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GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1939

ANNUAL SUMMARY

PART C

STORMS AND DEPRESSIONS

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INDIA WEATHER REVIEW, 1939.

ANNUAL SUMMARY.

PART C.

STORMS AND DEPRESSIONS.

DEPRESSIONS AND CYCLONIC STORMS.

During the year, six storms and ten depressions formed in the Bay of Bengal, two depressions in the Arabian Sea and one storm and two depressions over Bengal. The dates on which the storms occurred and the greatest barometric depths observed during their life are summarised in *Table 1* below :—

TABLE 1.

Region.	Month.	Date.	Greatest observed barometric depth.
			"
Bay of Bengal .	January . .	7th—12th . .	0·48
Do. .	April . . .	11th—14th . .	0·35
Do. .	June . . .	22nd—25th . .	0·15
Bengal . . .	July-August . .	29th July—9th August.	0·50
Bay of Bengal .	August-September .	26th August—2nd September.	0·39
Do. .	November . .	14th—21st . .	0·40
Do. .	December . .	4th—10th . .	At least 0·25

The detailed descriptions of these storms and depressions are followed by a list of western disturbances during the year. Then follow lists of the more important local storms, and of the places in which winds of force 9 or more were experienced by ships in the Indian Seas where there were no major disturbances.

1. Severe Bay storm of 7th to 12th January 1939.—On the afternoon of the 6th January, reports from ships and the upper winds at Port Blair indicated that weather was becoming unsettled in the south Bay of Bengal. By 8 hrs. of the next morning, the unsettled conditions concentrated into a deep depression with central region within a degree of Lat. 7½°N., Long. 88°E. The depression intensified into a severe cyclonic storm by 8 hrs. on the 8th when its centre lay near 9°N., 86°E. The observations of the following ships in the neighbourhood of the storm centre are of interest.

TABLE 2.

Date.	Hr. of Obsn.	Name of Ship.	Position.		Wind.		Sea.	Swell.	Pressure.	Remarks.	
			Lat. N.	Long. E.	Dir.	Force (B. S.)				Present weather	Past weather.
			° ′	° ′					"		
8th January .	0830 I. S. T. .	*S. S. Jalapadma* .	9 12	85 30	NW	10	Very high .	Heavy swell, long/Nly.	29·62	Heavy squalls (last 3 hours).	Rain, whole gale, squally.
	1130 I. S. T. .	Do. .	8 54	85 24	W/N	8	Very high .	Do. .	29·65	Heavy squalls (last 3 hours).	Rain.
	0830 I. S. T. .	*S. S. Tanfield* .	7 42	84 54	W/N	7	Very rough .	Heavy swell, average length/NW-ly.	29·65	Cont. heavy rain .	Rain, squally.
	0830 I.S.T. .	*M. V. Terukunimaru*	6 12	84 30	W	7	High . .	Heavy swell, average length/Wly.	29·62	Squally, mainly overcast.	Squally.

The storm began to move westnorthwestwards and was centred within a degree of Lat. 10½°N., Long. 83½°E. on the morning of the 9th. Moving in a westerly direction, it was centred about 120 miles southeast of Cuddalore at 8 hrs. of the 10th after which it began to weaken. The pressure deficiency at the centre of the storm when it was most severe was probably about 0″·4. S. S. Gogra bound for Colombo from Madras, M. S. Orna bound for Calcutta from Bombay and S. S. Yoma bound for Rangoon from Liverpool experienced severe weather between the 8th and 9th. Extracts from their logs are reproduced below.

TABLE 3.

Date.	Hr. of Obsn. I.S.T.	Name of Ship.	Position.		Wind.		Sea.	Swell.	Remarks.
			Lat. N.	Long. E.	Dir.	Force (B. S.)			
			° ′	° ′					
7th January .	2000	*S. S. Yoma*	..	..	N	7	High.	Heavy.	Rain.
	2100	Do.	..	..	N	9			
	2200	Do.	..	..	NE	9			
	2300	Do.	..	..	NE	9	High.	Heavy.	Frequent violent rainsqualls and lightning.
	2400	Do.	..	..	NE	9			
8th January .	0100	Do.	..	..	NE	8			
	0200	Do.	..	..	NE	8			
	0300	Do.	..	..	NE	8			
	0400	Do.	..	..	NE	7	High.	Moderate.	Shower.
	0500	Do.	..	..	E	7			
	0600	Do.	..	..	E	6			
	0700	Do.	..	..	ENE	6			
	0800	Do.	9 05	86 00	ENE	5	Rough.	Moderate.	
	0900	Do.	..	..	E/N	6—7			
	1200	Do.	9 31	86 12	E/N	6—7	High.	Heavy.	Frequent rainsqualls.
	1300	Do.	..	..	E/S	7			
	1400	Do.	..	..	ESE	7			
	1600	Do.	..	..	E/S	7	Very rough.	Moderate.	Fierce rainsqualls.
8th January .	1200	*S. S. Orna*	8 54	83 00	NW	6	Rough.	Moderate, from ENE.	Rainsquall.
	1300	Do.	9 04	83 03	NW/N	7	Rough.	Mod. confused.	Rainsquall.
	1400	Do.	9 15	83 07	NNW	7	Rough.	Heavy confused.	Rainsquall.
	1500	Do.	9 23	83 11	NNW	8	Very rough.	Heavy confused.	Rainsquall.
	1600	Do.	9 32	83 14	NNW	8	Rough.	Heavy confused.	Rainsquall. Wind and sea increasing 1630 I.S.T.
	1700	Do.	9 31	83 19	NNW	7	Rough.	Mod. confused.	Rainsquall. Frequent heavy rainsquall.
	1800	Do.	9 30	83 24	NNW	8	Very rough.	Mod. from SE.	Shower. Slight moderation of rainsqualls.
	1900	Do.	9 18	83 23	NW/N	7	Very rough.	Mod. confused.	Rainsquall.
	2000	Do.	9 05	83 22	NW/N	7	Rough.	Mod. from E.	Rainsquall. Frequent rainsquall.
	2100	Do.	8 49	83 24	NW/W	7	Very rough.	Mod. confused.	Rainsquall.
	2200	Do.	8 40	83 26	W/S	7	Rough.	Mod. confused.	Rainsquall. Cont. mod. rain.
	2300	Do.	8 34	83 34	W	6	Rough.	Mod. from NE.	Rainsquall.
	2400	Do.	8 28	83 36	W/N	6	Rough.	Mod. from NE.	Rainsquall. Cont. drizzle with intermittent rain.

TABLE 3—*contd.*

Date.	Hr. of Obsn. I.S.T.	Name of Ship.	Position.		Wind.		Sea.	Swell.	Remarks.
			Lat. N.	Long. E.	Dir.	Force (B. S.)			
			° ′	° ′					
9th January	0100	*S. S. Orna*	8 28	83 53	W	6	Rough.	Heavy, confused.	Rainsquall.
	0200	Do.	8 28	84 10	W/S	6	Rough.	Heavy, confused.	Rainsquall.
	0300	Do.	8 29	84 21	WSW	6	Rough.	Heavy, confused.	Rainsquall.
	0400	Do.	8 30	84 32	SW	6	Rough.	Heavy, confused.	Rain.
	0500	Do.	8 36	84 34	SW/S	6	Rough.	Heavy, from W.	
	0600	Do.	8 42	84 36	SW/S	6	Rough.	Heavy, confused.	
	0700	Do.	8 35	84 57	SW/S	6	Rough.	Heavy, confused.	
	0800	Do.	8 28	85 18	SW/S	6	Rough.	Heavy, from W.	
	1730	*S. S. Gogra*	12 10	82 50	NE	7	Very rough.	Heavy from SE.	Overcast, rain, occasional mod. rainsqualls between 1700-2000 I.S.T.
	1800	Do.	12 09	82 51	NE/E	7	High.		
	1900	Do.	12 04½	82 52	ENE	7—8	Very high.		
	2000	Do.	12 00	82 54	E	8	Very high.		
	2100	Do.	11 55½	82 54	E	8—9	High.		
	2200	Do.	11 52	82 54	E/S	10	High.		
	2300	Do.	11 51	82 55	E/S	8—9	Very rough to high.		2230 I.S.T. Estimated vessel heading for centre of storm. Weather rapidly wossening. Altered course to 58°E (T).
	2330	Do.	11 50½	82 56	E/S	11	Very rough.	Heavy from E.	2245 I.S.T. Wind moderated to force 8 and sky cleared to northeastward, until about 2330 when wind suddenly increased to storm force. Flattening out sea.
10th January	0000	Do.	11 50½	82 57	E/S	10—11	Very rough.		
	0100	Do.	11 50	82 59½	ESE	9	High.		
	0200	Do.	11 49½	83 01½	ESE	9			
	0230	Do.	11 49½	83 03½	ESE	9	High.	Heavy from E.	At 0100 I.S.T. on 10th wind settled to strong gale.
	0300	Do.	11 49	83 05½	ESE	9			
	0400	Do.	11 48½	83 08½	ESE	8			From 0400 I.S.T. to 0900 I.S.T. weather rapidly moderated, and at 1000 I.S.T. the weather was partly cloudy, wind force 4-5, and moderate sea and moderate long confused swell. The only other signs of the storm were dark heavy clouds to the westward. When the ship's position was obtained at 1200 I.S.T. it was found to be 3 miles north and 9 miles west of the estimated position.
	0500	Do.	11 48	83 12	ESE	8			
	0530	Do.	11 47½	83 13	ESE	7—8	Very rough.	Heavy from E.	

The storm weakened into a depression and moving southwestwards through the Gulf of Mannar, became unimportant over the southeast Arabian Sea to the west of Ceylon by the morning of the 12th.

Associated with this storm, fairly widespread rain fell in and around southeast Madras between the 9th and 11th.

2. Bay Storm of 11th to 15th April 1939.—On the morning of the 11th, observations from ships and coastal stations indicated that weather was becoming unsettled in the south Bay of Bengal. The unsettled conditions moved in a westerly direction and by 8 hrs. of the 12th, had intensified into a depression in the southwest Bay with central region near Lat. 7°N, Long. 82°E. The depression moved northwestwards and deepened ; at 8 hrs. of the 13th it was centred about 80 miles southeast of Negapatam. The weather reports from coastal observatories and ships in the southwest Bay, given in *Table 4* are of interest. During the course of the day, the deep depression moved northnorthwestwards and intensified into a storm. This lay at 14 hrs. close to the Coromandal coast between Cuddalore and Negapatam. The pressure deficiency at the centre of the storm at this stage was about 0″·35.

TABLE 4.

Date.	Hr. of Obsn.	Name of Ship or Station.	Position.		Bar.	Wind.		Sea.	Swell.	Remarks.
			Lat. N.	Long. E.		Dir.	Force (B. S.)			
			° ′	° ′	″					
13th April .	0800 L.T. .	Cuddalore . .	..	..	29·69	N	3	Rough .	I	Intermittent sl. rain. (Thunderstorm).
	0800 L.T. .	Negapatam .	..	..	29·64	NE	5	Very rough	5	Cont. heavy rain.
	0800 L.T. .	Pamban . .	..	..	29·73	WNW	6	Rough .	4	Intermittent sl. drizzle.
	0800 L.T. .	Trincomalee .	..	..	29·72	SW	3	Smooth .	0	Cont. light drizzle.
	0800 L.T. .	*S. S. Werdenfels* .	10 5	81 0	29·62	SE	5	Very rough	..	..
	0830 I.S.T. .	*S. S. Rajula* .	10 5	80 3	29·56	NE	4	Moderate .	4	Raining.

The storm crossed the coast near Cuddalore in the early morning of the 14th and at 8 hrs. of the same day, it lay as a deep depression centred near Vellore. The depression moved northwestwards, weakening at the same time, and at 8 hrs. of the 15th, lay over Mysore. Continuing to move northwestwards it lay over the south Bombay Deccan on the morning of the 16th and became unimportant during the next 24 hours.

The storm was responsible for widespread and locally heavy rain in the south of the Peninsula. The noteworthy district averages of rainfall as well as the amounts of particularly heavy falls are given below :—

TABLE 5.

District	District averages recorded on			Particularly heavy falls.
	13th.	14th.	15th.	
	″	″	″	
Chingleput . .	..	2·8	2·2	....
Chittoor . . .	..	1·7	3·3	....
South Arcot . .	2·0	5·6	..	....
Tanjore . . .	3·3	6·0	..	Mayavaram 11·8″, Papanasam 9·7″, Valangiman 10·0″, Kodavasal 11·0″ and Nanniam 10·0″ on 14th.
Trichinopoly . .	..	4·9	..	Ariyalur 11·2″ and Jayankondan 15·2″ on 14th.
Travancore State (Kottayam Dn.)	..	..	2·1	....
Malabar . . .	..	1·6	..	....
Salem . . .	..	1·8	..	....

3. Unsettled conditions of 12th to 14th May 1939 in the Bay of Bengal.—A preliminary advance of the monsoon occurred in the south Bay of Bengal on the 11th and 12th. On the morning of the 12th a fall of pressure was noticed along the Circars coast from Nellore to Calingapatam with indications of a feeble cyclonic circulation in the upper air at 1·5-2·0 km. over the west central Bay and the neighbourhood. The unsettled conditions after slight intensification in the next 24 hours, became less marked on the morning of the 14th, and thereafter became unimportant. The monsoon current had in the meanwhile, established itself in the south Bay and extended into the central Bay on the 15th.

4. Bay storm of 22nd to 26th June 1939.—The Bay monsoon strengthened on the 19th June and on the morning of the 20th a large fall of pressure was noticed over the whole of northeast India. The fall of pressure continued during the next 48 hours and on the 22nd morning, a trough of low pressure appeared over the head of the Bay and deltaic Bengal. The upper winds over Chittagong, Dacca and Calcutta on this day also showed a cyclonic circulation to heights of 1 km., and more. These facts indicated that conditions were unsettled at the head of the Bay of Bengal on the 22nd. The unsettled conditions became more marked during the course of the day, and by 8 hrs. of the 23rd had moved northwestwards and intensified into a storm of small extent with centre about 50 miles southsouthwest of Burdwan. The pressure deficiency at the centre of the circulation at this stage was only about 0″·15 but winds of gale force were reported from off the coast in the field of disturbance.

The storm weakened rapidly while moving northwestwards and was centred near Ranchi at 8 hrs. of the 24th and about

50 miles to the south of Benares on the morning of the 25th. It merged into the seasonal trough of low pressure over the Gangetic plain during the next 24 hours.

This disturbance was responsible for strong to vigorous monsoon in Chota Nagpur on the 22nd and 23rd and in Bihar, east Central India, the east Central Provinces, the United Provinces and the east and north Punjab between the 24th and 26th. It also caused strong monsoon in Bengal on the 22nd and 23rd. The noteworthy district averages of rainfall for these days are given below :—

TABLE 6.

District.	District averages recorded on				
	22nd.	23rd.	24th.	25th.	26th.
	"	"	"	"	"
24 Perganas . . .	1·4	1·4	..	..	..
Midnapore . . .	2·0	..	..	..	..
Jalpaiguri . . .	..	..	..	1·6	2·2
Darjiling . . .	..	..	2·1	1·8	..
Palamau . . .	..	..	1·9	..	..
Manbhum . . .	..	1·9	1·6	..	..
Singhbhum . . .	..	1·7	..	..	..
Hazaribagh . . .	..	1·5	2·3	..	..

5. Unsettled conditions of 2nd to 5th July 1939 in the Bay of Bengal.—On the morning of the 2nd, the isobaric chart showed a feeble cyclonic circulation in the west central Bay of Bengal. The upper winds up to 2 km. over Vizagapatam which had been blowing from west or northwest on the morning of the previous day had weakened and changed to north or northeast. The upper winds up to 1 km. over Sambalpur also showed a similar change while at 1·5 km. and 2·0 km. over this station, the northwesterlies had been replaced by easterlies. These facts indicated that the weather was unsettled in the west central Bay off the Circars coast. The unsettled conditions persisted without intensification during the next 48 hours, moved inland across the Circars coast by the morning of the 4th and became unimportant on the following day. Associated with these conditions, the monsoon was active on the 2nd and strong on the 3rd over practically the whole of the Peninsula.

6. Bay depression of 8th to 11th July 1939.—A fall of barometric pressure over northeast India was noticed on the afternoon of the 5th, which continued and extended over the whole country during the next 48 hours. By the morning of the 8th a depression had formed in the Bay with centre about 130 miles to the eastsoutheast of Gopalpur and a concentrated area of negative pressure departures lay along and off the Orissa-Circars coast. The depression moved northwestwards and crossed the coast near Puri by 2 hrs. of the 9th. Continuing to move in the same direction and weakening during its movement, it lay as a shallow depression over the northeast Central Provinces on the 8th morning and as a trough of low pressure over the region extending from the east Central Provinces to north Rajputana on the morning of the 10th. It became unimportant by the next day.

Associated with this depression the monsoon was strong in Orissa, the east Central Provinces, Central India, Gujarat and the Konkan on some of the days between the 6th and the 10th and in the United Provinces, east Rajputana and the west Central Provinces on the 10th. Some of the noteworthy district averages of rainfall and the amounts of particularly heavy falls are given below :—

TABLE 7.

District.	District averages recorded on			Particularly heavy falls.
	7th.	8th.	9th.	
	"	"	"	
Cuttack . . .	..	1·4	..	....
Hamirpur . .	..	1·5	..	....
Gonda . . .	..	2·3	..	....
Dehra Dun . .	..	..	2·5	....
Broach and Panch Mahals.	1·8	2·7	..	Dehej 9·9" on 8th.
Surat . . .	3·7	4·5	..	Ahwa 9·6" on 8th.

7. Land depression of 13th to 18th July 1939.—On the morning of the 13th, a trough of low pressure extended from the northeast angle of the Bay of Bengal to the east United Provinces and pressure was falling over the whole of northeast India. The monsoon was vigorous in the east central Bay and neighbourhood and strong elsewhere in the Bay. Pressure fell further during the next 24 hours and by the morning of the 14th the trough of low pressure concentrated into a depression over southwest Bengal with centre near Burdwan. Simultaneously the monsoon became vigorous in the north Bay. During the next 24 hours the depression moved westwards and on the morning of the 15th, lay over Chota Nagpur and the adjoining parts of the northeast Central Provinces with centre between Ranchi and Daltonganj. Continuing to move westwards it lay over east Central India with centre at about 100 miles to the eastsoutheast of Sutna on the morning of the next day. Thereafter the depression began to weaken but remained practically stationary over east Central India until the 18th when it became unimportant.

Associated with this depression rainfall was widespread and heavy in Central India and the Central Provinces. Pachmarhi recorded 25" of rain between the 13th and 16th, Bhopal 17" between the 13th and 15th, Chanda Nallab in Saugor District 12" and Roomal in the Chindwara District 11" during the twentyfour hours ending at 8 hours on the 14th and 15th respectively.

8. Bay depression of 19th to 23rd July 1939.—On the morning of the 19th, the monsoon was strong in the north Bay and a trough of low pressure extended from

11. Bay depression of 21st to 28th August 1939.— With the movement of a low pressure wave into the north Bay from the east across Burma, conditions became unsettled along and off the Arakan coast on the 21st morning. The unsettled conditions concentrated into a depression with central region within a degree of Lat. 19°N, Long. 91°E. on the morning of the 22nd. The depression moved westnorthwestwards and lay centred about 80 miles to the south of the Sandheads on the morning of the 23rd. By the evening of the same day the depression passed inland across the Orissa coast and moving rapidly in a westerly direction, lay over the east Central Provinces on the 24th morning and over west Central India on the 25th morning. Thereafter it moved northwestwards through Rajputana and filled up over the Punjab by the morning of the 28th.

Under the influence of this depression the monsoon was strong in the central parts of the country and north Hyderabad on the 23rd, strong to vigorous in west Central India, the north Deccan, east Gujarat and the Konkan on the next two days and generally strong in east Gujarat, south Rajputana and the Konkan on the 26th and 27th. Some of the noteworthy district averages and particularly heavy falls of rain are given below :—

TABLE 12.

District.	District averages recorded on		Particularly heavy falls.
	24th.	25th.	
	"	"	
Southern Central India States Agency.	2·5	..	
East Khandesh . .	..	3·5	Navapur 9·5" on 25th.
Nasik . . .	..	2·7	Trimbak 9·6" on 25th.
Poona . . .	..	2·8	Lonavla 10·5" on 25th.

12. Bay storm of 26th August to 2nd September 1939.— With the movement of a low pressure wave westwards across central Burma after 8 hours of the 25th, conditions became unsettled in the Bay of Bengal off the Arakan-Chittagong coast on the morning of the 27th. The unsettled conditions concentrated into a depression with central region within a degree of Lat. 18½°N., Long. 91½°E. by the morning of the next day.

The depression moved in a northwesterly direction and was centred within a degree of Lat. 19°N., Long. 90°E., at 17 hours of the 28th. Continuing to move in the same direction, the depression deepened rapidly into a cyclonic storm with centre about 200 miles south of Calcutta by 2 hours of the 29th. At 8 hours of the same day the storm lay close to Sandheads when this station recorded a pressure deficiency of 0"·39. The pilot balloon flight at Calcutta on the morning of the 29th showed that easterly winds of gale and storm force were blowing at 0·5 and 1·0 km. respectively. Upper winds over Chittagong and Akyab which were blowing from southeast and south respectively were also of similar strength up to the heights reached by the pilot balloons. The hourly observations recorded by Sandheads from 8 hours to 20 hours of the 29th (*Table 13*) are of interest in this connection.

TABLE 13.

Sandheads.

Date.	Hr. of Obsn. I. S. T.	Pressure.	Av. speed M. P. H. Since previous observation.	Wind.		Sea.	Swell.	Present weather.	Past weather.
				Dir.	Force (B. S.)				
		"							
29th August .	0737	29·25	..	NE	8	Rough . .	Confused .	Squally . .	Shower.
	1100	29·23	23 or more	E	7	Confused .	Confused .	Precipitation within sight.	Shower.
	1200	29·22	24	SE	6	Confused .	Confused .	....	..
	1300	29·22	30	SE	6	Confused .	Confused .	....	..
	1400	29·20	32	S	6	Confused .	Confused .	....	Drizzle.
	1500	29·20	24	SSW	7	Very rough .	Confused .	Int. sl. rain . .	Drizzle.
	1600	29·27	24	SSW	6	Very rough .	Confused .	Precipitation within sight.	Rain.
	1700	29·30	..	S	7	Very rough .	Confused .	Precipitation within sight.	Shower.
	1800	29·31	30	S	7	Very rough .	Confused .	Ditto .	..
	1900	29·34	24	S	7	Very rough .	Confused .	Ditto .	..
	2000	29·41	30	S	7	Very rough .	Confused .	Ditto .	..

Continuing to move in a northwesterly direction, the storm crossed the coast near Balasore by 17 hours of the 29th. Thereafter it weakened, while moving westnorthwestwards and lay as a deep depression with centre about 70 miles to the east of Pendra on the morning of the 30th and between Saugor and Jubbulpore on the morning of the next day. It then moved in a northerly direction, weakening at the same time, and lay over Gwalior on the morning of the 1st of September, after which it became unimportant.

In association with this storm the monsoon was strong to vigorous in Orissa and the east Central Provinces on the 29th and over the region from the west Central Provinces to east Gujarat and south Rajputana on the 30th and 31st August. It also caused an extension of the monsoon to the United Provinces-Punjab Hills during the first three days of September. Some of the noteworthy district averages and particularly heavy rainfalls are given below :—

TABLE 14.

District.	District averages recorded on			Particularly heavy falls.
	29th.	30th.	31st.	
	"	"	"	
Cuttack . . .	1·7	3·4	..	
Balasore . . .	..	1·5	..	
Sambalpur . .	2·8	4·6	..	
Singhbhum . .	..	1·5	..	
Indore . . .	..	4·3	2·7	Kannod 10·7" and Kataphor 9·4" on 30th.
Bhopal . . .	..	..	3·3	Mardanpur 9·8" and Makrai 13·1" on 31st.
Hoshangabad . .	..	1·7	5·0	Seoni 10·7" and Pachmarhi 10·7" on 31st.
Nimar . . .	..	1·5	4·9	
Betul . . .	..	..	6·7	
Chhindwara . .	..	2·5	5·0	Tamia 14·3" on 30th.
Banswara . .	..	..	3·3	Arthuna 10·3" on 31st.
Partabgarh (Raj.) .	..	..	..	Partabgarh 9·8" on 31st.
Kusalgarh (Raj.) .	..	..	..	Kusalgarh 11·6" on 1st Sept.

13. Bay depression of 5th to 8th September 1939.—The isobaric chart on the morning of the 2nd showed a shallow low pressure area over south Bengal and the northeast angle of the Bay. During the course of the next 24 hours pressure fell along the Arakan-Chittagong coast and the upper winds over Chittagong which were blowing from directions between northwest and northeast on the morning of the 2nd veered to southeast; the upper winds above 0·5 km. over Calcutta had also veered and become northeasterly or easterly on the 3rd. These changes indicated that the conditions were unsettled in the north Bay. During the next 24 hours the unsettled conditions appeared to be less marked but on the morning of the 5th, they became quite pronounced and a depression formed by 15 hours of the same day centred about 150 miles south of Calcutta. The depression moved in a northwesterly direction and at 2 hours of the 6th was centred about 60 miles southwest of Saugor Island. Moving in a westnorthwesterly direction and passing inland across the Orissa coast near Balasore, it lay centred at 8 hours of the same day about 50 miles south of Chaibasa. Continuing to move in about the same direction the depression gradually weakened and was centred near Jubbulpore on the morning of the 7th and near Jhansi at 8 hours of the next day. It merged into the seasonal trough of low pressure over northwest India in the course of the next 24 hours.

Associated with the movement of this depression widespread and locally heavy rain occurred in Orissa and the central parts of the country. Some of the noteworthy district averages and particularly heavy falls of rain are given below :—

TABLE 15.

District.	District averages recorded on			Particularly heavy falls.
	6th	7th	8th	
	"	"	"	
Cuttack . . .	2·5	..	..	
Balasore . . .	1·9	..	..	
Sambalpur . .	..	3·5	..	Padampur 14·5" on 7th.
Ganjam . . .	2·7	..	..	
Raipur . . .	..	3·3	..	Mahasamund 6·9" on 7th.
Bilaspur . . .	..	1·9	..	
Hoshangabad . .	..	..	1·9	
Chhindwara . .	..	2·1	..	

14. Land depression of 12th to 20th September 1939.—On the 10th morning the surface and the upper air charts indicated a tendency for the establishment of a cyclonic circulation over the head of the Bay and the adjoining parts of south Bengal. During the next 24 hours a fall of pressure occurred over northeast India and on the 11th morning, a trough of low pressure extended from the northwest angle of the Bay to the east United Provinces.

By the 12th morning the trough of low pressure concentrated into a depression over Chota Nagpur where it persisted during the next 24 hours. The depression then moved westnorthwestwards and was centred near Sutna at 8 hours of the 14th. Subsequently it moved in a northwesterly direction, intensifying during its movement, and lay over the west United Provinces centred near Gwalior on the morning of the 15th and near Aligarh on the morning of the 16th. Thereafter it began to weaken. Taking a retrograde

course and moving southeastwards, it lay as a trough of low pressure over the central parts of the country on the 19th and became unimportant by the next day.

Associated with this depression the monsoon was strong in the east United Provinces between the 13th and the 15th and in the west United Provinces and the adjoining parts of northeast Rajputana between the 14th and 16th. Some locally heavy falls of rain occurred, of which a very heavy fall of 16″ in two days at Agra caused much damage. Some noteworthy district averages and particularly heavy falls are given below :—

TABLE 16.

District.	District averages recorded on							Particularly heavy falls.
	12th.	13th.	14th.	15th.	16th.	17th.	18th.	
	″	″	″	″	″	″	″	
Sambalpur	2·3	1·4	..	..	..	..	..	
Hazaribagh	..	1·6	..	..	..	..	..	
Buland Sahr	..	..	..	..	2·5	2·0	..	
Muttra	..	..	..	1·9	5·2	1·5	1·9	
Agra	..	..	..	2·4	4·7	2·0	2·7	
Cawnpore	..	..	..	3·6	..	..	..	
Allahabad	..	..	3·7	..	..	..	..	
Gurgaon	..	..	..	..	3·9	..	..	Hattia 10·0″ on 16th.
Jubbulpore	..	..	1·8	..	..	..	..	

15. Bay depression of 18th to 27th September 1939.—On the 18th morning stations round the Andaman Sea showed negative pressure departures of the order of 0″·05 and the upper winds up to 2 km. over Port Blair, Victoria Point, Tavoy and Rangoon showed that an anticlockwise circulation was developing over the Andaman Sea. On the morning of the 19th Port Blair reported a fall of 4″ of rain and thunderstorm during the preceding 24 hours with continuous light drizzle and skies overcast with Cb., As. and Ci. clouds at the time of observation. The 8 hours isobaric chart of that day showed a trough of low pressure extending from the north Andaman Sea to the west central Bay. The morning pilot balloon flight over Port Blair on the 20th showed westsouthwesterly winds of gale force up to 1·0 km. (limit of the ascent). The 8 hours observations of that day also showed that pressure was falling over the Arakan-Chittagong coast and upper Burma and by 17 hours of the same day the fall of pressure extended over south Bengal. These facts indicated that the depression which had possibly formed in the east central Bay was moving northwards towards the Bengal coast. In the absence of ships' observations, it was not possible to locate the centre or follow the movement of this depression in the Bay and the upper winds as well as observations from land stations only gave indications of a general nature. At 2 hours of the 21st, it was noticed that the depression had moved close to the coast being centred about 70 miles to the west of Chittagong. Moving northwards, the depression crossed the coast and lay with central region over southeast Bengal at 8 hours of the same day. It then moved in a westerly direction and was centred near Jessore on the morning of the 22nd and near Asansol on the morning of the next day. At 8 hours of the 24th, it lay over Chota Nagpur with centre near Hazaribagh where it remained practically stationary during the next 24 hours. It then recurved and moved in a northeasterly direction deepening at the same time, and was centred near Sabour at 8 hours of the 26th. During the next 24 hours the depression moved towards Assam and was centred near Tezpur on the morning of the 27th, after which it became unimportant.

