	15·7	—0·6	16·8	88	+2	64
WEST BENGAL—																						
Dum Dum ..	33	1016·0	..	1012·6	77·4	..	83	30	56·5	..	52	25, 26	62·8	72·8	58·9	62·7	15·2	..	14·9	78	..	54
Calcutta	21	1016·4	—0·4	1013·0	78·3	—1·1	84	31	57·3	+2·3	53	25	629	71·6	59·7	62·9	16·1	+1·4	15·9	82	+2	59
Saugor Island ..	10	1016·3	—0·6	1013·1	75·4	—1·5	80	31	60·8	+1·6	52	14	66·9	71·6	62·6	63·1	17·3	0	15·9	77	—3	60
Sandheads ..	28	1015·9	—0·3	1013·2	..	..	..	..	..	..	..	..	73·0	75·3	65·4	65·2	18·0	—0·1	16·7	64	+3	55
Midnapore ..	149	1011·8	—0·5	1008·4	77·4	—2·4	84	31	55·4	—0·1	51	13, 14	61·4	73·3	57·6	63·0	14·4	+1·4	14·9	79	+13	54
Contai	35	1015·7	..	1012·1	77·5	..	84	31	57·4	..	51	14	62·8	72·9	59·5	63·3	16·1	..	15·5	81	..	57
Burdwan	106	1013·4	—0·6	1009·8	77·6	—1·3	83	30,31	55·7	—0·2	52	14	61·2	73·5	57·2	63·6	14·2	+0·8	15·5	77	+6	56
Krishnagar ..	48	1015·2	—0·8	1011·9	79·0	+0·3	83	30, 31	53·9	+0·8	49	4 days	59·0	73·6	57·4	64·6	15·4	+1·0	16·7	90	+13	59
Asansol	414	1003·3	0	999·7	76·5	—2·1	81	31	53·4	0	49	13, 14	59·5	70·8	55·7	61·1	13·3	+0·4	14·1	77	+7	55
Berhampore ..	62	1015·0	—0·6	1011·5	77·5	+0·4	81	8, 31	55·7	+0·6	51	26, 27	61·0	71·8	57·7	63·4	14·7	+0·1	16·1	81	+2	59
Malda	103	1013·9	—0·4	1010·4	74·8	—1·0	79	7	54·0	+1·5	49	27, 28	61·4	70·0	57·6	62·5	14·4	+0·2	15·9	79	+3	63
Jalpaiguri ..	271	1007·7	—0·4	1004·0	76·3	—0·4	81	5	52·0	—1·2	48	17	55·1	71·1	53·0	61·5	12·8	—1·7	14·3	86	—1	55
ORISSA—																						
Balasore	65	1015·4	0	1012·0	78·2	—1·8	85	31	56·3	+0·6	50	14	64·9	70·5	59·6	63·7	15·0	+0·9	17·0	72	—1	69
Chandbali ..	20	1016·6	+0·2	1013·3	78·8	—1·5	87	31	56·5	—1·3	49	14	61·9	72·7	59·4	63·9	16·2	+0·3	16·2	86	+8	60
Puri	20	1016·7	+0·3	1015·4	79·6	—0·9	82	4 dys	61·6	—0·9	57	14, 15	65·5	75·0	60·9	64·8	16·2	—0·8	16·4	75	0	55
Gopalpur	56	1015·3	+0·1	1011·8	79·4	—1·0	82	7 days	59·8	—1·2	54	15	65·2	74·8	60·8	66·1	16·2	—0·9	18·1	77	+2	61
Cuttack	87	1014·1	—0·5	1016·5	79·9	—1·3	86	31	58·1	—0·6	52	14	61·7	75·9	58·6	63·8	15·5	—0·2	14·8	81	+3	48
Angul	455	1001·6	+0·3	998·0	78·0	—2·0	83	29,30,31	54·3	—0·7	49	14	59·8	74·5	56·4	61·2	13·9	—0·5	12·4	79	+4	43
Sambalpur ..	486	1000·6	—0·1	996·8	79·3	—0·9	84	30, 31	52·1	—1·7	47	15	58·3	76·3	56·1	62·3	14·5	+0·4	12·9	86	+10	42
CHOTA NAGPUR—																						
Jamshedpur ..	423	1002·8	0	999·0	77·2	—2·6	82	30, 31	53·0	+1·5	47	14	58·3	72·7	55·6	61·9	14·0	+1·2	13·9	84	+6	51
Chaibasa	742	991·3	—0·2	987·7	76·9	—1·3	82	30, 31	52·8	+1·2	47	14	56·8	72·7	54·0	62·0	12·9	—0·3	14·3	82	+3	52
Ranchi	2,150	942·3	—0·5	939·9	71·0	—1·9	78	31	49·0	—1·6	45	4 days	56·2	66·4	52·9	56·3	12·1	+1·9	11·1	80	+19	53
Hazaribagh ..	2,006	947·6	—0·2	945·1	69·9	—2·5	76	29	48·9	—1·1	44	13, 16	56·3	63·8	52·2	55·0	11·5	+1·2	10·9	75	+11	56
Daltonganj ..	725	992·7	0	989·0	74·3	—2·1	80	27	47·8	+1·3	41	14	56·6	69·6	53·2	60·6	12·3	+0·8	14·0	79	—3	58
Dhanbad	839	988·1	..	..	74·9	..	80	31	52·8	..	49	10	61·2	..	55·3	..	12·2	..	..	67	..	..
BIHAR—																						
Purnea	124	1013·3	—0·3	1009·6	76·9	+0·6	81	16	48·5	—1·0	42	31	55·7	69·3	54·3	63·0	13·7	+0·1	16·7	91	+3	69
Saharsa	156	1012·1	..	1008·7	74·9	..	79	5, 8	52·0	..	46	31	60·2	70·1	56·8	61·7	14·2	..	14·9	80	..	60
Darbhanga ..	161	1012·0	—0·3	1008·7	76·3	—0·1	82	8	50·8	—1·0	45	31	55·2	70·3	53·9	62·4	13·5	—0·6	15·6	94	+8	62
Motihari	218	1010·3	+0·1	1006·9	73·7	—1·5	77	5, 6, 8	48·1	0	42	31	58·8	65·9	56·7	60·9	14·8	+1·4	16·0	87	+4	74
Patna	173	1011·6	—0·4	1008·4	75·5	+0·9	79	5, 6, 7	52·3	0	48	5 days	59·5	69·8	54·8	59·7	12·6	—0·1	13·0	72	—1	52
Dehri	352	1005·7	..	1001·8	75·2	..	78	23	52·9	..	49	13, 17, 27	59·9	69·7	56·7	59·4	14·3	..	12·6	79	..	52
Gaya	365	1004·5	—0·2	1001·3	75·4	+0·8	78	5, 23	49·9	+1·3	45	14, 16	56·1	70·5	53·5	60·6	12·8	+1·9	13·5	84	+ 14	55
Naya Dumka ..	489	1000·6	+0·1	996·9	77·0	+0·8	81	31	48·1	—3·5	42	14, 26	62·3	71·3	54·7	61·7	11·2	—1·5	14·5	60	—9	55
Sabour	122	1013·0	—0·4	1009·4	74·2	—1·5	78	7	47·8	—0·1	42	26	56·8	67·9	54·4	62·5	13·3	—0·1	16·8	80	0	72

d amount, hs of sky).		Rainfall, inches.				No. of rainy days, (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																		STATION.
										8 hrs I. S. T.									17 hrs. I. S. T.									
Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																												BAY ISLANDS—
+0·5	5·6	0·51	—7·41	0·36	29	1	—6·2	9·7	+0·6	0	20	10	0	0	0	0	0	1	1	23	7	0	0	0	0	0	0	Port Blair
																												ASSAM—
+0·1	1·9	0·47	—0·16	0·36	30	2	+0·6	1·0	+0·5	4	6	12	3	1	1	0	0	4	0	1	2	0	0	0	0	0	28	Dibrugarh.
—1·0	2·0	0·84	+0·26	0·70	30	1	—0·5	1·5	+0·5	7	6	1	0	3	0	1	2	11	6	11	0	0	0	0	0	3	11	Sibsagar.
—0·8	1·0	0·63	+0·38	0·63	30	1	+0·3	1·4	0	1	9	19	0	0	0	0	0	2	0	6	7	0	0	0	0	0	18	Tezpur
+3·4	1·4	0	—0·16	0	..	0	—0·5	1·5	+0·4	5	6	4	3	2	0	0	0	11	0	6	8	0	0	0	0	0	17	Gauhati.
+0·6	1·2	0	—0·07	0	..	0	—0·1	3·8	+0·3	3	10	15	2	0	0	0	0	1	3	2	14	0	2	2	2	1	5	Dhubri.
—2·0	0	0	—0·42	0	..	0	—0·7	0·9	0	0	6	7	8	0	0	0	0	10	1	1	0	2	0	0	0	0	27	Silchar.
																												WEST BENGAL—
..	1·2	0	..	0	..	0	..	2·7	..	10	0	2	0	0	1	0	9	9	11	0	0	1	1	0	1	10	7	Dum Dum.
—0·9	1·3	0	—0·18	0	..	0	—0·3	1·5	—0·4	7	1	1	0	0	0	1	4	17	1	0	0	0	0	0	0	0	30	Calcutta.
—1·4	1·2	0	—0·21	0	..	0	—0·4	7·2	+1·7	19	5	0	1	0	1	0	5	0	16	1	0	0	1	6	2	5	0	Saugor Island.
—1·7	0·4	0	—0·15	0	..	0	—0·3		..	13	7	0	0	0	1	1	6	3	15	4	1	2	1	0	1	4	3	Sandheads.
—1·1	1·2	0	—0·16	0	..	0	—0·3	2·4	+1·0	19	2	0	0	0	1	0	0	9	10	6	0	0	0	0	0	0	15	Midnapore.
..	0·9	0	..	0	..	0	..	2·3	..	19	0	0	0	0	1	0	9	2	11	0	1	3	5	0	0	0	11	Contai.
—1·4	0·5	0	—0·19	0	..	0	—0·3	2·4	+1·2	9	2	0	0	1	0	2	11	6	7	4	0	1	0	0	3	10	6	Burdwan.
—1·1	0·7	0	—0·11	0	..	0	—0·2	1·0	—0·1	2	0	0	1	2	0	8	3	15	1	0	0	0	0	0	1	0	29	Krishnagar.
—1·3	0·8	0	—0·18	0	..	0	—0·4	3·6	+0·3	4	0	0	0	0	0	4	18	5	4	0	0	1	0	0	0	7	19	Asansol.
—0·6	0·6	0	—0·16	0	..	0	—0·4	1·0	+0·1	5	0	0	1	1	1	1	5	17	4	0	0	0	0	0	0	0	27	Berhampore.
—0·6	0·8	0	—0·07	0	..	0	—0·2	2·9	+0·1	13	1	0	0	1	2	0	10	4	1	1	0	0	0	0	4	11	14	Malda.
+0·1	1·6	0	—0·17	0	..	0	—0·4	2·0	+1·2	19	3	1	1	0	0	0	0	7	0	1	5	1	2	1	1	0	20	Jalpaiguri.
																												ORISSA—
—1·0	1·9	0	—0·16	0	..	0	—0·3	2·0	+0·4	20	0	0	0	0	1	1	6	3	0	1	1	2	2	0	0	0	25	Balasore.
—1·7	0·7	0	—0·03	0	..	0	—0·1	3·1	—0·2	12	0	0	0	0	0	2	16	1	4	14	8	4	0	0	0	0	1	Chandbali.
—0·9	1·4	0	—0·24	0	..	0	—0·4	3·0	+0·2	21	5	0	0	0	0	0	5	0	2	8	2	10	6	2	0	1	0	Puri.
—0·4	2·2	0	—0·53	0	..	0	—0·7	3·4	+0·3	20	0	0	0	0	0	0	11	0	1	4	14	11	1	0	0	0	0	Gopalpur.
—1·2	1·6	0	—0·23	0	..	0	—0·4	1·7	+0·8	0	1	0	0	0	0	1	1	28	0	2	0	0	0	0	0	0	29	Cuttack.
—0·9	1·8	0	—0·14	0	..	0	—0·4	3·4	+0·4	2	0	0	0	0	1	19	7	2	17	6	1	0	0	1	0	3	3	Angul.
—1·1	1·3	0	—0·17	0	..	0	—0·3	1·9	0	9	7	2	0	0	0	0	0	13	5	4	1	2	1	4	5	2	7	Sambalpur.
																												CHOTA NAGPUR—
—1·4	1·5	0·01	—0·22	0·01	28	0	—0·4	2·0	+0·5	1	0	0	0	0	0	19	5	6	2	3	4	0	0	0	3	5	14	Jamshedpur.
—0·9	1·5	0	—0·18	0	..	0	—0·4	1·0	—0·1	0	0	0	1	1	16	2	0	11	0	2	0	0	0	1	1	1	26	Chaibasa.
—1·2	0·3	0	—0·27	0	..	0	—0·6	0·8	—2·1	0	0	0	0	0	1	2	0	28	0	0	0	0	0	0	0	0	31	Ranchi.
—0·5	0·8	0·01	—0·26	0·01	30	0	—0·5	4·2	—0·3	3	1	0	2	1	1	0	15	8	8	2	1	0	1	1	0	17	1	Hazaribagh.
—0·6	0·7	0·08	—0·17	0·08	29	0	—0·5	1·4	—0·1	0	0	6	7	1	0	1	1	15	2	2	1	2	0	0	6	6	12	Daltonganj.
..	..	0	..	0	..	0	..	4·3	..	3	2	0	0	0	9	5	6	6	..	..	..	..	..	..	..	..	..	Dhanbad.
																												BIHAR—
—0·8	0·2	0	—0·12	0	..	0	—0·3	1·2	+0·1	0	1	0	1	0	6	8	1	14	0	0	0	0	0	2	3	0	23	Purnea.
..	0·4	0	..	0	..	0	..	1·3	..	0	1	1	0	1	10	3	3	12	0	0	0	0	0	3	1	1	26	Saharsa.
—1·1	0·3	0	—0·12	0	..	0	—0·3	0·5	—0·6	0	1	1	0	0	2	10	3	14	0	0	0	0	0	1	3	1	26	Darbhanga.
—1·2	0·5	0	—0·15	0	..	0	—0·4	1·0	—0·3	0	0	1	0	0	0	8	0	22	0	0	1	0	0	0	2	0	28	Motihari.
—0·7	0·6	0	—0·22	0	..	0	—0·5	2·5	+0·8	0	2	0	0	3	10	5	2	9	0	0	0	0	0	1	13	2	15	Patna.
..	0·5	0	—0·18	0	..	0	—0·5	2·0	..	0	0	0	0	6	17	0	3	5	2	0	0	0	0	0	3	7	19	Dehri.
—1·0	0·7	0	—0·18	0	..	0	—0·4	2·9	—0·2	0	0	0	7	18	2	0	0	4	3	0	1	0	0	0	8	11	8	Gaya.
—0·8	0·7	0	—0·13	0	..	0	—0·3	1·7	+0·6	6	1	1	3	1	5	5	9	0	4	2	0	2	0	2	7		5	Naya Dumka

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars.			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity, %	
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
U. P., EAST—																					
Gonda	360	1004·8	..	1002·1	75·2	—0·6	79	5, 6	46·5	—1·2	42	15, 31	50·2	66·6	49·2	58·9	11·4	—0·5	13·5	93	+8
Gorakhpur ..	254	1008·3	—0·5	1005·6	74·7	+0·2	79	3	50·4	+0·6	46	16, 31	54·8	70·9	52·4	61·4	12·6	+0·1	14·4	81	+3
Banaras	250	1008·5	—0·7	1005·9	73·6	—1·6	77	6, 27	50·1	+1·9	44	14	54·2	70·9	53·2	60·7	13·3	+1·4	13·1	93	+14
Allahabad (Bamrauli)	322	1006·2	—0·6	1003·5	74·8	—0·7	78	6, 9	49·5	+2·4	44	13,14, 15	53·7	71·4	52·2	60·5	12·8	+1·9	13·7	90	+10
Fatehpur	375	1005·0	..	1001·9	75·0	—1·1	79	5, 8, 24	48·3	+0·8	42	14	57·3	72·9	53·5	61·6	12·1	+0·6	13·9	75	+3
Kanpur	414	1003·1	—0·2	1001·0	75·7	+1·7	80	5, 6	46·6	+0·1	40	12, 14	50·3	71·9	48·6	58·7	11·1	+0·4	11·1	88	+8
Lucknow	371	1004·9	+0·2	1002·5	76·2	+0·3	81	4, 7	47·9	+0·6	42	5 days	50·8	67·9	49·2	60·2	11·4	+0·5	14·4	87	+7
Bahraich	407	1003·5	+0·6	1000·5	75·9	+0·9	77	5 days	46·8	—1·4	39	31	55·6	70·3	51·6	60·3	11·2	—0·3	13·0	79	—4
U. P., WEST—																					
Jhansi	823	988·2	—1·1	985·7	78·0	—0·1	83	5	49·1	+0·8	44	13, 14,15	51·4	74·4	49·6	60·0	11·2	+1·2	11·2	52	—11
Agra	553	998·1	—0·4	995·5	76·2	+0·8	83	5	47·1	+0·8	41	13	49·6	73·5	47·2	58·0	10·0	+1·3	9·5	83	+18
Mainpuri	516	999·5	0	997·3	77·0	+1·6	84	6	46·2	—0·1	41	13, 14	51·1	70·7	50·2	60·5	11·9	+2·2	14·5	82	+8
Aligarh	615	995·7	..	993·1	74·8	+0·8	91	5	46·4	—0·7	42	12, 13	49·6	71·6	46·4	57·9	9·5	+0·4	11·6	78	+13
Bareilly	568	997·3	—0·2	994·4	74·7	+1·6	82	6	47·5	+0·9	42	24	53·3	68·8	50·2	57·7	10·4	—0·3	11·2	80	—4
Meerut	762	991·4	..	..	..	..	..	..	44·8	..	39	13, 25	47·5	..	45·9	..	9·9	..	..	87	..
Roorkee	899	985·3	—0·5	983·3	71·0	—0·2	75	7 days	43·2	—0·2	38	12, 13,30	46·1	66·3	44·4	55·3	9·0	—0·5	10·0	87	+2
Dehra Dun ..	2,239	939·4	+0·1	937·8	67·5	—1·6	72	3	43·2	—1·9	37	31	45·6	62·4	43·3	53·2	8·8	+0·2	9·9	80	+2
EAST PUNJAB—																					
New Delhi ..	714	991·7	—0·4	989·6	74·3	+0·6	84	5	44·9	—0·1	41	12, 13	47·7	70·0	44·5	56·9	8·5	+0·2	10·0	76	+9
Hissar	725	992·1	—0·1	989·8	75·4	+1·2	81	2, 3	42·1	—1·1	34	12	45·4	70·8	42·5	57·5	7·9	—0·2	10·6	77	+5
Ambala	892	985·2	—0·7	983·0	73·8	+1·5	79	4	44·3	+0·5	37	25	46·2	69·4	45·5	56·9	9·9	+1·1	10·0	82	+5
Ludhiana . ..	810	988·4	—0·6	987·0	72·5	+1·7	79	2, 3	42·9	—1·3	38	5 days	46·2	67·0	44·8	57·2	9·3	+0·7	11·7	88	+10
KASHMIR—																					
Srinagar	5,205	845·5	—1·1	843·9	44·5	—3·7	56	1	31·2	+3·6	25	1, 12	33·9	41·3	32·7	38·5	5·7	+0·3	6·6	89	—4
Gulmarg	8,709	(Closed during Winter months).																			
Dras (R)	10,059																				
Leh	11,529	665·6	—1·0	662·8	30·4	—4·9	39	1	11·1	—1·6	4	12	14·9	27·4	11·4	20·9	1·4	—0·4	1·8	53	—8
Skardu (R) ..	7,505																				
Gilgit (R)	4,890																				
Misgar (R) ..	10,190																				
RAJPUTANA, WEST—																					
Sri Ganganagar ..	580	996·1	..	994·7	71·8	—1·8	79	2, 3	43·5	+3·5	38	12, 24	45·8	69·0	44·2	56·9	9·3	+1·9	10·5	87	+19
Bikaner	734	991·5	—0·3	988·7	76·4	..	84	2, 3, 4	42 9	..	36	12	47·4	74·2	45·1	67·2	9·3	..	19·4	83	..
Jaisalmer	793	988·4	..	985·7	78·5	..	86	2	49·0	..	42	9, 10	53·9	75·3	48·6	60·8	9·4	..	11·6	67	..
Phalodi	783	988·9	..	987·3	78·0	..	86	2	45·0	..	41	6 days	50·5	76·0	45·8	62·6	8·5	..	13·3	69	..
Jodhpur	736	990·5	+0·4	988·4	80·5	+1·5	85	2, 3, 15	52·2	+1·6	45	9	54·7	77·4	46·5	58·3	7·1	—0·2	8·7	51	—2
Barmer	638	994·3	+0·1	991·5	82·5	+2·4	88	17	53·6	+0·1	49	10	56·2	79·5	49·3	61·5	8·8	+0·5	10·5	58	+2
RAJPUTANA, EAST—																					
Sikar	1,406	967·5	..	965·2	77·5	..	84	5	44·2	..	36	12	47·3	73·2	43·1	56·9	7·5	..	8·5	70	..
Jaipur	1,431	967·3	—0·8	964·9	77·4	+1·0	81	5, 22	49·0	+1·4	40	12	52·5	73·5	46·7	56 5	8·5	+0·3	8·0	62	+4
Ajmer	1,593	961·8	—0·4	959·1	77·0	+1·6	81	4, 5	45·9	—0·7	41	12, 13	48·8	73·3	44·2	56·4	6 3	—2·1	8·0	69	+9
Kotah	843	987·9	—0·3	984·5	80·3	+1·2	85	5, 6	52·7	+0·6	49	15, 29	54·9	77·2	51·1	60·5	11·1	+1·8	10·4	74	+14
Jhalawar	1,053	979·5	—1·0	976·3	79·9	+1·7	83	21, 22, 24	49·5	+0·8	45	14, 15	51·5	76·7	49·2	59·3	7·3	—2·3	7·6	70	..
Rajsamand ..	1,850	952·3	..	..	78·2	..	82	18	54·6	..	49	30	57·0	..	51·9	..	11·2	..	..	82	+16
Udaipur	1,910	951·0	..	948·1	78·4	..	82	22	47·2	..	43	29, 30	52·3	75·1	47·7	58·1	9·6	..	10·4	71	..