Associated with this depression, the monsoon was strong in south Bengal on the 21st, in Bihar on the 25th and in north Bengal and Assam on the 26th and generally active over the rest of northeast India from 24th to 27th. Some noteworthy district averages and particularly heavy rainfalls are given below :—

TABLE 17.

District.	District averages recorded on								Particularly heavy falls.
	21st.	22nd.	23rd.	24th.	25th.	26th.	27th.	28th.	
	″	″	″	″	″	″	″	″	
24-Parganas	..	1·5	..	..	..	..	..	..	
Murshidabad	..	..	..	..	1·9	1·6	..	..	
Boalia	..	..	..	..	..	2·5	..	..	
Jalpaiguri	..	..	..	..	..	4·1	..	1·9	
Rangpur	..	..	..	..	..	..	3·8	..	
Bogra	..	..	..	..	..	2·8	..	..	Khetlal 10·2″ on 26th.
Malda	..	..	..	..	2·2	..	..	..	
Mymensingh	..	..	..	..	..	1·8	2·1	..	Dewanganj 12·2″ on 26th.
Chittagong	2·3	..	..	..	..	..	..	..	
Patna	..	..	..	..	2·3	1·9	..	..	
Gaya	..	..	..	..	..	2·7	..	..	

TABLE 17—*contd.*

District.	District averages record on								Particularly heavy f lls.
	21st.	22nd.	23rd.	24th.	25th.	26th.	27th.	28th.	
	"	"	"	"	"	"	"	"	
Shahabad . . .	..	..	..	..	1·7	..	..	..	
Hazaribagh . . .	..	..	..	2·0	2·0	1·7	..	..	
Palamau . . .	..	..	..	..	1·9	..	..	..	
Goalpara . . .	..	..	..	..	..	..	2·2	..	
Kamrup . . .	..	..	..	..	..	..	2·2	..	
Nowgong . . .	..	..	..	..	..	..	..	2·6	
Sibsagar . . .	..	..	..	..	..	..	..	1·9	
Lakhimpur . . .	..	..	..	..	..	2·1	1·7	1·5	
Cachar	..	..	1·7	..	..	..	..	2·0	
Garo Hills . . .	..	..	..	..	4·6	5·1	..	..	Mahendraganj 10·8" on 26th.
Khasi and Jaintia Hills .	..	..	..	..	2·0	6·4	9·4	..	Cherrapunji Welsh Mission House 13·9" on 26th and Cherrapunji Observatory 17·7" on 27th.
Balipara Frontier Tract .	..	4·5	..	..	2·1	..	..	1·9	

16. Bay depression of 29th September to 2nd October 1939.—On the morning of the 29th September an area of negative pressure departures was noticed along and off the Arakan coast and the upper winds over Tavoy, Rangoon, Sandoway and Akyab showed that a cyclonic circulation was establishing itself over the east central Bay of Bengal. By 2 hrs. of the next day a shallow depression formed with centre about 200 miles south of Akyab. The depression moved northwards and was centred about 100 miles south of Akyab at 8 hrs. of the 30th. It then moved northwestwards and lay with centre about 170 miles southsouthwest of Chittagong on the morning of the 1st October. Continuing to move in the same direction, the depression crossed the Bengal coast in the early hours of the 2nd and at 8 hrs. of the same day, lay centred near Jessore. It became unimportant during the next 24 hours.

Under the influence of this depression, there was a strengthening of the southwest monsoon over Bengal and Assam where nearly general and locally heavy rain fell between the 1st and 4th. Some of the noteworthy district averages and particularly heavy rainfalls are given below :—

TABLE 18.

District.	District averages recorded on		Particularly heavy falls.
	2nd.	3rd.	
	"	"	
Khulna . . .	1·5	..	
Boalia . . .	2·3	2·0	
Dinajpur . .	2·4	2·5	
Darjiling . .	1·6	3·1	
Rangpur . .	1·5	4·8	
Bogra . . .	4·5	5·1	Panchbibi 10·3" on 2nd and Bogra 10·9" on 3rd.
Mymensingh . .	2·5	4·2	
Tippera . . .	1·8	1·6	
Khasi and Jaintia Hills.	1·9	5·1	

17. Depression of 17th to 20th October 1939 in the Arabian Sea.—Weather became unsettled in the west central Bay on the afternoon of the 14th. On the 15th morning, a trough of low pressure was extending from the north Andaman Sea to the east Arabian Sea and was concentrating off the Malabar-Kanara coast, where widespread rain occurred, Cochin recording 4". In the course of the next 48 hours, the conditions in the Bay became normal, while a shallow depression formed off the Malabar coast with centre near Lat. 10°N. and Long. 72½°E. on the morning of the 17th ; Minicoy had westerly wind, while Amini Devi wind was southeasterly. The winds at both Minicoy and Amini Devi were, however, light and although Minicoy reported high seas, the seas at Amini Devi were only slight. During the next 24 hours, the depression apparently remained stationary, as the winds at Amini Devi and Minicoy indicated no change, but the Mangalore upper winds at 200 m. strengthened and became southeast. The shallow depression had, therefore, apparently intensified slightly. Between the morning and afternoon of the 18th, Mangalore winds at 200 and 500 metres veered to south, showing that the depression was moving in some northerly direction. It was probably centred in the neighbourhood of Lat. 13°-14°N. and Long. 72°-73°E. on the 18th afternoon. By the 19th morning, the Mangalore upper winds weakened again and backed to southeast and Amini Devi winds became southwest indicating that the depression was weakening and moving away westwards or north-westwards. It was probably centred near Lat. 14°-15°N. and Long. 70°-71°E. at 8 hrs. on the 19th. In the course of the next 24 hours the depression apparently filled up or passed away westwards as a low pressure wave.

In association with this depression there was widespread thunderstorm rain along and near the west coast of the Peninsula.

18. Bay depression of 20th to 25th October 1939.—On the morning of the 19th October, pressure departure

was negative over Ceylon and the southern half of the Peninsula. During the next 24 hours a fall of pressure occurred at stations along the Coromandel-Circars coast and the upper winds up to 3 km. over Madras backed from a northeasterly to a westerly direction. The 8 hrs. charts of the 20th showed that conditions were unsettled off the Circars-Coromandel coast where a shallow depression formed by 11 hrs. of the same day with central region within a degree of Lat. 14½°N and Long. 82½°E. The depression moved in a westnorthwesterly direction and was centred about 150 miles northeast of Madras at 8 hrs. of the 21st. By 17 hrs. of the same day, the depression passed inland close to Nellore and at 8 hrs. of the 22nd, lay over the south Deccan centred between Bellary and Kurnool. During the next 24 hours the depression moved northwestwards and on the morning of the 23rd, lay over the north Deccan. It remained practically stationary there for 24 hours and became unimportant thereafter.

In association with this disturbance there was a marked increase in the thunderstorm activity over the southern half of the Peninsula. Fairly widespread rain fell over the north Madras coast between the 19th and 23rd and in the south Bombay Deccan, north Hyderabad, Berar and the east Central Provinces between the 22nd and 24th. Some of the noteworthy district averages and particularly heavy falls of rain are given below :—

TABLE 19.

District.	District Averages recorded on					Particularly heavy falls.
	20th.	21st.	22nd.	23rd.	24th.	
	"	"	"	"	"	
East Godavari (Plains)	1·9	3·9	3·8	1·5	..	
West Godavari .	..	4·3	2·8	..	..	
Kistna . . .	..	3·2	1·6	..	..	
Guntur . . .	..	5·2	..	..	..	Kanuparti 11·3" on 21st
Nellore . . .	1·7	1·8	..	..	..	
Malabar . . .	..	..	1·5	..	..	
Cuddapah . .	..	1·6	..	..	..	
Adilabad . .	..	..	..	3·8	3·0	
Kareemnagar . .	..	..	..	..	4·1	Jactial 12·1" on 24th.
Nizamabad . .	..	..	..	3·7	1·5	

19. Bay depression of 29th to 31st October 1939.—The northeast monsoon set in over the Bay of Bengal on the 28th of October. On the morning of that day, the pressure changes and departures were negative over Ceylon and the southern half of the Peninsula. During the next 24 hours conditions became unsettled in the west central Bay. By 14 hrs. of the 29th a depression had formed off the Coromandel-Circars coast with centre about 100 miles northnortheast of Madras. Moving northwestwards and weakening at the same time, the depression crossed the coast as a low pressure wave on the 29th night and passed out into the Arabian Sea on the 31st. As a consequence weather was unsettled off the Kanara coast on the 31st.

In association with this depression rainfall was widespread in the Madras Presidency between the 28th and 31st and extended into Hyderabad and the Bombay Deccan during the last two days of the month. The noteworthy district averages and particularly heavy rainfalls on these days are given below :—

TABLE 20.

District.	District Averages recorded on		Particularly heavy falls.
	29th.	30th.	
	"	"	
East Godavari (Plains)	3·0	4·0	Alamur 9·6" on 29th.
West Godavari .	..	6·5	Bhimavaram 10·3" and Narsapur 10·4" on 30th.
Kistna . . .	..	6·4	Divi (Avanigadda) 12·9" and Masulipatam 9·9" on 30th.
Guntur . . .	1·6	4·1	
Nellore . . .	4·6	..	Kavali 12·3" and Pakala 12·0" on 29th.

20. Unsettled conditions of 6th to 9th November 1939 in the Bay of Bengal and the Arabian Sea.—The northeast monsoon was generally moderate in the Bay of Bengal during the first five days of November. On the afternoon of the 5th, the isobaric chart showed that conditions were unsettled in Southwest Bay to the east of Ceylon. The unsettled conditions became more marked by the morning of the 6th. Thereafter they moved westwards to the southeast Arabian Sea through the Gulf of Mannar and were located off the Malabar coast on the 8th. The unsettled conditions became unimportant by the morning of the 9th.

In connection with the above, widespread and locally heavy rain occurred in southeast Madras and Malabar. Cuddalore recorded 9" and Negapatam 8" during the 48 hours ending at 8 hrs. on the 8th. Some noteworthy district averages are given below :—

TABLE 21.

District.	District Averages recorded on		
	7th.	8th.	9th.
	"	"	"
Tanjore	2·6	4·0	..
Tinnevelly	2·4	..	..
Travancore State (Trivandrum Dn.)	1·8	..	3·0

21. Shallow depression of 18th and 19th November 1939 in the east central Arabian Sea.—Following a severe cyclonic storm in the southwest Bay of Bengal which moved northwestwards and lay as a depression over southeast Madras on the 16th and 17th morning, conditions became unsettled in the Arabian Sea off the north Malabar and Kanara coasts after the 17th morning and a shallow depression formed there by 8 hrs. on the 18th with centre near Lat. 12°N and Long. 74°E. In the course of the next 24

hours it moved slightly northwestwards and at 8 hrs. of the 19th it was centred near Lat. 12½°N and Long. 73°E. Thereafter it became unimportant without any appreciable movement. In association with it, fairly widespread rain fell in Malabar and Kanara between the 18th and 20th.

22. Severe Bay storm of 14th to 21st November 1939.—On the morning of the 14th fairly widespread rain had fallen in southeast Madras, Malabar and Ceylon. By the same evening the isobaric chart showed that conditions were unsettled in the southwest Bay. By 2 hrs. of the 15th the unsettled conditions in the southwest Bay had concentrated into a depression with central region near Lat. 8½°N and Long. 82°E. Six hours later, the depression deepened and was centred about 130 miles southeast of Negapatam. Moving northwestwards, the depression intensified into a cyclonic storm which was centred about 100 miles eastsoutheast of Negapatam at 14 hrs. of the 15th. By 17 hrs. of the same day, the storm became severe and lay centred about 50 miles to the eastsoutheast of Negapatam; the pressure deficiency at the centre of the storm at this stage was not less than 0.″40. The severe cyclone then moved westnorthwestwards and crossed the coast near Negapatam by 5 hrs. of the 16th. After passing inland, it rapidly weakened and lay as a deep depression centred near Trichinopoly at 8 hrs. of the same day. Weakening further, the depression lay over southeast Madras on the morning of the 17th and as a trough of low pressure extending from the north Madras coast to southeast Madras on the morning of the 18th. The trough of low pressure persisted over the north Madras coast during the next 48 hours and caused unsettled weather in the west Central Bay on the 20th. It, however, became unimportant in the course of the next 24 hours.

Associated with the cyclonic storm and the disturbed conditions that followed a spell of wet weather prevailed over the Madras Presidency and Mysore between the 14th and 18th, the rainfall being particularly heavy in southeast Madras. Rainfall also extended to the adjoining parts of the Bombay Deccan and Hyderabad on the 19th. Some noteworthy district averages and particularly heavy falls of rain are given below :—

TABLE 22.

District.	District averages recorded on								Particularly heavy falls.
	14th.	15th.	16th.	17th.	18th.	19th.	20th.	21st.	
	″	″	″	″	″	″	″	″	
East Godavari (Plains)	..	..	..	1·7	1·7	2·2	..	..	
Kistna	..	..	..	..	..	1·5	..	..	
Nellore	..	..	2·9	3·0	1·9	..	..	..	
Chingleput	..	..	3·8	..	..	..	..	2·0	
Chittoor	..	..	3·1	..	1·6	..	..	1·8	
North Arcot	..	..	3·2	1·5	1·6	..	..	..	
South Arcot	..	2·5	4·3	..	..	..	..	..	
Tanjore	..	2·6	4·5	..	..	..	..	..	Muthupet 9·5″ and Grand Anicut 9·6″ on 16th.
Trichinopoly	..	..	5·7	..	..	..	..	..	Trichinopoly 11·7″ and Illupur 9·5″ on 16th.
Pudukkottai State	..	..	9·0	..	..	..	..	..	Pudukkottai 10·7″, Alangudi 11·2″, Keelanilai 10·2″, Kolattur 11·3″, Odayalippatti 13·8″, Adanakkottai 9·9″ and Perungalur 15·3″ on 16th.
Madura	..	..	3·1	..	..	..	..	..	
Ramnad	..	..	4·0	..	..	..	..	..	
Travancore (Devikulam Dn.)	..	..	3·3	1·6	..	..	..	..	Peermade (Taluk Office) 9·8″ on 16th.
Travancore (Kottayam Dn.)	..	..	3·0	3·3	1·5	..	..	..	Ettumanur 10·2″ on 17th.
Travancore State (Quilon Dn.)	2·2	..	2·1	..	..	..	..	..	
Travancore State (Trivandrum Dn.)	..	1·5	..	..	..	..	2·0	..	
Cochin State	..	..	1·5	3·0	1·9	..	..	..	
Malabar	..	..	1·5	..	..	..	..	..	
Salem	..	..	2·3	..	..	..	..	..	
Coimbatore	..	..	2·3	..	..	..	..	..	
The Nilgiris	..	..	5·1	4·5	..	..	..	..	Naduvattam 11·3″ and Glen Morgan 13·5″ on 17th.

According to the Press Reports, the cyclone caused extensive damage over the Madras Presidency. Following the heavy rain, the South Indian Railway Service was dislocated in many places. In many districts in the south including Tanjore, Trichinopoly, Madura, Chingleput, Pudukottai, Cuddalore and Pondicherry, the low-lying areas were inundated resulting in the collapse of many houses and in a certain number of casualties. Considerable damage also resulted to cattle and crops in the flooded districts. The high winds associated with the cyclone felled many trees in the area through which it passed. It is reported that some casualties also resulted from electrocution due to the snapping of overhead electric wires by falling trees.

23. Depression of 22nd to 29th November 1939 in the Bay of Bengal.—On the morning of the 22nd the isobaric and upperwind charts showed that weather was slightly disturbed in the north Andaman Sea and the east central Bay. During the next 48 hours conditions became markedly unsettled in the east central Bay where a depression formed by the morning of the 25th with central region within two degrees of Lat. 17°N and Long. 91°E. The depression weakened while moving in a westerly direction and lay as a trough of low pressure over the west central Bay of Bengal on the morning of the 27th. The trough of low pressure persisted during the next 24 hours and became unimportant thereafter.

Associated with the depression, scattered light showers occurred in south Bengal, Orissa and the north Madras coast between the 26th and 29th.

24. Severe storm of 4th to 10th December 1939 in the Bay of Bengal.—The morning charts of the 1st December showed that a low pressure wave from the Gulf of Siam was moving across the Malayan Peninsula into the south Andaman Sea. The weather became unsettled there on the morning of the next day. By 8 hrs. of the 3rd, the unsettled conditions had probably concentrated into a depression with central region in the neighbourhood of the degree square Lat. 9°-10°N and Long. 94°-95°E. The available data indicated that the depression had probably intensified into a cyclonic storm by 8 hrs. of the 4th when it was centred near degree square Lat. 10°-11°N and Long. 92°-93°E. The storm moved in a northwesterly direction and was probably centred in the neighbourhood of Lat. 10°-11°N, Long. 90°-91°E at 8 hrs. of the 5th. Continuing to move in the same direction, the storm was probably centred in the neighbourhood of degree square Lat. 11°-12°N, Long. 87°-88°E on the morning of the next day. By 8 hrs. of the 7th, it had become severe and was centred in the neighbourhood of degree square Lat. 14°-15°N and Long. 84°-85°E. The pressure deficiency at the centre of the storm at this stage was at least 0".25. The severe storm recurved and moving northeastwards, lay with centre in the neighbourhood of degree square Lat. 17°-18°N and Long. 85°-86°E at 8 hrs. of the 8th. Continuing to move further northeastwards the storm rapidly weakened into a depression which was centred on the morning of the 9th within a degree of Lat. 19°N and Long. 88°E. It became unimportant during the next 24 hours.

Associated with the movement of this storm scattered showers occurred in Orissa and Bengal between the 7th and 10th.

WESTERN DISTURBANCES.

The following is a list of the western disturbances which affected the weather in northern India during the year, together with brief notes on the pecipitation which they caused :—

Serial No.	Date.	Remarks.
—	30th December 1938 to 3rd January 1939.	A few light falls of rain or snow in the extreme north on the 1st; fairly widespread rain or snow in the extreme north with a few light showers in Baluchistan on the 2nd; and local rain or snow in Kashmir with a few light showers in the Punjab hills on the 3rd. (This was the last disturbance of December 1938 which continued into January 1939.)
	January.	
1	5—7 . .	A few light showers in Baluchistan on the 5th with local showers in Kashmir and a few light falls in the northwest frontier and the north Punjab hills on the 6th.
2	9—11 . .	Scattered light showers in the western Himalayas between the 9th and 11th.
3	13—15 . .	Scattered showers in Baluchistan and the North-West Frontier Province on the 13th; widespread rain or snow in north Baluchistan and Kashmir and a few light falls in the North-West Frontier Province on the 14th with local rain or snow in Kashmir on the 15th.
4	16—23 . .	Widespread rain in Baluchistan between the 17th and 19th and fairly widespread rain or snow in the North-West Frontier Province from the 18th to 20th and along and near the western Himalayas from the 18th to 22nd.
5	24—27 . .	A few light showers in the extreme north from the 24th to 27th.
6	27—31 . .	Isolated light showers in Baluchistan on the 27th and 28th; fairly widespread light showers in the northwest frontier and in and around Central India on the 29th; a few falls of rain or snow in Kashmir on the 29th and 30th with fairly widespread thundershowers in Chota Nagpur and the eastern and central districts of the United Provinces and a few falls in Orissa, the Central Provinces and east Central India on the 30th.
	February.	
7	1 . . .	No precipitation.
8	3—4 . .	No precipitation.
9	5—8 . .	A few light falls of rain in the North-West Frontier Province on the 5th and scattered showers in the extreme north on the 6th and 7th.
10	8—12 . .	Fairly widespread rain or snow in the North-West Frontier Province and scattered showers in north Baluchistan and Kashmir on the 8th, fairly widespread rain or snow along and near the western Himalayas and in the northwest frontier on the 9th and 10th, a few showers in Bihar and north Bengal on the 10th and scattered showers in Assam and Bengal on the 11th.

Serial No.	Date.	REMARKS.
	February—contd.	
11	11—14 . .	Fairly widespread rain or snow in the northwest frontier, the north Punjab hills and Kashmir on the 11th, fairly widespread rain or snow in Kashmir and along and near the Punjab hills and a few light falls in the northwest frontier and the east United Provinces on the 12th, a few falls of rain or snow along and near the western Himalayas on the 13th, and scattered or local rain in Assam, Bengal and Orissa on the 14th.
12	13—16 . .	Fairly widespread rain or snow in Baluchistan and scattered showers in the rest of northwest India and in the hills of the United Provinces on the 14th, fairly widespread precipitation in the northwest India outside east Gujarat and east Rajputana, local rain in the west United Provinces and a few falls in the east United Provinces on the 15th and fairly widespread rain in the North-West Frontier Province, the Punjab, Kashmir and the west United Provinces with local or scattered showers in west Rajputana, Bihar, Chota Nagpur and the east United Provinces on the 16th.
13	18—23 . .	Scattered light showers in Baluchistan, Sind coast and Kashmir on the 18th, scattered light rain or drizzle in and around Sind and in Kashmir on the 19th, fairly widespread rain or snow along and near the northwest frontier and a few light falls in the southwest Punjab and Kashmir on the 20th, nearly general rain or snow in Baluchistan and the North-West Frontier Province and local falls in the Punjab, Sind, west Rajputana and the United Provinces on the 21st and fairly widespread rain over the region from the northwest frontier to Bihar and Chota Nagpur with a few falls in Bengal, Assam, the east Central Provinces and east Central India on the 22nd.
14	22—25 . .	A few falls in Baluchistan on the 22nd, fairly widespread precipitation in Baluchistan and Sind and scattered showers in the southwest Punjab on the 23rd, fairly widespread rain or snow in Baluchistan and a few showers in the rest of northwest India on the 24th and local falls of rain or snow in and near Kashmir on the 25th.
15	25th February to 2nd March.	Fairly widespread rain in Baluchistan and over the region from lower Sind and north Gujarat to east Rajputana on the 25th, fairly widespread rain in northwest India excluding Gujarat on the 26th, fairly widespread rain or snow in Kashmir, the Punjab, the North-West Frontier Province, north Baluchistan, upper Sind, Rajputana and the west United Provinces with scattered showers in the east United Provinces, the central parts of the country, Gujarat, Chota Nagpur and Orissa on the 27th and fairly widespread rain or snow along and near the northwest frontier, the Punjab, Kashmir, Rajputana and the west United Provinces with a few showers in the east United Provinces, Bihar, Gujarat and Sind on the 28th. Fairly widespread and locally heavy rain or snow along and near the western Himalayas, local falls in the North-West Frontier Province and a few showers in Baluchistan on the 1st with a few thundershowers in the Punjab hills on the 2nd.

Serial No.	Date.	REMARKS.
	March.	
16	3—5 . .	A few light showers in Baluchistan on the 3rd, widespread light showers in the northwest frontier and along and near the Punjab hills on the 4th and a few falls of rain or snow in the western Himalayas on the 5th.
17	5—10 . .	A few light showers in Baluchistan on the 5th, fairly widespread rainfall in and around northeast Baluchistan with isolated light showers in Kashmir on the 6th, fairly widespread light showers in the northwest frontier and the western Himalayas on the 7th, local rain or scattered falls along and near the northwest frontier, upper Sind and the Punjab on the 8th, fairly widespread rain or snow in the northwest frontier, Kashmir and the Punjab with local falls in the west United Provinces on the 9th and scattered showers in the North-West Frontier Province and the western Himalayas on the 10th.
18	14—16 . .	Light rain or snow at a few stations in the extreme north on the 14th, isolated thunderstorms in Baluchistan and a few light showers in Kashmir on the 15th and isolated light showers in Baluchistan on the 16th.
19	19—21 . .	Nearly general rain in north Baluchistan on the 19th, scattered thundershowers in Baluchistan on the 20th with fairly widespread rain in north Baluchistan and scattered showers in the North-West Frontier Province and the Punjab on the 21st.
20	22—25 . .	Local rain in Baluchistan and the North-West Frontier Province and scattered showers in Sind and the Punjab on the 22nd, fairly widespread rain in the North-West Frontier Province, Kashmir and the Punjab with a few falls in east Rajputana on the 23rd, widespread rain along and near the western Himalayas and local falls in the United Provinces on the 24th and local rain in and near the Punjab-Kumaon hills with isolated showers in northeast India and the Central Provinces on the 25th.
21	25—31 . .	Fairly widespread rain in Baluchistan and Sind with a few falls in the North-West Frontier Province and Kashmir on the 25th, nearly general rain in northeast Baluchistan, Sind, the North-West Frontier Province and the western Himalayas with scattered showers in the rest of northwest India on the 26th, fairly widespread rain or snow in the northwest frontier, the north Punjab and Kashmir with scattered showers in the rest of northwest India and the west United Provinces on the 27th, fairly widespread rainfall in Baluchistan, Sind, the North-West Frontier Province, the north and west Punjab and Kashmir and scattered showers in Rajputana, Gujarat and west Central India on the 28th, fairly widespread rain or snow in the northwest frontier, the north Punjab and Kashmir and scattered showers in the rest of the Punjab, Sind and Baluchistan on the 29th and fairly widespread rain or snow in Kashmir and along and near the Punjab hills with local showers in the North-West Frontier Province and a few thundershowers in south Baluchistan, east Rajputana and north Gujarat on the 30th and local rain or snow in Kashmir on the 31st.

Serial No.	Date.	Remarks.
	April.	
22	3—6 . .	Fairly widespread rain in north Baluchistan on the 3rd, local rain in the northwest frontier and a few showers in Sind on the 4th, local rain along and near the western Himalayas and scattered light showers in Rajputana and the central parts of the country on the 5th and local showers in east and north Punjab and the United Provinces on the 6th.
23	8—12 . .	A few light showers in Baluchistan on the 8th and 9th, scattered showers in the North-West Frontier Province, Kashmir and Sind with local rain in Baluchistan on the 10th, local rain or snow in Kashmir and the east and north Punjab with a few falls in the southwest Punjab, the North-West Frontier Province, Baluchistan and Rajputana on the 11th and local rain or snow in the east and north Punjab and Kashmir with a few falls in the North-West Frontier Province and the west United Provinces on the 12th.
24	13—18 . .	Local rain in the North-West Frontier Province and the Punjab hills on the 13th, nearly general rain in and near the North-West Frontier Province on the 14th, fairly widespread rain in the North-West Frontier Province with local rain in Kashmir and a few falls in the east and north Punjab on the 15th, scattered falls in the North-West Frontier Province, the north Punjab and Kashmir on the 16th, nearly general or local rain in Kashmir on the 17th and 18th and isolated light showers in the Simla hills on the 18th.
25	23—27 . .	Scattered light showers in the northwest frontier on the 24th, local rain or a few falls in Kashmir, the North-West Frontier Province and Baluchistan on the 25th, nearly general rain in Kashmir with local rain in the North-West Frontier Province and scattered showers in the Punjab hills on the 26th and local rain or snow in Kashmir on the next day.
26	28—30 . .	A few thunderstorms in the North-West Frontier Province on the 28th with a few falls of rain or snow in the extreme north with local duststorms in Baluchistan and the Punjab on the 29th and a few light showers in the North-West Frontier Province and the Punjab hills on the next day.
	May.	
27	1—3 . .	Isolated light showers in the North-West Frontier Province and in and near the Punjab hills on the 1st.
28	5—7 . .	No precipitation.
29	8—11 . .	Isolated showers in north Baluchistan on the 8th and in the North-West Frontier Province between the 9th and 11th.
30	12—13 . .	Isolated light showers in the North-West Frontier Province on the 12th and 13th.
31	17—21 . .	Local rain in Kashmir on the 18th with fairly widespread thundershowers along and near the Punjab-Kumaon hills on the 19th and a few falls in the United Provinces and the Punjab hills on the 20th.
32	23—27 . .	Fairly widespread rain in Kashmir from the 23rd to 26th with a few falls on one day and fairly widespread rain on two days in the North-West Frontier Province between the 24th and 26th, a few falls in and around the north Punjab hills on the 25th and 26th and scattered showers in Kashmir on the next day.
33	27—29 . .	Isolated light showers in the southwest Punjab, west Rajputana and Kashmir on the 27th.
34	31st May to 3rd June.	Isolated showers in the North West Frontier Province, north Rajputana and the plains of the Punjab on the 31st May and along and near the Punjab hills between the 1st and 3rd June.
	June.	
35	7—8 . .	Isolated light showers in Baluchistan on the 7th.
36	18—19 . .	A few light showers in Baluchistan on the 18th and 19th.
	July and August.	No well-marked western disturbances.
	September.	
37	26th September to 2nd October.	Scattered thunderstorms in the extreme north on the 25th and 26th with a few thundershowers along and near the western Himalayas between the 28th and 30th and scattered thundershowers along and near the western Himalayas on the 1st and 2nd.
	October.	
38	10—11 . .	Scattered showers in Kashmir and in and near the Punjab hills on the 10th and 11th.
39	13—15 . .	Scattered showers or thunderstorms in the North-West Frontier Province, Kashmir and the north Punjab between the 13th and 15th.
40	16—20 . .	Fairly widespread thundershowers in Kashmir, the North-West Frontier Province and the east and north Punjab between the 18th and 20th with a few dust or thunderstorms in the southwest Punjab on the 18th and 19th.
41	25—28 . .	Local rain or a few falls in the North-West Frontier Province, Kashmir and the Punjab hills from the 25th to 27th.
42	30—31 . .	A few dust or thunderstorms in the northwest frontier on the 30th and 31st.
	November.	
43	1—2 . .	Feeble disturbances, caused no precipitation.
44	5 . . .	
45	10 . . .	
46	12—13 . .	
47	19—20 . .	
48	21—23 . .	
49	27—28 . .	
50	29th November to 2nd December.	
	December.	
51	3—6 . .	Scattered showers in south Baluchistan and the northwest frontier between the 3rd and 6th.
52	9 . . .	No precipitation.
53	13—15 . .	
54	17—22 . .	Scattered light falls of rain or snow in south Baluchistan, along the northwest frontier and in Kashmir between the 19th and 22nd.
55	21—24 . .	Isolated light showers along the northwest frontier from the 21st to 23rd.
56	25—29 . .	Scattered light falls of rain or snow along the northwest frontier and in the Punjab hills and Kashmir on the 28th and 29th.