Cloud amount, (tenths of sky)			Rainfall, inches.				No. of rainy days (0·10" or more		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													U. P., EAST—
6	—1·3	0·8	0	—0·32	0	..	0	—1·1	1·8	—0·3	0	0	1	0	0	0	11	0	19	0	0	0	0	0	0	0	2	29	Gonda.
3	—0·8	0·5	0	—0·19	0	..	0	—0·4	1·3	+0·5	1	0	1	0	0	2	12	0	15	0	0	0	0	3	2	21	0	5	Gorakhpur.
8	—0·6	0·6	0	—0·27	0	..	0	—0·5	..	..	0	1	3	0	4	14	4	0	5	3	2	1	0	0	3	12	6	4	Banaras.
7	—1·2	1·0	0	—0·34	0	..	0	—0·7	1·4	—0·7	1	0	1	0	0	3	3	0	23	0	1	0	0	0	0	4	2	24	Allahabad (Bamrauli).
8	—1·0	1·0	0	—0·34	0	..	0	—1·1	1·1	—0·5	1	0	0	2	0	0	3	1	24	0	0	0	0	0	0	0	1	30	Fatehpur.
9	0	1·0	0	—0·28	0	..	0	—0·8	3·2	+1·1	0	1	1	1	0	6	6	0	16	8	5	3	1	0	0	6	4	4	Kanpur.
5	—0·8	1·1	0	—0·32	0	..	0	—0·7	0·5	—0·5	2	0	0	0	0	0	3	0	26	0	0	0	0	1	0	7	0	23	Lucknow.
5	—0·7	1·2	0	—0·34	0	..	0	—0·9	1·7	+0·5	1	0	0	0	0	1	1	4	24	0	0	0	0	0	0	1	1	29	Bahraich.
																													U. P., WEST—
5	—0·9	0·5	0	—0·29	0	..	0	—0·8	2·2	+0·5	0	0	0	0	0	0	1	0	30	0	2	1	0	0	1	2	1	24	Jhansi.
1	—0·7	1·1	0	—0·30	0	..	0	—0·8	1·5	—0·8	0	1	1	0	0	0	1	0	28	2	1	1	0	1	0	3	3	20	Agra.
3	—0·5	1·5	0	—0·37	0	..	0	—0·8	1·4	+0·3	1	2	1	0	0	4	4	0	19	0	0	0	0	0	0	4	7	20	Mainpuri.
4	—0·3	1·7	0	—0·43	0	..	0	—1·2	3·0	0	0	0	1	0	0	0	5	0	25	0	0	1	1	0	0	5	5	19	Aligarh.
4	—0·4	3·0	0	—0·41	0	..	0	—1·0	1·5	+0·3	1	0	0	1	1	1	4	3	20	3	0	0	1	0	0	9	7	11	Bareilly.
0	..	..	0·60	+0·12	0·60	7	1	—0·2	2·5	..	0	4	4	0	0	0	5	8	10	..	..	..	..	..	..	..	..	..	Meerut.
0	—0·2	2·6	0	—0·68	0	..	0	—1·3	1·6	+0·3	0	3	0	1	0	1	0	6	20	0	0	0	0	0	0	0	14	17	Roorkee.
1	0	4·1	0·36	—0·66	0·29	5	1	—0·7	1·7	+0·2	3	4	0	0	0	0	2	3	19	3	3	0	0	0	5	4	2	14	Dehra Dun.
																													EAST PUNJAB—
7	+0·5	3·0	0	—0·43	0	..	0	—0·9	3·6	..	0	0	0	3	2	0	7	6	13	6	3	7	2	0	1	0	10	2	New Delhi.
1	0	1·7	0	—0·39	0	..	0	—1·6	3·5	+0·5	2	3	3	5	2	4	3	2	7	6	4	2	3	0	0	3	7	6	Hissar.
4	—1·3	1·7	0	—0·76	0	..	0	—1·5	..	..	0	0	0	1	0	1	0	14	15	0	1	0	0	0	0	0	22	8	Ambala.
6	0	2·9	0·47	—0·25	0·28	6	2	+0·6	0·2	—0·9	0	3	1	1	0	0	0	3	23	1	4	1	1	0	0	1	8	15	Ludhiana.
																													KASHMIR—
5	+2·4	7·7	1·71	+0·39	0·43	6	5	+1·6	2·5	+0·5	1	0	1	6	2	0	7	7	7	6	2	0	3	0	1	7	8	4	Srinagar.
																													Gulmarg.
																													Dras. (R)
1	—0·9	6·7	0·16	—0·03	0·04	9	0	—0·6	2·8	+1·4	2	14	1	0	1	1	0	0	12	0	2	0	0	10	10	1	2	6	Leh.
																													Skardu. (R)
																													Gilgit. (R)
																													Miagar. (R)
																													RAJPUTANA, WEST—
3	+0·5	2·4	0·31	+0·19	0·29	5	1	0	1·9	—1·7	2	3	3	1	0	0	0	1	21	9	3	1	2	0	1	1	8	6	Sri Ganganagar.
2	—1·0	1·0	0·08	—0·12	0·08	6	0	—0·5	1·8	—0·7	0	6	0	2	1	1	2	0	20	0	14	0	1	0	4	0	7	5	Bikaner.
5	..	0·8	0·09	..	0·05	5	0	..	4·9	..	3	20	2	1	1	3	0	1	0	4	13	0	1	2	5	2	4	0	Jaisalmer.
0	..	1·8	0	—0·10	0	..	0	—0·2	5·0	..	8	2	0	4	4	2	2	2	7	13	3	0	1	2	3	4	4	1	Phalodi.
2	—0·9	1·7	0·01	—0·10	0·01	6	0	—0·3	1·5	—4·6	1	19	1	0	0	0	0	0	10	4	12	0	1	0	3	3	3	5	Jodhpur.
3	—0·9	1·1	0	—0·10	0	..	0	—0·3	3·2	—0·9	2	1	1	0	0	0	0	18	9	4	9	1	1	1	4	1	6	4	Barmer.
																													RAJPUTANA, EAST—
2	..	2·4	0	..	0	..	0	..	1·5	..	0	1	3	0	1	0	1	0	25	3	1	1	0	0	1	9	8	8	Sikar.
7	—1·2	2·2	0	—0·20	0	..	0	—0·7	2·9	—0·2	0	6	13	1	1	0	0	1	6	6	0	1	1	3	3	3	10	4	Jaipur.
8	—0·9	1·8	0·04	—0·22	0·04	6	0	—0·4	0·5	—0·7	0	0	0	0	1	0	0	0	30	2	2	0	0	0	0	2	3	22	Ajmer.
6	—1·2	0·9	0	—0·21	0	..	0	—0·5	1·1	+0·1	1	1	0	0	2	1	0	0	26	0	2	1	0	0	1	3	1	23	Kotah.
1	..	..	0	..	0	..	0	..	4·0	..	10	2	0	0	0	0	3	9	7	..	..	..	..	..	..	..	..	..	Jhalawar.
9	—1·0	1·0	0	—0·19	0	..	0	—0·3	1·2	—0·3	1	0	0	0	0	0	0	1	29	2	8	3	0	0	3	2	4	9	Rajsamand.
6			0	—0·11	0		0		1·1		3	0	0	0	4	0	1	1	26	0	7	5	0	1	1	4	4	4	Udaipur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars. Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Maximum temperature, °F Mean.	Departure from normal.	Highest.	Date.	Minimum temperature, °F Mean.	Departure from normal.	Lowest.	Date.	Dry bulb temperature, °F Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Wet bulb temperature, °F Mean 8 hrs. I.S.T.	Mean 17 hrs. I.S.T.	Vapour pressure, millibars. Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I.S.T.	Relative humidity, % Mean 8 hrs. I.S.T.	Departure from normal.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
GUJARAT—																						
Deesa* ..	466	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Bhuj ..	343	1004·2	—0·5	1001·8	84·2	+2·4	88	11	55·4	+1·0	53	8 days	57·5	82·2	51·3	60·5	10·1	—0·6	8·2	63	+11	
Dwarka ..	37	1014·4	—0·8	1011·9	82·4	+1·2	87	2	62·8	+0·9	60	17,30,31	65·0	78·4	60·3	64·4	15·8	+0·8	14·4	75	+8	
Jamnagar ..	60	1014·5	+0·1	..	80·6	—0·6	89	3	54·9	+0·2	52	22,23	60·1	..	53·3	..	10·9	—0·2	..	61	—1	
Rajkot ..	432	1000·5	—0·3	997·4	87·2	+2·1	90	4 days	55·7	+2·2	51	17,28,30	59·1	85·0	51·9	64·5	10·0	+1·1	11·5	60	+8	
Veraval ..	26	1013·7	—0·9	1011·1	86·3	..	91	16,22,23	58·5	..	54	28	62·3	79·9	55·6	71·0	12·1	..	21·8	61	+9	
Surat ..	39	1014·0	—0·1	1010·8	91·5	+3·6	95	22	60·8	+1·4	56	13	63·9	84·9	57·6	67·9	13·4	+0·3	15·6	66	+5	
Bhavnagar ..	55	1013·8	—0·4	1010·6	86·2	+1·1	88	4 days	56·3	+0·6	53	13, 14	58·1	84·3	50·3	63·2	9·0	—0·6	10·3	54	+3	
Ahmedabad ..	163	1010·5	—0·3	1007·3	87·8	+1·4	90	4 days	61·8	+2·2	59	30, 31	63·5	83·7	54·1	63·8	10·1	+0·5	11·3	50	—1	
Dohad ..	1,093	977·0	..	974·3	84·0	—0·3	88	25, 26	53·2	+0·1	49	16	56·1	81·2	50·7	61·6	10·2	—0·4	9·9	65	—3	
Baroda ..	115	1011·7	..	1008·3	88·9	+1·7	92	25	52·6	+1·3	49	15, 16	54·6	85·5	51·9	66·1	12·1	+0·6	13·1	84	+17	
CENTRAL INDIA, WEST—																						
Neemuch ..	1,626	960·8	—0·2	957·9	79·5	+1·1	82	5 days	49·7	+0·3	46	13, 14, 15	52·7	76·9	48·1	58·5	9·6	+1·0	9·3	71	+15	
Ratlam ..	1,596	..	..	..	80·1	..	83	22, 25	52·2	..	46	29	55·0	78·0	49·1	62·0	9·4	..	12·5	63	..	
Indore ..	1,823	953·3	—0·5	950·5	78·5	—1·2	82	25, 26	48·3	—1·3	44	14, 16	51·2	76·9	48·9	58·7	10·9	+0·5	9·5	85	+22	
Bhopal ..	1,643	959·7	—0·5	957·1	78·5	—0·5	82	26	50·6	+1·1	45	14, 15	56·6	75·3	51·7	59·7	11·2	+1·5	11·2	72	+11	
Guna ..	1,571	962·0	—0·7	959·6	77·5	—0·4	81	21	48·0	+2·5	41	13	51·2	75·2	48·5	59·7	10·5	+1·4	11·2	82	+13	
Gwalior ..	681	993·7	..	990·9	77·5	..	84	5	46·0	..	40	13, 14	55·7	72·3	50·9	57·6	10·6	..	9·7	69	..	
Madhosagar ..	757	990·7	..	987·9	79·0	..	85	5	53·8	..	48	13	56·2	73·8	51·7	57·9	11·1	..	9·3	71	..	
CENTRAL INDIA, EAST—																						
Nowgong ..	750	991·2	—0·4	988·2	76·7	+2.2	80	4 days	46·1	—0.3	41	13, 14, 15	49·1	73·5	47·9	59·0	10·8	+0·5	10·6	92	+13	
Sutna ..	1,041	980·5	—0·7	977·5	76·3	+0·6	90	28	48·5	+1·0	41	14	54·3	75·4	52·7	65·2	12·8	+2·8	16·7	94	+25	
Umaria ..	1,506	964·6	..	961·8	74·9	—2·0	79	28, 30	46·4	+0·6	39	14	51·3	71·1	49·1	59·8	11·0	+0·8	13·0	85	+ 15	
BERAR—																						
Buldana ..	2,133	942·7	..	940·3	77·9	..	91	29	56·8	..	53	16, 17	60·5	75·6	53·7	60·1	11·3	..	11·5	63	..	
Akola ..	925	984·1	—0·4	980·7	81·9	—2·8	87	31	52·9	—0·4	47	15, 16	56·3	79·7	52·6	61·7	11·9	+1·1	10·7	77	+17	
Amraoti ..	1,213	974·1	—0·4	970·9	79·8	—3·4	83	24, 31	56·2	—2·2	50	17	60·3	78·5	53·6	60·7	11·0	+0·1	10·1	62	+8	
C. P., WEST—																						
Khandwa ..	1,044	980·0	—0·3	976·5	82·7	—1·4	85	4 days	51·0	—0·5	45	15	55·7	80·2	51·9	61·6	11·5	+1·0	10·3	75	+12	
Hoshangabad ..	992	981·9	—1·1	978·8	78·4	—1·6	82	24, 25, 31	53·1	—0·8	49	14, 15,16	55·7	76·6	52·6	62·8	12·1	+1·4	13·3	80	+17	
Saugor ..	1,808	954·1	—0·5	951·7	74·5	—2·4	78	22, 27,29	54·2	+1·2	50	14	58·0	71·5	51·7	57·2	10·6	+1·9	10·2	65	+11	
Jubbulpore ..	1,289	972·3	0	969·1	79·3	+2·2	86	23, 27	48·0	+1·5	41	14	53·9	75·0	51·0	61·5	11·5	+0·6	12·6	80	+4	
Seoni ..	2,027	947·2	+0·2	944·4	76·1	—1·6	81	26, 30	49·7	—0·9	43	14	55·9	72·5	50·9	57·9	10·7	+0·1	10·6	71	+8	
Betul ..	2,144	942·0	..	940·2	76·5	..	80	31	49·3	..	42	15, 16	53·5	71·2	60·4	58·1	11·2	..	11·2	79	..	
Nagpur ..	1,010	981·8	—0·1	978·3	80·2	—1·5	85	30	51·3	—2·5	46	14	58·1	76·6	53·8	60·9	12·2	+1·3	11·2	75	+16	
C. P., EAST—																						
Gondia ..	1,026	981·3	..	978·0	78·0	..	83	31	52·7	..	47	14, 15	58·0	76·0	54·8	61·1	13·2	..	11·7	80	..	
Pendra ..	2,040	946·6	—0·2	944·3	73·4	—0·3	80	26	49·4	—0·2	44	14,15,16	55·4	68·6	51·7	56·9	11·6	+0·8	11·1	78	+11	
Champa .	805	989·6	..	985·8	78·3	..	83	4 days	54·3	..	49	14, 15,	57·7	75·9	55·1	61·0	13·7	..	11·6	80	..	
Raipur ..	979	983·2	+0·2	979·9	76·9	—3·1	83	30	53·8	—0·7	49	14, 15 16	60·6	74·2	53·6	58·3	10·9	—1·3	9·5	61	—6	
Titilagarh ..	691	993·1	..	989·2	79·6	..	83	4 days	52·8	..	47	15	59·3	76·5	55·7	61·9	13·5	..	12·3	79	..	
Kanker ..	1,318	971·5	+0·4	968·1	77·2	—2·9	82	31	50·0	—0·7	44	15	56·7	74·3	53·4	60·7	12·5	—0·6	12·0	79	+1	
Chanda ..	634	994·9	+0·1	991·1	79·2	—3·3	84	9	50·8	—2·0	45	15	54·9	77·2	53·0	64·4	12·8	—1·3	14·6	88	+13	
Jagdalpur ..	1,815	954·1	+0·2	950·5	76·7	—2·1	81	20	49·6	—0·1	44	15	54·7	73·3	53·0	60·0	13·0	—1·2	12·3	90	+1	

*Does not [illegible]