LOCAL STORMS.

Of the local storms reported in newspapers the following are noteworthy :—

Place.	Date.	Time.	Character of storm.	Loss of human life.	REMARKS.
Jakhaura (Jhansi) and 20 neighbouring villages.	January 31st .	..	Heavy hailstorm.	3	The storm lasted for about 90 minutes; many cattle and birds killed.
Tangibari and Serajdigha thanas of Munshiganj sub-division (Bengal).	February 14th .	Afternoon.	Do.	....	Hail fell for about an hour; the standing rabi crops, vegetables and mango sprouts were totally destroyed.
Vikrampur and several neighbouring villages (East Bengal).	February 14th .	..	Do.	1	Vegetable crops destroyed, several cargo boats sunk.
Dehri (Bihar)	February 22nd .	2-45 A.M.	Do.	....	All standing rabi crops, most of which were ready for harvest were destroyed.
Gondia (C. P.) . . .	February 24th .	..	Do.	....	Fields and tiles of roofs of houses damaged; glass panes in railway carriages broken.
Motihari, Darbhanga and Muzzaffarpur Districts (Bihar).	February 24th .	..	Heavy hailstorm and gale.	Many persons killed in Pupri thana (Muzzaffarpur); 15 in Benipatti thana (Darbhanga); 4 in Singeshwarsthan mela (Darbhanga).	Thousands of people rendered homeless; many injured; several houses demolished.
Large area in Cawnpore District.	March 1st . .	Afternoon.	Hailstorm.	....	Much damage to crops; hundreds of birds killed.
Amritsar, Hissar, Gurgaon, Lyallpur District.	March 5th . . (?)	..	Do.	....	All the more advanced crops of wheat, senji, shaftal and toria destroyed; 40,000 acres of crops affected. Estimated loss in land revenue and abiana Rs. 2,00,000.
Sohdag (Chota Nagpur) . .	March 5th . . (?)	..	Do.	1	11 head of cattle and large number of birds killed.
Dibrugarh (Assam) . . .	March 12th .	Evening.	Do.	....	Several houses collapsed; many trees uprooted; electric wires damaged.
Sylhet (Assam) . . .	March 17th .	Do.	Thundersquall.	....	An area of 1,000 sq. miles affected; trains held up in several stations for some time.
Dibrugarh (Assam) . . .	March 19th .	..	Do.	....	Several persons injured; many huts blown away and buildings damaged; trees uprooted; telegraph and telephone lines dislocated.
Malda (Bengal) . . .	March 22nd .	..	Hailstorm.	2	
Colombo and suburbs . .	March 29th .	Night.	Thunderstorm.	....	3 persons injured by lightning in Dalugama; several districts plunged in darkness; 400 telephones put out of action.
Surguja (Daltonganj) . .	April 3rd . .	..	Hailstorm.	Several killed.	Many persons injured; large number of cattle killed; standing crops destroyed; houses demolished.
Chorabari (Kamrup States, Assam).	April 6th . .	Evening.	Thundersquall.	....	Houses of 120 families completely gutted.
Feni (Noakhali, Bengal) . .	April 16th . .	Do.	Thunderstorm.	....	The storm lasted half an hour; 4 persons rendered unconscious; many trees struck by lightning.
Sawargaon (Bidar, Hyderabad) .	April 22nd . . (?)	..	Do.	3	The storm was very sudden.

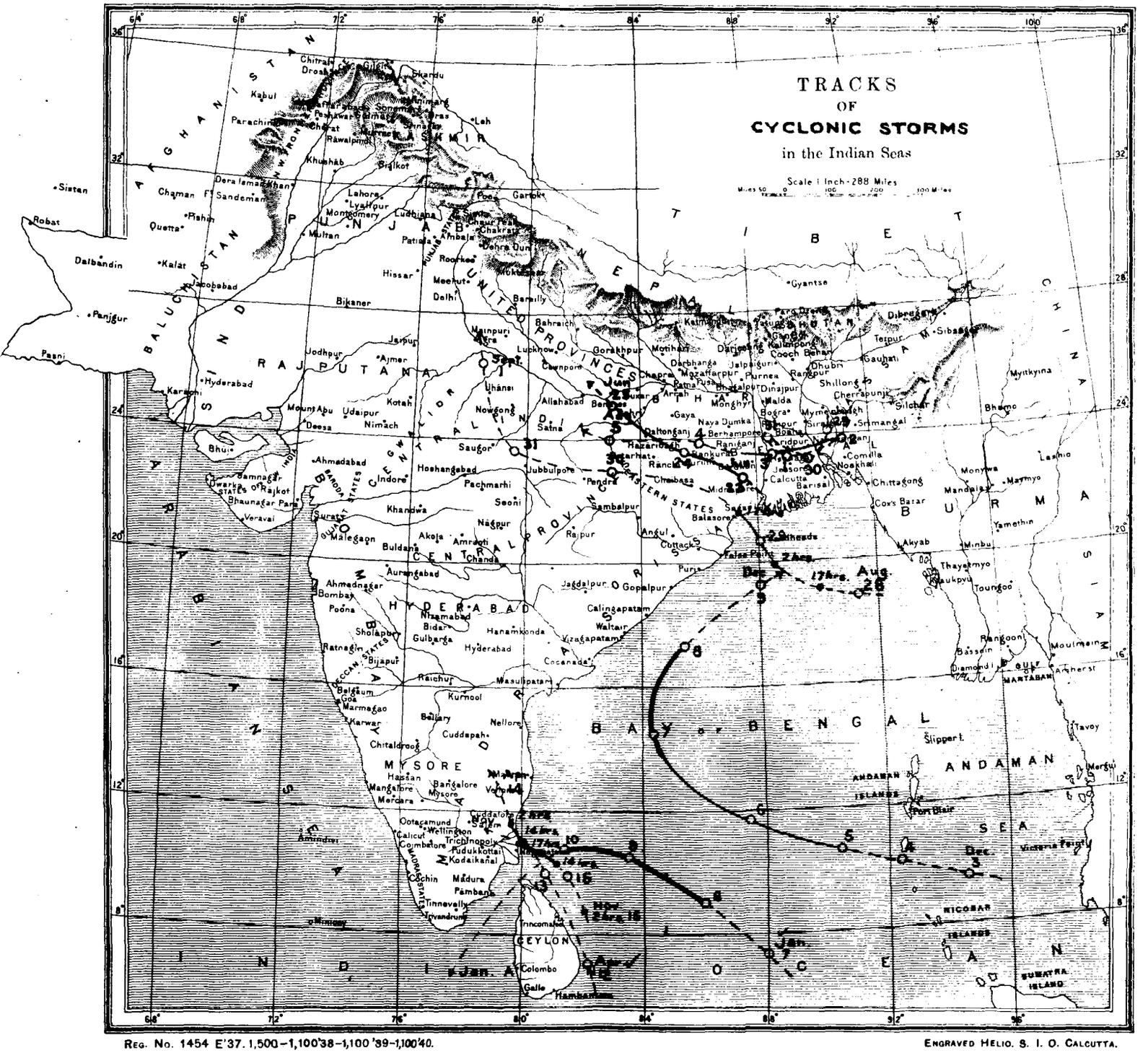
Place.	Date.	Time.	Character of storm.	Loss of human life.	REMARKS.
Shevpet, Salem (Madras) . .	May 3rd . .	..	Hailstorm.	3	A house collapsed killing 3 and injuring 3 others; trees were uprooted causing dislocation of traffic.
Kusthia (Nadia) . . .	May 5th . .	Evening.	Tornado.	3	The storm lasted over half an hour; several persons injured; many houses blown away or razed to the ground.
Mysore district . . .	May 6th (?) . .	..	Thunderstorm.	1	In a village in Hansur Taluka two huts burnt down by lightning resulting in the death of a person, 2 calves and 2 goats. An observation crane weighing 22½ tons at the Krishnarajasagara dam blown down.
Meherpur (Nadia) . . .	May 6th . .	..	Gale.	3	A motor bus caught in the storm and several passengers injured; several roofs of thatched cottages and corrugated sheds blown away; many houses demolished; considerable damage to mango, jackfruit and lichi crops.
Calcutta	May 7th . .	Evening.	Nor'wester thunderstorm.	....	First nor'wester of the year; the temperature fell by 18°, wind velocity reached 74 m.p.h. Tollygunge, Howrah and Cossipore plunged in darkness due to the overhead electric cables being blown down; numerous country craft capsized and sank in the Hooghly.
Chittagong	May 13th . .	Night.	Thunderstorm.	2	Two persons killed and one severely burnt.
Binnafair (Mymensingh) . .	May 16th . .	..	Do.	2	
Several districts of the west U. P.	May 19th-20th .	..	Duststorm.	....	The storm reached a velocity of 60 m.p.h. In Lucknow trees uprooted and electric cables snapped. At Dehra Dun, the tin roofs of 20 stalls in an exhibition blown away and 3 persons injured. All mango, lichi and tea plants destroyed in the Doon Valley. At Bareilly several persons injured.
Siliguri (North Bengal) . .	May 20th . .	10 A.M.	Thunderstorm.	1	3 coolies working in the Bagdagra Tea Estate struck by lightning; one of them died and another injured seriously.
Saran District (Bihar) . .	May 21st . .	Evening.	Gale, hailstorm, probably tornado.	5	The storm followed a northwest to southeast course in the central parts of the district and was most powerful in a narrow belt of 4 miles width; left a trail of devastation in the villages in its track, where hundreds of people were injured in addition to five killed. Almost all telegraph poles for 16 miles between Sonepur and Dighwara on the B. N. W. Rly. uprooted; 3 goods wagons at Paramanandpur were blown for over 200 yards and broke through a barrier at the end; one of them was lifted up a bank 10 ft. high.
Viramgam (Ahmedabad) . .	May 31st . .	Night.	Gale.	1	1 seriously injured; several buildings damaged.
Madhubani (North Bihar) .	June 2nd . .	Do.	Thunderstorm.	3	Several houses blown away, trees uprooted, mango crops destroyed.
Purnea	June 4th and 5th	Do.	Gale, rain.	....	Much damage to mango crops; a motor bus smashed by a tree falling over it and 2 of the occupants injured seriously.

Place.	Date.	Time.	Character of storm.	Loss of human life.	REMARKS.
Jhansi	June 5th . .	..	Duststorm.	1	The storm lasted 2 hrs., the driver of a tonga and its passengers received serious injuries by a falling tree; large number of trees and telegraph poles uprooted.
Lahore	June 5th . .	Evening.	Do.	....	Two planes of the Northern India Flying Club were carried away and after several attempts, one managed to land near the aerodrome and the other made a forced landing elsewhere.
Saugor (C. P.) . .	June 5th . .	..	Gale.	16	A boat carrying a party capsized in Nermuda 15 miles from Saugor. Of its 20 passengers only 4 could be rescued.
Village near Madhubani (North Bihar).	June 8th . .	..	Gale.	16	The loss of lives was due to a house collapsing; more lives reported lost in neighbouring villages.
Sukkur	June 10th . .	Evening.	Duststorm.	....	Several huts blown away; some people injured by electric wires snapping; the tents pitched for Ahrar conference blown away.
Darjeeling	June 20th . .	5-30—7 P.M.	Gale and rain.	1	A landslide injured some people.
Munshiganj (Bengal) .	July 12th . .	Night.	Gale.	6	A boat capsizing at the junction of the rivers Dhaleswari and Shitalakhya, resulting in the loss of goods worth about Rs. 8,000.
Niti Valley (north Garhwal)	July 25th . .	..	Blizzard.	1	300 sheep and two yaks killed, merchandise goods worth about Rs. 5,000 destroyed.
Dacca	August 19th .	12 midnight.	Gale.	....	A steam launch and several country boats in the river Buriganga were seriously damaged, 3 boats laden with pan sank.
Bareilly	August 24th .	3 A.M.	Thunderstorm.	....	Large number of trees and telegraph poles uprooted; some persons injured, a number of birds and several head of cattle killed by falling trees and collapse of roofs.
Jamalpur (Mymensingh) .	September 3rd .	Evening.	Gale.	4	A ferry boat capsized in Brahmaputra.
Lahore	September 12th .	Morning.	Do.	1	The Indian National Airways plane 'Beachcraft' crashed 30 miles from Lahore. The pilot was killed.

WINDS OF FORCE NINE OR MORE IN INDIAN SEAS.

Excluding dates of storms and depressions, a description of which has been given above, winds of force nine or more were recorded on ships in the Indian seas during the year 1939 on the following occasions :—

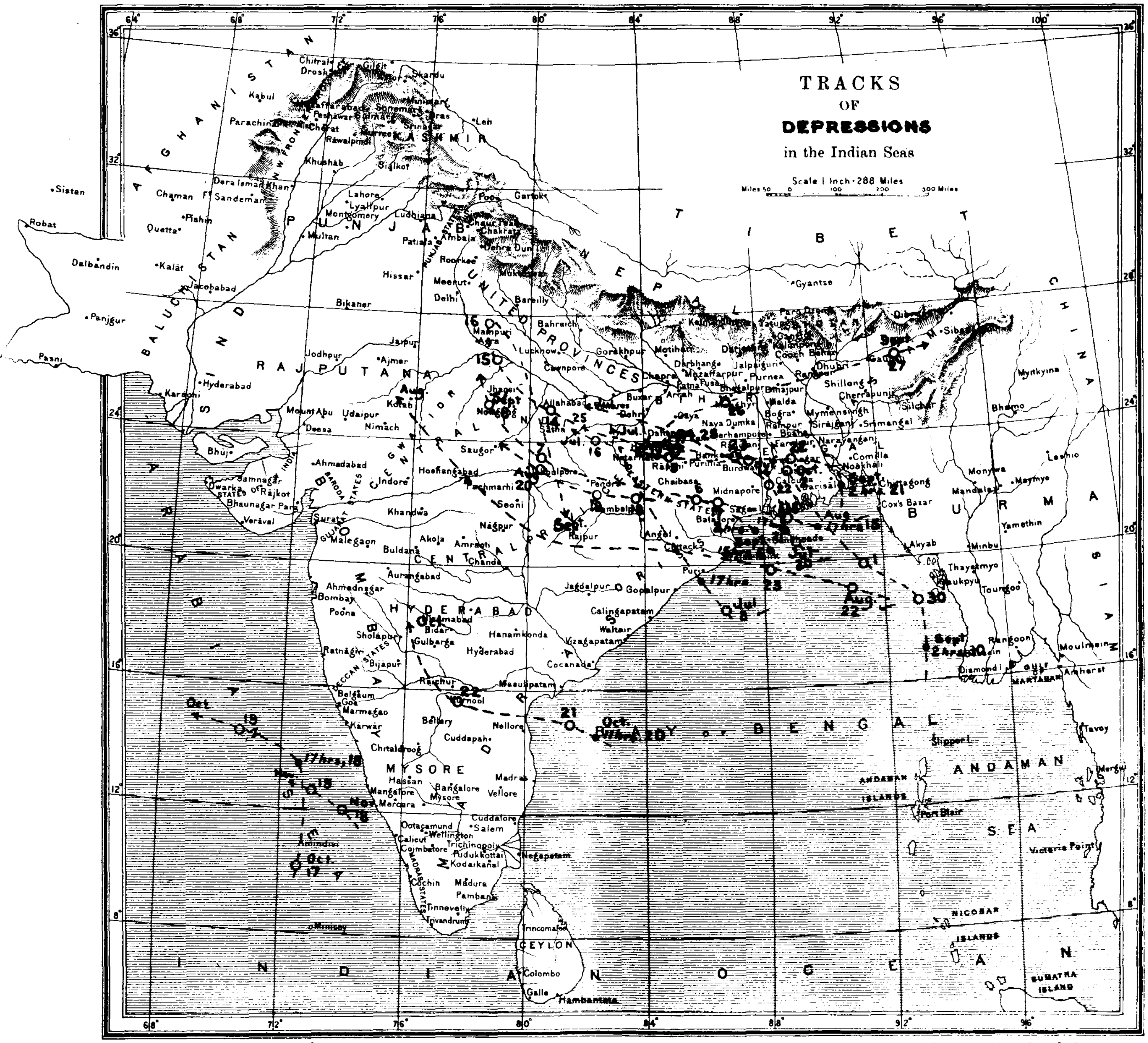
Date.	Name of Ship.	APPROXIMATE POSITION.	
		Lat. N.	Long. E.
		°	°
20th April	*S. S. Mashobra*	13	81
11th June	*M. V. Durenda*	16	59
11th June	*M. V. Nagara*	17	58
21st June	*S. S. Trautenfels*	15	59
16th July	*S. S. Maloja*	18	65
26th July	*S. S. Br. Trader*	19	58
20th August	*S. S. Nirpura*	13	55



REG. No. 1454 E'37. 1,500–1,100'38–1,100'39–1,100'40. ENGRAVED HELIO. S. I. O. CALCUTTA.

CIRCLE INDICATES POSITION OF CYCLONE OR DEPRESSION AT 8 HRS.
DOT " " " " " " " OTHER THAN 8 HRS.

- - - - - - - - *Depression* ——— *Storm.* ▬▬▬ *Severe storm.*



REG. No. 1454 E'37. 1,500–1,100'38–1,100 '39–1,100'40.

ENGRAVED HELIO. S. I. O. CALCUTTA.

CIRCLE INDICATES POSITION OF DEPRESSION AT 8 HRS.
DOT " " " " " OTHER THAN 8 HRS.

PUBLICATIONS OF THE INDIA METEOROLOGICAL DEPARTMENT.

(Complete list, including those publications which are now out of print.)

he Indian Meteorologist's Vade Mecum— . . .	H. F. Blanford.
Part I, 2nd Edition (1883). Rs. 3* . . .	
Part II (1877). Rs. 5*	
Instructions to Observers of the Indian Meteorological Department, 2nd Edition (1902). Rs. 3*.	Sir John Eliot.
Instructions to Observers at the 2nd and 3rd class Observatories, 2nd Edition (1934). Rs. 1-4 or 2*s.* 3*d.*	Departmental.
Cloud Atlas. 2nd and revised Edition (1937). Rs. 2-2 or 4*s.*	Do.
Supplement to 2nd and revised Edition (1938). As. 12 or 1*s.*	Do.
Tables for the Reduction of Meteorological Observations in India, 3rd Edition (1925). Rs. 5-8.	Do.
Relative Humidity Tables, new revised Edition (1937). As. 7 or 9*d.*	Do.
Handbook of Cyclonic Storms in the Bay of Bengal for use of Sailors—	Sir John Eliot.
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MONTHLY FREQUENCY TABLES

CONFIDENTIAL

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

January 1939

Supplement to the Monthly Weather Report, January 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:
The 28th May 1940.

C. W. B. NORMAND,
Director-General of Observatories.

[Price 6 annas.]

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Agra ...	6–25	31	3	2	2	1			5	6	12	31	7	4	3	2	2	1	2	3	1	31	6	3	4	1	2	2	1	5	2	30	2		1		3	2	7
φ = 27° 08′ N ...	26–50														1	3				1						3				1						1	1	5
λ = 78° 01′ E ...	51–75																			1										1								
H_s = 182 metres ...	>75																																						
Ahmedabad ...	6–25	31		9	2					1	19	31	5	3	2	1	1			5		31	2	4	6	1	1	1	2	10	1	31	1	2			1	2	4
φ = 23° 02′ N ...	26–50												1	4	4					2			1	1	1								2	1			3	8	1
λ = 72° 35′ E ...	51–75														3																								1
H_s = 55 metres ...	>75																																						
Bangalore ...	6–25	31	2	8	17	2					2	29	1	2	2	5						30		4	20	3						25		5	5	3				
φ = 12° 58′ N ...	26–50													5	13	1									3									4	6	1				
λ = 77° 35′ E ...	51–75																																			1			
H_s = 936 metres ...	>75																																						
Bhuj ...	6–25	31		3				1	1		26	31	4	5	2				2	1		31	3	7	2				4	2		31	3	4		1		5	3
φ = 23° 15′ N ...	26–50												4	10	1			1		1			6	3	1			1	1				1					1	2
λ = 69° 48′ E ...	51–75																							1										1				1	
H_s = 113 metres ...	>75																																						
Chittagong ...	6–25	31	14	3						2	12	31	16	6	1					1		31	17				2		1	7		31	3		1			1	4
φ = 22° 21′ N ...	26–50												7										2							1			5						2
λ = 91° 50′ E ...	51–75																						1																
H_s = 21 metres ...	>75																																						
Dacca ...	6–25	31									31	29	7	6			1		1	7	5	29	11	1				2	4	7	1	28	1	1					1
φ = 23° 43′ N ...	26–50												1	1									2							1			2						1
λ = 90° 24′ E ...	51–75																																						1
H_s = 21 metres ...	>75																																						
Fort Sandeman ...	6–25	31			4			6			21	31	1	4	1		5	2	7	6	5											31	1	2	1	1	6	5	5
φ = 31° 21′ N ...	26–50																																						
λ = 69° 27′ E ...	51–75																																						
H_s = 1421 metres ...	>75																																						
Hyderabad (Begumpet).	6–25	31	1		2	5					23	30	1	3	4	7	1					30	1	3	3	7	1					29	3	4	5	6	3	1	
φ = 17° 26′ N ...	26–50													1	1	10	2							1	1	11	2						1	3			1		
λ = 78° 27′ E ...	51–75																																						
H_s = 555 metres ...	>75																																						
Jubbulpore ...	6–25	31		1	1	5	4				20	31	5	3	2	3	5	4	1			31	4	3	2	2	5	5	1		1	31	2	1	1	2		5	6
φ = 23° 10′ N ...	26–50												1	2		1	2	1	1				1	1	1		3	1	1				1					1	2
λ = 79° 57′ E ...	51–75																																					3	
H_s = 402 metres ...	>75																																						
Lahore ...	6–25	31						1		2	28	31	3	1	1	1	1	2	3	10	3	31	6	2		1	4	1	5	4	4	31	2	1	2	2	4	2	5
φ = 31° 35′ N ...	26–50																			1						1				3							2		1
λ = 74° 20′ E ...	51–75																																						
H_s = 221 metres ...	>75																																						
Madho Sagar (Gwalior).	6–25																																						
φ = 26° 13′ N ...	26–50																																						
λ = 78° 08′ E ...	51–75																																						
H_s = 233 matres ...	>75																																						
Madras ...	6–25	31	1	4						1	25	31		10	6							30		6	9	1						27		4	7				
φ = 13° 04′ N ...	26–50													14	1									9	5									6	7	1			
λ = 80° 15′ E ...	51–75																																	1					
H_s = 13 metres ...	>75																																						
Malegaon ...	6–25	31							2	8	21	31	4	3	7	2	4	2			1	31	4	3	6	3	4	3				31	2	3		2	9	4	2
φ = 20° 33′ N ...	26–50														3	2	3								3	1	4										3	4	1
λ = 74° 32′ E ...	51–75																																						
H_s = 443 metres ...	>75																																						
Mangalore ...	6–25	31		5	18	2					6	31	8	1	8	4				1	2	31	3	7	8	5			1	1		31	3	6	8	8	1		
φ = 12° 52′ N ...	26–50														7									1	4	1								1	3	1			
λ = 74° 51′ E ...	51–75																																						
H_s = 40 metres ...	>75																																						
Peshawar ...	6–25	31				1	1	9	1		19	31	3	1		1	4	1	9	6	4	31	2	1			3	1	9	8	5	31	16	4	3		1		
φ = 34° 01′ N ...	26–50																			2										2							1		
λ = 71° 35′ E ...	51–75																																						
H_s = 363 metres ...	>75																																						
Poona ...	6–25	31	1					13		4	13	29			10	5	3	1	1		1	29			14	4	3	1			2	31	1	1	6	7	4	4	
φ = 18° 32′ N ...	26–50													1	4	3								1	1	3								2		2	2	1	
λ = 73° 51′ E ...	51–75																																						
H_s = 588 metres ...	>75																																						
Port Blair ...	6–25	31	6	14	3	2				2	3	31		11	2							29		4	9	2						17		1	4	3			
φ = 11° 40′ N ...	26–50				1									11	5	2								4	8	2								2	5	2			
λ = 92° 43′ E ...	51–75																																						
H_s = 87 metres ...	>75																																						
*Raj Samand (Kankroli)	6–25	18	3							11	4	18	2	1	3	1	1	1	3	1		17	2	1	3				2	2	1	18	1	1		1		1	
φ = 25° 03′ N ...	26–50												2		2	1							2		4								1			1	1	4	5
λ = 73° 53′ E ...	51–75																																						
H_s = 587 metres ...	>75																																						

* Only on 18 days in the month, pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the late night. Visibility observations were however recorde the morning throughout the month.

TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING)

TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
28	1					1	2	3		1 — 10							1		4	26				1	3	10	17				Agra
						3	12	4																							
							2			9 or 10									2	2											
31	1					2	4	2		1 — 10									2	29							3	28			Ahmedabad
					2	7	4	6																							
						2				9 or 10										2											
						1																									
24		5	4	5	1	1	1			1 — 10	2	1	2		5	2	1			18				1		3	22	4	1		Bangalore
		3	3	1																											
										9 or 10	2	1	1		4	2				14											
30	2	1				4	5	4		1 — 10							1			30					1		27	3			Bhuj
					1	3	5	4																							
						1				9 or 10																					
27		1				3	3	1		1 — 10										31						1	27	3			Chittagong
							9	6																							
							1	3		9 or 10										1											
25						1		1		1 — 10	3									28		2	1	1	5	11	11				Dacca
	1						9	3																							
							5	5		9 or 10	3									4											
30	2			1	1	3	5	3		1 — 10						1			5	25							14	17			Fort Sandeman
	2					3	3	4																							
							1	1		9 or 10						1				9											
							1																								
28	3	5	2	1	4	3	1	2	4	1 — 10					3		1		1	26						9	9	12	1		Hyderabad (Begumpet)
		1	1					1																							
										9 or 10					2					3											
19				1			3	1		1 — 10	1							3	3	24		1		1	1		11	17			Jubbulpore
						1	6	5																							
							1	1		9 or 10	1									3											
29	2	1		2	1	1	4	6	2	1 — 10									1	30					16	11	3	1			Lahore
				2	3		3																								
					1			1		9 or 10									1	6											
										1 — 10												2			1		6	22			Madho Sagar (Gwalior)
										9 or 10																					
18	1	6	3	1			1		2	1 — 10					2	5	15	3		6						1	9	21			Madras
		2	2																												
										9 or 10					1					11											
29	3	1			1	1	2	4		1 — 10								1	7	23							2	8	21		Malegaon
	1					10	2	2																							
					1	1				9 or 10								1		2											
27	3	3	8	3	1	1		1		1 — 10								1	1	29					1	8	12	10			Mangalore
		2	3	2																											
										9 or 10										2											
28	4	5	4	3	1	2		3	1	1 — 10						1		3	2	25							1		6	24	Peshawar
	1				1	1		1																							
								1		9 or 10										13											
30	2	2	1		1	5	1	6		1 — 10					1				3	27				1			1	8	21		Poona
	1	1			5	4		1																							
										9 or 10																					
10		2	4	1						1 — 10					6	16	4			5							4	27			Port Blair
		1	2																												
										9 or 10					2					14											
18						1	3	1		1 — 10									1	17							1	30			Raj-Samand (Kankroli)
					1	3	4	2																							
						3				9 or 10										2											

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W
Sambalpur ...	6–25	31	1	1	1					1	27	30	4	2	4	6	2	4	1	2	4	31	2	5	4	2	4	4	1	7	1	31	7	1		1	1	3	3
ϕ = 21° 28′ N ...	26–50													1									1										3						2
λ = 83° 58′ E ...	51–75																																						
H_s = 153 metres ...	>75																																						
Tezpur ...	6–25	31		4							27	29		1	16	2	1		1	1	6	27	2	4	9	1	1	2	2		4	25		4	5	3		7	2
ϕ = 26° 37′ N ...	26–50														1										2														
λ = 92° 47′ E ...	51–75																																						
H_s = 80 metres ...	>75																																						
Trichinopoly ...	6–25	31	2	15						1	13	30		3								28		2	2							25	2	2	8	1	1		
ϕ = 10° 49′ N ...	26–50												2	21	2								2	16	5								1	5	4				
λ = 78° 42′ E ...	51–75												1	1									1											1					
H_s = 88 metres ...	>75																																						
Trivandrum ...	6–25	31	3	11	1	1				1	14	30		6	3	3	6	3	1	2	5	30	3	2	6	4	4	1	3	2	1	28		9	5	3	2		
ϕ = 08° 29′ N ...	26–50																			1				2	1					1			1	1	2	4			
λ = 76° 57′ E ...	51–75																																						
H_s = 76 metres ...	>75																																						
Vizagapatam ...	6–25	31	2	5					1	6	17	31		8	10	2	3	1			2	31	2	8	11	1					3	31	5	8	5	1	1		
ϕ = 17° 42′ N ...	26–50													4	1									4	2								2	3	4				
λ = 83° 18′ E ...	51–75																																						
H_s = 56 metres ...	>75																																						

TABLE 4—

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W
Allahabad (Bamrauli)	6–25	31	1	1	1	1	1	3	3	2	18	27	2	1	3	2	2	2	6	4	2	28	4		1	3		2	7	7	1	24			1			2	4
ϕ = 25° 26′ N ...	26–50															1			2								1		1	1								1	3
λ = 81° 44′ E ...	51–75																																						1
H_s = 98 metres ...	>75																																						
Bahrein ...	6–25	31	5	2	1	6	3	1	3	9	1	31	2	4	2	2	1					31	2	2	1	1	3	2	1	3	1	27	2				1	2	7
ϕ = 26° 14′ N ...	26–50												4			1	3	1	1	7			4				4	1	1	3							1	5	5
λ = 50° 35′ E ...	51–75																2	1										1											1
H_s = 14 metres ...	>75																																						
Bombay (Juhu) ...	6–25	31	1	6	3	1				1	19	31	2	8	10	4		1			1	31		6	6	4	3	4	2	2	1	30	1	3	3	1	5	6	1
ϕ = 19° 07′ N ...	26–50														2	2	1									2	1										3	3	
λ = 72° 50′ E ...	51–75																																						
H_s = 5 metres ...	>75																																						
Calcutta (Dum Dum)	6–25	31	5	8	1			1		1	15	31	10	4	1		1	3	3	1	5	31	8	4				3	3	10		30							3
ϕ = 22° 38′ N ...	26–50													3									1							2			3						
λ = 88° 27′ E ...	51–75																																1						1
H_s = 5 metres ...	>75																																						
Gaya ...	6–25	31			1	2	5	9	1	2	10	31	1	1	2	1	1	2	10	8	2	30	2			1	1	1	10	12	1	29	1					1	2
ϕ = 24° 49′ N ...	26–50								1								1		1	1									1	1								1	8
λ = 85° 01′ E ...	51–75																																						1
H_s = 117 metres ...	>75																																						
Jacobabad ...	6–25	31	1		3	1				3	23	31	4	1	8	4		2	1	2	6	31	3	1	4	6		4	4	4	4	31	3	1	2	1	1	3	7
ϕ = 28° 17′ N ...	26–50												1	1									1															3	1
λ = 68° 29′ E ...	51–75												1																										
H_s = 66 metres ...	>75																																						
Jiwani ...	6–25	31	3	17						1	10	30	1	3	6	1	3	4	6	3	1	30	3	2	2		4	4	7	4	1	29			1	2		4	6
ϕ = 25° 10′ N ...	26–50												1	1									2			1							1					1	7
λ = 61° 47′ E ...	51–75																																						
H_s = 5 metres ...	>75																																						
Jodhpur ...	6–25	31		22							7	31	3	1	7	2	2		4	2		31	3	4	5	2	1	1	3	4		31	7	1		1	2	4	5
ϕ = 26° 18′ N ...	26–50			2									1	4	3	2							1	3	2	1	1						2					3	2
λ = 73° 01′ E ...	51–75																																						
H_s = 233 metres ...	>75																																						
Karachi (Drigh Road)	6–25	31	2	14		1				1	13	31	4	4	5				4	3	1	31	5	7	1		1	1	3	5	4	31	3	3	2		1		7
ϕ = 24° 53′ N ...	26–50													7	3									2					1	1								1	3
λ = 67° 07′ E ...	51–75																																					1	
H_s = 29 metres ...	>75																																						
New Delhi ...	6–25	31	1	1	2				8	8	10	31	2	3	1	2	1	2	2	7	2	31	4		1	1		2	8	6	3	31	1	1	1	2	2	5	8
ϕ = 28° 39′ N ...	26–50								1						1	1	1		2	4					1	1		1		3							1		
λ = 77° 15′ E ...	51–75																																						
H_s = 227 metres ...	>75																																						
*Raj Samand (Kankroli)	6–25	12	1	1						1	9	12	1	1	1	2	1		2	1		12	1	1	1	3	1		3			12	2			1	1		1
ϕ = 25° 03′ N ...	26–50													1	1	1								1	1								1					3	3
λ = 73° 53′ E ...	51–75																																						
H_s = 587 metres ...	>75																																						
Sharjah ...	6–25	31		2		10	4	2	1		12	31	2	3	4	1	4	2	7	2	3	31	1	2			7	4	7	4	2	28	2				1	2	8
ϕ = 25° 20′ N ...	26–50																1	1	1									1	3									3	4
λ = 55° 24′ E ...	51–75																																						2
H_s = 10 metres ...	>75																																						

* Only on 12 days in the month, pilot balloon ascents were made in the forenoon; on the remaining days the ascents were made in the afternoon.

EQUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

peed nits km./ hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	29	3					2	4	3		1 — 10									1	30								29	2		Sambalpur
6–50		1						7	8																							
1–75									1		9 or 10										4											
>75																																
6–25	14	1	3				2	2	2	1	1 — 10	8				1		2	2	9	9	5	2	1	1	7	7	8				Tezpur
6–50								3																								
1–75											9 or 10	8				1		1			13											
>75																																
6–25	14			7							1 — 10					11	3	3	5	2	7						1	5	25			Trichinopoly
6–50			3	4																												
1–75											9 or 10					1	1	1	1		10											
>75																																
6–25	28	2	6	11	2	1					1 — 10						1	4	1	1	24				1	9	16	5				Trivandrum
6–50		1	1	3	1																											
1–75											9 or 10										2											
>75																																
6–25	29	5	4	3	1	2	2	5	1	1	1 — 10							4		2	25							2	29			Vizagapatam
6–50		2	2						1																							
1–75											9 or 10										6											
>75																																

EQUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

6–25	20					1	1	4	1		1 — 10	1			1		1		2	4	22	1		1		2	9	18			Allahabad (Bamrauli)
6–50								6	4																							
1–75								2	1		9 or 10	1			1		1			1	4											
>75																																
6–25	22						1		2		1 — 10					1		1	7	1	21					2	1	5	23			Bahrein
6–50							4	10	2																							
1–75								2	1		9 or 10										9											
>75																																
6–25	29	4	4	1			2	4	3		1 — 10								1	1	29						2	28	1			Bombay (Juhu)
6–50						2	8		1																							
1–75											9 or 10										2											
>75																																
6–25	20					1	1	1	1		1 — 10					1				2	28		1	1	2	17	9	1			Calcutta (Dum Dum)
6–50		1						1	10																							
1–75								1	3		9 or 10										1											
>75																																
6–25	23		1				2		2		1 — 10					3		1			27					1	14	16				Gaya
6–50								7	7																							
1–75								2	1		9 or 10										3											
>75									1																							
6–25	25	1			1		1	3	7		1 — 10										31					1	4	17	9			Jacobabad
6–50							2	4	6																							
1–75											9 or 10										8											
>75																																
6–25	26					1		4			1 — 10					1	14	4			12						1	22	8			Jiwani
6–50		1					2	12	4																							
1–75								1	1		9 or 10										7											
>75																																
6–25	31						3	6	2		1 — 10										31						1	1	22	7		Jodhpur
6–50		1					6	4	4																							
1–75							3	2			9 or 10										2											
>75																																
6–25	29						1	3	6		1 — 10						3	2	1	1	24						1	4	17	9		Karachi (Drigh Road)
6–50		1						8	6																							
1–75							1	3			9 or 10										7											
>75																																
6–25	30	1	1			1	3	6	2	1	1 — 10								1	3	27						3	11	17			New Delhi
6–50							5	5	4																							
1–75							1				9 or 10										1											
>75																																
6–25	11						1	1	1		1 — 10										12											Raj Samand (Kankroli)
6–50							4	1	2																							
1–75							1				9 or 10																					
>75																																
6–25	24			1	1		1	2	2		1 — 10					2	1	4	5	5	14								5	26		Sharjah
6–50		1					2	10	3																							
1–75								1			9 or 10										9											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31	4	2	5	1	1	1	2	3	12	30	5	4	3	1		1	4	7	2	31	3	5	2	1		1	5	8	3	31		1		1	2	7	3
	26–50														1		1		1						1					1						1		1	6
	51–75																										1										1		
	>75																																						
Ahmedabad ...	6–25	31	1	8	4		1	1		3	13	31	7	8	6		2		1	4	3	31	5	5	5	2	1		2	7	2	31	5		2		3	3	2
	26–50																							2									2					7	1
	51–75																																						
	>75																																						
Allahabad (Bamrauli)	6–25	31	1	2	1	3			3	12	9	30	2	1	3	3	1		4	10	4	30	3		1	1	1	2	6	9	2	28	1			1		3	7
	26–50																		2								1		1	3									7
	51–75																																						1
	>75																																						
Bahrein ...	6–25	31	11	3	2	3			2	10		31	1	3	1	3	2	2	1	4		30	2	3		1	4			5	1	28	2					4	3
	26–50												4			1	1		1	6			2	1			4	2	2	3						3	4	6
	51–75												1																										1
	>75																																						
Bangalore ...	6–25	31		13	7	8						30		7	13	3						30		6	17	4						29	1	4	12	5			
	26–50			1	1	1								1	5	1								1	1	1								1	6				
	51–75																																						
	>75																																						
Bhuj ...	6–25	31	8	10			1		1	5	6	31	9	11	1			2		3		31	5	8	1	2		2	3	4	1	31	3	1	1	1		2	3
	26–50												1	3					1				1	3					1								1	2	5
	51–75																																	1					
	>75																																						
Bombay (Juhu) ...	6–25	31				1		4	4	22		31	8	5	2	3	5	2	2	1	2	31	2	9	6	3	5	4	1		1	31	3	3	3	1	5	4	
	26–50																	1																	1		2	5	
	51–75																																						
	>75																																						
Calcutta (Dum Dum)	6–25	31	3						1	11	16	31	12	1			1	1	2	11	2	31	12	1					2	16		31	1					2	
	26–50												1																				3					3	1
	51–75																																						
	>75																																						
Chittagong ...	6–25	31	7	2				1	5	8	8	31	22	1			1		1	3	3	31	15	3			2		1	8	1	31	5					4	
	26–50																						1										1					2	1	1
	51–75																																						
	>75																																						
Dacca ...	6–25	31	1	2				2	2	10	14	31	2					2	10	15	2	31	6	1				1	5	16	1	31	1		1		1		3	
	26–50																													1			1						2	1
	51–75																																						
	>75																																						
Fort Sandeman ...	6–25	31						3	5	2	21	31	2	1		1	1	10	6	4	6											31	1	2		1	3	9	7
	26–50																																						
	51–75																																						
	>75																																						
Gaya ...	6–25	31	3	1			1	2	5	11	7	30		3				1	10	14	2	30	2		1			1	8	15	1	30	1					2	5
	26–50									1																			1	1								1	8
	51–75																																						2
	>75																																						
Hyderabad (Begumpet)	6–25	31		6	8	11	1				5	31	1	6	10	8	2	1			2	31	1	6	10	9	1	1			2	31	3	4	6	7	2		1
	26–50														1										1								1	2			2		
	51–75																																						
	>75																																						
Jacobabad ...	6–25	31		1						2	28	31	4		3	2	1	1	2	4	13	31	2	3	4		2	2		5	12	31	5	1	2	1	2	2	5
	26–50																			1										1								3	2
	51–75																																						
	>75																																						
Jiwani ...	6–25	31		1	1	3	2	19	1	3	1	31	2		1	5	7	7	3	4	2	30	3			3	3	3	11	3	3	29	3				3	1	5
	26–50																						1										2						7
	51–75																																						1
	>75																																						
Jodhpur ...	6–25	31	1	15	1	3		3	1	2	4	30	5	7	3	1	3	3	1	2	3	30	4	5	6	1	1	5	1	3	2	31	5	1		1	2	6	4
	26–50							1						1				1							1			1										1	2
	51–75																																					1	
	>75																																						
Jubbulpore ...	6–25	31	4	3			3	2	2	3	14	31	7	4	2	1	5	2	3	4	1	31	7	3	1	3	4	1	2	4	4	30	2			1	1	6	6
	26–50																1	1									1	1					2				1	3	3
	51–75																																						
	>75																																						
Karachi (Drigh Road) ...	6–25	31	1	11	3	1	2	4		4	4	31	6	5	5		1	1	2	3	3	31	5	11	2	1		1	2	6		31	2	4				1	4
	26–50			1									1	1	1				1					2					1					2					1	5
	51–75													1																									
	>75																																						

ed its ./).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	30					1	2	1	1	1	1 — 10							1		2	28					1	1	28	1			Agra
-50						1	4	9	5																							
-75						1		4			9 or 10									1	1											
>75																																
-25	30		1			1	1	5	4		1 — 10								1		30							1	30			Ahmedabad
-50		1	1			1	5	2	2																							
-75							4	1			9 or 10										5											
>75							1																									
-25	18						2	1	3		1 — 10				1		1	3		3	23						1	26	2			Allahabad (Bamrauli)
-50								8	2																							
-75								2			9 or 10				1						2											
>75																																
-25	18							1	1		1 — 10					1	1	2	5	1	21							2	28	1		Bahrein
-50						2	3	7	1																							
-75									2		9 or 10										9											
>75								1																								
-25	26	1	4	7	3	1	2	1		2	1 — 10					1	1	2	2	1	24								26	5		Bangalore
-50			3	1	1																											
-75											9 or 10					1		1			4											
>75																																
-25	29						5	4	3		1 — 10								1		30						2	9	18	2		Bhuj
-50		1					3	4	5																							
-75							3				9 or 10										1											
>75							1																									
-25	31	4	3			1	2	1	5	1	1 — 10							1	1	2	27								31			Bombay (Juhu)
-50		1	1			3	8																									
-75							1				9 or 10										2											
>75																																
-25	25		1					1	1		1 — 10							2		3	26						2	29				Calcutta (Dum Dum)
-50								4	14																							
-75								1	3		9 or 10																					
>75																																
-25	30						2	2			1 — 10										31							3	28			Chittagong
-50		1					1	11	11																							
-75								2			9 or 10										1											
>75																																
-25	29	1						3			1 — 10								1	1	29							31				Dacca
-50								8	2																							
-75								7	8		9 or 10										1											
>75																																
-25	29		1			1	5	7	5		1 — 10							2	2	6	21							3	16	12		Fort Sandeman
-50						2	1	4	3																							
-75											9 or 10									1	12											
>75																																
-25	24							1	1		1 — 10					3	1	1	1		25						4	25	2			Gaya
-50								11	3																							
-75								4	3		9 or 10										2											
>75								1																								
-25	30	5	5	1	2	3	5	5	2		1 — 10								1	7	23								1	15	15	Hyderabad (Begumpet)
-50									2																							
-75											9 or 10									1	1											
>75																																
-25	27	1					2	5	3		1 — 10									1	30						1	8	22			Jacobabad
-50		1					3	5	5																							
-75							1	1			9 or 10										5											
>75																																
-25	27	1				1		3	4		1 — 10						20	3			8						1	11	19			Jiwani
-50		1						11	3																							
-75							2	1			9 or 10										8											
>75																																
-25	29					1	1	4	1		1 — 10									4	27							1	9	21		Jodhpur
-50		1					2	7	4																							
-75							5	1	2		9 or 10										2											
>75																																
-25	28					1	1	4	3		1 — 10								1	11	19							2	25	4		Jubbulpore
-50						1	2	7	5																							
-75							1	2			9 or 10										4											
>75								1																								
-25	26	1						6	1		1 — 10							1	2	3	25							1	6	24		Karachi (Drigh Road)
-50							1	5	9																							
-75								2	1		9 or 10										3											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.						
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW
Lahore ...	6-25	31					1	2	1	12	15	30	6	2		2	1		8	7	2	31	5			3	5	1	4	10	1	30	1			4	6	4
	26-50																			2									1	1							1		
	51-75																																			1		
	>75																																					
Madho Sagar (Gwalior).	6-25	31		10	2		1	1	1	5	11	31	8	9	1	4			5	2	1	31	7	3	3	4	1		6	5		30	1		1		1	7
	26-50																	1										1		1								1
	51-75																																					
	>75																																					
Madras ...	6-25	31	3	21	4						3	30	2	13	3							27	1	4	5	1						19	1	2	5	1		
	26-50												2	8	2								3	10	3									4	4			
	51-75																																					
	>75																																					
Malegaon ...	6-25																																					
	26-50																																					
	51-75																																					
	>75																																					
Mangalore ...	6-25																																					
	26-50																																					
	51-75																																					
	>75																																					
New Delhi ...	6-25	31	2	1	3	1	1		2	11	7	31	2	2	3	2	1	1		14	3	31	1	2	2	4		2	3	11	1	30		1		1	2	6
	26-50					1				2						1				2						1			1	3							1	
	51-75																																					
	>75																																					
Peshawar ...	6-25	31		4				2		6	19	31	11	1					1	15	3	31	8	1		1				20	1	30	7	4	1		2	1
	26-50																																1		1			
	51-75																																					
	>75																																					
Poona ...	6-25	31	1	6	8	4	1	3	2		6	31		2	12	3	2	5	2		3	31		2	13	2	3	3	1	1	4	31		6	1	5	4	9
	26-50															1		1								1		1							1	1		
	51-75																																					
	>75																																					
Port Blair ...	6-25	31		23	2	2					1	31		15	4	1						29		6	7	1					1	19	1	1	6	5		
	26-50			3										6	3	2								2	11	1									5	1		
	51-75																																					
	>75																																					
*Raj-Samand (Kankroli)	6-25	19	1	2		3	1	1			10	19	2	3	3	1	3	2	1		2	19	1	4	3	2	3	1	1		2	19	1	1			1	
	26-50									1			1					1					1					1										2
	51-75																																					
	>75																																					
Sambalpur ...	6-25	31	1				1	4	4		21	29	1	3	2	1		3	6	5	8	29	5	1	6	1		3	3	7	3	30	7			1		1
	26-50																																3					1
	51-75																																					
	>75																																					
Sharjah ...	6-25	31	4	1				6	4	15	1	31		3			1	4	11	5	3	31			3		4	7	10	3		29	1	1			1	5
	26-50																		4									1	3								1	3
	51-75																																					
	>75																																					
Tezpur ...	6-25	31		7	3		2	2	1		16	31	1	6	7		3	2	1		10	31		1	9	2	3	4	3		8	30			8		6	7
	26-50														1										1													
	51-75																																					
	>75																																					
Trichinopoly ...	6-25	31	1	27	2					1		31	1	13	3					1		30	1	17	1							19	1	3	2		1	
	26-50												1	11	1									8	3										8	3	1		
	51-75																																					
	>75																																					
Trivandrum ...	6-25																																					
	26-50																																					
	51-75																																					
	>75																																					
Vizagapatam ...	6-25	31	1	6	10	10					4	31	1	6	10	3		2	1		2	31	2	12	1	2		1	1	1	4	29	7	4	4	1		
	26-50													5	1									6	1								4	3	3			
	51-75																																					
	>75																																					

* Only on 19 days in the month, pilot balloon ascents were made in the afternoon; on the remaining days ascents were made in the forenoon in place of the afternoon. Visibilit

ed its n./).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	29		1	1		4	3	8	1	1	1 — 10							1		2	28							8	23			Lahore
-50					1	3	1	2	1																							
-75					1		1				9 or 10										8											
>75																																
-25	29						2	4	1		1 — 10							2	1	3	25						1	1	26	3		Madho Sagar (Gwalior)
-50							2	8	6																							
-75								6			9 or 10										5											
>75																																
-25	18	3	5	2			1			1	1 — 10					4	6	17	1		3								1	30		Madras
-50			4	2																												
-75											9 or 10					1					7											
>75																																
-25											1 — 10																	1	7	23		Malegaon
-50																																
-75											9 or 10																					
>75																																
-25											1 — 10																		2	29		Mangalore
-50																																
-75											9 or 10																					
>75																																
-25	28	1			3	1	2	4	4		1 — 10									5	26						2	3	26			New Delhi
-50						1	6	5	1																							
-75											9 or 10										4											
>75																																
-25	27	2	5	2	2	1	2	4	3	2	1 — 10							3	8	7	13								1	3	27	Peshawar
-50					1	2			1																							
-75											9 or 10										14											
>75																																
-25	31	6	4	1		1	7	3	1		1 — 10									12	19									31		Poona
-50					1		6		1																							
-75											9 or 10																					
>75																																
-25	12	2	4	2	1	1					1 — 10					1	16	11			3							8	23			Port Blair
-50			2																													
-75											9 or 10										8											
>75																																
-25	19							1	2		1 — 10									2	17							1	30			*Raj Samand (Kankroli)
-50							3	7	3																							
-75							2	1			9 or 10										2											
>75																																
-25	29						3	5	4		1 — 10								3	7	21								2	29		Sambalpur
-50			1					7	8																							
-75									1		9 or 10										2											
>75																																
-25	24	1					2	4	1		1 — 10						2	5	9	5	10							1	6	24		Sharjah
-50							2	7	3																							
-75								2	2		9 or 10										12											
>75																																
-25	28		2	3			2	7	3	1	1 — 10							1	8	13	9						2	3	25	1		Tezpur
-50			1				1	5																								
-75								3			9 or 10										3											
>75																																
-25	11	1	3	3							1 — 10					2	3	3	20		3							2	11	16	2	Trichinopoly
-50			4																													
-75											9 or 10					2	2				9											
>75																																
-25											1 — 10																	7	24			Trivandrum
-50																																
-75											9 or 10																					
>75																																
-25	27	6	5	3				2	4		1 — 10							2		1	28								7	22	2	Vizagapatam
-50		2	1					2	2																							
-75											9 or 10							2			4											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)...	6-25	31	1	2	3		1		1		23	30	3	1	1	3	2	2	2	11	2	30	1	1	1	1	4	2	11	7	20						1	3	5
	26-50													1		1				1									1	1							1		6	4
	51-75																																								
	>75																																								
Bahrein ...	6-25	31	8		3	8			1	10	1	31	8	2	1	2	3	2		2	1	31	4	1		1	5	4	3	6	1	21					1	3	7	
	26-50												2				4			3			1				1	1		2								4	3	3
	51-75												1																												
	>75																						1																		
Bombay (Juhu) ...	6-25	31	1	3	1					1	25	31	9	10	7		1	1		3		29	7	6	5	3	1	4	2	1		22	3	2	1	3	4	4		1
	26-50																																				2	1		
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	31	6	3		1		3	1	3	14	31	10	4			1	5	3	6	1	31	10						2	17		17						3	5
	26-50												1																	2									2	7
	51-75																																								
	>75																																								
Gaya ...	6-25	31			4	4		5		2	16	31	1		1	2			8	13	5	31				1			19	5	4	19	1					4	3
	26-50																			1										2									4	7
	51-75																																								
	>75																																								
Jacobabad ...	6-25	31	2	1	1					1	26	31	1	1	7	2	1	4	1	1	10	31	4	1	3	4	1	7	3	2	6	28	1				1	3	9	8
	26-50												2							1																	1	1	2	1
	51-75																																								
	>75																																								
Jiwani ...	6-25	31	2	11	2				1	2	13	31	2	1	1	1	2	4	9	6	4	31	3	2		1	2	4	11	6	2	22			1			1	9	2
	26-50												1																									1	6	1
	51-75																																								
	>75																																								
Jodhpur ...	6-25	31		23				1	1		5	31	3	8	3	2	1	2	4	3	1	31	3	5	2	1	4	2	5	5	1	28						4	8	9
	26-50			1									1	1	1	1									1			1	1									3	2	1
	51-75																																					1			
	>75																																								
Karachi (Drigh Road) ...	6-25	31	6	16						2	7	31	4	5	9	1	1	1	5	4	1	31	5	5	4		1	2	6	4	3	29	5	1				1	8	7
	26-50																												1				1	1					2	1
	51-75																																								
	>75																																								
Madho Sagar (Gwalior).	6-25	31		2				5	1	1	22	30	8	2	5	2	1	2	2	4	2	30	2	2	1	2	2	3	6	6	4	21	1	1				3	5	3
	26-50															1				1										2									6	2
	51-75																																								
	>75																																								
New Delhi ...	6-25	31	1	1			1	1	1	15	11	31	5	1	1	3	2	1	2	11	3	31	1	1		2	3	1	10	9	2	31	1				2	3	13	4
	26-50																			1										1								3	1	3
	51-75																			1										1										
	>75																																								
*Raj Samand (Kankroli).	6-25	13	2	1						8	2	13	2	1	1	2	1		2	3	1	13	1	1	1	2	2		2	3		13	2				1	1	5	2
	26-50																						1															2		
	51-75																																								
	>75																																								
Sharjah ...	6-25	31			5	13	1			1	10	31	2	5	3	1	1	4	6	4	3	31	1		1	1	1	6	8	7	3	25					1	2	6	3
	26-50							1									1		1					1					2									2	6	5
	51-75																																								
	>75																																								

*Only on 13 days in the month pilot balloon ascents were made in the late night; on the remaining days ascents were made in the morning. Visibility observations in the late night

Speed limits (km./hr.).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
6-25	5							1	1		1 — 10	1			1			1	1	2	25			1		3	5	21	1			Allahabad (Bamrauli)
26-50								2																								
51-75							1				9 or 10	1			1			1			3											
>75																																
6-25	3							1	1		1 — 10					1		3	1		26						2	29				Bahrein
26-50								1																								
51-75											9 or 10										4											
>75																																
6-25	13	2	1			1	1		3		1 — 10						2		1	1	27							19	12			Bombay (Juhu)
26-50							3		2																							
51-75											9 or 10								1		1											
>75																																
6-25	1						1				1 — 10							1			30			1		2	28					Calcutta (Dum Dum)
26-50																																
51-75											9 or 10										1											
>75																																
6-25	4								1		1 — 10						2				29						7	23	1			Gaya
26-50								2	1																							
51-75											9 or 10										1											
>75																																
6-25	13	1					2	4	1		1 — 10										31							17	14			Jacobabad
26-50								3																								
51-75									1		9 or 10										3											
>75								1																								
6-25	5							1			1 — 10					1	8	3			19						5	26				Jiwani
26-50							1	2																								
51-75									1		9 or 10										2											
>75																																
6-25	12							2	1		1 — 10										31							1	30			Jodhpur
26-50							1	7																								
51-75								1			9 or 10																					
>75																																
6-25	13	2					2	2	1		1 — 10						2				29							2	29			Karachi (Drigh Road)
26-50		1						2	3																							
51-75											9 or 10										2											
>75																																
6-25	3							1			1 — 10	3						1	1	1	25		1	1	1	1	1	10	16			Madho Sagar (Gwalior).
26-50								2																								
51-75											9 or 10	2									6											
>75																																
6-25	19							6	1		1 — 10									1	30						1	11	19			New Delhi
26-50						1	1	8	1																							
51-75							1				9 or 10										1											
>75																																
6-25	8	1						1	2		1 — 10										13							12	1			*Raj Samand (Kankroli).
26-50								3	1																							
51-75											9 or 10																					
>75																																
6-25	15								1	1	1 — 10						1	2	3		25								10	21		Sharjah
26-50							1	7	4																							
51-75								1			9 or 10										3											
>75																																

Y. P. P.—S 2631—950—5-40

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MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

February 1939

Supplement to the Monthly Weather Report, February 1939

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Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 2nd July 1940.

C. W. B. NORMAND,

Director-General of Observatories.