Cloud amount (tenths of sky)			Rainfall, inches				No. of rainy days (0·10" or more).		Wind velocity, miles per hour.		Wind direction—Number of winds from :—																			STATION.
											8 hrs. I. S. T.									17 hrs. I. S. T.										
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm		
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	
																														GUJARAT—
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		Deesa*.
0·9	—0·5	0·8	0	—0·07	0	..	0	—0·1	2·8	—0·8	2	2	0	1	8	0	0	0	18	8	12	0	0	2	1	2	6	0		Bhuj.
1·7	—0·2	1·5	0·21	+0·12	0·21	26	1	+0·8	7·4	—0·1	8	15	6	0	0	0	1	1	0	5	5	1	0	0	1	2	17	0		Dwarka.
1·1	—0·2	..	0	—0·08	0	..	0	—0·1	1·0	—4·6	0	0	0	0	0	0	0	0	31	..	..	..	..	..	..	..	..	..		Jamnagar.
0·8	—0·9	0·9	0	—0·06	0	..	0	—0·2	4·5	+0·9	3	3	4	6	1	1	0	1	12	6	13	2	1	1	2	2	4	0		Rajkot.
0·8	—0·7	1·0	0	—0·07	0	..	0	—0·2	7·6	..	10	19	2	0	0	0	0	0	0	0	1	0	2	13	3	8	4	0		Veraval.
0·6	—1·0	1·0	0	—0·08	0	..	0	—0·1	4·0	+1·3	1	6	12	4	1	0	0	0	7	1	6	1	0	0	5	6	10	2		Surat.
0·7	—1·1	1·7	0	—0·06	0	..	0	—0·1	3·7	—0·4	1	0	1	0	2	7	12	1	7	2	11	13	0	1	0	1	0	3		Bhavnagar.
0·8	—0·5	1·0	0	—0·04	0	..	0	—0·4	3·4	—0·2	1	14	14	0	0	0	0	1	1	6	5	2	0	0	1	3	11	3		Ahmedabad.
0·6	—1·3	0·5	0	—0·08	0	..	0	—0·3	4·2	+1·7	0	4	9	4	8	0	0	1	5	4	4	8	2	0	5	5	1	2		Dohad.
0·2	—1·1	0·5	0	—0·02	0	..	0	—0·1	1·2	—0·9	1	4	4	0	0	0	0	0	22	1	3	1	0	0	1	2	1	22		Baroda.
																														CENTRAL INDIA, WEST—
1·1	—0·6	1·7	0	—0·18	0	..	0	—0·5	2·8	—0·7	0	14	4	2	0	2	0	0	9	1	9	0	2	0	5	3	4	7		Neemuch.
1·2	..	2·1	0	..	0	..	0	..	3·9	..	7	12	6	2	0	0	0	1	3	4	8	6	2	0	2	7	2	0		Ratlam.
0·8	—0·9	1·6	0·16	—0·11	0·16	7	1	+0·4	1·3	—0·2	0	0	0	4	0	0	0	0	27	1	11	3	4	0	4	2	2	4		Indore.
1·1	—1·0	1·5	0	—0·20	0	..	0	—0·5	1·8	+0·2	0	1	0	0	1	1	1	0	27	1	7	5	1	0	4	4	0	9		Bhopal.
1·2	—0·5	2·0	0	—0·42	0	..	0	—1·2	2·2	+0·6	0	0	3	1	0	0	0	0	27	9	2	0	2	0	0	3	9	6		Guna.
1·3	..	2·5	0	..	0	..	0	..	0·1	..	0	0	0	0	0	0	0	1	30	1	0	0	1	0	1	0	0	28		Gwalior.
1·5	..	2·1	0	..	0	..	0	..	2·8	..	0	1	0	0	3	15	1	0	11	8	10	3	3	0	0	0	3	4		Madhosagar.
																														CENTRAL INDIA, EAST—
1·1	—0·8	1·7	0	—0·40	0	..	0	—0·7	1·4	+0·5	3	4	0	2	7	6	0	0	9	14	8	0	0	0	1	1	5	2		Nowgong.
0·7	—1·0	1·0	0	—0·43	0	..	0	—0·9	1·3	—0·4	0	1	2	0	0	0	2	0	26	4	3	1	0	0	2	2	10	3		Sutna.
1·1	—1·2	0·9	0	—0·35	0	..	0	—0·9	1·6	—0·2	1	0	2	3	2	0	0	0	23	18	1	0	0	0	0	4	5	3		Umaria.
																														BERAR—
2·2	..	2·5	0	..	0	..	0	..	4·0	..	0	0	0	3	19	9	0	0	0	15	9	0	0	0	0	6	1	0		Buldana.
1·5	—0·5	0·9	0	—0·54	0	..	0	—0·9	2·4	0	1	3	7	5	1	0	0	0	14	2	11	3	3	2	0	1	3	6		Akola
1·9	—0·1	1·8	0	—0·44	0	..	0	—0·8	4·2	+0·9	0	25	0	3	0	2	0	1	0	0	14	0	6	0	2	0	9	0		Amraoti.
																														C. P., WEST—
0·9	—0·8	1·3	0	—0·32	0	..	0	—0·5	2·4	+0·2	0	2	0	7	5	1	0	0	16	8	6	2	1	5	0	1	5	3		Khandwa.
1·1	—0·7	1·5	0	—0·47	0	..	0	—0·7	0·9	—1·0	1	14	1	0	0	0	0	0	15	0	4	0	0	1	2	1	0	23		Hoshangabad.
1·1	—0·7	1·7	0	—0·51	0	..	0	—0·8	6·7	—0·6	0	1	5	13	8	2	0	0	2	5	8	2	0	0	1	6	4	5		Saugor.
1·0	—0·6	0·9	0	—0·37	0	..	0	—0·7	2·1	+1·0	0	0	1	23	3	0	0	0	4	10	13	0	0	1	1	4	1	1		Jubbulpore.
1·2	—0·5	1·8	0	—0·52	0	..	0	—0·9	2·0	0	2	1	1	0	1	2	2	1	21	7	8	3	2	5	2	0	1	3		Seoni.
1·1	..	1·5	..	..	0	..	0	..	2·2	..	0	3	13	9	0	0	0	0	6	1	10	11	0	1	2	3	1	2		Betul.
1·0	—1·1	1·5	0	0·47	0	..	0	—0·8	2·7	..	9	4	2	0	0	0	0	5	11	1	5	15	5	1	1	0	0	3		Nagpur.
																														C. P., EAST—
0·2	..	0·4	0	..	0	..	0	..	1·4	..	11	5	1	0	1	1	0	1	11	11	5	0	0	1	1	0	2	11		Gondia.
0·9	—1·1	2·0	0	—0·29	0	..	0	—0·5	2·4	+0·1	5	2	0	0	2	3	4	5	10	11	1	1	0	3	4	0	10	1		Pendra.
0·7	..	1·1	0	..	0	..	0	..	3·0	..	16	1	0	0	0	0	0	11	3	10	3	1	0	0	1	3	5	8		Champa.
0·6	—0·9	1·3	0	—0·20	0	..	0	—0·3	2·6	+0·9	10	3	0	2	5	0	0	1	10	7	8	2	2	0	1	0	1	10		Raipur.
0·4	..	0·4	0	..	0	..	0	..	1·0	0	0	1	0	4	4	0	0	0	22	3	16	5	0	0	0	0	0	7		Titilagarh.
1·3	—0·8	2·0	0	—0·14	0	..	0	—0·4	1·7	0	0	0	0	0	0	0	0	0	31	0	10	0	0	0	0	0	0	21		Kanker.
0·4	—1·5	1·0	0	—0·27	0	..	0	—0·7	1·3	0	0	0	0	0	0	0	0	0	31	0	3	1	1	0	0	0	2	24		Chanda.
1·6	—1·2	1·5	0	—0·16	0	..	0	—0·4	1·7	+0·5	0	2	0	0	0	0	0	13	16	0	9	0	0	0	7	0	9	6		Jagdalpur.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars.			Relative humidity. %		
		Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
KONKAN—																						
Dahanu ..	15	1013·9	..	1011·1	85·9	..	91	24	63·6	..	59	16	65·8	80·3	62·2	74·5	17·5	..	26·6	80	..	76
Bombay ..	35	1013·2	—0·2	1010·2	87·3	+0·7	91	9, 21	70·5	+1·7	67	29	73·0	82·2	67·0	71·0	19·9	+0·4	20·9	72	—1	56
Alibag ..	23	1013·9	..	..	86·7	+1·5	91	1	65·6	+0·4	62	4 days	69·0	..	63·6	..	17·6	+0·7	..	93	+6	..
Harnai ..	66	1010·8	..	1008·5	87·4	..	92	9, 14	72·0	..	69	16	74·2	81·1	64·8	70·5	16·7	..	20·7	58	..	58
Devgad ..	110	1009·5	..	1006·1	87·7	..	91	4 days	69·8	..	63	16, 17	72·9	83·8	65·5	71·3	18·1	..	20·5	65	..	54
Vengurla ..	29	1012·3	..	1008·9	90·2	..	94	9, 22	64·7	..	57	15, 26	66·9	84·0	63·7	71·3	18·7	..	21·2	83	..	52
Marmagao ..	202	1006·1	—0·6	1002·9	86·6	—0·1	90	21, 22	..	..	..	..	73·7	83·2	65·8	71·3	18·1	—0·6	20·8	64	—1	54
Honavar ..	85	1010·6	..	1007·0	90·9	..	94	1,8, 20	70·3	..	65	28	75·2	86·0	66·2	72·6	17·9	..	20·5	62	..	52
BOMBAY, DECCAN—																						
Jalgaon ..	660	992·6	..	988·6	85·3	..	89	31	52·3	..	46	16	57·7	83·0	52·9	64·4	11·5	..	12·3	72	..	32
Malegaon ..	1,432	967·1	+0·4	962·5	83·4	—1·6	86	6, 25	51·1	—1·2	45	16	61·2	80·4	54·6	61·3	11·6	+1·2	9·9	63	+3	28
Ahmednagar ..	2,154	941·6	—0·6	938·6	81·3	—1·8	84	18	51·7	—1·2	44	17	58·5	78·5	54·7	61·4	13·1	+2·1	11·7	74	+16	36
Poona ..	1,834	952·5	—0·2	948·8	83·1	—1·8	87	31	52·8	—0·2	45	16	55·5	79·6	53·9	62·5	13·8	+1·5	12·4	90	+16	37
Sholapur ..	1,570	961·2	—0·4	958·0	83·1	—2·4	86	16, 31	57·7	—0·7	52	15, 17	62·0	81·0	55·1	62·3	12·0	0	11·6	63	+7	32
Miraj ..	1,817	952·4	—0·7	948·6	83·0	—1·0	87	7, 31	57·4	+0·4	51	17	60·9	80·6	55·1	62·9	12·5	—0·6	12·4	69	+6	38
Kolhapur ..	1,885	960·5	..	946·7	82·5	..	85	5 days	57·2	..	49	17	60·4	81·0	55·1	62·1	12·7	..	11·4	70	..	32
Bijapur ..	1,950	948·0	—0·6	945·5	80·4	—3·8	85	10	56·5	—2·1	48	16	62·6	78·9	56·0	61·9	12·7	—1·2	12·0	65	+1	30
Belgaum ..	2,562	927·8	0	924·4	79·1	—2·9	83	7, 8	56·7	—1·7	52	14,25,26	63·4	77·3	57·7	62·3	13·9	+0·6	13·1	71	+6	49
Gadag ..	2,131	942·1	—0·1	938·6	84·0	+0·6	89	6, 7	59·5	—1·8	53	15, 16	67·5	81·2	59·8	63·7	14·4	—0·1	13·0	63	—2	33
HYDERABAD, NORTH—																						
Aurangabad ..	1,905	950·8	—0·4	947·6	80·7	—2·8	83	25, 31	53·7	—2·1	48	16	56·1	78·9	52·4	61·8	12·0	—1·1	11·9	77	+21	30
Parbhani ..	1,350	968·2	..	964·8	80·8	..	83	5 days	52·3	..	46	15	58·8	78·2	54·5	62·3	12·6	..	12·0	74	..	30
Bidar ..	2,178	941·0	..	938·2	76·6	—4·5	80	7	58·9	—1·8	56	15, 18	63·4	73·2	56·6	59·3	12·9	—1·6	11·6	65	—1	41
Nizamabad ..	1,250	972·8	+0·4	969·0	80·3	—3·4	84	1	58·1	+3·1	50	16	59·4	76·7	56·0	60·6	13·8	—0·5	10·8	82	+12	30
Ramakundam ..	527	998·6	..	995·0	81·3	..	85	23,30,31	56·4	..	51	15	62·1	78·0	58·7	62·9	15·4	..	12·8	80	..	39
HYDERABAD, SOUTH—																						
Gulbarga ..	1,503	963·6	—0·5	960·6	80·2	—5·2	84	23	57·1	—1·6	49	16	62·9	79·1	57·9	65·4	14·4	+1·3	15·9	73	+11	47
Raichur ..	1,311	970·0	—0·3	966·6	81·7	—3·1	85	7, 8, 22	62·3	—1·4	56	17	66·6	80·3	59·9	62·9	14·7	—1·5	11·7	66	—2	34
Hyderabad (Begumpet) ..	1,778	954·7	0	951·5	80·3	—3·2	84	20	54·0	—2·4	49	15	58·5	75·5	56·3	63·1	14·6	—0·1	14·7	87	+13	49
Hanamkonda ..	881	985·7	—0·2	982·1	81·4	—1·8	85	21	57·6	—2·7	52	15	62·5	78·0	58·8	62·8	15·3	—1·3	12·7	79	+6	40
Khammameth (R)	367	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
MYSORE—																						
Chitaldrug ..	2,405	932·7	—0·1	929·1	79·7	—2·7	84	4, 6	59·8	—2·0	53	14	65·2	78·2	61·1	63·3	16·7	+0·2	13·6	80	+9	43
Hassan ..	3,149	908·2	..	905·1	78·5	—2·1	83	7	57·6	0	51	15	63·1	75·6	59·8	62·8	16·1	—0·6	14·2	82	+4	49
Bangalore ..	3,021	912·4	—0·3	909·5	77·7	—0·5	83	6	59·2	+1·0	54	14	62·9	74·5	59·7	62·2	16·4	—0·1	14·2	83	+2	49
Mysore ..	2,518	928·5	—0·5	925·1	80·5	—1·4	85	6	61·5	+0·4	56	15	64·8	79·8	61·4	63·9	17·2	—0·3	13·9	82	+5	40
MALABAR—																						
Mangalore ..	72	1010·1	—0·6	1006·7	88·9	—0·2	93	20	71·3	+0·1	66	27	74·8	83·9	67·8	73·0	20·0	—1·1	22·7	69	—1	58
Calicut ..	27	1011·1	—0·8	1007·7	89·6	+1·9	92	19, 31	72·5	+1·2	69	5 days	75·3	87·1	71·0	75·8	24·0	+0·5	25·2	80	0	58
Palghat ..	319	1001·6	..	997·4	89·1	..	94	1	72·3	..	68	25	75·7	86·1	69·1	71·4	21·3	..	19·6	71	..	46
Cochin ..	10	1011·7	—0·8	1008·2	86·8	+0·3	91	19	74·1	—0·1	70	25,26,27	77·8	84·3	71·7	75·2	23·8	+0·3	25·8	73	—3	64
Alleppey	12	1011·3	..	1008·1	88·9	..	92	19	73·5	..	69	17,23,25	77·6	85·0	72·9	75·7	25·2	..	26·1	80	..	64
Trivandrum ..	211	1004·1	—1·0	1001·5	88·6	..	91	6 days	72·3	..	69	25, 27	76·4	84·0	72·1	75·4	25·6	+0·9	26·2	81	—2	66
Nagercoil ..	195	1004·7	..	1001·9	89·0	..	91	5 days	75·2	..	70	23	78·3	83·7	70·1	73·2	21·4	..	23·1	65	..	52

R—Register not received.

Cloud amount, (tenths of sky).			Rainfall, inches.				No. of rainy days (0·10" or more)		Wind velocity, miles per hour.		Wind direction—Number of winds from :— 8 hrs. I. S. T.									17 hrs. I. S. T.									STATION.
Mean 8 hrs. I. S. T.	Departure from normal	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm.	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													KONKAN—
1·9	..	0·9	0	..	0	..	0	..	6·4	..	1	1	17	12	0	0	0	0	0	13	0	0	0	0	0	4	14	0	Dahanu.
1·7	0	1·2	0	—0·08	0	..	0	—0·2	7·2	+0·7	1	7	16	7	0	0	0	0	0	6	1	0	0	0	0	2	22	0	Bombay.
1·4	—0·8	..	0	—0·15	0	..	0	—0·4	2·3	—2·2	2	6	9	2	0	0	0	0	12	..	..	..	..	..	..	..	..	..	Alibag.
1·5	..	0·5	0	..	0	..	0	..	8·6	..	2	15	6	2	0	0	2	4	0	0	0	0	0	0	4	16	11	0	Harnai.
1·8	..	2·5	0·51	..	0·51	1	1	..	7·4	..	0	7	24	0	0	0	0	0	0	2	2	3	0	0	0	11	13	0	Devgad.
2·2	..	2·3	0	..	0	..	0	..	..	..	17	8	5	0	0	0	0	1	0	0	4	2	1	0	6	13	1	4	Vengurla.
2·7	+0·5	2·9	0	—0·35	0	..	0	—0·6	5·8	+0·4	0	5	20	6	0	0	0	0	0	0	2	3	1	0	4	13	8	0	Marmagao.
3·7	..	3·3	0	—0·37	0	..	0	—0·4	3·5	..	0	12	14	2	0	0	0	1	2	0	5	6	0	0	0	10	9	1	Honavar.
																													BOMBAY, DECCAN—
1·3	..	1·3	0	—0·22	0	..	0	—0·4	3·7	..	0	1	17	8	1	0	0	0	4	5	8	10	2	2	0	2	2	0	Jalgaon.
0·4	—1·6	2·0	0	—0·21	0	..	0	—0·4	2·6	—0·3	0	0	0	0	0	0	0	0	31	0	12	3	0	1	1	0	0	14	Malegaon.
1·6	—0·1	2·0	0	—0·26	0	..	0	—0·5	3·1	—0·3	0	0	0	1	0	2	0	3	25	1	14	1	5	5	4	0	0	1	Ahmednagar.
1·8	+0·1	2·2	0	—0·15	0	..	0	—0·5	1·5	—2·0	0	0	0	0	0	0	0	0	31	0	9	8	3	0	1	0	1	9	Poona.
2·7	+0·7	2·5	0	—0·41	0	..	0	—0·7	6·2	+0·5	0	7	9	3	0	1	0	0	11	2	14	5	2	0	0	0	3	5	Sholapur.
2·0	—0·3	3·4	0	—0·28	0	..	0	—0·6	6·7	+1·8	0	4	18	1	2	0	1	2	3	3	5	18	1	1	0	3	0	0	Miraj.
1·2	..	1·6	0	..	0	..	0	..	6·5	..	0	3	12	2	0	1	1	0	12	0	14	13	0	0	0	1	1	2	Kolhapur.
2·3	+0·1	3·9	0	—0·25	0	..	0	—0·6	3·0	+0·7	1	7	3	3	2	0	0	0	15	0	13	9	4	1	0	0	0	4	Bijapur.
1·5	—0·7	1·2	0·14	—0·20	0·10	1	1	+0·5	3·9	+0·8	9	1	21	0	0	0	0	0	0	6	2	20	0	0	2	1	0	0	Belgaum.
3·4	+1·2	5·1	0	—0·41	0	..	0	—0·6	5·3	+0·9	0	14	15	1	0	0	0	0	1	0	14	15	0	1	0	0	0	1	Gadag.
																													HYDERABAD, NORTH—
1·6	—0·5	2·2	0	—0·27	0	..	0	—0·5	3·9	—0·4	2	20	9	0	0	0	0	0	0	3	2	14	3	0	6	3	0	0	Aurangabad.
2·2	..	1·9	0	—0·02	0	..	0	—0·4	..	..	0	24	5	0	0	0	0	0	2	0	30	0	0	0	0	0	1	0	Parbhani.
2·4	—0·1	2·9	0	—0·24	0	..	0	—0·5	5·7	+0·2	0	7	16	7	1	0	0	0	0	4	16	10	1	0	0	0	0	0	Bidar.
0·5	—1·5	0	0	—0·18	0	..	0	—0·4	2·3	+0·5	0	1	0	0	2	0	0	1	27	1	23	1	1	0	0	0	0	5	Nizamabad.
0·1	..	0·3	0	..	0	..	0	..	1·6	..	1	0	0	0	0	0	0	0	30	5	19	2	4	0	0	0	0	1	Ramakundam.
																													HYDERABAD, SOUTH—
1·8	+0·1	2·4	0	—0·15	0	..	0	—0·3	6·7	+1·8	6	16	6	1	1	0	0	1	0	5	16	9	1	0	0	0	0	0	Gulbarga.
2·1	0	3·3	0	—0·13	0	..	0	—0·3	6·3	+1·0	0	14	12	5	0	0	0	0	0	0	16	12	3	0	0	0	0	0	Raichur.
1·9	—0·7	2·5	0	—0·30	0	..	0	—0·4	3·5	+0·4	2	4	2	1	0	0	0	0	22	2	16	8	2	0	0	0	0	3	Hyderabad (Begumpet)
1·6	—1·1	1·7	0	—0·23	0	..	0	—0·4	2·5	—0·1	6	6	1	3	1	0	0	0	14	13	14	0	0	1	0	0	0	3	Hanamkonda.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	Khammameth. (R.)
																													MYSORE—
4·4	+1·0	4·3	0	—0·52	0	..	0	—0·8	4·9	+0·3	0	0	21	8	0	0	0	0	2	0	2	19	9	0	0	0	1	0	Chitaldrug.
5·1	+1·1	5·4	0·81	+0·15	0·81	21	1	—0·1	4·3	+1·3	0	2	26	2	0	0	0	0	1	0	3	23	3	0	0	2	0	0	Hassan.
5·6	+1·2	6·1	0·20	—0·24	0·13	20	1	—0·2	6·8	+2·0	0	13	15	2	0	0	0	0	1	4	13	11	3	0	0	0	0	0	Bangalore.
5·0	+0·7	6·4	0·03	—0·37	0·03	1	0	—0·9	8·5	+2·2	2	19	9	0	0	1	0	0	0	2	12	15	0	0	0	0	2	0	Mysore.
																													MALABAR—
4·3	+1·3	3·8	0	—0·51	0	..	0	—0·7	5·3	+0·8	0	2	27	2	0	0	0	0	0	6	0	0	0	0	1	4	20	0	Mangalore.
5·8	+2·4	5·8	0·61	—0·40	0·31	21	2	+0·4	5·5	+1·5	1	15	15	0	0	0	0	0	0	0	0	0	0	0	10	16	5	0	Calicut.
4·4	..	5·5	0·32	..	0·28	21	1	..	7·7	..	0	0	28	3	0	0	0	0	0	1	2	25	1	0	0	1	0	1	Palghat.
5·4	+2·2	7·0	0·80	—0·80	0·48	1	2	—0·5	4·6	+1·0	0	13	15	2	0	0	0	0	1	2	0	1	0	0	3	18	7	0	Cochin.
6·2	..	6·9	0·80	..	0·47	3	2	..	4·2	..	0	4	19	7	0	0	0	0	1	1	0	0	0	0	0	13	17	0	Alleppey.
5·7	+1·2	7·4	0·43	—2·04	0·28	5	2	—1·7	3·2	+0·6	3	18	2	3	0	0	0	2	3	1	0	1	3	0	18	5	2	1	Trivandrum.
6·8	..	8·4	0·18	..	0·13	13	1	..	8·8	..	2	23	4	0	0	0	0	0	2	0	20	3	0	0	5	3	0	0	Nagercoil.