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Agra ...	6–25	28	5	6	1	1			6	2	7	28	4	3	1	1	3			2	1	28	4	2		1	2	1		4	1	28						1	3
ϕ = 27° 08′ N ...	26–50												2	2	1	2	1			4			3		1	2	1		5						1		1	6
λ = 78° 01′ E ...	51–75												1												1										1		1	1
H_s = 182 metres ...	>75																																						
Ahmedabad ...	6–25	28		4	1					1	22	28	2	5	2			1	3	2	1	28	5	2	6				6	3	1	28	1					5	7
ϕ = 23° 02′ N ...	26–50												1	2	5		1		1	2								1	3	1								5	3
λ = 72° 35′ E ...	51–75																																					5	
H_s = 55 metres ...	>75																																						
Bangalore ...	6–25	28		1	9	16					2	24			5	6	3	1			1	28		1	10	11	5					23	2	5	8	2			
ϕ = 12° 58′ N ...	26–50													2	6	3									1									4	2				
λ = 77° 35′ E ...	51–75																																						
H_s = 936 metres ...	>75																																						
Bhuj ...	6–25	28			1	1		1			25	28	8	2	1			1	2	2		28	5	3	1		2	1	3	2	2	25	3					8	5
ϕ = 23° 15′ N ...	26–50												1	4	1		1	1	3	1			1	1				2	5									2	6
λ = 69° 48′ E ...	51–75																																						
H_s = 113 metres ...	>75																																						
Chittagong ...	6–25	28	6	5		2					15	28	14	5			1	3		1	2	28	14	1				2	3	3		28	2					2	5
ϕ = 22° 21′ N ...	26–50												1					1					2						1	2			1						4
λ = 91° 50′ E ...	51–75																																						2
H_s = 21 metres ...	>75																																						
Dacca ...	6–25	28				2	1				25	26	9	1			2	2	1	5	3	25	6				1	1	6	5	2	24	1						1
ϕ = 23° 43′ N ...	26–50																	1	1	1								1	3										3
λ = 90° 24′ E ...	51–75																																						4
H_s = 21 metres ...	>75																																						
Fort Sandeman ...	6–25	28		1	1		3	3			20	24	1	2	3			6	8	1	3											24		1	1	1	4	3	9
ϕ = 31° 21′ N ...	26–50																																				1		
λ = 69° 27′ E ...	51–75																																						
H_s = 1421 metres ...	>75																																						
Hyderabad (Begumpet).	6–25	28			1	6					21	28			4	7			1			28			3	8	1		1			28	5	2	1	2	3	1	5
ϕ = 17° 26′ N ...	26–50														1	7	7		1						1	7	6		1				3	1		2			
λ = 78° 27′ E ...	51–75																																						
H_s = 555 metres ...	>75																																						
Jubbulpore ...	6–25	28		1				1		1	25	26	1	5	3	2	3		1			26	3	4	2	1	4		1		1	26					1	2	4
ϕ = 23° 10′ N ...	26–50													3			5	1	1	1			1	1			4	1	1	1			4				1	5	4
λ = 79° 57′ E ...	51–75																										1											2	1
H_s = 402 metres ...	>75																																						
Lahore ...	6–25	28	3			2	1				22	27	6	2	1	3	1	1	3	6	1	27	2		3	2		2	4	9		24	2		2		2	2	6
ϕ = 31° 35′ N ...	26–50												1				1									1	1			2						1	1	1	1
λ = 74° 20′ E ...	51–75																									1													
H_s = 221 metres ...	>75															1																							
Madho Sagar (Gwalior).	6–25																																						
ϕ = 26° 13′ N ...	26–50																																						
λ = 78° 08′ E ...	51–75																																						
H_s = 233 metres ...	>75																																						
Madras ...	6–25	28									28	28		2	15	9	2					28		5	11	9						27	1	2	4	3			
ϕ = 13° 04′ N ...	26–50																							1		2							1	8	6	2			
λ = 80° 15′ E ...	51–75																																						
H_s = 13 metres ...	>75																																						
Malegaon ...	6–25	28		1					1	8	18	27	4	5	3	3	2	1	1	3	2	27	5	3	3	2	3		3	3	2	28	2			1	4	8	3
ϕ = 20° 33′ N ...	26–50												1		1	1							1		1	1												7	3
λ = 74° 32′ E ...	51–75																																						
H_s = 443 metres ...	>75																																						
Mangalore ...	6–25	28		7	11						10	28	8	2	3		1			7	3	28	7	5	6	1		2	3		1	27		4	7	12	2		
ϕ = 12° 52′ N ...	26–50														3					1					2	1									1				
λ = 74° 51′ E ...	51–75																																						
H_s = 40 metres ...	>75																																						
Peshawar ...	6–25	28		1		3	2	6	1		15	27	2	3				1	3	8	10	27	8	2				2	2	8	5	24	6	4	3			1	1
ϕ = 34° 01′ N ...	26–50																																2		1				
λ = 71° 35′ E ...	51–75																																						
H_s = 363 metres ...	>75																																						
Poona ...	6–25	28		1			2	19			6	28	4	6	5	1	1		3	5	2	28	7	4	5	2	1	2	1	5		28		2	3	4	4	2	4
ϕ = 18° 32′ N ...	26–50															1									1											1	1	5	
λ = 73° 51′ E ...	51–75																																						
H_s = 588 metres ...	>75																																						
Port Blair ...	6–25	28	2	7					1		18	28	2	15	2							27	1	7	7	3				1	1	25	1	3	2	6	2		
ϕ = 11° 40′ N ...	26–50												1	6	2									4	3									1	9				
λ = 92° 43′ E ...	51–75																																						
H_s = 87 metres ...	>75																																						
*Raj Samand (Kankroli)	6–25	17	1	1		1		2		8	4	17	1	3	2	1	1		3	1	2	16	1	3	2	1			2	2	2	17						2	3
ϕ = 25° 03′ N ...	26–50													1				1	1					1				1	1									4	1
λ = 73° 53′ E ...	51–75																																					2	1
H_s = 587 metres ...	>75																																						

* Only on 17 days in the month pilot balloon ascents were made in the morning. On one day it was raining in the morning. On the remaining 10 days the ascents were made in the late ni
Visibility observations were, however, recorded in the morning throughout the month.

ed ts n./).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	28						1	3	2		1 — 10								1	3	24					1	9	17	1			Agra
-50		1				1	2	6	2																							
-75							2	5	1		9 or 10									2	6											
-75							1		1																							
-25	27						2	2	1		1 — 10									1	27							1	27			Ahmedabad
-50		1					4	6	1																							
-75							8	2			9 or 10										8											
-75																																
-25	22	2	5	5	1	1			1		1 — 10	1	1	2		4	1				19						1	25	2			Bangalore
-50			3	2	2																											
-75											9 or 10	1	1	1							4											
-75																																
-25	23	1		1				4			1 — 10	1		1		1		3	1	1	20			1			2	20	5			Bhuj
-50							3	7																								
-75							2	5			9 or 10	1		1							7											
-75																																
-25	27						1	2	2		1 — 10				1	1	1			1	24						2	17	9			Chittagong
-50								10	5																							
-75									6		9 or 10					1					1											
-75									1																							
-25	20	1						3			1 — 10	3					2	1		2	20		2			3	15	8				Dacca
-50								3	1																							
-75							1	4	4		9 or 10	3					1			1	7											
-75								2	1																							
-25	22					1		2	3		1 — 10					9	1		1	4	13		1	2		1	2	10	11	1		Fort Sandeman
-50							3	3	6																							
-75							2	2			9 or 10					5	1		1	1	14											
-75																																
-25	27	4	2		2	3	1	5	7		1 — 10					4					24						8	6	12	2		Hyderabad (Begumpet)
-50		2	1																													
-75											9 or 10					2					2											
-75																																
-25	10							1			1 — 10	1							1	4	22		1		1			2	24			Jubbulpore
-50							1	3	1																							
-75							1	2	1		9 or 10	1									4											
-75																																
-25	20			1		1	4	4	3	1	1 — 10		1			1		2	2	1	21	1				6	15	4	2			Lahore
-50									3																							
-75							2	1			9 or 10		1			1		2		1	9											
-75																																
-25											1 — 10																	1	23	4		Madho Sagar (Gwalior)
-50																																
-75											9 or 10																					
-75																																
-25	24	3	4	4	4				1	1	1 — 10						2	12	1		13						9	19				Madras
-50			3	2	2																											
-75											9 or 10																					
-75																																
-25	28	1				1	3	2	2	1	1 — 10									4	24								1	27		Malegaon
-50						1	13	1																								
-75						1	2				9 or 10																					
-75																																
-25	24	3	7	5	1			1		2	1 — 10						1		2	2	23					3	9	15	1			Mangalore
-50			2	2	1																											
-75											9 or 10																					
-75																																
-25	19	3	4	2	1	1	2	2	1	1	1 — 10			1		3		2	5	3	14					1		1	3	4	19	Peshawar
-50					1	1																										
-75											9 or 10			1		1					13											
-75																																
-25	27		2		3	5	2	2		1	1 — 10									2	26						1		1	26		Poona
-50					1	8	2	1																								
-75											9 or 10																					
-75																																
-25	13	1	2	1	1	1		1	1	1	1 — 10						9	5			14						4	23	1			Port Blair
-50				3																												
-75				1							9 or 10										3											
-75																																
-25	15							2	1		1 — 10					1		1	1		15						1	2	14	11		Raj-Samand (Kankroli)
-50							2	4	2																							
-75							2				9 or 10																					
-75							2									1					8											

TABLE 1—

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Sambalpur ...	6–25	28	1	1	1						25	28	2	3	3	4	3	5	2	1	1	28	3	2	1	5	4	1	1	3	1	28	1					6	4
ϕ = 21° 28′ N ...	26–50														1		1	2										4	3				1					3	4
λ = 83° 58′ E ...	51–75																																						
H_s = 153 metres ...	>75																																						
Tezpur ...	6–25	28		6	5						17	26		2	9	2	2		1		2	26	1	4	8			4			3	20	1	1	3	1		2	5
ϕ = 26° 37′ N ...	26–50														6				2						3			1	2										2
λ = 92° 47′ E ...	51–75																																						1
H_s = 80 metres ...	>75																																						
Trichinopoly ...	6–25	28		10							18	28		6	12							27		4	9	3						24	5	1	5	5			
ϕ = 10° 49′ N ...	26–50													5	5									3	7	1							2	5		1*			
λ = 78° 42′ E ...	51–75																																						
H_s = 88 metres ...	>75																																						
Trivandrum ...	6–25	28	3	5	2				1		17	28	1	3	6	3	3	1		3	8	27	4	7	6	5				1	4	26	4	3	8	1	2		
ϕ = 08° 29′ N ...	26–50																																1	2	1	1			
λ = 76° 57′ E ...	51–75																																						
H_s = 76 metres ...	>75																																						
Vizagapatam ...	6–25	28									28	28		3	1	4	3	9	1		7	28	3	2	3	3	3	7	1	1	5	28	5	5	3	2	1	1	
ϕ = 17° 42′ N ...	26–50																																1	2	1		1	1	
λ = 83° 18′ E ...	51–75																																						
H_s = 56 metres ...	>75																																						

TABLE 4—

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Allahabad (Bamrauli)	6–25	28			2	4		1	4		16	27	2	1	3	1	1	2	9	3	1	27	2	3	1			2	6	6		25	1	1		2	1	1	5
ϕ = 25° 26′ N ...	26–50				1									1	2										2		1		3										2
λ = 81° 44′ E ...	51–75															1										1												2	
H_s = 98 metres ...	>75																																						
Bahrain ...	6–25	28	5	2	2	3	1	1	5	8	1	28	4	3	1	2	1			2		28	4	2			4	1		2	1	27						2	3
ϕ = 26° 14′ N ...	26–50												6			1	3			4			3				2	1		6			1					4	5
λ = 50° 35′ E ...	51–75																	1					1															1	1
H_s = 14 metres ...	>75																											1											1
Bombay (Juhu) ...	6–25	28	3	4	1	1				1	18	28	14	8	1	1				2	1	28	11	5		1	1		1	7		28		1	1	5	5	2	2
ϕ = 19° 07′ N ...	26–50												1																1	1							3	8	1
λ = 72° 50′ E ...	51–75																																						
H_s = 5 metres ...	>75																																						
Calcutta (Dum Dum)	6–25	28	5	4	1		2	3	1	5	7	28	6	4	2	1	2	2	4	2		27	5		1		2	2	9	4	1	25	1					2	1
ϕ = 22° 38′ N ...	26–50													1				3	1									2	1									2	7
λ = 88° 27′ E ...	51–75																																						
H_s = 5 metres ...	>75																																						
Gaya ...	6–25	28		1	4	2	3	6	3	2	7	27	1	4	1		1	4	7	4		26	1	2	1	1	2	1	8	6		26						1	4
ϕ = 24° 49′ N ...	26–50															1	1		1	2									4							1			3
λ = 85° 01′ E ...	51–75																																						4
H_s = 117 metres ...	>75																																						
Jacobabad ...	6–25	28			6	2				2	18	26	2	2	4	2	4	1	1	3	2	24	3	2	1	2	6	3	1	2		21				1	4	3	2
ϕ = 28° 17′ N ...	26–50													2	1	1	1								2	1											1	1	2
λ = 68° 29′ E ...	51–75																								1														
H_s = 66 metres ...	>75																																						
Jiwani ...	6–25	28	2	9	2		4			4	6	28	1	2		3	5	1	5	4	1	25	1			4	2	5	3	2	1	22			1	1	1	2	5
ϕ = 25° 10′ N ...	26–50									1				1		1	1		2	1			1					1	4										4
λ = 61° 47′ E ...	51–75																												1										2
H_s = 5 metres ...	>75																																						1
Jodhpur ...	6–25	28	1	15	2	4		3			3	28	3	4	3	4	2	1		1		28	4	4	5	2	1	1	1	1		26		1			1	4	5
ϕ = 26° 18′ N ...	26–50														3	1	1	4	1							1	2	5	1							1		3	3
λ = 73° 01′ E ...	51–75																																						1
H_s = 233 metres ...	>75																																					1	
Karachi (Drigh Road)	6–25	28	1	6				1	1	1	17	28	3	2	2		1		4	8	2	26	1	3		2	1	1	7	4	1	26		1	2	1		2	3
ϕ = 24° 53′ N ...	26–50			1											2			1	3						1			2	2	1								3	6
λ = 67° 07′ E ...	51–75																																		1				2
H_s = 29 metres ...	>75																																						
New Delhi ...	6–25	28		2	2	1			12	4	7	28	1		1	4			3	5	2	27	1		1	1			3	5	1	25	3					2	2
ϕ = 28° 39′ N ...	26–50															1				9						1	2			9			1				2	2	5
λ = 77° 15′ E ...	51–75														2										2	1													
H_s = 227 metres ...	>75																																						
*Raj Samand (Kankroli)	6–25	11			2	3				1	5	11		1	2	4	3			1		11		2	1	4	3			1		11			1			1	
ϕ = 25° 03′ N ...	26–50																																			1		2	4
λ = 73° 53′ E ...	51–75																																					1	
H_s = 587 metres ...	>75																																						
Sharjah ...	6–25	28		1	1	6	7	2	3		5	27	2	1		1	1	3	3	3	3	28	2		2			3	2	5		25						1	6
ϕ = 25° 20′ N ...	26–50								2	1							2	1	6				1			1	2	1	6	2						1	5	5
λ = 55° 24′ E ...	51–75																1												1										1
H_s = 10 metres ...	>75																																						

* Only on 11 days in the month, pilot balloon ascents were made in the forenoon; on the remaining days the ascents were made in the afternoon.

QUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

eed nits m./ r.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
3-25	25							2	1		1 — 10								4	1	23									28		Sambalpur
3-50		1					2	7	10																							
-75		1							1		9 or 10								1		2											
>75																																
3-25	9			2				3	2	1	1 — 10	2			1	2		2	5	10	6	1		1	1	2	14	9				Tezpur
3-50																																
-75								1			9 or 10	2			1	1		1	1	1	12											
>75																																
3-25	16	1	6	2	1						1 — 10					11	5	2	2	2	6						2	24	2			Trichinopoly
3-50			3	2	1																											
-75											9 or 10																					
>75																																
3-25	25	2	3	10	1	1	1	1		2	1 — 10							1		1	26					4	16	8				Trivandrum
3-50				2	2																											
-75											9 or 10										1											
>75																																
3-25	26	5	2	2	3	1	6		1	1	1 — 10							3	2	1	22							3	25			Vizagapatam
3-50		3							1																							
-75		1									9 or 10																					
>75																																

EQUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

3-25	15		1					2			1 — 10					1			2	1	24						1	24	3			Allahabad (Bamrauli)
3-50								3																								
-75							2	5	2		9 or 10								1		1											
>75																																
3-25	14										1 — 10							1	2	2	23							6	22			Bahrain
3-50		1					4	3																								
-75							1	4			9 or 10										3											
>75								1																								
3-25	26		1			4	1	1	3	1	1 — 10						1	1		1	25							27	1			Bombay (Juhu)
3-50						4	9	2																								
-75											9 or 10																					
>75																																
3-25	13	1				1					1 — 10					1	2	1	1	4	19			1	3	9	10	5				Calcutta (Dum Dum)
3-50							1	3	5																							
-75								1	1		9 or 10										1											
>75																																
3-25	22	1						2	1		1 — 10					1	1	2		1	23						6	22				Gaya
3-50								4																								
-75								8	5		9 or 10						1				3											
>75									1																							
3-25	17	1				1		4	2		1 — 10				2	1	2	1			22						3	7	18			Jacobabad
3-50								4	3																							
-75							1	1			9 or 10				1		1				7											
>75																																
3-25	13						2		2		1 — 10					1	14	2			11						2	23	3			Jiwani
3-50								5																								
-75								3			9 or 10						1				10											
>75								1																								
3-25	23	1				1	1		3	1	1 — 10						1		3		24					1		2	8	17		Jodhpur
3-50							2	8																								
-75							4	1			9 or 10								2		12											
>75							1																									
3-25	20						1	1	3		1 — 10				1	2	1	2	6	2	14						1	3	12	12		Karachi (Drigh Road)
3-50							3	7																								
-75								3			9 or 10				1	1			1		10											
>75							1	1																								
3-25	23	2						7			1 — 10			1		1			3	1	22						1	11	16			New Delhi
3-50		1					1	6	3																							
-75							1	2			9 or 10			1					1		8											
>75																																
3-25	10						1	2			1 — 10									2	9											*Raj Samand (Kankroli)
3-50							1	2																								
-75							1	2			9 or 10					1					5											
>75							1																									
3-25	16						1	1			1 — 10						1	2	7	4	14							2	13	13		Sharjah
3-50							1	5																								
-75								6	1		9 or 10										8											
>75								1																								

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Agra ...	6–25	28	2	1	2	1	2	2	3	5	10	28	2	2	2	2	2	1	3	11	2	28	2	2		2	4		4	10	1	28	1			1		3	2	4
	26–50					1										1										2				1						1		4	6	6
	51–75																																								
	>75																																								
Ahmedabad ...	6–25	28		4	4	1	1	5	5	2	6	27	1	4	3		2	3	6	2	4	28	4	1	4		3	3	7	2	1	28	2	1				4	4	1
	26–50																	1	1									1	2									7	4	2
	51–75																																					3		
	>75																																							
Allahabad (Bamrauli)	6–25	28	1	4	1	4			5	9	4	28	1	3	2	2	1		7	7	3	28		2	2	2		2	4	10	1	24	1	1			1	2	6	2
	26–50					1										1			1				1		1			1	1	1									4	5
	51–75																																					1	1	
	>75																																							
Bahrain ...	6–25	28	10	2	2	3				11		27	2	3	1	2	1	2	1	2		27	4		1		1	3		3	1	24			1		1	1		2
	26–50												5			1	1	1		4			2				1	2	1	6								4	5	4
	51–75																			1			1				1											1	1	3
	>75																																1							
Bangalore ...	6–25	28		4	4	14					4	28		2	18	5						25		2	8	12					1	28		10	12	4				
	26–50			2										1		2									2										1	1					
	51–75																																								
	>75																																								
Bhuj ...	6–25	28	1	5	1			8	2	3	7	28	6	3	1	1		2	7		4	27	4	3	1	2	2	2	7	1	1	25	2			1	3	5	4	2
	26–50								1									3	1									3	1									2	4	1
	51–75																																					1		
	>75																																							
Bombay (Juhu) ...	6–25	28							2	25		28	6	3	2		3	1	2	7	3	28	5	1	2	3		2	4	8	3	26		1	2	1	6	6	
	26–50									1			1																								3	7	2	
	51–75																																							
	>75																																							
Calcutta (Dum Dum)	6–25	28		2		1	5	1	5	8	6	28	4	1	1	1	2	1	5	8	3	28	3	1		1		4	6	10	2	27							6	6
	26–50													1			1												1									1	6	6
	51–75																																							2
	>75																																							
Chittagong ...	6–25	28	1	2				6	13	5	1	28	9				2	3	3	10	1	28	13	2			3	1	3	6		28	2					3	7	4
	26–50																																					1	4	6
	51–75																																							1
	>75																																							
Dacca ...	6–25	28	1			2		1	1	11	12	27	1				2	3	8	11	1	28	1			1	2	2	8	10		26	1				1		4	4
	26–50																			1			1						3										10	3
	51–75																																						2	1
	>75																																							
Fort Sandeman ...	6–25	28		2	1			5	1	1	18	25	1	1	1	1		11	3	2	3											24	1		1	1	3	8	3	2
	26–50																	2																				3		
	51–75																																							
	>75																																							
Gaya ...	6–25	28	3	3				1	6	12	2	26	1	2					10	8		26	1	1	1		1		10	8	2	25					1		2	5
	26–50			1										1	1				1	2								1	1								1	1	11	3
	51–75																																							1
	>75																																							
Hyderabad (Begumpet).	6–25	28		1	10	4	4	3			6	28		1	6	9	9	2				28		1	6	9	7	3				27	1	3	4	5	8	3		
	26–50																1										2						1			1				
	51–75																																							
	>75																																							
Jacobabad ...	6–25	28		3		3	2	1			19	28	1	1	8	2	4	2	2		6	26	1	1	7	3	4	3	2	1	2	23	1		1		3	6	1	2
	26–50													1			1								1			1									2		4	1
	51–75																																							
	>75																																							
Jiwani ...	6–25	28	1				2	18			4	28		1	1	1	5	11	2	1	1	27			1	2	3	4	7	3	2	24	1		1			2		3
	26–50							1	1	1								1	4										5				1					1	8	4
	51–75																																						2	
	>75																																						1	
Jodhpur ...	6–25	28	1	5		5	1	4	2	3	3	28	3	2	2	4	2	4		2	3	27	5	2	3	3	2	4		1	1	26	2	1		2	1	4	4	2
	26–50							2	2									2	4									4	2									1	4	1
	51–75																																					2	1	
	>75																																							
Jubbulpore ...	6–25	28	2	1		2	3	1	4	3	12	26	4	3	1		4	1	4	5	1	26	3	3	1		4	2	5	4	1	26		1			2	3	3	3
	26–50																1		2								1		2								2	4	6	2
	51–75																																							
	>75																																							
Karachi (Drigh Road) ...	6–25	28		1	1	1	2	10		1	5	28	3	2		2	2	3	8		1	27	2	2	1	2	1	1	9	2		24	1		1	1		1	5	5
	26–50			3				2	2									2	4					1			1		5									2	4	1
	51–75														1																							1	2	
	>75																																							

Frequency (Afternoon) — Table 8—Frequency of low cloud heights (Afternoon) — Table 9—Frequency of Visibility (Afternoon)

Speed limits (km./hr.)	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	24		1				2	1	1		1 — 10								2	4	22							26	2			Agra
26–50							2	9	1																							
51–75								4	1		9 or 10										10											
>75							2																									
6–25	22							2			1 — 10									1	27								28			Ahmedabad
26–50							2	9	1																							
51–75							4	4			9 or 10										4											
>75																																
6–25	11	1						2			1 — 10							2	1	3	22						1	19	8			Allahabad (Bamrauli)
26–50								3	1																							
51–75							2	1			9 or 10										8											
>75								1																								
6–25	14									1	1 — 10					1	1	4	3	1	18							1	27			Bahrain
26–50								3	1																							
51–75							1	4	1		9 or 10					1					7											
>75								2	1																							
6–25	26	2	5	7	4			1	1		1 — 10							1	5	4	18							5	8	15		Bangalore
26–50				4	2																											
51–75											9 or 10										1											
>75																																
6–25	23	1			1	1		3	1		1 — 10						1	6	5		16							14	14			Bhuj
26–50							3	8	1																							
51–75							1	2			9 or 10										4											
>75							1																									
6–25	28	1		2	1		2	3	3	1	1 — 10							1		1	26								25	3		Bombay (Juhu)
26–50						4	10	1																								
51–75											9 or 10																					
>75																																
6–25	21							1	1		1 — 10							2	3	3	20						1	27				Calcutta (Dum Dum)
26–50							1	6	9																							
51–75									3		9 or 10																					
>75																																
6–25	27	1						3	2		1 — 10						1	3			24								28			Chittagong
26–50							1	10	6																							
51–75									3		9 or 10																					
>75									1																							
6–25	20					1		1	1		1 — 10							4	3	3	18						2	26				Dacca
26–50								3	3																							
51–75								6	4		9 or 10										2											
>75									1																							
6–25	21	1			1	2	5	3	2		1 — 10					7		1	4	4	12					2	2	5	15	4		Fort Sandeman
26–50							1	2	2																							
51–75							2				9 or 10					4					12											
>75																																
6–25	22							1	1		1 — 10						2	2	1	1	22						3	21	4			Gaya
26–50								5	1																							
51–75								7	3		9 or 10						1				5											
>75								2	2																							
6–25	25	3	3	4	1	7	2	2		1	1 — 10									9	19									2	26	Hyderabad (Begumpet)
26–50		1			1																											
51–75											9 or 10																					
>75																																
6–25	16					1	3	2	2		1 — 10					1	2	3		1	21					1		5	22			Jacobabad
26–50		1						5																								
51–75								1			9 or 10							1			10											
>75								1																								
6–25	19	1							1		1 — 10					1	14	1			12						4	16	8			Jiwani
26–50							2	4	3																							
51–75								6	1		9 or 10							1			9											
>75								1																								
6–25	23	1					1	2	2		1 — 10							1	1	4	22						1	1	4	22		Jodhpur
26–50						1	3	7																								
51–75								5			9 or 10									1	10											
>75								1																								
6–25	24	1					1	1	1		1 — 10									17	11								28			Jubbulpore
26–50							7	4	1																							
51–75							1	3	1		9 or 10										3											
>75								3																								
6–25	16								2		1 — 10					1	3	10	5	2	7							3	6	19		Karachi (Drigh Road)
26–50							2	5	4																							
51–75							1	1			9 or 10					1					11											
>75							1																									

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Lahore ...	6–25	28		1		2		1	3	6	15	26	1	2	1	1	1	2	3	8	3	23		1	2	1		1	6	10		23			1		3	4	4	5
	26–50														1	1				1																		1	1	2
	51–75															1										2											1			
	>75																																							
Madho Sagar (Gwalior)	6–25	28		4	2	2	1	2	2	7	8	28	4	2	2	3		3	3	5	5	28	4	3	1	3		2	2	8	5	28	2			1		6	6	3
	26–50													1																								2	6	1
	51–75																																							
	>75																																							
Madras ...	6–25	28		4	11	13						26		2	14	7					2	27		8	6	6	4			2		26	1	4	4	6	1			1
	26–50													2		1									1								2	3	4					
	51–75																																							
	>75																																							
Malegaon ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
Mangalore ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
New Delhi ...	6–25	28		1	1	4		1	5	9	4	28	1		2	3			5	10		28			2	1	1	1	4	10	1	26	1		1		2	4	5	4
	26–50					1				2						2			2	2						1		1	1	3							1	1	3	4
	51–75															1										1	1													
	>75																																							
Peshawar ...	6–25	28		3	1					3	21	27	7	2	2		1			10	5	27	6	4	1		1			10	5	25	7	4	2	1	2	1	2	2
	26–50																									1									2					
	51–75																																							
	>75																																							
Poona ...	6–25	28	2	2	1			8	2	7	6	26		1	4			8	4	2	7	26		4	2	1		5	6	2	6	28			3	4	3	8	5	
	26–50																																				1	2	1	
	51–75																																							
	>75																																							
Port Blair ...	6–25	28		24	3							28	2	16	6							28	4	9	6	1					3	25	1	2	6	5	2	1		2
	26–50			1									1	2	1								1	1	3									1	5					
	51–75																																							
	>75																																							
*Raj-Samand (Kankroli)	6–25	17			1	5	1	1	1	2	5	17	1	1	2	3	2	1	1	1	2	17	1	1	3	2	2	2		1	2	17	1			1	1	6	2	
	26–50							1									1	1	1								1	1	1									1	2	
	51–75																																					2	1	
	>75																																							
Sambalpur ...	6–25	28	2	1			2	7	2	2	12	28	4	2		2	4	5	5	1	4	28	3	2		2	2	8	4	1	5	27	2					2	8	1
	26–50																		1										1								1	3	3	6
	51–75																																							
	>75																																							
Sharjah ...	6–25	28	1					3	7	13		28	2	1	1	1	6	3	5			28				3	4	1	3	4	1	25				1	1	4	3	1
	26–50								2	2								1	5	3							3	1	6	2						1		2	6	1
	51–75																																				1		2	1
	>75																																							
Tezpur ...	6–25	28		3	4	1	1	8			11	27		2	7	4	1	5	2		3	27		1	7	2	1	1	6		5	25	1	1	3		2	6	6	
	26–50														1			1	1										4										3	
	51–75																																						1	
	>75																																						2	
Trichinopoly ...	6–25	28		18	8						2	28		10	12						1	28		9	12							25	2	3	9	2				
	26–50													2	3									3	4								4	1	3	1				
	51–75																																							
	>75																																							
Trivandrum ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
Vizagapatam ...	6–25	28			1	14	11				2	28		1	4	6	4	7	2		4	28	2	4	2	4	1	5	3	1	5	27	4	4	6	1	1	2	2	1
	26–50																											1					2	1			1			1
	51–75																																							
	>75																																							

* Only on 17 days in the month, pilot balloon ascents were made in the afternoon; on the remaining days the ascents were made in the forenoon. Visibility observations were, ho recorded in the afternoon throughout the month.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
20		1	1	1	2	3	2	3		1 — 10					2	2	2		2	20						1	4	22	1		Lahore
					1	3	1	1		9 or 10					1	2	1			9											
22							2			1 — 10								6	6	16							1	16	11		Madho Sagar (Gwalior)
		1				4	11																								
						1	1	1		9 or 10										13											
							1																								
25	3	4	7	3	1			3		1 — 10						1	7			20									28		Madras
		1	1							9 or 10																					
			2																												
										1 — 10																		2	26		Malegaon
										9 or 10																					
										1 — 10																		13	15		Mangalore
										9 or 10																					
21	2					1	4	2		1 — 10					1		1	2		24							6	22			New Delhi
						4	6	1		9 or 10										8											
						1																									
23	2		4	2	1	3	2	3	2	1 — 10			1	1	2	2		10	6	6						1	1	3		23	Peshawar
				1	1	2				9 or 10			1						1	11											
28		1	2		1	4	4	2	2	1 — 10									10	18									28		Poona
					1	11				9 or 10																					
16		3	1		1	2	1	1		1 — 10					1	8	9			10						2	14	12			Port Blair
	1	1	3	2						9 or 10										1											
15						1	2	1		1 — 10							2	1	3	11							1	18	9		*Raj Samand (Kankroli)
						2	4																								
						1	4			9 or 10										4											
25							2	5		1 — 10								8	6	14								2	26		Sambalpur
						2	10	5																							
	1									9 or 10																					
14							2			1 — 10							5	8	4	11						2	5	9	12		Sharjah
							5	3																							
						1	3			9 or 10										4											
19			1	1	1	3	1	2	1	1 — 10				1			2	3	16	4						1	5	14	8		Tezpur
			1			1	4																								
							2			9 or 10							1		1	7											
							1																								
19	1	6	5	1						1 — 10							1	20	3	4								3	20	5	Trichinopoly
		1	3	2						9 or 10																					
										1 — 10																	9	19			Trivandrum
										9 or 10																					
27	5	2	1	2	1	2		7	2	1 — 10								2	1	25								3	20	5	Vizagapatam
	4	1								9 or 10																					