STATION.	Height of bar. cistern above mean sea level in feet.	Pressure at station level in millibars			Maximum temperature, °F				Minimum temperature, °F				Dry bulb temperature, °F		Wet bulb temperature, °F		Vapour pressure, millibars			Relative humidity, %		
		Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean.	Departure from normal.	Highest.	Date.	Mean.	Departure from normal.	Lowest.	Date.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean 17 hrs. I. S. T.	Mean 8 hrs. I. S. T.	Departure from normal.	Mean
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	2
MADRAS, SOUTH EAST—																						
Pamban ..	37	1011·7	—0·2	1008·8	81·7	—0·9	85	1,7,8	74·2	—0·6	73	9 days	77·8	79·0	75·2	75·9	29·0	+1·2	29·2	58	0	
Madura ..	437	998·1	—0·7	994·8	85·2	+0·5	89	8	71·2	+1·0	66	27	75·5	81·4	69·8	71·4	22·5	—0·5	21·8	74	—6	
Negapatam ..	31	1012·2	—0·4	1009·6	81·9	—0·1	86	1	72·4	+0·1	69	26	74·5	79·7	71·1	73·2	24·5	—0·7	25·0	84	0	
Trichinopoly ..	295	1003·6	—0·6	1000·2	85·0	—0·1	88	2, 3	71·0	+1·5	66	15	74·4	81·6	69·7	72·1	22·7	—1·1	22·6	78	—2	
Coimbatore ..	1,341	967·7	—0·5	964·1	83·8	—0·5	89	1	67·5	+1·5	63	15, 23	70·3	81·6	66·2	68·2	20·1	—0·9	17·5	80	+2	
Salem ..	913	982·3	—0·6	978·5	86·6	+0·5	90	7, 31	67·7	+1·8	61	15	70·6	82·4	65·8	69·9	19·8	—1·0	19·3	76	—2	
Cuddalore ..	39	1012·7	—0·3	1010·0	82·4	—0·2	85	1, 2	70·9	+0·7	67	26	73·5	79·7	69·7	70·9	23·1	—1·4	21·8	82	—4	
Vellore ..	703	990·5	+0·2	986·9	82·6	+0·2	86	2,6,7	65·5	+0·7	61	16	68·9	79·9	66·3	69·0	20·9	—0·5	19·3	87	—1	
Madras ..	51	1012·7	—0·3	1009·8	82·5	—1·6	86	1, 2	69·7	+0·8	66	15	73·1	78·9	69·8	70·9	23·4	—1·1	22·2	84	—3	
Arogyavaram ..	2,299	937·0	..	933·7	77·1	..	80	4 days	59·5	..	55	26	64·6	74·0	62·1	63·8	17·9	..	15·7	86	..	
MADRAS, DECCAN—																						
Cuddapah ..	428	1001·0	+0·4	996·7	85·0	—1·0	89	1	66·2	+0·5	59	14, 16	74·6	80·7	67·1	70·1	19·3	—1·6	21·0	66	—13	
Bellary ..	1,473	964·5	0	960·5	82·2	—3·5	85	5 days	61·6	—0·3	55	16	66·1	80·5	61·4	64·8	16·5	+0·4	13·9	75	+5	
Kurnool ..	923	983·7	+0·1	980·0	84·2	—2·2	88	20	59·2	—1·6	51	17	65·4	81·9	61·0	65·5	16·3	—0·3	14·0	77	+3	
Rentichintala ..	348	1004·2	..	1001·1	83·3	—2·5	87	6, 7	59·6	—2·3	53	16	64·8	82·8	60·4	65·3	16·0	—1·8	13·4	76	+2	
Anantapur ..	1,147	975·4	..	971·5	82·9	..	87	1, 20	61·8	..	54	16	68·1	80·7	63·8	67·4	18·3	..	16·9	78	..	
MADRAS COAST, NORTH—																						
Nellore ..	66	1012·8	—0·2	1009·9	82·0	—1·7	86	31	67·7	—0·7	63	14, 26	70·7	78·0	68·2	70·5	22·4	—1·3	22·1	87	0	
Ongole ..	38	1014·3	..	1010·8	83·3	..	87	31	66·1	..	61	14,15,16	70·1	79·5	65·7	69·0	19·6	..	19·6	78	..	
Masulipatam ..	10	1015·6	—0·2	1012·2	81·0	—1·6	83	5 days	66·4	—0·1	61	11	70·5	78·5	66·1	70·4	19·9	—1·2	21·8	77	—4	
Cocanada ..	26	1015·5	+0·2	1012·1	79·2	—1·3	82	1	65·3	—1·1	58	15	71·4	77·5	65·4	68·5	18·7	—0·9	21·0	71	+4	
Vizagapatam ..	126	1011·9	—0·1	1008·8	79·9	—0·8	82	1,29,31	66·5	—1·4	62	15,16,25	70·9	76·4	64·5	66·4	17·8	—0·2	17·8	67	+1	
Calingapatam ..	19	1015·7	—0·3	1012·7	78·4	—1·9	82	27	61·7	—1·4	56	15	65·0	76·1	61·3	67·4	16·9	—2·0	19·0	80	—1	
HILL STATIONS EXCLUDING KASHMIR—																						
Shillong ..	4,921	852·6	—0·2	850·3	60·1	—1·5	66	17	38·5	—1·5	34	27	51·9	52·4	46·0	49·7	8·3	—0·9	11·2	62	—10	
Cherrapunji ..	4,309	871·8	0	869·5	62·1	—0·2	67	16	46·0	—2·0	40	28, 29	56·2	53·2	50·4	51·0	10·1	0	11·9	66	+3	
Aijal	3,599	893·4	..	891·4	68·6	..	73	3	50·1	..	44	30	57·7	59·4	53·8	55·1	12·6	..	13·1	77	..	
Darjiling ..	7,432	777·1	—0·9	774·8	52·3	+1·8	62	4 days	36·3	—0·3	31	30, 31	43·8	41·7	39·4	39·6	6·6	—0·3	7·5	70	+1	
Kalimpong ..	3,965	884·4	+0·8	881·5	61·6	—0·7	65	6 days	44·7	—3·5	42	25, 31	49·5	53·7	45·9	49·6	9·2	—1·6	10·5	78	+2	
Katmandu ..	4,388	870·8	..	867·4	65·4	—0·5	71	16	37·0	—0·7	30	31	41·0	55·2	39·8	48·9	7·9	+0·2	9·3	90	+1	
Muktesar ..	7,592	772·5	—1·2	771·3	53·1	—0·1	57	6 days	36·7	—1·7	31	11,29,30	40·1	45·5	31·8	37·3	3·1	—0·7	4·7	40	—2	
Mussooree ..	6,999	802·0	..	797·5	53·0	—0·6	60	16	39·0	—0·6	32	6, 30	42·7	45·0	35·4	39·7	4·4	—0·5	6·3	50	+2	
Simla ..	7,224	782·6	—0·4	782·3	49·1	—1·5	58	15	36·9	—2·4	31	28,29,30	40·3	43·9	32·0	36·5	3·3	—0·1	4·7	59	+2	
Abu	3,945	884·0	+0·2	882·2	69·4	+1·0	75	15	50·9	—1·6	45	29	55·2	64·2	45·7	50·1	6·6	+0·2	6·7	44	—3	
Pachmarhi ..	3,528	897·7	—0·5	895·7	69·1	—2·2	73	22, 25	43·9	—1·9	40	16	49·1	66·2	46·7	55·2	9·8	—0·2	10·5	85	+20	
Mahabaleshwar	4,534	864·7	—0·5	863·1	71·5	—1·2	75	25, 31	54·2	—2·3	50	15	56·7	67·4	50·6	57·9	10·1	+0·8	12·5	63	+5	
Mercara ..	3,781	886·1	—1·2	884·1	72·4	—2·5	75	7 days	57·4	—0·3	51	17	59·8	72·9	58·1	61·8	15·9	+0·3	14·5	89	+3	
Ootacamund ..	7,364	780·6	+0·2	778·7	67·6	+2·6	75	24	43·3	—0·6	34	14	48·7	59·2	47·5	54·1	10·7	+1·8	12·6	86	+19	
Coonoor ..	5,730	828·1	..	..	..	..	..	..	48·3	—0·9	40	28	59·6	..	55·9	..	13·9	+2·0	..	80	+5	
Kodaikanal ..	7,688	771·9	+0·3	770·3	61·1	—0·6	66	14	48·1	+0·9	43	26	51·7	55·1	47·2	51·7	9·6	+0·5	11·7	74	+7	
CEYLON—																						
Colombo ..	24	1010·7	—0·8	1007·5	85·8	—0·6	90	9	72·6	+0·1	70	27	74·8	80·3	72·8	75·6	26·6	+0·8	28·1	90	+1	
Trincomalee ..	24	1011·3	+0·2	1008·6	81·3	—1·2	85	1,2,20	74·7	+0·3	71	28	77·5	78·5	75·2	75·2	28·8	+1·7	28·4	89	+1	
Hambantota ..	61	1008·5	—1·1	1005·8	84·6	0	88	2	73·5	+0·7	69	27	76·4	81·1	73·7	76·5	27·2	+1·5	29·1	89	—1	
Mannar ..	12	1012·0	..	1009·2	81·4	..	86	3, 21	74·8	..	72	16,17	77·1	78·5	74·1	74·2	27·4	..	26·9	86	..	

Cloud amount (tenths of sky)			Rainfall, inches				No. of rainy days (0·10" or more)		Wind velocity, miles per hour		Wind direction—Number of winds from :—																		STATION.
											8 hrs I. S .T.									17 hrs. I. S. T.									
Mean 8 hrs. I.S.T.	Departure from normal.	Mean 17 hrs. I. S. T.	Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Mean.	Departure from normal.	N	NE	E	SE	S	SW	W	NW	Calm	N	NE	E	SE	S	SW	W	NW	Calm	
24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
																													MADRAS, SOUTH-EAST—
7·4	+2·6	7·1	9·78	+2·19	2·20	28	14	+4·6	12·3	+0·9	20	2	0	0	0	0	0	9	0	17	14	0	0	0	0	0	0	0	Pamban.
6·0	+0·7	7·4	1·34	—0·67	1·03	8	1	—2·6	4·3	+0·1	16	4	2	0	0	0	0	2	7	7	17	6	0	0	0	0	0	1	Madura.
8·0	+1·7	8·0	10·23	—0·72	4·37	18	11	+1·9	11·5	+3·2	4	4	1	0	0	0	4	18	0	1	28	1	0	0	0	1	0	0	Negapatam.
5·5	+0·7	7·8	0·36	—2·44	0·07	3,8,20	0	—4·5	8·4	+3·0	15	12	2	0	0	0	0	2	0	0	12	19	0	0	0	0	0	0	Trichinopoly.
6·4	+1·7	6·5	1·11	—0·25	0·82	21	2	—0·6	4·4	+1·9	9	15	6	1	0	0	0	0	0	7	15	8	0	1	0	0	0	0	Coimbatore.
4·4	+0·5	6·3	0·42	—0·61	0·25	21	1	—1·2	6·5	+3·2	2	17	8	0	0	0	0	1	3	0	5	24	2	0	0	6	0	0	Salem.
7·9	+2·6	8·[illegible]	2·57	—4·92	1·23	21	4	—2·3	7·1	+2·3	17	5	0	0	0	0	1	8	0	2	26	2	0	0	0	0	0	1	Cuddalore.
5·8	+1·7	7·1	0·53	—2·09	0·21	1, 21	2	—1·9	4·2	+1·9	0	1	0	0	0	0	0	0	30	0	7	24	0	0	0	0	0	0	Vellore.
6·1	+1·1	7·3	1·70	—3·75	0·59	19	5	—0·4	14·0	+1·5	3	12	0	0	0	0	0	16	0	7	21	1	0	0	0	0	2	0	Madras.
7·1	..	6·2	0·22	..	0·13	20	1	..	3·0	..	5	0	4	1	1	0	0	0	20	1	18	11	1	0	0	0	0	0	Arogyavaram.
																													MADRAS, DECCAN—
3·8	+0·2	3·9	0	—0·81	0	..	0	—1·5	3·3	—1·2	0	0	2	0	0	0	0	0	29	0	1	16	5	0	0	0	0	9	Cuddapah.
4·5	+1·3	4·2	0	—0·13	0	..	0	—0·3	2·4	0	0	0	4	0	0	0	0	0	27	0	1	19	4	0	0	0	0	7	Bellary.
2·6	+0·3	2·3	0	—0·20	0	..	0	—0·3	2·4	0	0	5	2	0	0	0	0	0	24	0	7	9	8	1	0	0	0	6	Kurnool.
4·2	+0·2	3·5	0	—0·12	0	..	0	—0·4	2·4	—0·8	0	1	1	0	1	3	1	1	23	5	9	8	3	1	1	0	0	4	Bentichintala.
3·6	..	4·0	0·06	—0·19	0·06	2	0	—0·5	6·3	..	1	5	6	4	0	2	1	1	11	0	12	16	1	0	0	0	0	2	Anantapur.
																													MADRAS COAST, NORTH—
6·5	+1·5	5·1	2·47	—0·39	1·52	2	2	—1·0	3·2	+0·2	11	2	0	0	0	0	0	9	9	1	16	11	0	0	0	0	0	3	Nellore.
5·3	..	4·2	0·11	..	0·08	1	0	..	3·8	..	17	6	0	0	0	1	1	4	2	3	6	17	4	0	0	0	0	1	Ongole.
3·8	+1·3	4·3	0·33	—0·32	0·33	2	1	+0·1	6·0	+1·3	11	12	2	0	0	0	0	6	9	1	1	9	10	0	0	0	1	9	Masulipatam.
2·2	—1·1	2·7	0·44	—0·26	0·31	1	2	+1·2	8·3	+1·9	6	21	0	0	0	0	0	4	0	0	7	10	14	0	0	0	0	0	Cocanada.
1·3	—2·1	2·2	0·63	—0·06	0·63	1	1	+0·1	4·8	+1·4	13	6	1	0	0	0	2	6	3	0	2	28	1	0	0	0	0	0	Vizagapatam.
3·5	+1·1	3·8	0	—0·54	0	..	0	—0·4	8·8	+3·3	10	0	1	0	0	0	5	15	0	0	4	15	12	0	0	0	0	0	Calingapatam.
																													HILL STATIONS EXCLUDING KASHMIR—
0·3	—1·5	6·2	0	—0·28	0	..	0	—0·9	2·3	+1·1	0	1	5	7	1	2	1	1	13	3	3	2	0	0	0	1	4	18	Shillong.
1·3	—0·9	2·7	0	—0·49	0	..	0	—0·7	..	..	0	8	11	1	0	1	2	0	8	0	2	0	0	0	4	1	0	24	Cherrapunji.
1·8	..	0·7	0·05	..	0·05	1	0	..	3·8	..	0	0	24	2	0	0	1	0	4	0	1	2	0	0	2	16	10	0	Aijal.
2·5	—0·7	3·3	0	—0·27	0	..	0	—0·7	3·7	+1·8	0	0	24	1	0	0	3	1	2	0	1	6	0	1	1	13	0	9	Darjiling.
2·7	+0·1	3·8	0	—0·32	0	..	0	—0·7	6·7	—0·1	1	0	0	0	1	0	4	24	1	0	0	0	25	6	0	0	0	0	Kalimpong.
6·5	—1·1	0·7	0	—0·33	0	..	0	—0·8	0·9	—0·1	0	0	2	0	1	0	0	0	28	8	0	0	0	1	0	0	4	18	Katmandu.
1·5	—1·4	2·6	0·27	—0·78	0·27	6	1	—0·8	6·2	+1·0	1	5	3	3	0	1	10	4	4	1	1	0	1	0	9	18	0	1	Muktesar.
3·5	+0·3	4·7	0·86	—0·52	0·74	6	1	—1·6	3·0	—1·5	11	10	1	1	4	1	1	1	1	3	4	2	6	9	5	2	0	0	Mussooree.
3·3	—0·2	5·3	1·11	—0·13	0·45	5	4	+1·6	1·6	—1·4	7	1	1	5	5	0	0	0	12	3	4	2	6	6	4	2	0	4	Simla.
3·0	—0·8	0·5	0	—0·12	0	..	0	—0·3	1·6	—1·3	2	0	0	0	0	2	2	0	25	6	1	0	0	2	1	4	4	13	Abu.
1·0	—1·1	1·1	0	—0·43	0	..	0	—0·8	1·1	—0·7	0	0	1	0	2	4	0	0	24	4	8	2	0	0	0	1	4	12	Pachmarhi.
1·4	—0·4	1·4	0	—0·26	0	..	0	—0·6	7·3	+0·2	0	6	14	10	1	0	0	0	0	4	6	8	1	2	1	8	0	1	Mahabaleshwar.
6·3	+0·9	5·3	0·41	—0·31	0·41	1	1	—0·2	8·1	+3·5	1	15	14	0	0	0	0	1	0	2	15	13	0	0	0	0	1	0	Mercara.
1·2	+0·4	6·1	1·03	—0·69	0·63	21	3	—0·7	2·4	—0·5	0	2	2	2	1	0	0	0	24	8	6	8	3	1	0	0	0	5	Ootacamund.
5·5	+0·3	..	10·55	+4·97	5·39	1	8	+1·4	2·5	—0·7	0	0	1	17	7	0	0	0	6	..	..	..	..	..	..	..	..	..	Coonoor.
3·5	+0·9	4·3	3·71	—1·45	0·67	19	8	+0·9	8·8	+0·3	0	5	9	10	1	1	0	4	1	1	13	3	5	0	0	2	6	1	Kodaikanal.
																													CEYLON—
(a) 7·1	+1·6	8·7	8·54	+2·95	3·66	1	10	+2·4	..	..	8	14	4	1	0	0	0	0	4	10	8	0	2	1	2	1	7	0	Colombo.
7·7	+1·7	8·5	27·83	+14·17	3·56	16	21	+7·4	..	..	10	12	1	1	0	1	1	1	4	13	11	4	0	0	0	0	1	2	Trincomalee.
7·5	+2·9	8·7	3·83	—1·16	1·77	4	8	+0·3	..	..	22	2	0	0	0	0	1	5	1	10	13	5	0	1	2	0	0	0	Hambantota.
7·7	..	8·7	7·99	..	1·48	4	16	..	..	..	10	17	4	0	0	0	0	0	0	9	20	1	0	0	0	1	9	0	Mannar.

TABLE III—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2·30 HRS. G. M. T.) AT 4TH CLASS STATIONS—DECEMBER 1948.

STATION.	Maximum temperature °F.				Minimum temperature °F.				Mean dry bulb temperature 8 hrs. I.S.T. °F.	Mean wet bulb temperature 8 hrs. I.S.T. °F.	Vapour pressure, millibars.		Relative humidity %		Mean cloud amount 8 hrs. I.S.T.	Rainfall, inches				Number of rainy days (0·10" or more)		Wind	
	Mean.	Departure from normal.	Highest	Date.	Mean.	Departure from normal.	Lowest.	Date.			Mean 8 hrs. I.S.T.	Departure from normal.	Mean 8 hrs. I.S.T.	Departure from normal.		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.	Resultant direction 8 hrs. I.S.T.	Velocity in miles per hour
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
ASSAM—																							
Lumding ..	75·0	+1·0	79	19	52·5	+1·8	45	29	64·9	60·4	15·9	+0·7	75	—19	..	0·12	—0·02	0·10	24	1	+0·6	..	..
Kashmir—																							
Jammu ..	68·7	+0·7	74	1	49·3	+0·2	44	25	51·5	47·1	9·0	+0·7	70	+5	4·7	0·89	—0·35	0·80	4	1	—1·6	N16E	..
Kargil (R)																							
MYSORE—																							
Balehonnur ..	77·7	—1·2	82	19	57·6	—1·0	52	15, 26	63·3	60·3	16·7	+0·6	84	+5	..	0·08	—0·39	0·08	21	0	—0·8	..	..
Tibet—																							
Yatung (Chumbi) ..	47·3	+0·5	51	4	17·9	—3·2	11	30	23·8	23·1	4·3	+0·2	92	+6	1·8	0·37	0	0·18	30	1	+0·2	..	..

R—Register not received.

TABLE IV—ABSTRACT OF OBSERVATIONS RECORDED AT 8 HRS. I.S.T. (2-30 HRS. G.M.T.) AT 5TH CLASS STATIONS—DECEMBER 1948

DIVISION.	STATION.	Rainfall,—inches				Number of rainy days (0·10" or more.)		DIVISION.	STATION.	Rainfall,—inches				Number of rainy days (0·10" or more)	
		Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.			Total of the month.	Departure from normal.	Heaviest fall in 24 hours.	Date.	Total in the month.	Departure from normal.
1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Assam ..	Mawsynram (R)	..	..	..	..	..	..	Kashmir ..	Sonamarg ..	6·56	+0·94	0·94	20	13	+6·
West Bengal ..	Bankura ..	0	—0·11	0	..	0	—0·3		Gurez ..	22·85	+20·08	4·00	16	18	+11
	Coech Behar ..	0	—0·16	0	..	0	—0·3	Bombay, Deccan ..	Khandala ..	0	—0·12	0	..	0	
Bihar ..	Muzaffarpur ..	0	—0·12	0	..	0	—0·3	Madras, Southeast	Palamcottah ..	0·72	—0·99	0·45	20	2	—0·
	Chapra ..	0	—0·14	0	..	0	—0·4	Sikkim ..	Lachung ..	1·23	+0·60	1·07	30	1	—0·
	Arrah ..	0	—0·17	0	..	0	—0·5								
East Punjab ..	Dharampore ..	0·87	—0·91	0·55	6	4	+1·5								
	Kyelang ..	1·44	+0·12	0·45	4	5	+2·1								
	Dalhousie ..	4·43	+0·58	2·50	6	5	+0·5								

R—Register not received.

MONTHLY MEANS OF UPPER WINDS

NOTE.—Data upto 9·0 Km. a.s.l. are given under table A and data above 9·0 Km. under Table B.

In Tables A & B,

n represents the number of observations,

V represents the mean wind speed in m/second irrespective of direction,

v represents the resultant mean velocity in m/second,

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

For the coordinates of the stations for which data have been published in these Tables and other particulars please refer to the Monthly Weather Report January 1948, and subsequent issues.

Table A—Monthly mean directions and velocities of upper winds

Winds up to 9·0 km. above sea level

DECEMBER 1948

Height in km.	AHMEDABAD												ALLAHABAD											
	0100				0700				1600				0100				0700				1600			
	n	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	0·5	18	31	1·5	1·4	55	31	1·7	0·6	333	31	0·2	0·1	286	31	0·3	0·1	297	31	0·9	0·6	301
0·15 a.g. ..	31	7·3	5·7	39	31	8·6	7·9	76	31	3·6	1·3	343	30	4·2	1·5	333	30	3·7	0·5	306	31	2·9	1·9	328
0·6 a.s. l. ..	31	4·8	3·4	48	31	6·1	4·2	90	31	3·6	1·2	344	30	4·1	2·4	324	30	37	1·6	324	31	3·1	2·0	319
1·0 „	31	3·8	1·8	73	31	4·4	2·0	80	31	3·6	1·1	2	31	5·1	3·7	314	31	4·3	3·2	314	31	4·2	3·1	307
1·5 „ ..	31	4·1	1·5	135	31	3·8	0·1	178	30	3·9	1·2	5	29	6·0	4·3	304	31	5·9	4·4	313	31	5·8	4·6	306
2·0 „ ..	31	4·6	0·7	234	31	5·0	1·8	288	29	4·7	1·4	347	27	6·8	5·1	296	31	7·1	5·5	308	31	6·8	5·9	298
2·5 „ ..	30	5·5	2·2	298	31	6·2	2·9	308	30	5·6	1·9	337	20	6·7	5·1	303	30	7·9	6·5	299	31	8·3	7·7	292
3·0 „ ..	30	6·7	4·8	304	31	7·2	4·9	311	30	6·9	3·6	310	16	7·6	6·6	300	30	8·9	8·3	294	31	9·9	9·4	287
4·0 „ ..	16	10·2	8·7	299	31	10·3	8·1	293	30	11·3	9·3	288					28	12·0	11·2	291	28	12·9	12·2	286
5·0 „ ..	4	12·4	12·2	279	30	14·2	12·4	291	30	15·2	13·7	285					26	16·9	16·5	284	25	17·3	16·8	286
6·0 „ ..	3	17·2	17·1	284	28	17·9	16·7	288	30	18·8	17·7	285					26	21·5	21·1	280	20	19·6	19·1	285
7·5 „ ..					15	20·6	19·9	285	25	24·2	23·0	282					18	28·7	27·9	278	5	24·6	24·6	286
9·0 „ ..					9	22·9	22·4	288	14	27·0	25·9	284					11	32·4	31·4	276	2	23·3	19·9	288

Height in km.	AMBALA												ANANTAPUR								ASANSOL			
	0100				0700				1600				0700				1600				0100			
	n	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	1·7	0·9	344	31	1·4	0·6	347	31	2·1	1·1	316	31	1·4	0·8	88	31	3·3	3·1	74	31	1·8	1·5	326
0·15 a.g. ..	31	6·4	3·8	357	31	5·3	0·8	350	31	4·0	2·1	310	31	4·4	3·8	87	31	5·2	5·0	74	31	5·1	4·0	344
0·6 a. s. l. ..	31	6·0	3·4	352	31	5·5	1·2	327	31	4·2	1·9	315	31	5·7	5·5	93	31	5·0	4·8	75	31	5·2	4·2	335
1·0 „ ..	31	4·5	2·1	332	31	5·1	1·5	38	31	4·9	2·2	312	29	8·0	7·8	88	31	4·5	4·4	76	31	5·9	4·7	320
1·5 „ ..	31	4·1	2·1	308	31	5·7	2·7	311	31	5·2	2·5	311	28	5·7	5·2	74	31	4·6	4·1	78	31	6·5	5·1	311
2·0 „ ..	31	4·7	2·9	298	31	5·5	2·8	298	31	4·9	2·3	299	28	4·8	2·2	57	31	4·3	2·8	73	28	6·7	4·3	295
2·5 „ ..	30	4·6	3·1	279	31	5·8	3·2	284	31	4·8	2·4	291	27	4·1	0·4	103	30	4·1	0·9	63	19	7·3	4·3	283
3·0 „ ..	28	5·2	4·0	286	30	6·8	3·3	283	30	5·3	3·1	276	27	3·8	0·6	155	28	4·2	0·9	333	16	8·1	5·1	273
4·0 „ ..	12	8·5	7·3	285	26	8·2	5·5	281	27	7·5	6·8	288	26	4·8	1·8	324	26	4·3	2·2	325				
5·0 „ ..	4	13·7	13·5	283	22	11·9	6·8	291	24	13·7	12·7	287	26	5·6	3·0	308	26	5·2	2·9	301				
6·0 „ ..					18	17·4	16·5	282	24	19·6	18·3	281	24	6·7	4·2	301	24	6·1	3·9	292				
7·5 „ ..					10	22·1	21·3	293	17	26·8	25·3	277	23	7·9	5·3	286	22	9·3	6·8	288				
9·0 „ ..					6	28·0	27·4	288	6	26·3	24·5	294	21	13·4	9·5	270	14	13·9	11·8	276				

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	ASANSOL 0700				ASANSOL 1600				BANGALORE 0100				BANGALORE 0700				BANGALORE 1600				BAREILLY 0700			
	n	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	2·1	315	31	1·9	1·6	330	30	3·5	3·4	88	31	2·9	2·8	77	31	3·1	2·9	79	31	1·2	0·6	328
·15 a. g. ..	31	4·9	4·1	334	31	3·8	3·2	336	30	8·4	8·1	87	31	8·5	8·1	74	29	5·4	5·0	80	31	4·6	3·2	320
·6 a. s. l. ..	31	4·8	4·1	351	31	4·2	3·4	339													30	5·3	4·5	304
·0 „ ..	31	5·8	4·5	337	31	4·6	3·6	331	30	6·4	6·2	88	31	6·2	6·0	74	29	5·2	4·8	82	30	5·7	4·8	305
·5 „ ..	31	6·4	5·0	328	31	5·9	4·4	328	25	6·6	6·1	82	28	7·2	6·0	81	29	5·4	4·9	77	31	5·6	4·3	307
0 „ ..	31	7·3	5·3	314	30	7·8	5·4	318	22	4·0	2·4	72	26	4·6	3·0	81	29	4·3	3·4	75	31	5·8	4·7	300
·5 „ ..	31	8·6	5·9	307	30	9·3	7·3	303	14	3·8	2·5	85	25	4·4	2·0	106	24	3·8	1·7	68	31	6·1	5·0	297
·0 „ ..	28	9·6	7·2	288	27	10·6	8·6	293	7	3·1	0·7	75	23	3·6	0·9	144	22	3·5	1·0	40	31	6·7	5·6	301
·0 „ ..	13	10·5	10·2	273	26	13·4	12·7	281					20	4·1	1·0	7	20	3·9	1·6	28	30	9·3	8·4	291
·0 „ ..	6	15·5	14·9	276	19	18·3	16·8	277					17	4·7	1·8	350	16	5·0	2·5	11	26	14·6	14·0	283
·0 „ ..	3	16·3	16·3	268	17	18·8	16·9	278					16	5·3	2·6	305	12	5·7	2·4	357	18	19·7	15·9	286
·5 „ ..					5	21·5	20·5	281					11	7·4	3·3	294	6	7·4	5·5	247	5	17·5	16·2	285
·0 „ ..					1	22·0	22·0	305					5	11·2	8·2	230	2	13·3	12·3	219	2	17·3	17·1	294

Height in km.	BAREILLY 1600				BHOPAL 0100				BHOPAL 0700				BHOPAL 1600				BHUJ 0100				BHUJ 0700			
	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D	n	V	v	D
urface ..	31	1·9	1·5	294	31	2·3	1·4	94	31	1·1	0·8	119	31	2·3	0·5	346	31	2·6	0·9	303	31	0·1	0·1	336
·15 a. g.	29	4·6	3·9	288	31	6·2	3·7	104	31	5·9	4·4	133	31	3·1	0·6	1	31	5·3	4·0	14	31	3·7	2·5	28
·6 a. s. l. ..	29	4·5	4·1	291	31	5·9	3·5	105	31	5·5	4·2	132	31	2·9	0·6	5	31	5·5	4·2	28	31	5·3	2·9	45
·0 „ ..	30	5·3	4·7	296	31	5·0	2·3	98	31	4·5	1·7	125	31	3·2	0·7	324	31	3·9	1·9	48	30	4·4	1·6	44
·5 „ ..	30	5·9	4·8	306	31	4·4	0·5	347	31	4·6	0·7	11	31	3·1	0·9	316	31	4·0	0·7	226	30	3·9	0·5	336
·0 „ ..	31	5·5	4·4	307	30	4·6	1·3	310	30	5·4	2·3	315	31	3·9	1·8	301	30	4·4	1·8	287	30	4·7	1·8	316
·5 „ ..	30	5·7	4·5	297	26	5·9	2·9	315	31	6·0	3·0	315	30	5·2	3·0	302	26	5·5	3·1	312	30	5·8	3·0	324
·0 „ ..	30	6·7	6·2	291	24	7·1	4·3	300	30	6·4	4·6	300	29	6·9	5·4	299	23	8·0	6·2	299	30	7·4	5·0	316
·0 „ ..	29	10·0	9·6	291	4	11·3	10·9	262	28	10·3	9·1	288	27	12·1	11·1	284	4	10·9	10·0	289	29	10·5	8·6	297
·0 „ ..	25	14·7	14·0	285					23	14·3	13·4	282	25	15·3	14·3	285					29	14·1	12·9	291
·0 „ ..	22	19·9	18·8	284					17	18·0	16·8	282	24	20·2	19·4	287					26	17·6	17·0	290
·5 „ ..	13	26·0	24·5	279					4	20·4	19·8	287	17	25·5	24·7	280					14	23·3	22·9	283
·0 „ ..	7	23·3	22·7	283					2	29·5	29·5	252	11	31·9	30·6	275					4	28·1	27·6	301

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	BHUJ				BIKANER								BOMBAY										
	1600				0700				1600				0100				0700				1600		
	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	1·6	0·8	20	31	1·7	1·1	119	31	2·0	0·9	337	31	0·9	0·7	78	31	1·8	1·7	79	31	3·6	2·7 2
0·15 a. g. ..	31	3·9	2·2	14	30	5·9	3·3	101	31	3·4	1·5	339	31	3·9	3·7	34	31	5·1	4·1	76	31	3·0	2·0 3
0·6 a. s. l. ..	31	3·4	1·7	6	30	5·3	1.1	59	31	3·5	1·1	330	30	4·2	3·0	53	31	4·9	3·8	87	31	2·4	1·8
1·0 „ ..	31	3·2	1·4	356	29	4·7	1·3	294	31	3·7	0·8	31	31	3·7	2·9	85	31	3·9	2·9	87	31	3·5	2·6
1·5 „ ..	31	3·5	1·3	305	29	5·1	2·7	274	31	4·0	1·4	276	29	4·2	3·5	108	31	4·0	2·1	120	30	4·7	3·0
2·0 „ ..	31	4·7	2·4	309	30	5·3	3·3	268	31	5·5	3·4	260	29	4·5	2·8	118	31	4·7	1·2	114	30	5·2	2·5
2·5 „ ..	29	5·8	3·8	311	30	6·2	4·2	277	31	6·0	4·5	267	25	4·2	1·1	23	31	5·4	1·2	343	30	5·5	2·1
3·0 „ ..	29	7·3	5·3	306	30	7·9	5·9	277	30	7·6	6·3	279	24	4·7	2·2	318	29	6·3	3·3	328	31	4·8	1·8 3
4·0 „ ..	28	10·9	9·5	295	24	11·6	10·5	286	30	11·4	10·7	285	8	5·1	4·4	304	28	7·2	5·0	306	29	6·8	5·0 3
5·0 „ ..	26	14·7	13·5	292	18	18·1	16·8	283	27	17·1	16·2	281	3	5·3	3·2	299	24	8·9	7·9	295	28	9·6	8·2 2
6·0 „ ..	24	18·7	17·6	290	7	18·7	18·0	284	23	23·2	22·3	284	1	10·0	10·0	305	22	12·0	11·0	280	28	12·1	10·5 2
7·5 „ ..	9	21·8	20·9	289	1	30·5	30·5	265	8	20·7	20·5	296					8	15·1	14·7	285	21	16·1	13·1 2
9·0 „ ..	2	23·3	23·2	311													3	20·5	20·1	275	14	22·5	19·7 2

Height in km.	CALCUTTA												COCHIN										
	0100				0700				1600				0100				0700				1600		
	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	1·2	1·1	332	31	1·2	1·1	344	3	1·7	1·5	334	31	1·4	1·2	73	31	1·4	1·3	65	31	2·9	2·4 2
0·15 a. g. ..	31	5·6	3·9	351	31	5·7	4·6	360	31	3·4	3·0	335	31	3·8	2·8	81	31	4·3	4·1	72	31	3·2	2·8 2
0·6 a. s. l. ..	31	4·9	4·1	347	31	5·2	4·3	358	31	3·9	3·4	335	31	3·1	1·9	69	31	2·9	2·1	84	31	2·4	1·6
1·0 „ ..	31	5·1	4·2	344	31	5·6	4·6	345	31	4·6	3·9	334	31	2·8	1·9	72	31	2·3	1·4	76	31	3·9	3·1
1·5 „ ..	31	6·8	4·8	332	31	6·0	4·4	332	31	5·7	4·4	339	30	3·8	3·0	71	31	3·2	2·5	79	31	4·1	3·1
2·0 „ ..	29	7·1	5·0	322	31	6·9	5·2	326	31	7·2	5·1	318	26	4·1	2·8	72	31	3·9	2·8	82	29	4·0	2·7
2·5 „ ..	26	8·3	6·0	307	31	7·6	5·3	303	31	6·9	6·2	302	22	3·4	2·2	97	31	4·1	2·4	93	28	4·1	2·6
3·0 „ ..	23	8·8	7·4	289	31	8·9	7·0	287	31	9·8	8·6	289	21	3·5	2·3	105	31	4·1	2·4	104	27	4·1	2·7
4·0 „ ..	3	10·7	10·0	280	24	10·4	9·2	274	24	12·0	11·8	277	10	3·4	2·6	86	29	3·6	2·3	76	25	3·5	2·6
5·0 „ ..					22	13·1	12·4	270	20	16·4	15·7	276					23	4·7	3·2	69	22	4·4	2·8
6·0 „ ..					15	15·1	14·0	266	18	19·7	19·1	274					20	5·4	3·8	65	20	6·0	4·4
7·5 „ ..					4	23·8	23·0	280	9	22·7	22·0	268					9	5·9	0·4	22	8	8·3	3·8
9·0 „ ..					1	21·0	21·0	320	5	26·5	26·1	262					5	8·8	4·2	196	6	9·0	0·7 27