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	N
Allahabad (Bamrauli)...	6-25	28	1	4	1	1				4	17	27	3	1	4	1	1		2	12		27		1		1	4		7	10	1	16			1			1	1	
	26-50																1	1		1							1	1		1								1	5	
	51-75																																						3	
	>75																																							
Bahrain ...	6-25	28	9	2	1	5	1			7	1	28	4	2	4	1	2			5	1	26	3	1		1	1	3	1	7		12					1		1	
	26-50		1							1			3					1		4			2					1		5								1	6	
	51-75																1										1													
	>75																																							
Bombay (Juhu) ...	6-25	28	2			1				3	22	28	19	4						3		28	11	4				1	4	8		23				5	6	3	2	
	26-50												2																								4	3		
	51-75																																							
	>75																																							
Calcutta (Dum Dum) ...	6-25	28	5	3		3		6	1	3	7	26	3	5	1		1	2	4	7	2	26	2	2				2	3	12		10	1	1					1	
	26-50																	1										2	1	2									1		
	51-75																																							
	>75																																							
Gaya ...	6-25	28	1		4	2	3	2	3	2	11	27	1	3	1		1	5	2	10	1	26	1		1	2		4	8	8		21	1						4	
	26-50																		1	2									1	1									10	
	51-75																																							
	>75																																							
Jacobabad ...	6-25	28	1	2	6					2	17	27	3	1	3	2	3	5	2		6	26	1		2	2	6	7	2	1	3	20	1			1	1	3	3	
	26-50														2												1	1										3	5	
	51-75																																							
	>75																																							
Jiwani ...	6-25	28	1	3	3		5	1	5	2	7	28		1		2	2	8	6	3		27			3	2	1	5	6		3	16			1		1		6	
	26-50									1			1		1	1			3				1					2	3									1	5	
	51-75																												1										1	
	>75																																							
Jodhpur ...	6-25	28		18		4	1		2		3	28	2	5		2	2	2	3	3	5	28	1	1	1	1	2	7	6	5	2	24	2					3	4	
	26-50																	3	1									2										7	5	
	51-75																																						1	
	>75																																							
Karachi (Drigh Road) ...	6-25	28	2	6				1	3		16	27	1		5	1	1		11	4		26	2	1	3		1	1	8	3	1	17	3			1	1	2	2	
	26-50																	1	3									1	5					2					3	
	51-75																																							
	>75																																							
Madho Sagar (Gwalior).	6-25	28	1	2	1	2	1	4	1	2	14	28	9	4	2	2	2	2	1	3	1	28	4	2	1	1	1	1	5	7	3	24	1					1	5	
	26-50														1	1										1	1	1						1					3	9	
	51-75																																						1	
	>75																																							
New Delhi ...	6-25	28	3	2	1		1		3	9	9	27	1	1	1	4		1	1	12		27			1	1		4	6	9	1	24	2					2	5	
	26-50												1		1	1				3						2				3							1	3	4	
	51-75																																							
	>75																																							
*Raj Samand (Kankroli).	6-25	10	1	1						5	3	10		1	1	3	2	1	1	1		10		1	1	3	2	1	1	1		9					1	2	1	
	26-50																																					3	2	
	51-75																																							
	>75																																							
Sharjah ...	6-25	29		2	3	9	2		4		6	28	1		1	1	2	1	11	3	1	28				4			5	7		17					1	1	2	
	26-50							1	1						1	1	1		1	2							3	1	6	2								4	6	
	51-75																		1																					
	>75																																							

*Only on 10 days in the month, pilot balloon ascents were made in the late night; on the remaining days ascents were made in the morning. Visibility observations in the late were recorded only on days of ascent.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
2										1 — 10						1	1	2	1	23						1	25	2			Allahabad (Bamrauli)
						1	1			9 or 10						1				2											
2										1 — 10					1	1	1	1	1	23							27	1			Bahrain
						1	1			9 or 10																					
16	1					3	4	1		1 — 10							2		1	25							17	11			Bombay (Juhu)
				1	1	3	2			9 or 10																					
1										1 — 10	2							1	2	23			2			22	4				Calcutta (Dum Dum)
							1			9 or 10	2									2											
4										1 — 10					1	1	4			22						4	24				Gaya
							2	1		9 or 10						1				5											
4								1		1 — 10					1	1	3	1		22				1		3	19	5			Jacobabad
						1	1	1		9 or 10					1	1	2	1		7											
5	1						1	1		1 — 10					1	7	2			18						5	23				Jiwani
						1	1			9 or 10										5											
0						1	2	1		1 — 10							1	5		22						1	1	26			Jodhpur
						1	2	1																							
							2			9 or 10								2		7											
3										1 — 10					3	6				19							2	26			Karachi (Drigh Road)
						1	1	1		9 or 10					2					6											
5										1 — 10								6	2	20							2	25	1		Madho Sagar (Gwalior).
							4																								
						2				9 or 10										11											
2	2						1	1		1 — 10							1	4	1	22							16	12			New Delhi
						1	5	1																							
							1			9 or 10								2		7											
3								1		1 — 10								1		9						1	7	2			*Raj Samand (Kankroli).
						2	2																								
							1			9 or 10																					
5					1			1		1 — 10					1		1	6		20							5	17	6		Sharjah
							1	1																							
							1			9 or 10										2											

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

March 1939

Supplement to the Monthly Weather Report, March 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 23rd July 1940.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U25

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6-25	31	4		1		1		3	7	15	31	7		1	1	1	2	2	5	
ϕ = 27° 08′ N ...	26-50												3						1	6	
λ = 78° 01′ E ...	51-75												1					1			
H_s = 182 metres ...	>75																				
Ahmedabad ...	6-25	31		4	2			1		3	21	31	1	4	3	1			1	1	
ϕ = 23° 02′ N ...	26-50												3	4	4					6	
λ = 72° 35′ E ...	51-75													1	2						
H_s = 55 metres ...	>75																				
Bangalore ...	6-25	31		2	6	11		7	1	1	3	31		1	3	3	8	4	2	1	
ϕ = 12° 58′ N ...	26-50														5	3		1			
λ = 77° 35′ E ...	51-75																				
H_s = 936 metres ...	>75																				
Bhuj ...	6-25	31						1	4	1	25	31	4	4	1	1				3	
ϕ = 23° 15′ N ...	26-50												2	8					2	4	
λ = 69° 48′ E ...	51-75																		2		
H_s = 113 metres ...	>75																				
Chittagong ...	6-25	31	7	4		2					18	30	8	1			3	2	7	4	2
ϕ = 22° 21′ N ...	26-50												2	1							
λ = 91° 50′ E ...	51-75																				
H_s = 21 metres ...	>75																				
Dacca ...	6-25	31					1	2			28	29	5	1		1	2	4	7	3	
ϕ = 23° 43′ N ...	26-50												2					1	1	2	
λ = 90° 24′ E ...	51-75																				
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6-25	31	1	5			1	3	1		19	29	2	1	1		1	13		4	3
ϕ = 31° 21′ N ...	26-50								1										3	1	
λ = 69° 27′ E ...	51-75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6-25	31	2		4	4	1	1	2	1	16	31	2	2	2	6	5	1			
ϕ = 17° 26′ N ...	26-50														1	4	6	1	1		
λ = 78° 27′ E ...	51-75																				
H_s = 555 metres ...	>75																				
Jubbulpore ...	6-25	31	1	1		1			1		27	31	3	4	1	1	2	2	1		2
ϕ = 23° 10′ N ...	26-50												2	6	2		2	1		2	
λ = 79° 57′ E ...	51-75																				
H_s = 402 metres ...	>75																				
Lahore ...	6-25	31		1		1		2	4	2	21	29	1	3	1	2		2	1	11	2
ϕ = 31° 35′ N ...	26-50												1			1		1		2	
λ = 74° 20′ E ...	51-75																1				
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6-25																				
ϕ = 26° 13′ N ...	26-50																				
λ = 78° 08′ E ...	51-75																				
H_s = 233 metres ...	>75																				
Madras ...	6-25	31									31	31			2	15	9				1
ϕ = 13° 04′ N ...	26-50																2	2			
λ = 80° 15′ E ...	51-75																				
H_s = 13 metres ...	>75																				
Malegaon ...	6-25	31		2					1	14	14	31	7	4	6					5	
ϕ = 20° 33′ N ...	26-50													3	3		1			2	
λ = 74° 32′ E ...	51-75																				
H_s = 443 metres ...	>75																				
Mangalore ...	6-25	31		6	16						9	31	10	1			4		1	12	3
ϕ = 12° 52′ N ...	26-50																				
λ = 74° 51′ E ...	51-75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6-25	31		2		3	3	2		1	20	31	4	3	1	1		1	2	9	8
ϕ = 34° 01′ N ...	26-50														1					1	
λ = 71° 35′ E ...	51-75																				
H_s = 363 metres ...	>75																				
Poona ...	6-25	31						17		1	13	31	8	9	3					8	
ϕ = 18° 32′ N ...	26-50													3							
λ = 73° 51′ E ...	51-75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6-25	31	2	2		1		1		5	20	31	2	11	8	2			3	3	1
ϕ = 11° 40′ N ...	26-50													1							
λ = 92° 43′ E ...	51-75																				
H_s = 87 metres ...	>75																				
*Raj Samand (Kankroli)	6-25	18	1	1				1	1	11	2	18	1	1	2	3				3	1
ϕ = 25° 03′ N ...	26-50		1										2		1		1		2		
λ = 73° 53′ E ...	51-75												1								
H_s = 587 metres ...	>75																				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	
Agra ...	6-25	31	3			2		1	6	6		31	1					2	4	1	
ϕ = 27° 08′ N ...	26-50		2					1	2	8								2	12	9	
λ = 78° 01′ E ...	51-75																				
H_s = 182 metres ...	>75																				
Ahmedabad ...	6-25	31	4	5	4				3	4	1	31	2	3	1	2	1	5	4	4	
ϕ = 23° 02′ N ...	26-50		1	3	4				1	1									8		
λ = 72° 35′ E ...	51-75																		1		
H_s = 55 metres ...	>75																				
Bangalore ...	6-25	31		1	5	10	5	6	3			29		2	2	4		1	3	2	
ϕ = 12° 58′ N ...	26-50				1									7	6	1					
λ = 77° 35′ E ...	51-75																				
H_s = 936 metres ...	>75																				
Bhuj ...	6-25	31	8	3		1		1	2	3		31		2				3	8	1	
ϕ = 23° 15′ N ...	26-50		1	5					5	2			4	1				2	9		
λ = 69° 48′ E ...	51-75																		1		
H_s = 113 metres ...	>75																				
Chittagong ...	6-25	30	6	1			1	5	5	10	2	27	4	1				2	4	4	
ϕ = 22° 21′ N ...	26-50																	1	6	5	
λ = 91° 50′ E ...	51-75																				
H_s = 21 metres ...	>75																				
Dacca ...	6-25	28	3	1				2	8	3	2	27						2	2	5	
ϕ = 23° 43′ N ...	26-50								4	5								3	11	2	
λ = 90° 24′ E ...	51-75																		1	1	
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6-25											29	2			1	2	11		5	
ϕ = 31° 21′ N ...	26-50																	1	3	1	
λ = 69° 27′ E ...	51-75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6-25	31	2	2	2	6	5	1	1			31	2	1	9	4	2	4	1	2	
ϕ = 17° 26′ N ...	26-50				1	4	6	1					1				1	2			
λ = 78° 27′ E ...	51-75																				
H_s = 555 metres ...	>75																				
Jubbulpore ...	6-25	31	4	2	1	1	2	2	1	1	1	31		2	2	1	3	4	1	4	
ϕ = 23° 10′ N ...	26-50		4	5	2		1	2		2			1	1				1	7	2	
λ = 79° 57′ E ...	51-75																		1	1	
H_s = 402 metres ...	>75																				
Lahore ...	6-25	30	3	1	2	1	2	2	2	12		30	4		1	2	1	5	4	9	
ϕ = 31° 35′ N ...	26-50					1		1		2							1			1	
λ = 74° 20′ E ...	51-75						1										1				
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6-25																				
ϕ = 26° 13′ N ...	26-50																				
λ = 78° 08′ E ...	51-75																				
H_s = 233 metres ...	>75																				
Madras ...	6-25	31		1	11	10	4					29	1	8	4			1	1		
ϕ = 13° 04′ N ...	26-50						5							11	3						
λ = 80° 15′ E ...	51-75																				
H_s = 13 metres ...	>75																				
Malegaon ...	6-25	31	6	7	3				1	4		31	1	4	5	2	1		7		
ϕ = 20° 33′ N ...	26-50			3	4		1			2			1	1		2	1	1	5		
λ = 74° 32′ E ...	51-75																				
H_s = 443 metres ...	>75																				
Mangalore ...	6-25	31	10	4	3	2	1		2	5	2	31	2	1	11	3		3		1	
ϕ = 12° 52′ N ...	26-50		1			1								1	7	1					
λ = 74° 51′ E ...	51-75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6-25	31	4	3	3	1		1	3	12	2	26	8	2	3	1			1	3	
ϕ = 34° 01′ N ...	26-50				1					1							1		1	5	
λ = 71° 35′ E ...	51-75																			1	
H_s = 363 metres ...	>75																				
Poona ...	6-25	31	6	7	3				1	12		31	3	5	2	2	2	2	3	3	
ϕ = 18° 32′ N ...	26-50			2											1			4	4		
λ = 73° 51′ E ...	51-75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6-25	28	3	4	5	5	2		1	4	3	23	2	5	5	3		1	1	1	
ϕ = 11° 40′ N ...	26-50			1									1	2		2					
λ = 92° 43′ E ...	51-75																				
H_s = 87 metres ...	>75																				
*Raj Samand (Kankroli)	6-25	18	2	1	3	3				3		18	2			4	1		2	3	
ϕ = 25° 03′ N ...	26-50		1		1		1		2										1	3	
λ = 73° 53′ E ...	51-75		1																2		
H_s = 587 metres ...	>75																				

*Only on 18 days in the month pilot balloon ascents were made in the morning. On the remaining days ascents were made in the late night. Visibility observations were, however, recorded the morning throughout the month.

3-0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
30							1	1		1 — 10									2	29					1	7	23				Agra
						2	12	7																							
						3	4			9 or 10										3											
27				1		2	6	2		1 — 10								2		29								31			Ahmedabad
					1	3	7	2																							
						1	1	1		9 or 10										1											
25	1	8	3		1				1	1 — 10						4	5	2		20						4	25	2			Bangalore
		10	1																												
										9 or 10						2				4											
29	1	1				3	4	1		1 — 10						2	3	1		25							18	13			Bhuj
						6	11	1																							
							1			9 or 10																					
26	1					3	1	2		1 — 10	4		1	1	1	4	1			19				1	1	2	17	10			Chittagong
						2	5	5																							
							1	6		9 or 10	4			1		1				7											
27						1	1			1 — 10	2	1			2			1		25			2		4	1	24				Dacca
						3	9	4																							
						1	5	2		9 or 10	2	1								4											
								1																							
26	1				1	1	4	1	1	1 — 10				1	4	1		5	4	16		1		1		3	3	22	1		Fort Sandeman
	1					3	4	3																							
	1					1		4		9 or 10				1	2	1		1	1	13											
30	3		2		1	5	5	8		1 — 10				1	3		1		4	22						3	2	13	7	6	Hyderabad (Begumpet)
	3	1				2																									
										9 or 10				1						1											
22			1				1	3	1	1 — 10									3	28						2	4	25			Jubbulpore
						1	4	6																							
							5			9 or 10										2											
30	2		1	1	2	1	5	2	2	1 — 10							1	1	1	28						4	8	17	2		Lahore
					1	1	5	4																							
					2		1			9 or 10									1	4											
										1 — 10															2	2	2	22	3		Madho Sagar (Gwalior)
										9 or 10																					
25	4	2		1	1			4		1 — 10						2	9	2		18					3	3	15	8	2		Madras
	5	4	4																												
										9 or 10										4											
29			1	2	3	4	5	1		1 — 10									3	28						5	4	11	11		Malegaon
				1	1	8	1	1																							
						1				9 or 10										1											
30		3	7	4	3	1			1	1 — 10					1	5	1	2	10	12					2	8	9	7	5		Mangalore
		6	4		1																										
										9 or 10										1											
24	5	1	2		2	2	2	4	3	1 — 10						3	4	4	1	19						3	1	1	1	25	Peshawar
							1	2																							
										9 or 10						2	2			11											
30			3	6	6	2	1			1 — 10										30						1			30		Poona
					7	2	1																								
					2					9 or 10																					
15	1		4	3		2		1		1 — 10					1	14	11			5						1	17	13			Port Blair
	2			2																											
										9 or 10										13											
17					1	1	4	2		1 — 10							1			17						2	3	10	16		*Raj-Samand (Kankroli)
						2	4	1																							
							2			9 or 10										3											

TABLE 1—W

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Sambalpur ...	6–25	31	1		1					1	28	31	5	2	4		2	4	4	4		31	3	1		2	4	4	4	6	1	31	5			1	3	1	5	5
ϕ = 21° 28′ N ...	26–50												1	1	1	1							4			1											1	1	7	2
λ = 83° 58′ E ...	51–75												1							1										1									
H_s = 153 metres ...	>75																																							
Tezpur ...	6–25	31		5	9			1	1		15	30		1	9	6	2	1			1	30		3	9	2	3	7	2		1	31			1			11	7	
ϕ = 26° 37′ N ...	26–50													1	7				1						2			1										2	8	
λ = 92° 47′ E ...	51–75														1																									
H_s = 80 metres ...	>75																																							
Trichinopoly ...	6–25	31		8	2	1	1		1		18	31	2	1	12	8	3	2	3			31	1	3	8	7	4	3	2			30	1	1	10	1	2	1		1
ϕ = 10° 49′ N ...	26–50																								3									8	4					
λ = 78° 42′ E ...	51–75																																							
H_s = 88 metres ...	>75																																							
Trivandrum ...	6–25	31	15	5						2	9	30	3	3	2	2	1		1	12	2	30	5	3	4	5		1	1	9	1	29	1	1	8	4		1	2	
ϕ = 08° 29′ N ...	26–50																			4										1				6	5					
λ = 76° 57′ E ...	51–75																																	1						
H_s = 76 metres ...	>75																																							
Vizagapatam ...	6–25	31							3	1	27	31			4		2	10	8		2	30	1	1	3		7	6	4	2	3	29	4	4	1	1	4		2	6
ϕ = 17° 42′ N ...	26–50																	3	2									1	2					1				1			3
λ = 83° 18′ E ...	51–75																																							
H_s = 56 metres ...	>75																																							

TABLE 4—W

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)	6–25	31	2			4	1	4	7	4	9	31	2	3	1	1	3	2	2	6	1	31		3	2	1	2	3	1	5		26	1			1	2	4	4	2
ϕ = 25° 26′ N ...	26–50												1		1				2	5									2	10								1	3	3
λ = 81° 44′ E ...	51–75																			1										2										5
H_s = 98 metres ...	>75																																							
Bahrain ...	6–25	31	1	2	2	6	1	1		12	4	31	2	3	1		3	1	1	1	1	30	4	1		1	2	3	1		1	28	2					1	2	4
ϕ = 26° 14′ N ...	26–50		1			1							6		1	1	2			1			6				1			2			1					2	2	4
λ = 50° 35′ E ...	51–75												4			1	1	1								1	2	2		2							2	3	1	2
H_s = 14 metres ...	>75																										1													
Bombay (Juhu) ...	6–25	31	4	4	1	5				8	9	31	10	10	2					1	1	29	8	9	2					4		26	2	2	4	2		5	5	2
ϕ = 19° 07′ N ...	26–50												2	5									2	2						2					2				1		
λ = 72° 50′ E ...	51–75																																							
H_s = 5 metres ...	>75																																							
Calcutta (Dum Dum)	6–25	31		2	1		1	3	2	8	14	31	5	2				6	5	9		31	2	1	1	1		2	8	8	3	28	1					4	2	7
ϕ = 22° 38′ N ...	26–50												2	1				1					1					2	1	1								2	5	3
λ = 88° 27′ E ...	51–75																																						1	1
H_s = 5 metres ...	>75																																							
Gaya ...	6–25	31	1	1		3	1	8	7	3	6	31	3	1		2		3	7	5		31	2			2		1	6	6	1	29	1	1				3	6	1
ϕ = 24° 49′ N ...	26–50								1						1		1		4	2						1	1		4	4								2	5	6
λ = 85° 01′ E ...	51–75																			2									1	1									1	2
H_s = 117 metres ...	>75																													1										1
Jacobabad ...	6–25	31		1	6	1			1	1	21	31	1	2	4	4	3	3		5	2	30	2		1	7	2	4	3	3	3	30				1		4	9	4
ϕ = 28° 17′ N ...	26–50												1		4					1			1			2			1	1								2	7	1
λ = 68° 29′ E ...	51–75														1																							1	1	
H_s = 66 metres ...	>75																																							
Jiwani ...	6–25	31	1	13		2	1	2			11	31	1	4	4	2	3	3	4	1	3	29	3	3	2		2	6	3	4		27	2		1			3	4	2
ϕ = 25° 10′ N ...	26–50								1					3		2								1			1	2	2				2				1	3	5	2
λ = 61° 47′ E ...	51–75																		1																				1	
H_s = 5 metres ...	>75																																						1	
Jodhpur ...	6–25	31		14	1	3		3		2	4	31	2	5	3	2	1	1	1	1		31	4	2	1		3	1	5	3	1	30	3	2			1	2	3	4
ϕ = 26° 18′ N ...	26–50			2				2					2	2	4		2		4	1			1	3	2		1		2	1			1					1	8	2
λ = 73° 01′ E ...	51–75																											1										1	2	
H_s = 233 metres ...	>75																																							
Karachi (Drigh Road)	6–25	31	2	7		2		4	1	5	9	31	1	5	2	1	1	1	5	3		30	1	2		1	3	2	6	3	2	27	3	1				2	7	2
ϕ = 24° 53′ N ...	26–50								1				1		2		1		5	2					1				5	3			2				1	4	1	
λ = 67° 07′ E ...	51–75												1																1									1	1	
H_s = 29 metres ...	>75																																						1	
New Delhi ...	6–25	31	2		1	1		1	14	3	5	30	1				2	2	1	14	1	30	1						3	11	1	28	1				1		5	2
ϕ = 28° 39′ N ...	26–50									4			1						1	6			1				2	1	1	8							1	1	8	8
λ = 77° 15′ E ...	51–75																			1										1									1	
H_s = 227 metres ...	>75																																							
*Raj Samand (Kankroli)	6–25	13		2	3	3		2		2	2	13		3	3		1	1	1	2		13		3	3		2		1	2		13			1	1	2		3	2
ϕ = 25° 03′ N ...	26–50														1		1								1		1											2	1	
λ = 72° 53′ E ...	51–75																																						1	
H_s = 587 metres ...	>75																																							
Sharjah ...	6–25	31		8		8	2	4	2	2	4	30	1		2	5	2	2	6	1		31		2	1	4		3	3	3		27		1		1	1	3	2	1
ϕ = 25° 20′ N ...	26–50									1					1	2	2	3	2							1	5	1	5								1	6	3	3
λ = 55° 24′ E ...	51–75																1										2	1										1	3	
H_s = 10 metres ...	>75																																							

* Only 13 days in the month pilot balloon ascents were made in the forenoon. On the remaining days ascents were made in the afternoon.

UENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
24	2						2	3		1 — 10								2	7	22									31		Sambalpur
					1	3	4	5																							
						1	1	2		9 or 10										3											
22				1		3	1			1 — 10								2	7	22					1	5	21	4			Tezpur
							11																								
						1	3			9 or 10								1		7											
							2																								
23	1	7	1			1		1	1	1 — 10					5	1		2	8	15							6	16	8	1	Trichinopoly
	2	6	3																												
										9 or 10																					
28	1	7	2	2		1		1		1 — 10						3	4	1		25					2	12	17				Trivandrum
		5	6				3																								
										9 or 10						1				1											
27	6	3	1	1			2	5		1 — 10						2		2	1	26							3	28			Vizagapatam
	3	2			1			1																							
								2		9 or 10										1											

UENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

14							2			1 — 10								1	2	28						1	30				Allahabad (Bamrauli)
						2	4	3																							
							1	2		9 or 10										2											
13	1						3	1	1	1 — 10	1						2	1	4	23				1			11	19			Bahrain
						1	2	1																							
						1	1	1		9 or 10	1									7											
										1 — 10						5	3			23						1	27	3			Bombay (Juhu)
25			1	3	5	2	4																								
					4	2	3			9 or 10																					
					1																										
17						1	1			1 — 10						2		2	5	22					6	13	12				Calcutta (Dum Dum)
	1					2	4	4																							
							1	2		9 or 10										2											
							1																								
17						2	1			1 — 10							3		3	25						2	29				Gaya
							5	1																							
							2	4		9 or 10										8											
							2																								
25	2				1			1		1 — 10					1	1			1	28							1	30			Jacobabad
	2					1	8	3																							
							2	2		9 or 10						1				5											
						1	2																								
16	1						1	3		1 — 10					1	13	3			14					2	3	24	2			Jiwani
	2					3	4	1																							
										9 or 10							1			8											
								1																							
25	1					1	6	1		1 — 10								2	1	28						2	2	12	15		Jodhpur
	2						5	2																							
						1	4			9 or 10										5											
						1	1																								
17	1					1	2	3		1 — 10					3	7		1		20						1	9	17	4		Karachi (Drigh Road)
	3					1	2																								
						1	1	1		9 or 10					2					7											
								1																							
26					1		2	1		1 — 10								2		29				1		1	14	15			New Delhi
					1	1	7	6																							
							5	1		9 or 10										4											
						1																									
11					2	1	3			1 — 10										13											*Raj Samand (Kankroli)
						2	1																								
							2			9 or 10										2											
19	2		1			1	1	2		1 — 10					3	1	1	4		22				1			10	15	5		Sharjah
						1	2	3																							
						2	2	1		9 or 10							1			4											
							1																								

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31	4	1				2	10	10	4	31			1			1	6	16	1
	26–50																	1	2	2	
	51–75																		1		
	>75																				
Ahmedabad ...	6–25	31	1	5	3	1	4	2	2	6	7	30	2	6	4	2	1	3	6	1	2
	26–50													1					2		
	51–75																				
	>75																				
Allahabad (Bamrauli)	6–25	31	3	1		1		1	6	18	1	31	3	2			2		4	7	
	26–50																		4	3	
	51–75																			1	
	>75																				
Bahrain ...	6–25	31	4	3	4	5				12		31	1	3	1	1	3	2	1	1	
	26–50				1					2			4		1	2	2	1		3	
	51–75												2			1	1				
	>75												1								
Bangalore ...	6–25	31		7	5	7		2		3	5	29	1	3	11	3		1	1		3
	26–50				2										6						
	51–75																				
	>75																				
Bhuj ...	6–25	31	6	5	2		1	3	4	2	8	30	6	5	1		1	3	2	5	4
	26–50													2					1		
	51–75																				
	>75																				
Bombay (Juhu) ...	6–25	31						6	3	22		31	7	2				3	3	10	1
	26–50												2							3	
	51–75																				
	>75																				
Calcutta (Dum Dum)	6–25	31	2	2			1	7	3	9	7	31	3	2			2	2	9	8	1
	26–50												1						1	2	
	51–75																				
	>75																				
Chittagong ...	6–25	31	2				1	9	15	3	1	31	6					5	11	7	1
	26–50																	1			
	51–75																				
	>75																				
Dacca ...	6–25	31	3	1				6	2	2	17	31	2	1		1	2	7	8	5	1
	26–50												2					2			
	51–75																				
	>75																				
Fort Sandeman ...	6–25	31	2	2			1	8	3	2	12	31	1	1	1		5	7	2	5	3
	26–50								1									2	2	1	
	51–75																	1			
	>75																				
Gaya ...	6–25	31	2	1	1	2		1	8	7	2	30	3	1		2			7	5	1
	26–50							1	4	2									6	2	
	51–75																		1	2	
	>75																				
Hyderabad (Begumpet)	6–25	31			3	7	2	3	1	1	14	31		1	6	7	3	6		2	5
	26–50														1						
	51–75																				
	>75																				
Jacobabad ...	6–25	31			2	2	2		2	1	22	30	2		4	4	4	2	1	4	8
	26–50																	1			
	51–75																				
	>75																				
Jiwani ...	6–25	31		1	2	4	6	15	1		1	31	3	2	2	3	6	7	2		1
	26–50							1									2		3		
	51–75																				
	>75																				
Jodhpur ...	6–25	31		7	2	2	1	4	1	9	3	31	5	6	1	2		4	6	5	
	26–50							1	1									1	1		
	51–75																				
	>75																				
Jubbulpore ...	6–25	31	1	3					5	7	15	31	5	4			2	1	6	8	2
	26–50												1						1	1	
	51–75																				
	>75																				
Karachi (Drigh Road) ..	6–25	31		1	2	4		8	2	4	2	31	5	3	3		1	2	6	1	2
	26–50							6	1	1					1		1	1	5		
	51–75																				
	>75																				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	
Agra ...	6–25	31	1		1			1	6	10		28					1	1	6	6	
	26–50							1	2	9								1	8	4	
	51–75																				
	>75																				
Ahmedabad ...	6–25	31	3	7	2	3	1	4	6	2	1	31	2	3	2	1	1	2	4	6	
	26–50				1				1										6	1	
	51–75																		1		
	>75																				
Allahabad (Bamrauli)	6–25	31	3	1			2		4	7		29			1	1	1	2	4	2	
	26–50							1	5	8								1	8	5	
	51–75																			4	
	>75																				
Bahrain ...	6–25	31	4	1		2	2	1		2		24	3			1	1	1	3		
	26–50		4		1		4	2	2	3							1	3	3	5	
	51–75		1				1	1										1		1	
	>75																				
Bangalore ...	6–25	31	1	4	13	2	1	1	1	2	2	29	1	3	10		2		1	1	
	26–50				2									1	8						
	51–75																				
	>75																				
Bhuj ...	6–25	31	6	5	2			5	5	2	2	31	3	2	1		1	2	4	3	
	26–50			2					1	1				2				5	5	3	
	51–75																				
	>75																				
Bombay (Juhu) ...	6–25	31	12	1	2	4	3		3	4		30	1	1	2	4	5	2	7	2	
	26–50		1							1							1	1	3		
	51–75																				
	>75																				
Calcutta (Dum Dum)	6–25	31	1	3				4	9	11		31		1				2	9	5	
	26–50		1						1	1									3	8	
	51–75																	1	1	1	
	>75																				
Chittagong ...	6–25	31	9	1			3	2	6	10		30	3					4	8	8	
	26–50												1						2	4	
	51–75																				
	>75																				
Dacca ...	6–25	31	5				2	5	12	3		31	1					4	10	1	
	26–50							1	3									1	11	1	
	51–75																		2		
	>75																				
Fort Sandeman ...	6–25											31	2	2			5	4	4	3	
	26–50																	3	2	1	
	51–75																	1			
	>75																				
Gaya ...	6–25	30	1	1				2	8	5		27					1		4	2	
	26–50								10	3								1	8	7	
	51–75																		2		
	>75																		1		
Hyderabad (Begumpet)	6–25	31			7	7	3	6		2	5	31	1	2	5	2	7	6	2	2	
	26–50				1									1			1	1			
	51–75																				
	>75																				
Jacobabad ...	6–25	29	4	1		7	4	5	4		2	29					3	4	6	5	
	26–50						1	1										1	6	2	
	51–75																		1		
	>75																				
Jiwani ...	6–25	30		5	2		2	4	3	3	1	29	2					1	4	3	
	26–50						1	5	3	1			2					4	7	4	
	51–75																		1		
	>75																			1	
Jodhpur ...	6–25	31	4	5	2	1	1	3	9	3		31	3	1	1	1	3	1	4	2	
	26–50							2	1									3	6	3	
	51–75																	1			
	>75																				
Jubbulpore ...	6–25	31	5	4			2	2	5	7	2	31	3	1		2	1	4	3	7	
	26–50		1						2	1			1					1	3	4	
	51–75																	1			
	>75																				
Karachi (Drigh Road) ..	6–25	31	4	3	3	3	1	3	7	3		28	5		1			2	6		
	26–50							1	1	1			1					2	5	3	
	51–75																		2		
	>75																				