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	COOCH-BEHAR 0700 n	V	v	D	1600 n	V	v	D	CUTTACK 0100 n	V	v	D	0700 n	V	v	D	1600 n	V	v	D	DEOLALI 0830 n	V	v	D
Surface ..	31	1·5	1·3	59	31	0·7	0·3	109	31	0·2	0·1	1	31	0·4	0·4	325	31	0·6	0·5	354	24	1·5	1·4	29
·15 a. g. ..	24	6·3	6·1	75	23	2·3	1·2	116	31	2·9	0·9	340	31	3·6	2·4	357	31	2·2	1·8	9	24	4·1	3·6	88
·6 a. s. l. ..	24	6·3	5·3	86	23	2·8	1·2	101	31	4·0	2·0	27	31	4·4	3·2	36	31	2·5	1·9	360	24	2·7	2·5	61
·0 „ ..	24	5·8	4·8	80	23	3·2	1·8	109	31	4·1	3·1	356	31	4·7	4·1	19	31	3·5	2·8	354	24	6·5	6·1	112
·5 „ ..	24	6·2	4·4	89	23	3·9	2·4	103	31	4·7	3·7	343	31	5·7	4·1	351	30	4·7	3·5	333	24	5·8	5·0	109
·0 „ ..	24	6·3	2·8	82	23	4·6	1·5	96	28	4·8	3·2	342	31	5·6	3·9	339	29	5·1	3·9	318	24	5·3	2·4	116
·5 „ ..	22	6·0	0·7	110	23	5·7	2·5	287	21	5·5	4·1	328	31	6·1	4·0	305	29	6·7	5·2	294	24	5·6	0·5	359
·0 „ ..	20	7·3	4·1	278	23	7·5	6·1	286	20	6·3	5·1	299	31	7·8	6·4	278	29	8·2	7·4	283	24	6·5	3·2	332
·0 „ ..	16	12·9	12·2	275	19	13·4	13·0	275	3	10·0	10·0	276	30	10·3	9·6	271	27	11·2	10·3	278	22	7·3	5·3	312
·0 „ ..	13	15·7	14·4	275	15	14·4	13·5	268					29	13·2	12·4	272	25	14·3	13·1	278	20	9·9	8·5	300
·0 „ ..	9	16·0	14·3	262	11	19·1	18·3	266					24	15·5	14·8	271	20	17·5	16·7	270	16	11·5	10·3	290
·5 „ ..	6	21·3	18·3	274	5	19·6	18·3	280					6	23·2	22·9	266	11	23·3	22·7	267	12	15·1	14·1	275
·0 „ ..	3	21·1	20·7	288	2	15·5	15·5	293									4	31·6	30·3	277	7	23·6	21·4	280

Height in km.	DIBRUGARH 0700 n	V	v	D	1600 n	V	v	D	GADAG 0700 n	V	v	D	1600 n	V	v	D	GAYA 0100 n	V	v	D	0700 n	V	v	D
Surface ..	31	1·3	1·1	67	31	1·2	0·9	37	31	4·7	4·4	107	31	3·4	3·0	74	31	1·1	0·6	166	31	1·9	1·6	185
·15 a. g. ..	28	2·7	2·5	57	30	2·1	1·7	32	31	8·2	7·9	105	31	4·6	4·4	80	31	3·5	1·7	291	31	3·6	2·8	239
·6 a. s. l. ..	28	3·2	3·0	38	30	2·4	2·2	68									31	4·1	3·2	311	31	3·9	2·7	312
·0 „ ..	28	3·4	3·0	50	29	2·6	2·1	64	31	9·9	8·9	103	31	5·2	4·9	81	31	4·8	4·1	299	31	4·6	3·7	303
·5 „ ..	28	3·1	2·5	60	29	2·3	1·2	123	30	7·0	5·9	87	31	4·6	4·2	81	31	6·1	4·8	305	31	6·6	4·7	308
·0 „ ..	27	2·9	1·6	75	28	3·0	2·0	166	30	4·7	2·8	78	31	4·3	3·6	79	28	6·5	5·0	294	31	7·9	5·8	305
·5 „ ..	27	3·3	1·0	115	28	4·0	2·9	176	30	3·9	0·4	32	30	3·7	1·0	60	9	5·8	4·6	285	31	8·3	6·6	300
·0 „ ..	26	4·1	1·3	187	28	4·7	2·9	204	30	3·7	0·8	325	27	3·8	0·9	345	5	9·2	8·5	281	31	8·8	7·7	285
·0 „ ..	22	7·5	4·4	265	26	8·1	5·6	248	30	5·1	2·5	323	25	4·4	2·0	329					19	9·5	8·4	287
·0 „ ..	19	15·3	13·4	266	26	17·2	15·5	261	30	6·5	3·4	311	24	5·6	3·8	305					9	11·1	10·1	278
·0 „ ..	18	19·6	17·6	267	23	21·7	20·6	260	29	7·1	5·0	303	23	7·2	5·4	293					5	13·3	13·1	278
·5 „ ..	15	27·7	26·5	259	20	28·9	27·3	267	26	9·0	6·7	286	20	10·3	8·3	293								
·0 „ ..	8	36·1	35·5	256	12	35·3	28·9	264	21	12·8	10·3	280	13	11·4	9·0	279								

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	GAYA				GOPALPUR								GORAKHPUR								HYDERABAD (DN			
	1600				0700				1600				0700				1600				0100			
	n	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	2·0	299	31	4·4	4·3	336	31	3·6	3·2	97	31	0·8	0·6	266	31	0·9	0·9	273	31	1·5	1·1	7
0·15 a. g. ..	31	4·0	3·3	305	31	5·6	5·2	353	31	4·8	4·2	91	31	3·7	2·9	303	31	2·3	2·3	269				
0·6 a. s. l. ..	31	4·2	3·4	303	31	4·3	3·5	36	31	3·6	2·8	29	31	3·5	2·6	290	31	2·9	2·7	283	31	3·9	3·5	8
1·0 „ ..	31	4·1	3·2	306	31	4·4	3·8	27	31	4·2	3·2	344	31	4·2	3·0	290	31	3·9	2·7	290	31	6·5	5·9	8
1·5 „ ..	31	5·6	4·2	301	31	5·1	2·9	8	31	5·9	4·4	335	31	5·7	3·5	290	31	6·2	4·1	299	31	6·4	5·7	8
2·0 „ ..	31	7·2	5·7	295	31	4·7	1·9	331	31	6·0	4·4	315	31	6·2	3·9	292	30	7·4	5·7	296	31	4·8	3·4	9
2·5 „ ..	31	8·7	7·4	289	31	5·3	3·5	286	31	6·6	5·3	287	31	6·1	4·7	291	30	7·5	6·1	291	31	4·5	1·7	1
3·0 „ ..	31	10·0	9·2	287	31	6·8	5·6	272	31	8·3	6·5	282	29	6·9	5·9	289	31	7·6	6·7	288	30	4·8	2·1	32
4·0 „ ..	29	13·9	13·1	280	30	8·1	7·5	269	31	9·6	5·7	272	23	8·3	7·7	281	29	10·8	10·2	288	30	4·7	2·1	29
5·0 „ ..	25	19·3	18·4	282	29	10·7	9·8	272	27	11·7	10·5	276	14	11·3	9·9	288	23	13·7	13·1	286	3	6·7	5·1	29
6·0 „ ..	18	24·1	23·0	280	24	14·8	14·0	273	23	16·0	15·2	271	10	14·5	13·5	275	16	17·9	17·3	283				
7·5 „ ..	5	23·3	21·2	276	15	20·4	19·0	274	13	22·3	21·6	267	1	10·5	10·5	305	6	21·4	20·6	277				
9·0 „ ..	2	28·0	26·9	277	5	21·4	21·0	273	5	23·5	22·3	273					2	28·3	28·3	280				

Height in km.	HYDERABAD (DN.)								JAGDALPUR								JAMNAGAR							
	0700				1600				0700				1600				0700				1600			
	n	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	0·8	47	31	2·2	1·4	69	31	CALM			31	1·6	1·2	14	15	2·3	1·8	97	16	6·1	5·3	
0·15 a. g. ..									29	3·0	2·3	44	31	2·9	1·9	22	15	5·1	4·3	47	16	5·8	5·1	35
0·6 a. s. l. ..	31	3·0	2·3	74	31	3·2	2·3	73	29	1·5	1·0	49	31	2·3	1·7	22	15	5·1	3·8	58	16	4·1	2·3	1
1·0 „ ..	31	6·1	5·0	83	31	3·6	3·0	66	29	4·3	3·6	47	31	2·7	2·0	22	18	4·0	2·2	49	16	4·4	1·2	6
1·5 „ ..	30	5·0	3·4	62	31	4·0	3·0	59	29	4·4	3·1	33	31	3·0	2·2	16	15	3·3	0·6	287	16	4·5	0·7	6
2·0 „ ..	30	5·4	3·1	17	31	4·2	1·8	25	26	4·6	2·5	1	30	3·4	2·0	353	14	4·4	2·2	309	16	4·7	0·2	36
2·5 „ ..	30	6·7	1·7	1	30	4·7	1·9	326	24	4·8	2·8	315	28	4·7	2·8	308	14	6·2	3·7	335	16	5·7	2·6	32
3·0 „ ..	30	4·9	1·7	295	30	5·6	3·1	282	24	5·2	3·8	288	26	5·2	4·0	292	14	6·9	4·5	322	15	7·0	5·2	30
4·0 „ ..	28	5·3	3·5	291	26	5·4	4·3	281	21	7·9	6·7	277	25	7·7	6·2	284	14	10·0	8·1	288	15	10·9	9·0	29
5·0 „ ..	28	7·6	6·0	296	26	7·6	6·1	289	18	9·7	8·9	283	20	9·3	8·3	292	13	15·2	13·7	290	15	14·8	13·4	28
6·0 „ ..	28	10·5	9·5	289	26	11·0	10·3	283	14	13·3	12·4	280	19	12·5	10·6	280	13	19·7	18·8	287	14	19·0	17·6	28
7·5 „ ..	19	12·9	11·7	278	26	13·4	12·5	275	7	18·5	17·8	279	8	17·6	17·1	266	9	26·1	24·1	287	7	22·1	21·0	29
9·0 „ ..	6	15·1	14·6	285	21	17·9	16·4	267	4	28·5	26·6	268	3	21·7	21·0	280	6	30·3	29·6	288	1	21·0	21·0	31

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	JAMSHEDPUR								JHARSUGUDA												JODHPUR			
	0700				1600				0100				0700				1600				0100			
	n	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	0·9	0·9	293	31	1·9	1·2	325	31	0·6	0·6	19	31	1·3	1·3	13	31	0·5	0·2	339	31	1·8	1·6	42
0·15 a. g. ..	31	2·6	2·3	290	31	2·7	1·9	328	31	3·5	2·4	32	31	4·4	4·1	37	31	2·3	1·3	328	31	6·0	4·3	57
0·6 a. a. l. ..	31	3·3	2·3	353	31	2·7	2·0	324	31	3·9	1·6	10	31	4·3	2·3	38	31	2·3	1·5	332	31	4·9	2·9	64
1·0 „ ..	31	4·5	3·3	342	31	3·2	2·4	323	31	3·5	1·7	342	31	4·0	2·0	355	31	2·7	1·7	333	31	3·4	1·1	119
1·5 „ ..	31	5·8	4·3	331	31	5·0	3·3	320	31	3·7	1·8	354	31	4·4	3·1	341	31	3·5	2·7	340	31	3·9	2·1	244
2·0 „ ..	31	7·0	5·0	324	31	6·5	4·8	310	29	4·7	3·6	317	31	5·6	4·7	322	31	5·1	4·0	330	30	4·7	3·1	265
2·5 „ ..	29	7·3	5·1	318	31	7·6	6·4	299	26	5·8	4·6	313	31	5·7	5·0	316	30	6·1	4·9	311	17	7·1	5·5	278
3·0 „ ..	29	8·0	6·4	291	30	9·3	8·5	288	23	7·7	6·4	305	31	7·0	5·4	305	30	7·7	6·7	295	9	8·4	7·1	302
4·0 „ ..	24	10·3	9·7	273	28	13·3	12·6	277	14	10·0	9·2	285	30	10·2	9·1	279	30	12·2	11·2	280				
5·0 „ ..	18	14·6	14·2	269	26	18·2	17·2	279					29	14·5	13·5	274	28	16·3	15·3	275				
6·0 „ ..	14	16·8	16·1	276	24	20·5	19·7	278					26	18·0	16·6	273	22	17·7	17·0	280				
7·5 „ ..	1	18·0	18·0	315	10	28·1	27·8	277					14	22·8	21·8	273	15	25·3	25·0	269				
9·0 „ ..					1	44·5	44·5	255					5	28·7	27·0	274	11	33·3	32·8	269				

Height in km.	JODHPUR								JUBBULPORE												MADHOSAGAR			
	0700				1600				0100				0700				1600				0700			
	n	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	1·2	43	31	1·6	0·5	357	31	1·3	1·1	141	31	1·4	1·3	141	31	1·3	0·7	317	31	1·2	0·9	220
0·15 a. g. ..	30	4·3	3·3	69	31	3·1	0·9	306	31	3·9	2·4	90	31	3·6	2·6	141	31	3·0	2·0	336	31	4·1	1·1	156
0·6 a. s. l. ..	30	4·1	2·2	75	31	3·0	1·1	319	31	4·0	2·3	82	31	3·7	2·5	134	31	3·0	2·0	339	31	4·4	1·4	109
1·0 „ ..	31	3·7	0·5	276	31	3·4	1·2	293	31	3·6	1·7	35	31	3·9	0·6	48	31	3·0	2·0	341	31	3·9	0·7	333
1·5 „ ..	31	4·0	2·0	292	31	3·7	1·9	274	31	4·0	2·1	321	31	5·1	2·9	343	31	3·0	2·0	341	31	5·1	3·3	307
2·0 „ ..	31	5·1	3·3	290	31	5·5	3·7	279	31	5·2	3·5	313	31	5·8	4·2	336	31	4·8	3·4	327	31	7·1	5·3	303
2·5 „ ..	31	6·8	5·7	289	30	7·0	4·8	280	30	5·8	4·6	304	31	6·1	5·2	323	31	5·4	3·9	308	31	8·8	6·8	299
3·0 „ ..	31	9·2	8·0	285	30	9·5	7·2	282	28	7·4	6·1	299	31	6·7	5·7	310	31	7·4	6·0	294	31	9·1	7·4	293
4·0 „ ..	30	14·3	12·8	279	27	13·3	11·5	289	18	10·9	9·8	289	28	10·4	9·4	283	29	11·1	10·2	287	30	11·3	10·2	284
5·0 „ ..	27	19·4	18·5	277	27	18·2	16·3	289	11	13·2	12·5	293	25	15·1	14·5	282	27	15·3	14·6	280	27	16·6	15·7	283
6·0 „ ..	24	23·9	23·0	279	22	23·2	22·0	286	2	14·3	14·2	317	17	18·1	17·5	277	24	19·7	18·9	282	22	23·1	22·6	280
7·5 „ ..	19	29·3	28·6	280	15	36·2	34·7	283					10	24·0	23·7	277	17	21·9	21·2	279	15	32·1	32·1	278
9·0 „ ..	16	33·5	32·4	278	2	34·0	31·1	289					3	26·8	26·1	277	9	25·7	24·6	283	12	37·5	37·1	278

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	MADHOSAGAR				MADRAS												MALEGAON							
	1600				0100				0700				1600				0100				0700			
	n	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	13	31	2·7	2·5	351	31	2·7	2·4	336	31	6·2	5·8	28	31	1·5	1·1	290	31	1·7	1·7	26
0·15 a. g. ..	31	3·1	1·5	30	31	7·4	7·1	36	31	6·8	6·5	28	31	8·3	8·1	31	31	4·6	3·0	88	31	3·3	2·1	15
0·6 a. s. l. ..	31	3·2	1·5	16	31	8·9	8·7	43	31	8·2	8·0	44	31	8·9	8·7	34	31	5·8	5·1	88	31	3·3	2·1	15
1·0 „ ..	31	3·1	1·3	339	31	8·5	8·1	47	31	7·6	7·3	46	30	9·2	8·8	34	31	4·2	3·4	95	31	5·1	4·3	13
1·5 „ ..	31	4·1	2·4	303	29	6·7	5·7	53	30	5·6	4·7	56	27	7·6	6·8	42	29	4·0	2·3	99	31	4·1	3·1	12
2·0 „ ..	31	6·2	4·4	299	28	5·1	3·5	67	28	3·9	2·4	68	21	5·7	3·9	50	26	4·2	1·0	104	31	4·8	1·3	12
2·5 „ ..	31	7·7	6·1	291	25	3·9	1·5	85	24	2·8	0·4	57	13	5·8	5·2	13	26	5·8	1·8	293	31	5·5	1·6	29
3·0 „ ..	31	8·9	7·5	287	21	3·9	0·7	115	24	3·2	0·2	67	7	4·0	1·7	314	15	8·3	6·8	297	31	6·9	4·7	32
4·0 „ ..	28	12·9	11·6	285	17	3·3	0·8	74	25	4·2	0·6	44	7	4·6	2·2	4					30	8·4	6·8	29
5·0 „ ..	26	17·3	16·2	283	2	4·5	4·5	318	24	4·4	0·9	323	6	5·5	4·0	327					29	10·3	9·5	28
6·0 „ ..	26	21·9	20·6	281	1	10·0	10·0	320	24	5·9	2·3	302	5	5·5	3·2	340					24	12·8	11·7	29
7·5 „ ..	16	31·0	27·8	276					23	7·9	3·4	272	5	8·7	5·8	273					14	16·9	16·0	28
9·0 „ ..	10	34·3	33·9	279					19	10·1	6·5	246	1	16·0	16·0	270					5	22·2	20·6	28

Height in km.	MALEGAON				MANGALORE												MASULIPATAM						
	1600				0100				0700				1600				0100				0700		
	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	1·6	0·7	89	31	2·7	2·5	74	31	3·5	3·4	89	31	3·2	2·5	293	31	1·6	1·4	35	31	2·0	2·0
0·15 a. g. ..	31	2·6	1·2	123	31	5·1	3·8	58	31	8·4	8·1	88	31	4·5	3·4	300	31	5·8	5·3	64	31	7·6	7·1
0·6 a. s. l. ..	31	2·6	1·2	123	31	5·8	3·5	61	31	6·6	5·5	83	31	2·7	1·8	23	31	6·3	5·7	73	31	6·2	5·9
1·0 „ ..	31	2·6	0·9	102	29	5·1	3·9	88	31	4·7	3·7	86	31	4·3	3·6	67	30	5·3	4·3	51	31	5·8	5·2
1·5 „ ..	31	2·9	1·1	93	26	5·3	4·7	104	31	4·3	2·2	97	31	5·1	4·0	72	30	5·6	4·0	48	31	5·6	3·6
2·0 „ ..	31	3·5	0·8	43	23	5·0	3·7	107	31	3·9	1·8	109	31	5·3	3·6	77	30	4·4	1·8	45	31	4·4	1·8
2·5 „ ..	30	4·6	1·1	325	18	3·4	1·3	93	30	3·6	1·4	98	30	4·4	2·4	64	25	3·8	1·0	206	29	4·0	0·6
3·0 „ ..	29	5·7	2·9	309	15	3.2	1·0	57	30	3·9	1·5	68	30	4·3	1·8	55	24	4·4	2·0	231	28	4·1	1·3
4·0 „ ..	26	7·8	5·8	289	2	6·0	3·0	274	29	4·0	1·8	38	30	4·3	2·2	23	19	4·7	2·5	275	26	4·6	2·1
5·0 „ ..	26	10·1	8·4	288					27	4·6	3·0	12	28	5·2	2·6	7					26	6·7	4·9
6·0 „ ..	24	13·5	12·2	290					26	5·6	1·5	3	25	5·6	2·5	35					24	8·5	7·4
7·5 „ ..	20	18·9	17·7	283					17	6·2	2·6	344	14	5·9	3·1	298					19	10·8	10·0
9·0 „ ..	16	22·8	21·1	283					11	8·0	5·5	253	11	9·5	6·5	294					12	15·8	14·8