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
25	1					4	3			1 — 10							1		1	29					1	3	24	3			Agra
						2	8	3																							
							1	2		9 or 10										3											
						1																									
28			1	1		3	4	3	1	1 — 10								5	1	25								31			Ahmedabad
					1	1	9	3																							
							1			9 or 10										1											
17					1	3		2		1 — 10								5	4	22						4	24	3			Allahabad (Bamrauli)
						2	6																								
							3			9 or 10										2											
17	1					1	3			1 — 10					1		2	2	1	25						1	7	23			Bahrain
						1	4	1																							
						1	3	1		9 or 10							1			3											
							1																								
25		1	7		2	2	1		2	1 — 10							1	3	15	12							11	19	1		Bangalore
		5	5																												
										9 or 10																					
29	2					1	1	3	1	1 — 10							4	3		24							8	23			Bhuj
					1	4	9	5																							
							2			9 or 10																					
28		1	1	3	4	4	4	1		1 — 10							1		1	29							4	27			Bombay (Juhu)
				2		6																									
					1	1				9 or 10										1											
23						1	2	2		1 — 10						1	3	4	6	17						1	30				Calcutta (Dum Dum)
						4	3	6																							
							2	3		9 or 10										1											
28	1	1		1		1	3	5		1 — 10					2		6	1	2	20							2	29			Chittagong
						2	5	4																							
							1	4		9 or 10										1											
29						1	4	2		1 — 10						1	1	6	5	18						2	29				Dacca
						3	8	2																							
							6	1		9 or 10										6											
							1	1																							
26	4		1	1		1	2	7		1 — 10					2	1	3	10	3	12					2	1	7	20	1		Fort Sandeman
					1	3	3	1																							
								1		9 or 10					1	1		1		12											
							1																								
21						1	3	1		1 — 10						4	4			23						3	24	4			Gaya
						1	7	2																							
							1	2		9 or 10										3											
							2	1																							
29	6	6	1		2	6	3	4		1 — 10								4	17	10				1					4	26	Hyderabad (Begumpet)
						1																									
										9 or 10								1		2											
24	2		1			1	1			1 — 10						2				29						1	3	27			Jacobabad
						1	3	8																							
						2	2	1		9 or 10						2				7											
							1	1																							
20	2						2	3		1 — 10					1	10	1			19					2	1	20	8			Jiwani
	2					2	6	2																							
								1		9 or 10						1				6											
30	2		1			2	4	2	1	1 — 10								3	4	24						1	1	8	21		Jodhpur
						2	4	3																							
							7			9 or 10										1											
						1	1																								
24		1			1	1	3	3		1 — 10								2	13	16					1		4	24	2		Jubbulpore
	1				1	4	6	1																							
							1			9 or 10										2											
							1																								
22	2						1	2		1 — 10						3	6	2		20							4	20	7		Karachi (Drigh Road)
	2			1		2	3	2																							
	1					1	4			9 or 10.						1				6											
							1																								

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Lahore ...	6-25	31	4	2		1	2	1	5	6	10	31	2	1		3	1	5	3	13		31	3	1		3		6	2	10	1	30	3			1	3	5	3	7
	26-50														2		1								1	1	2	1								2	1	1	1	
	51-75																																				1			
	>75																																							
Madho Sagar (Gwalior)	6-25	31	1		2			6	8	10	4	31	1	2	1	1			7	14	1	31	1	1	2				4	17	2	29					1	1	9	5
	26-50																	1	2	1									3	1								2	6	5
	51-75																																							
	>75																																							
Madras ...	6-25	31			3	27					1	31		2	6	10	9	2				31	1	1	7	5	6	2	1	2	1	31	1	9	3				1	2
	26-50																1	1							3									8	5					
	51-75																																							
	>75																																							
* Malegaon ...	6-25	17		7	2	2		1	2	1	2	16	4	2	5	3			1		1	16	3	2	6	3			1		1	16		1	5	1	2	2		3
	26-50																																							
	51-75																																							
	>75																																							
Mangalore ...	6-25																																							
	26-50																																							
	51-75																																							
	>75																																							
New Delhi ...	6-25	31	1	2		1		2	3	13		31	1		1		1	2	5	15		31	2			1	1	1	5	12		31					2	1	6	7
	26-50									8					1				1	4					1				2	6							1	1	2	10
	51-75								1																														1	
	>75																																							
Peshawar ...	6-25	31	3	4		2				3	19	29	6	2	2	1	1		1	10	5	29	5	2	3		1			13	3	25	4	2		2	2		1	9
	26-50														1										1					1							1		1	3
	51-75																																							
	>75																																							
Poona ...	6-25	31	2	7	3	2	2		8	6	1	31	1	1	7	2	1	1	7	5	4	31	1	1	6	3	1	1	8	4	4	31		1	4	6		8	7	1
	26-50																1		1							1			1									1	1	
	51-75																																							
	>75																																							
Port Blair ...	6-25	31		12	15	3				1		31	1	10	7	1	1	1	2	2	3	30	5	7	4	1		1	1	7	3	25	1	8	3	3	2		2	2
	26-50													2	1									1									1	1		2				
	51-75																																							
	>75																																							
†Raj-Samand (Kankroli)	6-25	18	1		1	1			2	3	9	17	1	1	4		2	2	3	2	1	17	1	1	4		3		3	2	2	18	2		1		1		3	2
	26-50								1										1										1									2	3	1
	51-75																																							
	>75																																							
Sambalpur ...	6-25	31	2				1	4	6	3	15	30	4	2			2	2	11	5	4	31	3			1	3		12	6	5	31	4				1	2	7	5
	26-50																													1								1	1	7	2
	51-75																																						1	
	>75																																							
Sharjah ...	6-25	31	5	2				4	7	9		31		4	1	1	1	4	11	1	1	30		1		2	4	4	4	1		29	1		1		1	2		3
	26-50		3	1														4	3							1	1	6	5								3	5	3	4
	51-75																												1								1	1	3	
	>75																																							
Tezpur ...	6-25	31	1	3	4		1	8	4		10	31		1	4	2		6	5	1	4	31		1	5		3	4	8	1	2	25					1	8	6
	26-50														1	1		2	3									3	3									3	7
	51-75																	1											1											
	>75																																							
Trichinopoly ...	6-25	31	2	15	4	1	1			2	6	31	1	6	15	5	2		1	1		31	1	5	13	5	3				2	30	1	7	5	3	2			1
	26-50														2										2									7	3						
	51-75																																	1						
	>75																																							
Trivandrum ...	6-25																																							
	26-50																																							
	51-75																																							
	>75																																							
Vizagapatam ...	6-25	31			3	6	19	2			1	31		1	2	1	10	7	3		4	31	2	3	3	1	3	5	7	1	4	31	4	6	2		1	3	3	2
	26-50														1			2										2						1	1			1		1
	51-75																																							
	>75																																							

* Afternoon ascents were started from 15-3-1939. † Only on 18 days in the month, pilot balloon ascents were made in the afternoon; on the remaining days ascents were made in forenoon. Visibility observations were, however, recorded in the afternoon throughout the month.

...UENCY (AFTERNOON)											TABLE 8—FREQUENCY OF LOW CLOUD HEIGHTS (AFTERNOON)										TABLE 9—FREQUENCY OF VISIBILITY (AFTERNOON)										
3·0 km. a. s. l.											Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C			0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
24	1 1		1	1	2	1 4 2	3 2	4 2		1 — 10									5	2	24					1		3	24	3		Lahore
										9 or 10									1		7											
25	1					2	6 5 5	2 1 1		1 — 10									3	2	26						1	2	20	8		Madho Sagar (Gwalior)
						1		1		9 or 10											3											
28	5 5	6 5	3		1	1	1	1		1 — 10								5	2		24							1		30		Madras
										9 or 10											4											
15				4	1	2 1	3	2 1	1	1 — 10								1		13	3						4	3	14	10		* Malegaon
										9 or 10											1											
										1 — 10																	1	4	18	8		Mangalore
										9 or 10																						
23					1	1 1 1	6 6 3	1 2 1		1 — 10								1	1	2	27							7	24			New Delhi
										9 or 10											6											
23	2	1	1	1	1 1	4	2	3 2 1	4	1 — 10						4	1	3	8	2	13					1		4		2	24	Peshawar
										9 or 10						3	1	1			14											
31	2	2		6	2	7 5 3	2	2		1 — 10										8	23									31		Poona
										9 or 10																						
16	2	5	2	3 1	1		1		1	1 — 10							7	20			4						2	12	17			Port Blair
										9 or 10							1				10											
18	1					2 1	3 7 1	1 1 1		1 — 10										5	13						1	2	11	17		† Raj Samand (Kankroli)
										9 or 10											2											
28	4		•			1 2	3 7 1	4 3 3		1 — 10									4	12	15								6	25		Sambalpur
										9 or 10											1											
20	2	1				3 1	4 2 1	1 3 2		1 — 10									6	2	23						1	13	12	5		Sharjah
										9 or 10											3											
22						3 1 3	2 5 6 1		1	1 — 10									1	14	16					1	4	9	17			Tezpur
										9 or 10											7											
25	2 1	2 11	2 2 1		1	1		1	1	1 — 10									21	2	6								4	20	7	Trichinopoly
										9 or 10																						
										1 — 10																		6	25			Trivandrum
										9 or 10																						
30	2 7	4 2	1	1	2	1	3 2	2 3		1 — 10								2			29								9	21	1	Vizagapatam
										9 or 10											1											

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6-25	31	3				1		1	8	18	31	5		3	1	1	1		9	
	26-50												3							6	
	51-75																			2	
	>75																				
Bahrain ...	6-25	31	4		3	5		1	1	8	7	31	7	1		2	2	4	1	1	
	26-50		1							1			5			2	2			3	
	51-75												1								
	>75																				
Bombay (Juhu) ...	6-25	31	3	1					1	4	22	28	9	1					2	7	1
	26-50												7	1							
	51-75																				
	>75																				
Calcutta (Dum Dum) ...	6-25	31	2	1		1		10		6	11	31	3	1		2		4	9	6	1
	26-50																	2	2	1	
	51-75																				
	>75																				
Gaya ...	6-25	31		2	2		5	7	6	1	8	30	3			4		1	4	11	1
	26-50																			4	
	51-75																			2	
	>75																				
Jacobabad ...	6-25	31	2	1	6					4	18	31		1	6	3	1	6	4	2	3
	26-50												2							3	
	51-75																				
	>75																				
Jiwani ...	6-25	31	2	4	4			3	3	1	14	30	3			2	6	6	3	5	1
	26-50												1					1	1		
	51-75																		1		
	>75																				
Jodhpur ...	6-25	31	1	19				7	1	1	1	31	1	5	2	2	1	1	4	3	1
	26-50			1										4		1		2	1	2	
	51-75																			1	
	>75																				
Karachi (Drigh Road) ...	6-25	31	1	5	1			2	6	5	10	30	2	2	1	2	2	1	6	6	
	26-50									1									6	2	
	51-75																				
	>75																				
Madho Sagar (Gwalior).	6-25	31				1	1	8		5	16	31	6	7		1		1	3	6	
	26-50												1			1		1	1	3	
	51-75																				
	>75																				
New Delhi ...	6-25	31	3		1		1		3	13	9	31	1	1			4		2	17	
	26-50									1										6	
	51-75																				
	>75																				
*Raj Samand (Kankroli).	6-25	13	1	1				1	1	4	5	13	2	3	1				2	2	
	26-50																	1	1	1	
	51-75																				
	>75																				
Sharjah ...	6-25	31		3	3	12	1	3	1	3	2	31	1	2	3	1		1	10	1	3
	26-50					1	1			1						1	4		1	1	
	51-75																	1			
	>75																1				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)...	6-25	31	3	2	1		2	1	2	7	2	24	1				1	4	2	1
	26-50		1						3	4									8	4
	51-75								1	2									2	1
	>75																			
Bahrain ...	6-25	30	5			1	1	6		2	1	22						1	4	3
	26-50		4			1	3	1		4							1	2	5	3
	51-75		1															1	2	
	>75																			
Bombay (Juhu) ...	6-25	29	20	2					1	4		26	2	2	1	1	2	7	6	
	26-50		2															2		
	51-75																			
	>75																			
Calcutta (Dum Dum) ...	6-25	31	1		2	1	1	4	8	10	1	16						1	5	5
	26-50									3								2	1	2
	51-75																			
	>75																			
Gaya ...	6-25	30	2		1	1	1	2	5	7		18						3	5	
	26-50						1		5	4								1	5	4
	51-75									1										
	>75																			
Jacobabad ...	6-25	31	2		1	1	3	5	6	5	2	23						6	6	4
	26-50							3	1	2								1	3	3
	51-75																			
	>75																			
Jiwani ...	6-25	29	3	1	1	2	2	5	5	1	3	21					1	2	3	4
	26-50						1	3	1	1			1					5	2	1
	51-75																			1
	>75																			
Jodhpur ...	6-25	31	3	2		1	3	3	7	3	1	27	1					3	8	4
	26-50			2				1	2	2								2	6	3
	51-75							1												
	>75																			
Karachi (Drigh Road) ...	6-25	30	1	1	1	1		2	11	5	3	18	3					2	4	1
	26-50								4	1			1					2	2	2
	51-75																			
	>75																			
Madho Sagar (Gwalior).	6-25	30	4	3		1			9	6		27						1	9	2
	26-50					1		1	1	4								2	7	6
	51-75																			
	>75																			
New Delhi ...	6-25	31					2		6	13	1	28	1					3	4	3
	26-50							2	2	5								1	8	6
	51-75																	1	1	
	>75																			
*Raj Samand (Kankroli).	6-25	13	2	2	1				3	2		13	1					1	5	
	26-50			1				1		1									3	1
	51-75																	1		
	>75																			
Sharjah ...	6-25	30	1	1	1	1	5	3	5	3		18			1		2	2	1	3
	26-50							3	3	1								2	3	1
	51-75						1	1											2	
	>75						1													

*Only on 13 days in the month, pilot balloon ascents were made in the late night; on the remaining days ascents were made in the morning. Visibility observations in the late
were recorded on days of ascent only.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
8						1	1	1		1 — 10							1	3	2	25							30	1			Allahabad (Bamrauli)
							2	1																							
						1		1		9 or 10										2											
7								1		1 — 10					1	1	1	2		26						1	30				Bahrain
							5	1																							
										9 or 10						1				1											
21			1	4	1	4	2		1	1 — 10					1	7	2	1	1	19							20	11			Bombay (Juhu)
				2		3	3																								
										9 or 10					1					1											
1						1				1 — 10					1	1		1		28		1	2	1		22	5				Calcutta (Dum Dum)
										9 or 10																					
6						1	1			1 — 10					1	1	3			26						4	26	1			Gaya
						1	3																								
										9 or 10										3											
12							2	5		1 — 10								2	2	27						3	17	11			Jacobabad
							4	1																							
										9 or 10								2	2	6											
9	3						1	1		1 — 10					1	9	1			20					1	3	27				Jiwani
						1	1	2																							
										9 or 10						1				4											
17						1	6	1		1 — 10								3		28						1	2	28			Jodhpur
						1	4	2																							
						1	1			9 or 10										2											
8			1			1				1 — 10					4	4				23						1	8	22			Karachi (Drigh Road)
	2						1	2																							
						1				9 or 10										2											
23	1					2	5	1		1 — 10								2	3	26					2	2	2	21	4		Madho Sagar (Gwalior).
						1	8	2																							
							2	1		9 or 10										6											
16						2	2	2		1 — 10								1		30						2	19	10			New Delhi
					1	1	5	3																							
										9 or 10																					
6							4			1 — 10									2	11						4	9				Raj Samand (Kankroli).
							2																								
										9 or 10										1											
10		1			1			1		1 — 10						1		2	1	27		1				2	10	17	1		Sharjah
						2	3	2																							
										9 or 10										3											

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MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

April 1939

Supplement to the Monthly Weather Report, April 1939

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Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:
The 19th August 1940.

C. W. B. NORMAND,
Director-General of Observatories.

STATION.	Speed limits (km./hr.)	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Agra ...	6–25	30	2			1		2	4	8	13	30	4	2	2		1		1	1		30	6		2				1	3	1	30				1	1	1	4	2
ϕ = 27° 08′ N ...	26–50												10				1		1	5			8					1	1	4								1	11	7
λ = 78° 01′ E ...	51–75												2										1							2									1	1
H_s = 182 metres ...	>75																																								
Ahmedabad ...	6–25	30		1				1		2	26	30	5	1	1					1		30	8	3	1				2	9		30	2		1		3	3	3	2
ϕ = 23° 02′ N ...	26–50												5	1					3	10								1	1	5							2	9	4	
λ = 72° 35′ E ...	51–75																			3																					
H_s = 55 metres ...	>75																																								
Bangalore ...	6–25	30		1	3	8	1	7	5	1	3	29			5	2	4	7	3	1		29			2	9	3	6	4	2		23		2	4	1	3		1	
ϕ = 12° 58′ N ...	26–50			1									1		2	2	1		1				1					1	1					4	7					
λ = 77° 35′ E ...	51–75																																								
H_s = 936 metres ...	>75																																								
Bhuj ...	6–25	30							4	3	23	30	1						3	3		30	5			1	1	2	2	4	1	29	3		1	1	2	4	1	2
ϕ = 23° 15′ N ...	26–50												4						8	10			1	1				2	4	5						1		6	4	
λ = 69° 48′ E ...	51–75																		1										1										1	
H_s = 113 metres ...	>75																																								
Chittagong ...	6–25	30				9	2				19	29				1	4	9				27					2	3	3	1		20						1	5	4
ϕ = 22° 21′ N ...	26–50																7	8										17		1									2	6	2
λ = 91° 50′ E ...	51–75																																								
H_s = 21 metres ...	>75																																								
Dacca ...	6–25	30				1	3	5		1	20	25						1			1	19						2	1			16							3	
ϕ = 23° 43′ N ...	26–50																	13	4	2								3	9	3								1	12	
λ = 90° 24′ E ...	51–75																	4												1										
H_s = 21 metres ...	>75																																								
Fort Sandeman ...	6–25	30		1	1	3	1	2			22	30	3	3	2		2	4	7	3	4											30	1	2	1	1	1	3	9	6
ϕ = 31° 21′ N ...	26–50																		1	1																			1	2
λ = 69° 27′ E ...	51–75																																								
H_s = 1421 metres ...	>75																																								
Hyderabad (Begumpet).	6–25	30				4	1	5	3	1	16	30				4	4	2	1	2		30				4	4	2	1	2		29	1	6	3	5	3	3	2	2
ϕ = 17° 26′ N ...	26–50												1			4	6	3	2	1			1			4	6	3	2	1					1	1	1			
λ = 78° 27′ E ...	51–75																																								
H_s = 555 metres ...	>75																																								
Jubbulpore ...	6–25	30									30	30	2	8	6	3	2	1	2			30	5	6	4	3	1		2		30	1	1			1	1	11	6
ϕ = 23° 10′ N ...	26–50												1	2					2	1			1	1	2		1		3	1						1	3	3	2
λ = 79° 57′ E ...	51–75																																								
H_s = 402 metres ...	>75																																								
Lahore ...	6–25	30	2	3	1						24	30	8	4	3	1			1	8		30	4	2	3	4				8	1	30	5			2	1	3	3	6
ϕ = 31° 35′ N ...	26–50												2			2							2			1				4						1			1	6
λ = 74° 20′ E ...	51–75																			1			1																	
H_s = 221 metres ...	>75																																								
Madho Sagar (Gwalior).	6–25	30				1	1	5		3	20	30	3	4	3	2				1		30	5		2	3			1	3		30				1	2	1	2	4
ϕ = 26° 13′ N ...	26–50												10	1	1				2	2			6		1	1			1	5							1	1	14	3
λ = 78° 08′ E ...	51–75												1										1							1									1	
H_s = 233 metres ...	>75																																								
Madras ...	6–25	30	1			1	2	1			25	30				3	9	1		1	1	23			2	4	7	6	1	1		27	4	5	1	1		1		
ϕ = 13° 04′ N ...	26–50													1		1	7	6							1	1	4	1				1	2	7	2	1				
λ = 80° 15′ E ...	51–75																							1										1						
H_s = 13 metres ...	>75																																								
Malegaon ...	6–25	30		1					6	17	6	30	9	1					4	8		30	11	2					4	5		30	1	1	2	2	2	4	8	4
ϕ = 20° 33′ N ...	26–50												3		1					4			3		1					4								1	2	1
λ = 74° 32′ E ...	51–75																																								
H_s = 443 metres ...	>75																																								
*Mangalore ...	6–25	23	2	4	5						12	23	8						2	4	6	22	7		2		2		4	5	1	22	1	2	5	3			1	1
ϕ = 12° 52′ N ...	26–50												2					1					1										2	1	2					
λ = 74° 51′ E ...	51–75																																1							
H_s = 40 metres ...	>75																																								
Peshawar ...	6–25	30		1		2		7		5	15	30	1	7	1		1	2	1	6	5	30	1	6	2			1	5	6	3	30	5	5		3		1	1	5
ϕ = 34° 01′ N ...	26–50																		1	3									1	3			2	1		1				2
λ = 71° 35′ E ...	51–75																			2										2										2
H_s = 363 metres ...	>75																																								
Poona ...	6–25	30	1				1	10	1	3	14	30	9	4		1		2	1	7	2	30	4	4			1	2	3	11	2	29	4	3	2	3	1	1	6	3
ϕ = 18° 32′ N ...	26–50																	1	1	2									2	1				2				2	2	
λ = 73° 51′ E ...	51–75																																								
H_s = 588 metres ...	>75																																								
Port Blair ...	6–25	30		4	1	1			9	2	13	30	4	3	7	1	1	1	8	2	3	29	2		7	3	1	2	7	1	5	24	1	2	3	7	2	2	1	2
ϕ = 11° 40′ N ...	26–50																								1										1	1					
λ = 92° 43′ E ...	51–75																																								
H_s = 87 metres ...	>75																																								
†Raj Samand (Kankroli)	6–25	19		1					3	9	5	19	1	3	2	2	1		3	2	1	19	1	3	2	2	1		2	2	1	19	2					5	5	
ϕ = 25° 03′ N ...	26–50									1			1							3			1							4								1	2	
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								

* Wind frequency tables prepared from 23 observations made in the morning.

† Only on 19 days in the month ascents were made in the morning. On the remaining 11 days ascents were made in the late night. Visibility observations were, however, recorded in the morning throughout the month.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
30						1				1 — 10										30						5	25				Agra
						5	8	2																							
						3	9	2		9 or 10										6											
24						4		1	1	1 — 10										30						1	1	28			Ahmedabad
						9	4																								
						4	1			9 or 10																					
18		2	1		1					1 — 10			2	1	7	3	1	4		12							16	11	2	1	Bangalore
		11	2																												
			1							9 or 10			2	1	2	1				14											
26	2				2	6	5	2		1 — 10					1		1	1		27						2	1	27			Bhuj
						4	3																								
						1	1			9 or 10										1											
14							2			1 — 10				1	16	4	3			6							5	25			Chittagong
	1						7	3																							
								1		9 or 10					3	1				7											
10								1		1 — 10				4	14	1		1		10							30				Dacca
							5																								
							2			9 or 10				1	3					7											
							1	1																							
29	1			1	1	3	4	4		1 — 10							4	4	1	21						3	6	21			Fort Sandeman
					2	2	6	4																							
								1		9 or 10								1	1	6											
28	4	8	2	1	5	1		1	3	1 — 10					1		1		4	24						1	4	10	9	6	Hyderabad (Begumpet)
	1	1	1																												
										9 or 10										4											
26	1					1	3	1		1 — 10								1	1	28							11	19			Jubbulpore
						6	11																								
							3			9 or 10										3											
29	1	1		1		1	6	4		1 — 10										30					2	2	12	14			Lahore
					1	2	4	7																							
						1				9 or 10										4											
24						2				1 — 10								2	3	25							6	24			Madho Sagar (Gwalior)
						3	7	2																							
						3	6	1		9 or 10																					
25		3	1	3	1	1				1 — 10						3	8			19						1	2	9	18		Madras
		9	3		1																										
		2	1							9 or 10						1	1			13											
28			1		7	5	3			1 — 10									10	20						1		16	13		Malegaon
					3	7																									
						1	1			9 or 10										1											
19		2	4							1 — 10					7	7	6	5	1	4						1	9	20			*Mangalore
		5	6																												
			1							9 or 10						1				9											
	1																														
30	2	4	2		2	2	5	5		1 — 10							1	5	3	21							1	2		27	Peshawar
	1				2		1																								
	1			1	1					9 or 10										6											
								1																							
26		1	5	5	3	1			2	1 — 10						1		1	1	27									30		Poona
			2	1	1	5																									
										9 or 10						1		1		5											
13		4	2	4						1 — 10						9	17	1		3							16	14			Port Blair
	1		1	1																											
										9 or 10										23											
17						1	2	2		1 — 10									1	18							3	9	18		†Raj-Samand (Kankroli)
						6	3																								
						3				9 or 10										1											

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Sambalpur ...	6–25	30	1								29	30	2	3	2	4	1	4	2	2	
φ = 21° 28′ N ...	26–50													1			1	6	2		
λ = 83° 58′ E ...	51–75																				
H_s = 153 metres ...	>75																				
Tezpur ...	6–25	30		11	15			1			3	30			4	2	1	2	3	1	
φ = 26° 37′ N ...	26–50														15	1					
λ = 92° 47′ E ...	51–75														1						
H_s = 80 metres ...	>75																				
Trichinopoly ...	6–25	30		4			1	1	3	2	19	29		1	2	4	6	5	2		2
φ = 10° 49′ N ...	26–50																1		5		
λ = 78° 42′ E ...	51–75																		1		
H_s = 88 metres ...	>75																				
*Trivandrum ...	6–25	27	9	9						4	5	26	1	1	1			1	3	10	3
φ = 08° 29′ N ...	26–50																			5	
λ = 76° 57′ E ...	51–75																			1	
H_s = 76 metres ...	>75																				
Vizagapatam ...	6–25	30						5	2	1	22	30			1		1	6	2		
φ = 17° 42′ N ...	26–50																	17	1		
λ = 83° 18′ E ...	51–75																	2			
H_s = 56 metres ...	>75																				

STATION.	1·0 km. a. s. l.										2·0 km. a. s. l.									
	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Sambalpur ...	30	4	3			2	7		2		30	1		1		1	2	10	6	
φ = 21° 28′ N ...			1				5	5	1								1	5	2	
λ = 83° 58′ E ...																				
H_s = 153 metres ...																				
Tezpur ...	30			5	4	3	8	3			27							2		
φ = 26° 37′ N ...				1			3	2									1	12		
λ = 92° 47′ E ...								1										11		
H_s = 80 metres ...																		1		
Trichinopoly ...	29		2	2	3	8	8	3		1	27		8	7	3	2				
φ = 10° 49′ N ...								1					4	1						
λ = 78° 42′ E ...								1											1	
H_s = 88 metres ...																				
*Trivandrum ...	26	4	5				1	2	10		26	6	10	4			1	1		
φ = 08° 29′ N ...									4				2	1					1	
λ = 76° 57′ E ...																				
H_s = 76 metres ...																				
Vizagapatam ...	29					3	9	4	1		29	5		1	4	3	2	3	5	
φ = 17° 42′ N ...		1					7	4							2					
λ = 83° 18′ E ...																				
H_s = 56 metres ...																				