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	MASULIPATAM				NAGERCOIL												NAGPUR							
	1600				0100				0700				1600				0100				0700			
	n	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	2·1	88	31	4·9	4·8	46	31	3·5	3·3	42	31	5·0	3·6	49	31	1·6	0·5	3	31	0·8	0·6	16
0·15 a. g. ..	31	4·7	4·0	80	31	8·9	8·7	44	31	8·4	8·2	43	31	9·4	7·4	54	31	4·6	2·4	99	31	3·1	2·4	59
0·6 a. s. l. ..	31	4·9	4·3	56	31	9·7	9·5	38	31	8·6	8·4	39	31	7·9	7·0	38	31	4·7	2·9	110	31	3·3	2·2	79
1·0 „ ..	31	5·3	4·5	42	31	10·9	10·6	40	31	8·0	7·9	37	31	8·1	7·8	40	31	3·9	2·2	88	31	3·0	1·9	67
1·5 „ ..	31	5·0	3·5	26	31	9·3	8·3	47	31	7·0	6·4	49	31	7·8	7·4	36	31	3·9	2·4	44	31	3·4	2·1	28
2·0 „ ..	31	4·4	2·2	355	31	6·8	5·7	67	30	6·1	5·0	58	31	8·0	6·8	43	29	4·2	2·9	21	31	4·2	2·5	352
2·5 „ ..	31	4·5	1·8	300	29	6·7	5·1	75	30	5·6	3·9	63	30	7·2	5·4	55	28	4·7	2·8	327	31	5·1	3·1	327
3·0 „ ..	31	5·0	1·8	274	29	6·0	4·3	88	30	5·4	3·4	77	29	6·3	4·1	64	20	6·5	4·4	318	31	7·1	5·6	307
4·0 „ ..	26	4·5	3·1	288	18	5·4	4·4	75	30	5·5	4·7	86	28	5·8	5·3	75	11	9·0	8·4	292	30	9·9	8·9	286
5·0 „ ..	26	6·8	5·2	279	10	6·3	5·7	91	29	6·8	5·9	80	24	5·7	4·9	59	4	13·4	12·3	284	29	13·4	12·5	283
6·0 „ ..	23	9·6	8·3	278	8	9·4	8·4	84	27	6·8	5·3	82	22	7·3	6·0	62	1	15·0	15·0	259	28	17·8	16·9	281
7·5 „ ..	17	13·3	11·9	279	2	10·3	10·3	95	23	8·9	5·1	61	17	9·2	6·2	75					27	24·2	23·0	277
9·0 „ ..	6	29·4	18·3	279	1	19·0	19·0	90	21	8·2	3·6	86	11	9·0	4·3	101					24	28·9	27·6	275

Height in km.	NAGPUR				NEW DELHI												POONA							
	1600				0100				0700				1600				0100				0700			
	n	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	0·6	64	31	1·0	0·7	309	31	1·3	0·7	283	31	2·3	1·5	327	31	0·2	0·2	96	31	0·3	0·3	103
0·15 a. g. ..	31	2·3	1·7	63	31	5·5	2·6	22	31	5·3	0·9	320	31	3·5	1·9	331	31	3·7	2·6	104	31	3·0	0·3	106
0·6 a. s. l. ..	31	2·3	1·7	67	31	5·1	1·5	343	31	5·3	1·7	300	31	3·5	1·9	317	31	2·0	1·3	116	31	1·2	1·0	105
1·0 „ ..	31	2·2	1·6	37	31	4·5	2·7	301	31	5·1	3·2	295	31	3·9	2·1	296	31	6·1	5·4	97	31	5·6	5·2	114
1·5 „ ..	31	3·2	2·4	23	30	5·1	4·2	289	31	5·1	3·6	302	31	4·7	3·0	289	31	6·0	5·2	102	31	4·5	3·6	112
2·0 „ ..	31	4·2	2·8	9	26	6·3	5·5	289	31	5·9	4·6	300	31	5·8	4·2	283	31	5·3	4·2	102	31	4·2	1·0	107
2·5 „ ..	29	4·3	3·2	340	20	6·6	5·7	292	29	7·3	5·9	299	31	7·0	5·3	277	31	5·0	0·9	124	31	4·7	2·0	335
3·0 „ ..	29	6·6	4·4	302	17	7·8	7·1	283	28	8·4	7·3	295	31	8·2	6·7	280	29	5·3	2·1	301	31	5·5	3·5	316
4·0 „ ..	29	9·4	8·0	285	3	10·8	10·3	281	24	11·8	11·1	288	31	11·3	10·3	278	18	6·2	4·5	307	31	7·0	5·4	306
5·0 „ ..	29	13·1	12·4	284					22	16·3	15·6	288	28	16·7	15·7	283					31	9·5	8·2	294
6·0 „ ..	28	17·3	16·5	285					18	23·1	22·2	278	28	21·7	21·0	279					31	12·5	11·3	288
7·5 „ ..	21	22·6	21·5	278					8	31·9	31·4	281	24	28·8	27·5	281					29	16·0	14·9	282
9·0 „ ..	6	28·0	27·8	276					4	46·1	45·7	275	20	41·1	40·0	281					21	20·7	19·6	279

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	POONA				PORT BLAIR												RAIPUR							
	1600				0100				0700				1600				0100				0700			
	n	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	1·3	1·0	78	31	5·2	5·1	59	31	4·3	4·1	57	31	4·8	4·6	50	31	1·5	0·5	123	31	1·0	0·5	12
0·15 a. g. ..	31	3·0	2·3	85	31	7·6	7·3	59	31	7·5	7·3	58	31	7·8	7·5	53	31	3·7	1·6	84	31	3·5	2·6	41
0·6 a. s. l. ..	31	2·0	1·6	99	31	7·5	7·3	65	29	8·2	8·0	66	31	7·9	7·7	57	31	3·5	1·3	73	31	4·0	2·8	57
1·0 „ ..	31	3·1	2·2	90	23	7·3	7·0	79	22	8·3	8·0	83	27	7·0	6·8	72	31	3·4	2·3	40	31	3·6	2·5	47
1·5 „ ..	31	3·3	2·2	97	21	7·1	6·7	83	14	8·1	7·5	93	24	6·1	5·7	90	31	3·4	2·3	27	31	3·8	2·9	18
2·0 „ ..	30	4·3	2·0	84	12	6·7	6·1	71	13	5·9	5·2	88	23	5·4	4·7	84	31	3·5	2·2	351	31	4·6	3·8	1
2·5 „ ..	30	4·7	1·5	43	7	4·3	3·6	48	11	4·3	3·1	76	20	4·9	3·5	82	29	4·6	3·9	310	31	4·8	3·5	343
3·0 „ ..	30	5·1	2·0	344	5	4·7	2·9	53	10	3·5	1·7	66	20	3·8	2·4	57	24	6·2	5·0	298	31	6·2	4·3	316
4·0 „ ..	31	6·4	3·6	297	1	9·0	9·0	35	9	2·7	0·7	240	15	3·0	1·5	50	13	9·7	8·9	282	31	9·6	8·8	287
5·0 „ ..	28	8·5	6·7	296					8	2·6	1·3	200	12	3·0	0·6	93	4	15·3	14·5	295	30	13·7	12·7	277
6·0 „ ..	28	12·1	10·7	287					8	4·8	2·3	210	10	4·1	0·7	139					30	17·1	16·0	276
7·5 „ ..	20	14·7	13·3	281					6	4·0	3·4	221	8	4·3	0·9	267					19	22·3	21·6	277
9·0 „ ..	14	17·3	16·6	277					2	5·3	5·3	167	6	4·1	2·8	228					7	30·1	28·6	274

Height in km.	RAIPUR				SAHARSA								TEZPUR											
	1600				0700				1600				0100				0700				1600			
	n	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	17	31	0·6	0·4	270	31	1·1	1·1	260	31	1·3	1·3	42	31	1·5	1·0	58	31	1·1	1·0	73
0·15 a. g. ..	31	2·6	2·2	25	30	3·8	2·4	297	31	2·8	2·5	274	31	4·9	4·8	59	31	4·1	4·0	67	30	4·2	4·0	70
0·6 a. s. l. ..	31	2·4	2·0	18	29	3·6	2·6	312	31	3·1	2·5	282	31	4·0	3·6	85	31	4·4	4·3	78	30	3·5	3·2	81
1·0 „ ..	31	3·0	2·3	12	29	3·7	2·0	313	31	3·5	2·4	294	31	4·0	3·0	86	31	4·8	4·4	82	30	3·6	2·5	103
1·5 „ ..	31	4·0	2·7	8	29	4·7	1·9	322	31	4·6	2·7	302	31	4·2	3·1	91	31	5·2	3·9	85	31	4·2	2·0	139
2·0 „ ..	31	4·5	3·2	360	29	5·5	2·5	320	31	6·7	4·2	304	30	4·5	1·1	109	27	5·5	3·5	79	31	4·8	1·5	158
2·5 „ ..	31	5·2	3·4	333	28	5·8	3·3	305	31	8·1	6·3	296	28	4·9	0·8	153	27	5·4	2·6	84	30	4·3	1·6	225
3·0 „ ..	31	6·0	4·3	298	26	6·5	4·8	288	31	9·2	7·8	291	27	6·2	2·7	243	26	5·0	0·1	178	30	5·5	3·8	263
4·0 „ ..	30	10·0	8·8	280	16	7.0	5·6	276	30	11·6	10·3	282	17	9·6	6·2	268	25	8·6	7·0	269	28	11·4	9·7	266
5·0 „ ..	29	13·3	12·6	279	8	10·9	10·4	275	30	15·2	14·4	280					22	15·8	14·1	265	25	19·8	19·2	267
6·0 „ ..	29	18·4	17·3	280	4	14·1	14·0	212	30	20·0	19·3	280					20	19·4	18·3	263	23	25·7	24·6	265
7·5 „ ..	21	22·9	22·3	279					11	19·9	19·5	268					14	21·7	20·5	263	14	33·4	32·5	265
9·0 „ ..	13	27·5	25·9	276					4	24·9	24·6	266					6	32·9	31·3	279	6	40·0	38·0	263

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	TRICHINOPOLY												TRIVANDRUM				UDAIPUR							
	0100				0700				1600				0700				0100				0700			
	n	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	3·6	32	31	2·9	2·8	21	31	3·5	3·3	47	31	0·5	0·5	44	31	0·2	0·2	315	31	0·2	0·2	296
0·15 a.g. ..	31	9·8	9·7	34	31	7·8	7·0	22	31	6·5	6·3	50	31	2·3	1·3	69	31	2·7	1·6	37	31	2·1	1·4	322
0·6 a.s.l. ..	31	12·6	12·4	42	31	11·0	10·9	38	31	8·3	8·1	46	31	2·1	1·1	96								
1·0 „ ..	31	10·4	10·1	45	31	10·0	9·8	46	31	8·5	8·2	43	31	2·9	1·8	79	31	3·6	1·9	73	31	3·3	1·2	117
1·5 „ ..	30	7·5	6·9	52	31	8·0	7·1	52	30	8·0	7·7	43	31	2·8	1·3	55	31	3·4	1·2	201	31	4·1	1·3	220
2·0 „ ..	27	5·3	3·8	65	31	6·2	5·5	73	25	6·9	5·8	50	31	2·7	1·1	61	31	5·3	1·8	243	31	5·6	2·9	270
2·5 „ ..	22	4·7	3·4	82	30	6·0	4·4	77	22	5·1	3·6	47	29	3·2	2·3	91	30	7·0	4·0	282	31	7·4	4·6	290
3·0 „ ..	22	4·5	2·9	106	28	4·5	3·2	91	22	4·0	1·9	78	29	4·2	3·2	87	30	7·6	6·3	289	31	8·4	5·7	301
4·0 „ ..	3	3·3	2·8	168	26	4·2	2·6	82	19	3·8	2·6	65	29	4·9	4·0	90	8	11·7	10·6	282	30	11·3	7·9	290
5·0 „ ..					23	4·6	2·5	80	18	4·8	3·1	48	28	5·5	4·2	86	4	19·2	19·0	278	24	15·5	13·8	291
6·0 „ ..					21	6·5	4·1	73	17	5·6	3·0	65	22	5·6	3·1	70	2	22·7	22·5	279	16	17·3	16·0	294
7·5 „ ..					16	7·7	1·1	128	13	8·3	0·4	25	16	5·8	0·6	165					4	20·0	20·0	274
9·0 „ ..					10	10·5	3·5	218	7	9·7	4·0	221	10	8·7	5·4	191								

Height in km.	UDAIPUR				VENGURLA												VERAVAL							
	1600				0100				0700				1600				0100				0700			
	n	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	0·2	263	31	1·8	1·6	13	31	0·9	0·8	12	31	3·0	1·5	259	31	3·0	2·3	360	31	3·2	2·9	26
0·15 a.g. ..	31	3·1	0·6	217	31	5·4	4·5	50	31	3·9	3·5	73	31	3·2	1·3	301	31	5·4	4·1	2	31	6·4	5·1	40
0·6 a.s.l. ..					31	6·4	5·0	75	31	6·2	5·7	94	31	3·2	2·4	49	31	5·3	3·1	41	31	4·2	2·7	71
1·0 „ ..	31	2·9	0·9	239	31	6·2	5·6	94	31	5·7	5·3	99	31	4·2	3·7	63	31	4·5	3·1	74	31	3·6	1·9	88
1·5 „ ..	31	3·5	2·1	265	29	5·4	5·0	110	31	4·1	3·1	108	31	5·4	4·7	72	31	4·9	3·5	86	31	4·3	1·2	93
2·0 „ ..	31	4·4	2·5	274	28	4·8	4·2	115	31	4·2	1·5	116	31	4·6	3·2	66	31	5·2	2·9	55	31	4·7	1·4	38
2·5 „ ..	31	6·2	3·9	295	24	3·5	0·6	202	31	4·7	0·5	330	31	4·3	1·9	53	26	4·9	2·7	338	31	5·4	2·8	339
3·0 „ ..	31	8·1	6·0	293	21	4·3	1·5	296	31	5·4	2·0	337	31	4·4	1·5	28	22	6·3	3·1	295	31	6·8	4·0	317
4·0 „ ..	31	12·1	10·4	286	7	4·4	3·5	289	30	5·1	2·8	325	29	4·6	2·0	312	8	9·3	8·6	282	31	9·5	7·8	296
5·0 „ ..	31	17·0	15·9	283	5	6·1	5·5	274	30	5·9	3·7	316	29	6·2	3·8	300					31	13·0	11·7	288
6·0 „ ..	31	21·8	20·7	283	3	6·0	5·8	266	30	7·4	5·5	310	28	7·7	6·1	302					30	17·0	16·3	282
7·5 „ ..	22	26·2	24·7	288	2	8·0	8·0	323	22	8·9	7·7	288	18	8·9	7·3	284					28	22·7	22·0	280
9·0 „ ..	11	28·9	19·5	299	1	3·5	3·5	275	15	12·4	11·0	286	16	13·3	11·0	285					22	26·0	25·2	275

Table A—Monthly mean directions and velocities of upper winds

Winds upto 9·0 km. above sea level

DECEMBER 1948

Height in km.	VERAVAL				VIZAGAPATAM												MINICOY							
	1600				0100				0700				1600				0100				0730			
	n	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	4·4	2·7	216	31	1·1	0·8	16	31	0·6	0·3	44	31	4·3	4·0	94	31	2·3	1·6	35	31	2·0	1·5	23
0·15 a.g. ..	31	5·3	2·9	224	31	3·0	2·7	40	31	3·3	2·8	27	31	6·1	5·1	91	31	5·1	3·8	34	31	4·4	3·3	23
0·6 a.s.l. ..	31	3·3	0·4	294	31	4·5	4·3	77	31	4·5	4·1	53	31	4·4	4·0	53	31	5·3	4·5	49	31	4·8	3·7	36
1·0 „ ..	31	4·0	1·5	30	31	4·0	3·5	61	31	4·5	3·8	48	31	4·5	3·6	22	30	5·6	4·6	66	31	5·4	4·7	59
1·5 „ ..	31	5·0	2·8	35	28	4·9	3·8	38	31	5·4	2·7	33	31	5·9	3·8	349	28	5·4	4·4	74	31	5·5	4·6	72
2·0 „ ..	31	5·7	3·0	31	26	3·7	1·5	24	31	4·8	1·4	357	31	5·8	3·3	329	28	5·2	4·0	75	30	5·4	3·9	82
2·5 „ ..	31	6·1	3·2	7	22	4·5	1·8	246	31	4·5	2·2	277	30	5·7	3·7	298	26	4·8	3·1	88	28	4·5	2·8	86
3·0 „ ..	31	7·4	4·3	332	19	4·5	2·6	275	30	4·9	3·2	273	30	6·2	4·3	279	19	5·0	3·8	79	25	5·1	2·9	97
4·0 „ ..	31	10·3	7·7	300	13	5·1	3·2	275	30	6·1	5·1	284	29	7·5	6·3	275	5	5·6	4·8	80	22	5·3	3·4	79
5·0 „ ..	30	13·2	10·9	294	2	8·0	6·2	311	27	8·0	7·1	272	27	9·5	8·4	275					20	4·5	3·7	74
6·0 „ ..	29	16·4	14·8	290	1	18·5	18·5	270	22	11·1	10·1	277	27	12·4	11·7	273					16	6·1	4·9	91
7·5 „ ..	19	20·2	19·2	280					18	13·6	13·1	272	18	15·7	14·9	273					10	9·3	6·2	78
9·0 „ ..	8	28·0	25·5	281					10	17·5	17·1	267	11	21·4	21·0	258					6	10·1	6·0	101

Height in km.	MINICOY			
	1430			
	n	V	v	D
Surface ..	31	2·7	2·1	35
0·15 a.g. ..	31	5·2	4·3	32
0·6 a.s.l. ..	31	5·7	4·8	40
1·0 „ ..	30	5·3	4·6	56
1·5 „ ..	30	4·8	3·4	74
2·0 „ ..	29	4·7	3·0	82
2·5 „ ..	29	4·2	2·3	83
3·0 „ ..	27	4·3	2·9	82
4·0 „ ..	24	4·3	3·5	69
5·0 „ ..	20	5·6	4·6	77
6·0 „ ..	16	6·7	4·9	73
7·5 „ ..	7	8·5	7·3	77
9·0 „ ..	4	11·4	4·6	209

Table B—Monthly mean directions and velocities of upper winds

Winds at and above 10 km. above sea level

DECEMBER 1948

. in Km.	n	V	v	D
	AHMEDABAD			
10·0	13	27·9	26·2	284
11·0	3	26·2	26·1	270
12·0	3	31·2	28·7	267
13·0	1	23·0	23·0	290
14·0	1	31·0	31·0	265
	ALLAHABAD			
10·0	9	32·5	31·9	273
11·0	5	36·2	35·9	273
12·0	5	36·5	36·4	273
13·0	4	38·9	38·8	269
	AMBALA			
10·0	5	28·6	26·4	300
	ANANTAPUR			
10·0	24	14·6	4·0	240
11·0	11	16·3	14·7	245
12·0	5	11·8	10·1	236
13·0	3	16·6	14·6	240
14·0	1	13·5	13·5	235
15·0	1	10·0	10·0	285
16·0	1	13·0	13·0	305
17·0	1	7·0	7·0	255
18·0	1	3·5	3·5	255
19·0	1	8·0	8·0	210
	BANGALORE			
10·0	5	13·2	9·9	225
11·0	1	16·0	16·0	260
12·0	1	18·5	18·5	265
13·0	1	24·0	24·0	265
14·0	1	27·5	27·5	270
15·0	1	35·0	35·0	265
	BAREILLY			
10·0	4	24·5	24·1	293
11·0	2	28·0	27·4	286
12·0	1	39·0	39·0	225

Ht. in Km.	n	V	v	D
	BHOPAL			
10·0	8	37·1	36·9	276
11·0	3	34·8	33·8	275
12·0	3	34·8	34·7	268
13·0	2	38·7	38·5	268
	BHUJ			
10·0	5	28·8	28·2	292
	BOMBAY			
10·0	14	26·1	24·6	276
11·0	5	35·0	18·7	274
12·0	2	34·7	34·5	257
	CALCUTTA			
10·0	2	27·2	23·0	279
	COCHIN			
10·0	7	8·9	5·7	187
	COOCH BEHAR			
10·0	2	22·7	22·7	289
11·0	2	22·3	21·7	281
	DEOLALI			
10·0	3	26·0	25·6	302
	DIBRUGARH			
10·0	15	40·3	38·3	263
11·0	7	41·5	40·3	269
12·0	4	47·9	46·6	266
13·0	3	49·3	48·0	261
14·0	2	46·5	46·5	275
15·0	2	53·5	53·5	270
	GADAG			
10·0	25	13·2	11·1	266
11·0	1	8·0	8·0	185
12·0	1	5·0	5·0	200
13·0	1	6·5	6·5	180
	GOPALPUR			
10·0	8	25·9	25·0	264
11·0	2	27·5	27·5	255
12·0	1	9·5	9·5	235

Ht. in Km.	n	V	v	D
	GORAKHPUR			
10·0	1	34·5	34·5	275
	HYDERABAD (Dn.)			
10·0	23	19·7	17·9	265
11·0	11	25·8	23·8	264
12·0	5	26·8	25·8	247
13·0	3	20·2	20·0	259
14·0	2	19·7	19·1	282
15·0	1	22·0	22·0	260
16·0	1	26·5	26·5	265
17·0	1	23·5	23·5	280
18·0	1	18·5	18·5	280
	JAGDALPUR			
10·0	3	26·0	25·5	264
	JAMNAGAR			
10·0	2	51·0	49·0	82
11·0	1	20·0	20·0	280
	JHARSUGUDA			
10·0	8	35·8	32·7	269
11·0	3	35·2	34·3	266
12·0	2	45·3	45·3	244
13·0	1	66·5	66·5	265
	JODHPUR			
10·0	10	35·7	34·1	281
11·0	7	36·9	35·2	283
12·0	5	37·9	37·6	275
13·0	2	42·0	42·0	264
14·0	1	29·0	29·0	260
15·0	1	27·0	27·0	250
16·0	1	19·0	19·0	280
17·0	1	21·0	21·0	280
18·0	1	19·5	19·5	260
19·0	1	16·5	16·5	265
20·0	1	11·5	11·5	300

Ht. in Km.	n	V	v	D
	JUBBULPORE			
10·0	3	24·3	23·3	292
11·0	3	26·3	24·7	290
12·0	2	28·3	28·2	287
13·0	1	62·0	62·0	300
	MADHOSAGAR			
10·0	16	43·3	43·1	280
11·0	6	38·9	38·7	282
12·0	4	42·0	41·7	285
13·0	2	48·7	48·7	280
14·0	2	52·3	51·8	281
15·0	2	75·7	75·5	279
16·0	1	53·0	53·0	280
17·0	1	57·0	57·0	285
18·0	1	61·0	61·0	280
19·0	1	60·0	60·0	285
20·0	1	62·5	62·5	280
21·0	1	52·0	52·0	280
	MADRAS			
10·0	15	12·3	8·6	237
11·0	13	13·9	10·9	237
12·0	12	13·7	10·4	230
13·0	6	13·2	10·2	227
14·0	3	10·5	4·4	189
15·0	3	11·8	1·1	119
16·0	3	12·6	3·4	293
17·0	1	7·0	7·0	130
	MALEGAON			
10·0	14	25·8	23·5	277
11·0	6	30·4	29·5	275
12·0	3	31·7	31·3	290
13·0	1	43·0	43·0	270
14·0	1	33·0	33·0	275

Table B—Monthly mean directions and velocities of upper winds

Winds at and above 10 km. above sea level

DECEMBER 1948

Ht. in Km.	n	V	v	D
	MANGALORE			
10·0	14	12·1	7·7	254
11·0	2	17·0	17·0	239
	MASULIPATAM			
10·0	8	17·2	16·6	257
	NAGERCOIL			
10·0	29	9·1	3·7	104
11·0	8	8·0	5·5	119
12·0	3	7·5	6·5	138
	NAGPUR			
10·0	21	31·6	30·8	270
11·0	18	32·2	30·8	270
12·0	15	34·9	32·8	265
	NEW DELHI			
10·0	18	50·5	49·4	279
11·0	8	54·3	53·4	276
12·0	3	36·2	36·2	269
13·0	2	54·5	54·5	281
	POONA			
10·0	27	21·1	19·4	267
11·0	22	21·1	19·1	256
12·0	17	19·8	18·5	248
13·0	10	17·1	15·0	254
14·0	8	18·0	15·4	257
15·0	7	16·3	10·4	268
16·0	5	13·8	11·5	285
17·0	1	13·0	13·0	2 0
18·0	1	7·5	7·5	270
19·0	1	7·0	7·0	230
	PORT BLAIR			
10·0	4	7·6	7·0	234
11·0	2	5 3	4·9	281
12·0	2	11·5	11·1	274

Ht. in Km.	n	V	v	D
	RAIPUR			
10·0	11	29·0	27·6	280
11·0	2	33·0	32·9	274
12·0	1	54·0	54·0	305
	SAHARSA			
10·0	1	37·0	37·0	275
	TEZPUR			
10·0	7	37·7	36·3	266
11·0	1	29·5	29·5	265
	TRICHINOPOLY			
10·0	12	10·7	4·9	175
11·0	4	11·9	6·2	188
12·0	3	13·7	12·7	202
13·0	2	19·7	16·3	200
14·0	1	18·0	18·0	170
	TRIVANDRUM			
10·0	5	9·0	3·3	190
11·0	3	9·0	7·6	219
12·0	1	11·5	11·5	220
13·0	1	16·0	16·0	255
	UDAIPUR			
10·0	2	27·2	27·0	315
	VENGURLA			
10·0	25	17·2	14·1	267
11·0	9	21·8	19·2	262
12·0	5	25·0	23·5	257
13·0	5	26·9	25·2	250
14·0	5	26·3	24·2	257
15·0	4	24·4	23·7	259
16·0	4	23·6	23 4	2`8
17·0	3	17·8	17·0	298
18·0	2	20·7	18·1	308
19·0	1	14·0	14·0	335
20·0	1	11·0	11·0	275
21·0	1	22·0	22·0	265

Ht. in Km.	n	V	v	D
	VENGURLA—*contd.*			
22·0	1	31·0	31·0	270
23·0	1	38·0	38·0	300
24·0	1	52·5	52·5	290
25·0	1	63·0	63·0	270
26·0	1	81·0	81·0	255
27·0	1	84·5	84·5	235
	VERAVAL			
10·0	15	28·4	27·2	276
11·0	6	25·7	25·3	265
12·0	4	28·0	24·5	273
	VIZAGAPATAM			
10·0	11	21·8	14·3	254
11·0	2	17·5	17·5	271
	MINICOY			
10·0	8	10·7	7·4	163
11·0	1	20·5	20·5	205

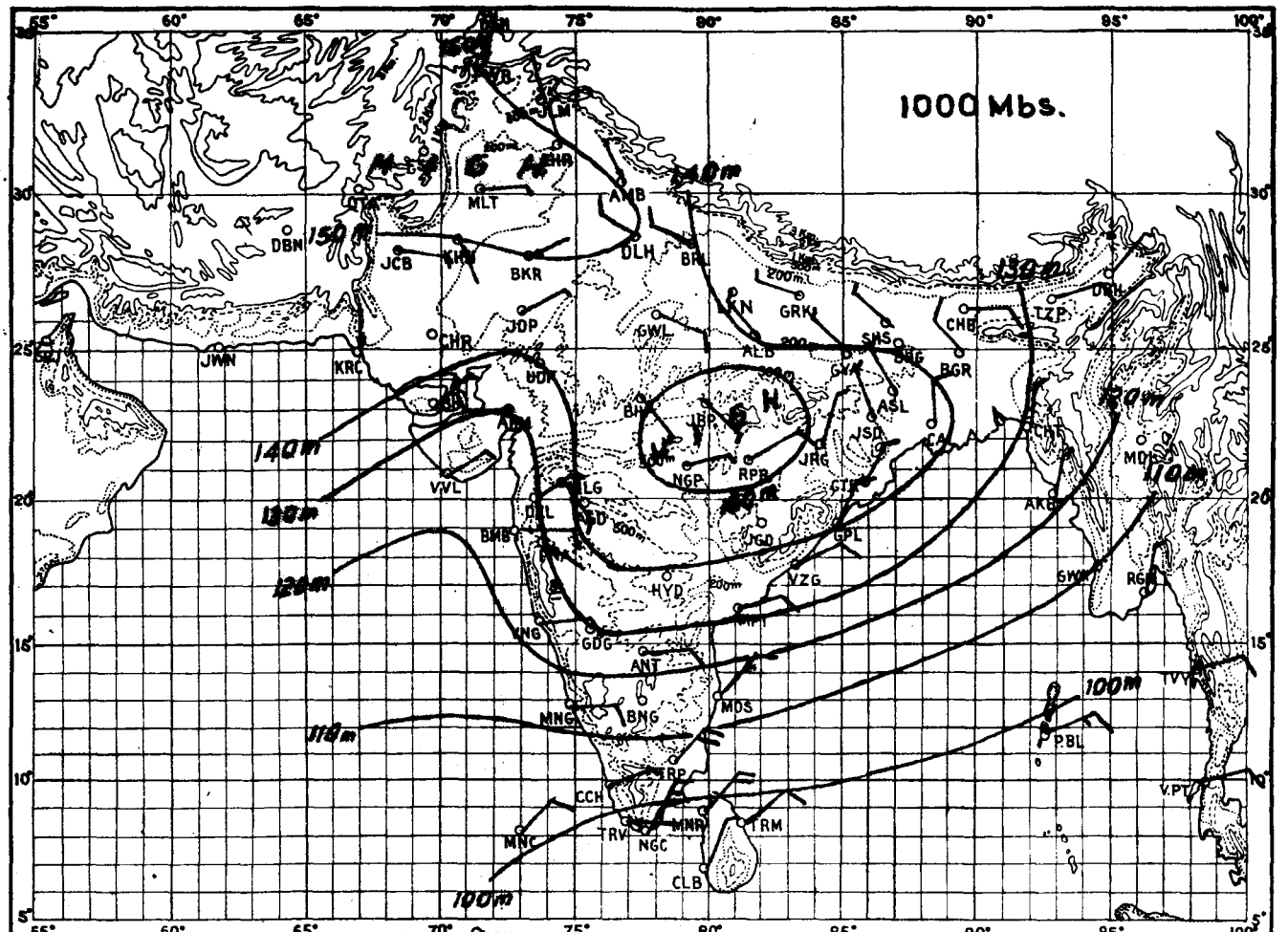
Ht. in Km.	n	V	v

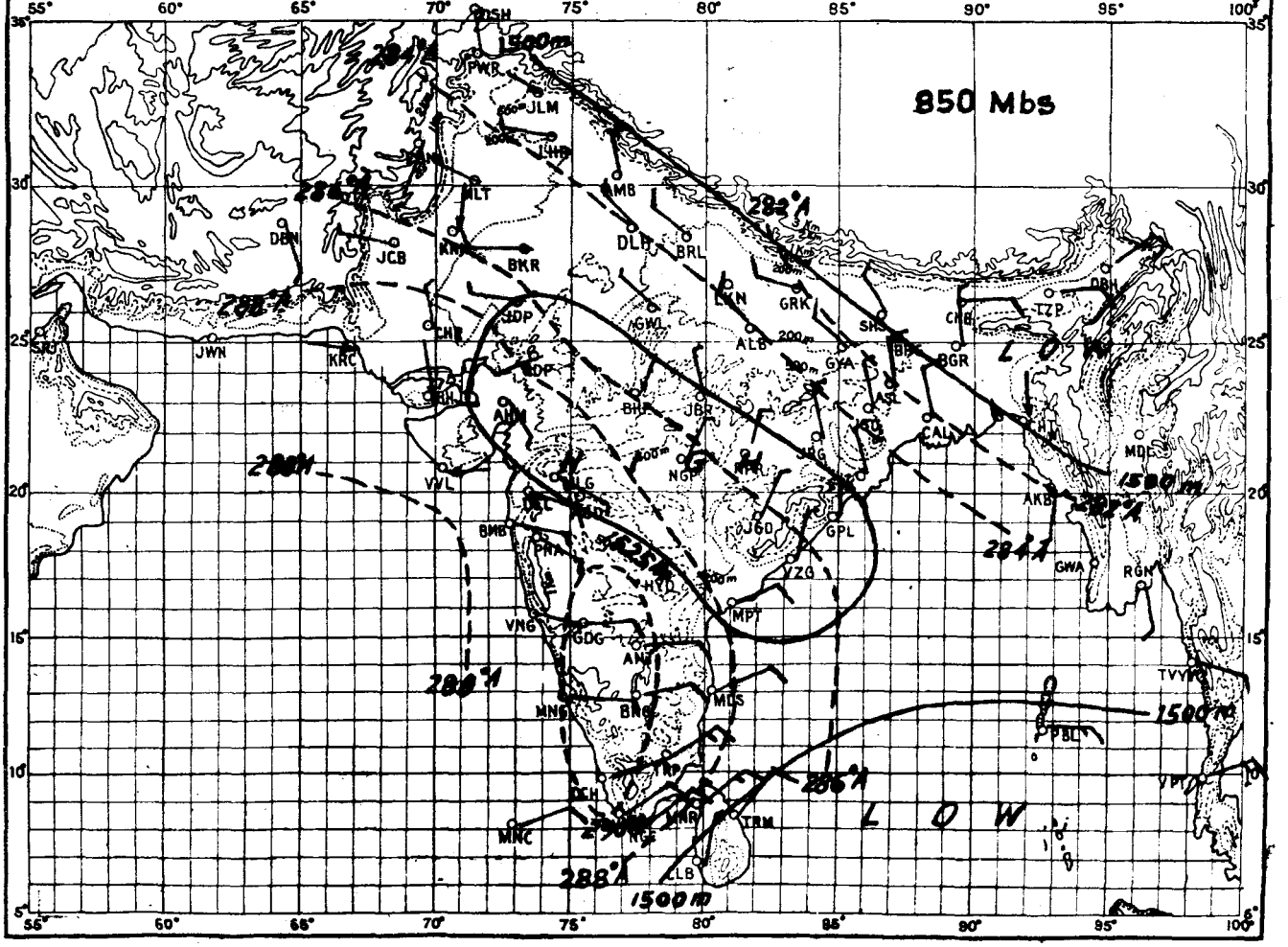
MH4 DGOb—325—9-2-53—GIPS

MONTHLY MEAN CONSTANT PRESSURE CHARTS

DECEMBER 1948

Plate I



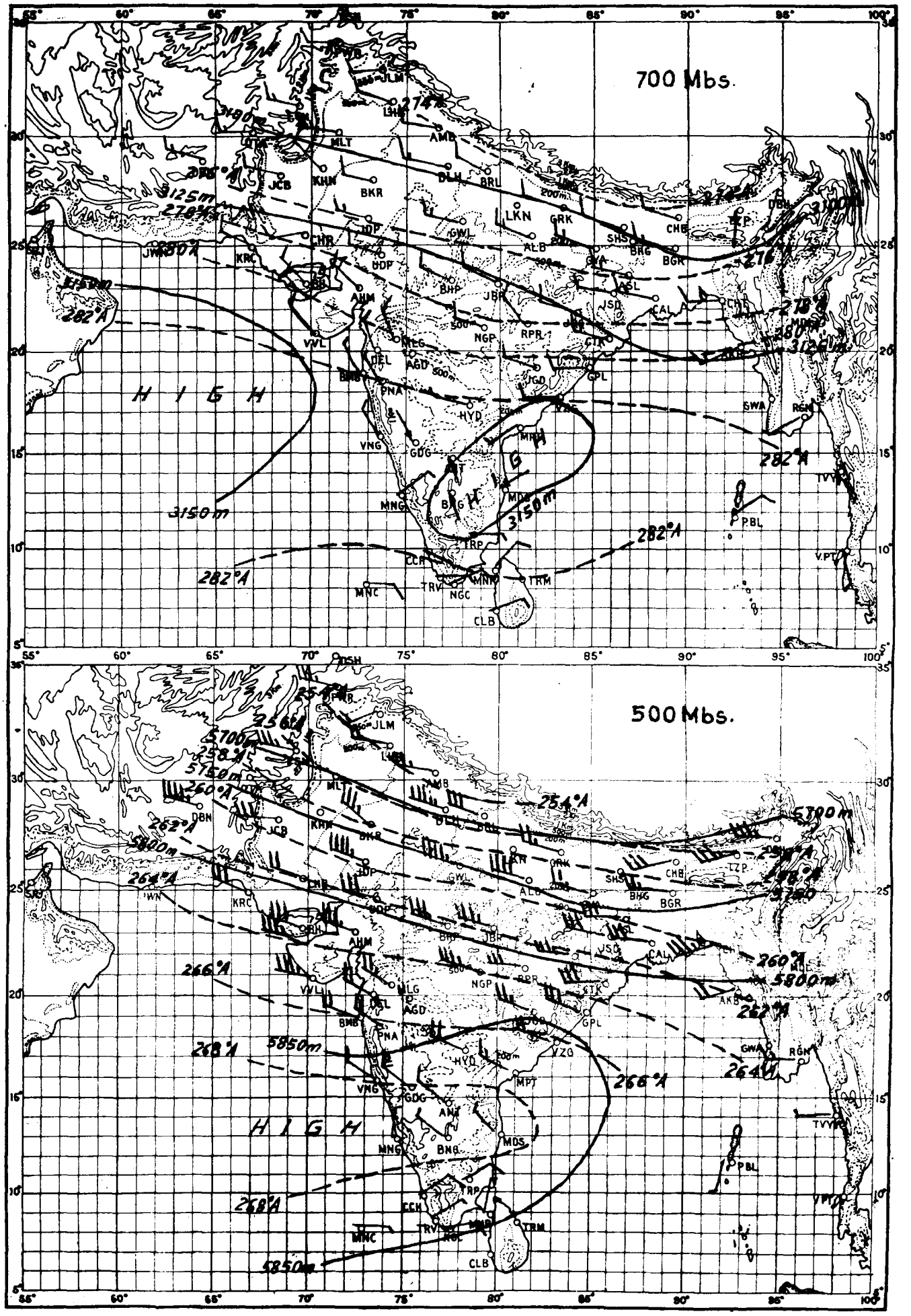


RESULTANT WIND ——\ = 5 Knots, ——\ = 10 Knots, ——▬ = 50 Knots.

G.P.Z.P. POONA, 1951.

MONTHLY MEAN CONSTANT PRESSURE CHARTS

DECEMBER 1948 Plate II



RESULTANT WIND —— = 5 Knots, —— = 10 Knots, —— = 50 Knots. G.P.Z.P. POONA, 1951.

Isotherms in degrees Absolute —— Contours in geopotential Metres