TABLE 4—W

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)	6–25	30		1		1		3	10	10	5	30	3		1	1		1	5	7	1
φ = 25° 26′ N ...	26–50												1						1	9	
λ = 81° 44′ E ...	51–75																				
H_s = 98 metres ...	>75																				
Bahrain ...	6–25	30	3	1		7	1	1	4	11	1	30	3	2		1	1	1	2	1	
φ = 26° 14′ N ...	26–50		1										6	1	1	1	3	1	1	2	
λ = 50° 35′ E ...	51–75												2					1			
H_s = 14 metres ...	>75																				
Bombay (Juhu) ...	6–25	30	2	1	1			10		13	3	30	11	6	1	1	3	1		3	1
φ = 19° 07′ N ...	26–50												3								
λ = 72° 50′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Calcutta (Dum Dum)	6–25	30	1	1				21	1	2	4	30	1					6	10	6	
φ = 22° 39′ N ...	26–50																	3	2	2	
λ = 88° 27′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Gaya ...	6–25	30					3	8	14	3	1	30	1				1	3	7	9	1
φ = 24° 49′ N ...	26–50								1										5	3	
λ = 85° 01′ E ...	51–75																				
H_s = 117 metres ...	>75																				
Jacobabad ...	6–25	30	3	1	5	3				3	15	30	2	2	3	2	2	2	2	1	2
φ = 28° 17′ N ...	26–50												3	1	2	2				3	
λ = 68° 29′ E ...	51–75														1						
H_s = 66 metres ...	>75																				
Jiwani ...	6–25	30	1	4			1	6	4	2	12	30	2	5	1	1	2	3	7	4	
φ = 25° 10′ N ...	26–50													2					3		
λ = 61° 47′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Jodhpur ...	6–25	30		7	3	1	1	8	3	1	6	30	4	3	3	1	3	3	3	6	
φ = 26° 18′ N ...	26–50														1			1	2		
λ = 73° 01′ E ...	51–75																				
H_s = 233 metres ...	>75																				
Karachi (Drigh Road)	6–25	30	1	1				8	7	4	7	30	5	1					2	12	1
φ = 24° 53′ N ...	26–50							2											6	3	
λ = 67° 07′ E ...	51–75																				
H_s = 29 metres ...	>75																				
New Delhi ...	6–25	30	2		1			2	10	10	4	30	2			3	1	4	2	9	
φ = 28° 39′ N ...	26–50								1										1	7	
λ = 77° 15′ E ...	51–75																			1	
H_s = 227 metres ...	>75																				
†Raj Samand (Kankroli)	6–25	14				1	1	2		6	4	14	1	1	1	1	2		3	5	
φ = 25° 03′ N ...	26–50																				
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				
Sharjah ...	6–25	30			1	3	4	8	1	3	10	29	2	2	2	1	3	3	6	5	1
φ = 25° 20′ N ...	26–50																1		2	1	
λ = 55° 24′ E ...	51–75																				
H_s = 11 metres ...	>75																				

STATION.	1·0 km. a. s. l.										2·0 km. a. s. l.									
	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)	30	1		1			1	6	8	1	28						3	5	2	
φ = 25° 26′ N ...								1	11								1	9	5	
λ = 81° 44′ E ...																		2	1	
H_s = 98 metres ...																				
Bahrain ...	30	5	1			2	2	2	2		30	1	1	1	1	3	2	1	3	
φ = 26° 14′ N ...		5		1		2	1		2			2			1	1	2	2	5	
λ = 50° 35′ E ...		2					1		1										3	
H_s = 14 metres ...							1										1			
Bombay (Juhu) ...	29	8	6	2		1	1	1	6		28	1	3	1	1		4	6	2	
φ = 19° 07′ N ...		4													1	1	3	3	2	
λ = 72° 50′ E ...																				
H_s = 5 metres ...																				
Calcutta (Dum Dum)	30	6					3	6	6		27	1				1	1	8	4	
φ = 22° 39′ N ...		1					2	2	3									11	1	
λ = 88° 27′ E ...								1												
H_s = 5 metres ...																				
Gaya ...	30					1	1	3	4		30						1	6		
φ = 24° 49′ N ...		1						11	8									10	7	
λ = 85° 01′ E ...									1									3	1	
H_s = 117 metres ...																		2		
Jacobabad ...	30	5	2	1	4	1	3	2	2	1	26	3		1		6	5	6	4	
φ = 28° 17′ N ...		2		2					4										1	
λ = 68° 29′ E ...																				
H_s = 66 metres ...				1																
Jiwani ...	30	3		1	1		4	5	4	1	29	3		1	1		5	4	3	
φ = 25° 10′ N ...		1	2		1			5	1			1			1			6	2	
λ = 61° 47′ E ...			1																	
H_s = 5 metres ...																				
Jodhpur ...	30	5	1	2	1	4	5	2	8		29	1	1			1	4	5	7	
φ = 26° 18′ N ...								2								1	7	2		
λ = 73° 01′ E ...																				
H_s = 233 metres ...																				
Karachi (Drigh Road)	29	2	2				1	3	7	2	28	2	2				5	5	8	
φ = 24° 53′ N ...		1					1	4	6							1		2	8	
λ = 67° 07′ E ...																				
H_s = 29 metres ...																				
New Delhi ...	30	2			3	1	2	3	6		30	1	1			2	3	5	3	
φ = 28° 39′ N ...								2	11								1	4	3	
λ = 77° 15′ E ...																			1	
H_s = 227 metres ...																				
†Raj Samand (Kankroli)	14		2	1	1	2		2	5		14			1	1		3	2	3	
φ = 25° 03′ N ...									1								2	1		
λ = 73° 53′ E ...																		1		
H_s = 587 metres ...																				
Sharjah ...	29	1	2	2	1	1	1	3	4	1	29		1	2		1	2	5	1	
φ = 25° 20′ N ...		1		1	1		2	5	2			1		2	1	1	2	6	2	
λ = 55° 24′ E ...						1												2		
H_s = 11 metres ...																				

* Wind frequency table prepared from 27 ascents made in the morning. † Only on 14 days in the month ascents were made in the forenoon.

EQUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

eed its n./ .).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	29						3	6	4		1 — 10								3	9	18								4	26		Sambalpur
-50								9	7																							
-75											9 or 10										4											
>75																																
-25	13										1 — 10					1	1	2	4	6	16					1	3	20	6			Tezpur
-50								4																								
-75								8			9 or 10					1	1		1	1	7											
>75								1																								
-25	22		3	8		2					1 — 10			1		13			4	1	8							4	20	5	1	Trichinopoly
-50			7	1																												
-75				1							9 or 10					1					7											
>75																																
-25	22	1	2	3	4				1	2	1 — 10						5	6		1	18						4	22	4			*Trivandrum
-50			3	5					1																							
-75											9 or 10										9											
>75																																
-25	29	9	4	6	1			2	1	1	1 — 10					2	4				24							1	29			Vizagapatam
-50		3	1		1																											
-75											9 or 10										5											
>75																																

EQUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

-25	14								1		1 — 10										30						3	27				Allahabad (Bamrauli)
-50							2	6																								
-75								3	1		9 or 10										2											
>75								1																								
-25	25	1	1		1				3		1 — 10							1	1		28							5	25			Bahrain
-50					3		1	4	4																							
-75						1	1	2	3		9 or 10										5											
>75																																
-25	26			1	1	8	4				1 — 10					3	3	3			21							23	7			Bombay (Juhu)
-50				1		7	4																									
-75											9 or 10										1											
>75																																
-25	15						1				1 — 10					1	3	4	1		21					1	4	25				Calcutta (Dum Dum)
-50								8	4																							
-75									1		9 or 10						1				3											
>75									1																							
-25	19							2			1 — 10						1	1		2	26						1	23	1			Gaya
-50							1	4	1																							
-75								4	2		9 or 10										1											
>75								4	1																							
-25	24					2	6	5	3	1	1 — 10										30						4	6	20			Jacobabad
-50						3	1		3																							
-75											9 or 10										3											
>75																																
-25	24	1		1			3	6	5		1 — 10					1	3	2			24					1	3	22	4			Jiwani
-50		1			1	1		1	1																							
-75		1					1	1			9 or 10										1											
>75																																
25	26	1				1	3	4	5		1 — 10										30							3	15	12		Jodhpur
50							6	2																								
75							3	1			9 or 10										4											
75																																
25	25						3	4	6	1	1 — 10					3	3	3	1		20						2	8	20			Karachi (Drigh Road)
50		1						6	2																							
75							1	1			9 or 10										4											
75																																
25	27		1			1	3		1		1 — 10								1	1	23							4	26			New Delhi
50		1					3	10	3																							
75							1	2	1		9 or 10										2											
75																																
25	14					1		1	1	1	1 — 10										14											†Raj Samand (Kankroli)
50							3	3																								
75							3				9 or 10										2											
75								1																								
5	25	1	1	1		1		2	2	2	1 — 10					2	2		4	1	21							3	19	8		Sharjah
0		1	1	1			1	4	5																							
5							1	1			9 or 10										4											
5																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
gra ...	6-25	30	1				2	6	8	8	5	30				1	1	4	6	8	
	26-50																	1	4	5	
	51-75																				
	>75																				
hmedabad ...	6-25	30	1	2	2		2	10	4	6	3	29	1		1		1	3	13	5	3
	26-50																		2		
	51-75																				
	>75																				
llahabad (Bamrauli)	6-25	30		1			1	1	7	16	3	30	2	1			1	1	5	5	
	26-50									1									8	7	
	51-75																				
	>75																				
Bahrain ...	6-25	30	6	5	3	2	1	1		12		30	3		1	2		3	2		2
	26-50												6			1	3			4	
	51-75																			3	
	>75																				
Bangalore ...	6-25	30	1	4	5	8	1	3		3	3	30	2	2	6	3	3	3	1	1	2
	26-50			2									1	1	4	1					
	51-75																				
	>75																				
Bhuj ...	6-25	30	1	1			1	8	8	4	12	30	5				1	3	8	5	5
	26-50																		3		
	51-75																				
	>75																				
Bombay (Juhu) ...	6-25	30						4	6	20		30	5			1		3	4	13	
	26-50												1					2		1	
	51-75																				
	>75																				
Calcutta (Dum Dum)	6-25	30				2	8	12	2	1	5	30	1			2	6	9	3		2
	26-50																4	1	1	1	
	51-75																				
	>75																				
Chittagong ...	6-25	30		1		1	8	16	3		1	30		1			6	9	1	1	
	26-50																3	9			
	51-75																				
	>75																				
Dacca ...	6-25	30				11	5	10	2		2	30					10	5			
	26-50																8	5	2		
	51-75																				
	>75																				
Fort Sandeman ...	6-25	30	1			1		8	2	5	12	30			1	2	4	5	8	4	3
	26-50							1										2			
	51-75																		1		
	>75																				
Gaya ...	6-25	30	2					1	11	5		30	1						5	6	
	26-50								8	3									10	5	
	51-75																		3		
	>75																				
Hyderabad (Begumpet)	6-25	30	2		5	2		5	2	1	13	29	3	1	5	7	2	5	2	2	2
	26-50																				
	51-75																				
	>75																				
Jacobabad ...	6-25	30	3	1	2		2	3	1	3	15	30	3	1	2	3	4	4	3	5	2
	26-50												1			1				1	
	51-75																				
	>75																				
Jiwani ...	6-25	30		1		1	3	22			1	30	1	1		1	3	12	2	1	1
	26-50							2									1	1	6		
	51-75																				
	>75																				
Jodhpur ...	6-25	30	1	1				7	11	6	3	30		1			1	5	13	2	3
	26-50							1										4			
	51-75																			1	
	>75																				
Jubbulpore ...	6-25	30	3					4	6	7	10	30	1	2			1	4	9	9	
	26-50																		4		
	51-75																				
	>75																				
Karachi (Drigh Road) ..	6-25	30		1				6	1	2	3	30			1			2	12	5	
	26-50							12	2	3								1	6	2	
	51-75																		1		
	>75																				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
gra ...	6-25	30				1	1	1	6	8	1	30				1	1	2	6	3	
	26-50							2	2	8								3	7	7	
	51-75																				
	>75																				
hmedabad ...	6-25	30	1	1			1	4	12	6	3	30	2					2	8	3	3
	26-50								2									4	7		
	51-75																		1		
	>75																				
llahabad (Bamrauli)	6-25	30	1		1		1		6	8		27					1		3	4	
	26-50								6	6			1					1	11	4	
	51-75									1									1	1	
	>75																				
Bahrain ...	6-25	30	3	1	1	1	1	3	3		1	29	1		1	1	3	2	1	1	
	26-50		4					3	1	8						1	1	4	3	4	
	51-75												1					1	1	3	
	>75																				
Bangalore ...	6-25	30	2	1	7	6	5	1	2	1	2	27		4	11	2	2	2		1	1
	26-50			1	1									1	3						
	51-75																				
	>75																				
Bhuj ...	6-25	30	4				1	1	13	3	6	29	1					4	11	5	1
	26-50								2									2	4		
	51-75																	1			
	>75																				
Bombay (Juhu) ...	6-25	30	7	6	1	2	2	2	2	7		30	1	1	2	1	4	5	5	3	
	26-50									1					2			5		1	
	51-75																				
	>75																				
Calcutta (Dum Dum)	6-25	30					4	7	13	2	1	30						1	7	8	
	26-50							1	1	1								2	7	4	
	51-75																			1	
	>75																				
Chittagong ...	6-25	25	2			1	3	8	3	2		20						3	8	4	
	26-50							5	1									1	2	2	
	51-75																				
	>75																				
Dacca ...	6-25	30					3	8	4			28							2		
	26-50						1	10	4									2	20		
	51-75																		4		
	>75																				
Fort Sandeman ...	6-25											30			1	1	6	5	5	7	2
	26-50																	2			
	51-75																		1		
	>75																				
Gaya ...	6-25	30							6	2		27							4	3	
	26-50								12	6									12	5	
	51-75								1	2									1	2	
	>75								1												
Hyderabad (Begumpet)	6-25	29	3		6	7	2	5	1	2	2	30	1	3	2	7	3	1	6	1	2
	26-50								1						2	1	1				
	51-75																				
	>75																				
Jacobabad ...	6-25	30	2	1	2	3	5	4	3	7	2	30	3	1		2	3	7	2	7	1
	26-50															1	1			2	
	51-75									1											
	>75																				
Jiwani ...	6-25	30	1	2			3	5	9	1	1	30			1			3	3	5	1
	26-50		1					3	4				6	1				2	6	2	
	51-75																				
	>75																				
Jodhpur ...	6-25	30	1	1			2	8	9	2	3	29	1				1	3	4	3	1
	26-50							3											4	2	
	51-75									1									1		
	>75																				
Jubbulpore ...	6-25	30	2	2			1	3	10	8		30	1					5	13	5	
	26-50							1	3									1	4	1	
	51-75																				
	>75																				
Karachi (Drigh Road) ..	6-25	30	4	2				1	8	4	1	29	3	2	1	1	2	1	5	5	1
	26-50							1	5	3							1	1	4	1	
	51-75								1										1		
	>75																				

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	3	3	4	5	6	7	8	9	
29					1	1	3			1 — 10								1		29						1	28	1			Agra
					1	3	8	7																							
							4			9 or 10										1											
							1																								
28						2	4	1		1 — 10									1	29						2		28			Ahmedabad
						8	3																								
						6	4			9 or 10										3											
21						1				1 — 10								4	1	25						4	26				Allahabad (Bamrauli)
						1	8	4																							
							5			9 or 10										2											
							2																								
25	2			2			3	2		1 — 10							1	3		26							4	23	3		Bahrain
	1		1				4	3																							
						2	4	1		9 or 10										3											
16		1	2	2					1	1 — 10					1	2	5	6	12	4						1	2	18	8	1	Bangalore
		2	6																												
		1	1							9 or 10					1	1		1		7											
28					1	3	5			1 — 10							1	4		25						2	2	26			Bhuj
						7	8	1																							
						3				9 or 10										1											
26			3	2	5	2	2	1		1 — 10										30							2	28			Bombay (Juhu)
					7	3	1																								
										9 or 10																					
21							1	1		1 — 10						1	6	7	1	15						3	27				Calcutta (Dum Dum)
							6	9																							
							1	3		9 or 10										3											
19							2	1		1 — 10					7	6	8	1		8								30			Chittagong
						1	7	5																							
							1	2		9 or 10							1			7											
18										1 — 10								9	15	6							30				Dacca
							6	1																							
							6	2		9 or 10										3											
							3																								
29	1			2	4	5	5	5	1	1 — 10							7	5	2	16					1	1	8	20			Fort Sandeman
						3	3																								
										9 or 10										5											
19							1			1 — 10							3		1	26						1	26	3			Gaya
						1	6	1																							
							9			9 or 10										1											
							1																								
27		7	4	4	1	4	2	2		1 — 10								2	17	11							1		5	24	Hyderabad (Begumpet)
			3																												
										9 or 10										4											
26		1			3	1	8	3	1	1 — 10									3	27						3	5	22			Jacobabad
	1				2	2	3																								
	1									9 or 10										3											
23	1	1			1	3	1	5		1 — 10					1	3				26					2	4	20	4			Jiwani
	4	1		1			4																								
							1			9 or 10										2											
26	2				1		5	2	1	1 — 10								1	3	26						2	3	11	14		Jodhpur
					1	3	6																								
						2	1			9 or 10										2											
						2																									
25						4	7	4		1 — 10							1	2	7	20							3	27			Jubbulpore
						3	7																								
										9 or 10																					
19	2				1	1	1	3	1	1 — 10						2	3	3		22						1	3	26			Karachi (Drigh Road)
	2					2	4	2																							
										9 or 10										1											

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
*Lahore ...	6-25	31	1	3		3			5	9	10	30	2	4			2	1	3	12	1	31	3				4	2	2	13	2	30	2			2	1	3	5
	26-50																2		1	2				1			2		1	1						1	2			9
	51-75																																							4
	>75																																							
Madho Sagar (Gwalior).	6-25	30				2		7	9	4	8	30				1	2	2	12	6		30	1			1	1	4	14	4		29	1				3	4	6
	26-50																		4	3									3	2			1						6
	51-75																																							
	>75																																							
Madras ...	6-25	30		1		29						29		1	1	8	6	7				28		1	3	2	7	5	5	2	1	27	1	5*	6		1	1		
	26-50															3	2										2							3	6		2			
	51-75															1																								
	>75																																							
Malegaon ...	6-25	30	1	3	1			6	2	10	7	30	3		1	2	3	5	6	3	6	30	1		1	2	3	5	6	5	6	30				5	4	8	6
	26-50																			1										1										3
	51-75																																							1
	>75																																							
Mangalore ...	6-25																																							
	26-50																																							
	51-75																																							
	>75																																							
New Delhi ...	6-25	30	1				1	2	1	9	3	30	2	1			1	1	7	8		30	1	1			2		3	8	1	30	1	1			1	1	7	4
	26-50								5	8								1	3	6								1	6	7								2	4	9
	51-75																																							
	>75																																							
Peshawar ...	6-25	30	3	3	2	3				5	13	30	7	1	4	4				3	6	30	9	3	2	4	1			2	4	29	6	1	1	1	3	3	2
	26-50									1			1							3										5					1		1			9
	51-75																			1																				
	>75																																							
Poona ...	6-25	30	1	2	2	3	1	3	11	4	2	30	1	1	3	3	1	1	7	8	3	30	2		3	2			9	7	5	30			6		2	5	6
	26-50									1									1	1									1	1										4
	51-75																																							
	>75																																							
Port Blair ...	6-25	30	1	5	9	1		2	2	7	3	30		8	6	1	1	4	4	2	1	27		2	5	3		3	3	3	5	18		3	6	2	2	1		
	26-50														1				2						3										2	1				
	51-75																																							
	>75																																							
†Raj-Samand (Kankroli)	6-25	18				2	1	1	1	7	5	18				1	3	3	5	2	1	18				1	3	2	5	2	2	18	1				2	4	4
	26-50								1									2										2										4	1
	51-75																		1										1											
	>75																																							
Sambalpur ...	6-25	30	2				1	8	7	2	10	30			1		1	6	15	6	1	30						9	11	9	1	29	1				1	2	10
	26-50																																							1
	51-75																																							
	>75																																							
Sharjah ...	6-25	30	2	1				2	9	14		29	1	3				1	9	5		29		1	4	1	2	4	4	3		29	2	1	2	2	1	2	4
	26-50								1	1				1				1	7	1				1				2	5	2					1		2	2	5	2
	51-75																																							1
	>75																																							
Tezpur ...	6-25	30		1	13	2		6	1	1	4	30	1	2	6	1	1	3	6	2		28		1	1	1	3	6	6	2		23							1
	26-50				2										4			1	2									1	6									4	4
	51-75																	1											1									5	9
	>75																																							
Trichinopoly ...	6-25	30		7	2	2		2	4	6	7	29	1		8	5	1	5	7	1	1	28	1	3	5	5	4	7		2		26		9	4	2	3	1	
	26-50																												1					3	2					1
	51-75																																							
	>75																																							
Trivandrum ...	6-25																																							
	26-50																																							
	51-75																																							
	>75																																							
Vizagapatam ...	6-25	30				1	23	6				30		1			4	10	7		1	30	1			1		15	4	2	2	30	9	4	1	2	3	1	2
	26-50																	6	1									3	2					2		1				
	51-75																																							
	>75																																							

*On one day 2 ascents were made in the afternoon. Therefore No. of observations in tables 7 and 8 is 31.

† Only on 18 days in the month ascents were made in the afternoon. Vis observations were, however, recorded in the afternoon throughout the month.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
28					2	6	3	4	1	1 — 10								2	3	26						3	3	21	3		*Lahore
				1	1	1	3	6		9 or 10										4											
28					1	1	2	2		1 — 10									7	23								23	7		Madho Sagar (Gwalior)
						6	8	4		9 or 10										4											
26		6		2	2	1				1 — 10					1	3	2			24						1			29		Madras
		8	5							9 or 10						1				12											
29	1				4	11	2	1		1 — 10								1	17	12							3	14	13		Malegaon
						9	1			9 or 10																					
										1 — 10																1	1	25	3		Mangalore
										9 or 10																					
26		1			2	1	4	3		1 — 10								2	2	26							5	25			New Delhi
						1	8	3		9 or 10										4											
							2																								
							1																								
29	3	2		1	2	4	3	4	3	1 — 10						1			15	14								3	2	25	Peshawar
				1	1	1	2	1		9 or 10										8											
						1																									
27		1	2	1	2	7	3	2	1	1 — 10									6	24									30		Poona
			1		1	5	1			9 or 10										5											
6	1	2	1						1	1 — 10					5	9	16									3	15	12			Port Blair
				1						9 or 10					1					23											
18						3	5	1		1 — 10									3	15							2	8	20		† Raj Samand (Kankroli)
						3	4			9 or 10										2											
						2																									
24	1					2	10	2		1 — 10								5	12	13								2	28		Sambalpur
							3	5		9 or 10										2											
								1																							
25	2	2					2	4	1	1 — 10						1	1	7	1	20						1	2	19	8		Sharjah
	3				2	1	5	2		9 or 10										3											
								1																							
15										1 — 10							1	4	7	18					2	3	9	16			Tezpur
							1			9 or 10										3											
						2	8																								
							4																								
19		2	5	1	1					1 — 10					3			22	3	2						1		10	12	7	Trichinopoly
		6	2				1			9 or 10					1					6											
			1																												
										1 — 10														1	2	6	9	12			Trivandrum
										9 or 10																					
28	4	9	5		1		1	2	1	1 — 10						1	1			28							1	17	11	1	Vizagapatam
	1	2	1					1		9 or 10										2											

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6-25	30					1	2	3	8	16	30	4				1	1	1	6	1
	26-50												3					1		12	
	51-75																				
	>75																				
Bahrain ...	6-25	30	2	1	1	6		4	1	9	4	29	5	1	1	1	2	2	3	2	
	26-50									2			6			1	1			1	
	51-75												1				1			1	
	>75																				
Bombay (Juhu) ...	6-25	30	2	1							27	30	12				1	3	2	7	
	26-50												3							2	
	51-75																				
	>75																				
Calcutta (Dum Dum) ...	6-25	30					2	26			2	29					1	5	1	3	
	26-50																	11	5	2	
	51-75																	1			
	>75																				
Gaya ...	6-25	30					7	9	8	1	5	30	1					2		7	2
	26-50																		1	15	
	51-75																			2	
	>75																				
Jacobabad ...	6-25	30	1	1	4			1		4	18	30	4		1	1	3	6	2	6	3
	26-50									1			1				1			1	
	51-75														1						
	>75																				
Jiwani ...	6-25	30	2	1				8	10	2	7	30	1	1			1	3	9	6	1
	26-50													1				1	4	2	
	51-75																				
	>75																				
Jodhpur ...	6-25	30	1	11				4	6	2	5	30	3	4	1	1	2	3	5	6	1
	26-50									1			1					1	2		
	51-75																				
	>75																				
Karachi (Drigh Road) ...	6-25	30						5	6	2	17	30	1	1					5	3	1
	26-50																		16	3	
	51-75																				
	>75																				
New Delhi ...	6-25	30	4						3	14	9	30	8	2		1			4	3	
	26-50												2	1						9	
	51-75																				
	>75																				
*Raj Samand (Kankroli).	6-25	11					1	2	2	5	1	11	3			1			3	3	
	26-50																	1			
	51-75																				
	>75																				
Sharjah ...	6-25	30		3	2	9	2	1	6	1	6	29	3	1	3		1	3	9	5	
	26-50																1		2	1	
	51-75																				
	>75																				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	
Allahabad (Bamrauli)...	6-25	30	2				1		4	9	1	26						3	3	1	
	26-50								3	10									15	1	
	51-75																		3		
	>75																				
Bahrain ...	6-25	28	3	1	1		2		5	4		20			1	2	2		5	1	
	26-50		1				1	2	1	5					1			1	2	4	
	51-75		1							1											
	>75																				
Bombay (Juhu) ...	6-25	30	11	3				5	2	6		19		1		2	2	4	6	1	
	26-50		2							1								3			
	51-75																				
	>75																				
Calcutta (Dum Dum) ...	6-25	28					1	2	7	7		11						1	5	2	
	26-50							4	5	2								1	2		
	51-75																				
	>75																				
Gaya ...	6-25	30	1					2	1	5	1	28		1				1	3		
	26-50								1	17									12	3	
	51-75									2									6	2	
	>75																				
Jacobabad ...	6-25	29	3	2		1	2	9	7	5		29	1	1			1	9	10	5	
	26-50																				
	51-75																				
	>75																				
Jiwani ...	6-25	29	5			1		1	10	3		22	2		1	1	2		5	5	
	26-50								7	2			1						5		
	51-75																				
	>75																				
Jodhpur ...	6-25	30	1	1			1	8	9	6	3	28					2	4	13	2	
	26-50								1									4	1		
	51-75																				
	>75																				
Karachi (Drigh Road) ...	6-25	30		1			1	1	11	5		24	3				1	7	6	3	
	26-50								9	2									1	2	
	51-75																			1	
	>75																				
New Delhi ...	6-25	30		1	1		1		4	12	1	29					1	5	5	1	
	26-50		2						2	6								2	8	6	
	51-75																		1		
	>75																				
*Raj Samand (Kankroli).	6-25	11	3			1			3	3		10		1	1		1	2	1	1	
	26-50							1										1	2		
	51-75																				
	>75																				
Sharjah ...	6-25	28	1	4	1	1		2	6	4		21		1	4		1	1	5	1	
	26-50				1		1	1	4	2				1		1		1	2	3	
	51-75																				
	>75																				

*Only on 11 days in the month, ascents were made in the late night; on the remaining days ascents were made in the morning. Visibility observations in the late night were recd only on days of ascents.

TABLE 11—FREQUENCY OF LOW CLOUD HEIGHTS (LATE NIGHT)

TABLE 12—FREQUENCY OF VISIBILITY (LATE NIGHT)

	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
5	3								1		1 — 10								1		29							30				Allahabad (Bamrauli)
0							1																									
5								1			9 or 10										1											
5																																
5	13			1		2			1		1 — 10						2		1		27					1		27	2			Bahrain
0			1				1		5																							
5								1	1		9 or 10						1				3											
5																																
5	11			1	2	4	1				1 — 10						4	2	1		23							26	4			Bombay (Juhu)
0						2	1																									
5											9 or 10										1											
5																																
5	1										1 — 10					5	1	3		1	20						22	8				Calcutta (Dum Dum)
0									1																							
5											9 or 10					2					4											
5																																
5	4							1	1		1 — 10									1	29							30				Gaya
0								2																								
5											9 or 10										1											
5																																
5	22		1			3	3	6	3	1	1 — 10								1		29					1		10	19			Jacobabad
0							1	4																								
5											9 or 10										2											
5																																
5	7				1			1	1		1 — 10					1	1	1			27						7	23				Jiwani
0		2							1																							
5							1				9 or 10										4											
5																																
5	18					1	1	4	2		1 — 10										30						1	2	27			Jodhpur
0							2	6	1																							
5								1			9 or 10										4											
5																																
5	10		1				1	2	1		1 — 10					1			1		28						1	3	26			Karachi (Drigh Road)
0							1	4																								
5											9 or 10								1		1											
5																																
5	21						2	3			1 — 10								1	1	28							21	9			New Delhi
0						1	1	11	2																							
5							1				9 or 10										4											
5																																
5	0										1 — 10										11							3	8			*Raj Samand (Kankroli).
0																																
5											9 or 10										2											
5																																
5	8	1	3	1		1					1 — 10						2		1		27					1	1		26	2		Sharjah
0								1	1																							
5											9 or 10										4											
5																																

Y. P. P.—S 3215—950—8-40

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

May 1939

Supplement to the Monthly Weather Report, May 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:
The 18th September 1940.

C. W. B. NORMAND,
Director-General of Observatories.

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31						4	12	4	11	31	1					1	2	5	1
φ = 27° 08′ N ...	26–50												1				1		1	10	
λ = 78° 01′ E ...	51–75																		4	4	
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	31					1	7	7	6	10	31	1					2	2		
φ = 23° 02′ N ...	26–50																	3	7	11	
λ = 72° 35′ E ...	51–75																			5	
H_s = 55 metres ...	>75																				
Bangalore ...	6–25	31					1	12	11	7		31	1					4	4	2	1
φ = 12° 58′ N ...	26–50												1						10	7	
λ = 77° 35′ E ...	51–75																		1		
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	31						22	2		7	31									
φ = 23° 15′ N ...	26–50																	3	11		
λ = 69° 48′ E ...	51–75																	1	14	2	
H_s = 113 metres ...	>75																				
Chittagong ...	6–25	31			1	9	1				20	31			1	1	9	5			
φ = 22° 21′ N ...	26–50															2	8	2			
λ = 91° 50′ E ...	51–75															1	2				
H_s = 21 metres ...	>75																				
Dacca ...	6–25	31		1	2	4					24	30			1	3	2	3			
φ = 23° 43′ N ...	26–50															2	16	3			
λ = 90° 24′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25	31			2	1	8	2			23	31	4	2		1		2	12	9	1
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	31	1		1				11	13	5	31	2	1	1		1		2	1	
φ = 17° 26′ N ...	26–50												6					2	2	4	
λ = 78° 27′ E ...	51–75												3							6	
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	31							13		18	31	2	1	2	1	1		1	2	
φ = 23° 10′ N ...	26–50													1					1	12	
λ = 79° 57′ E ...	51–75																		5	2	
H_s = 402 metres ...	>75																				
Lahore ...	6–25	31	1	2					1	2	25	30	3	1		1	1	4	3	8	3
φ = 31° 35′ N ...	26–50												2			1	1		1	1	
λ = 74° 20′ E ...	51–75																				
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6–25	29						16	8		5	29	2				1		2	2	1
φ = 26° 13′ N ...	26–50																		5	9	
λ = 78° 08′ E ...	51–75																		5	2	
H_s = 233 metres ...	>75																				
Madras ...	6–25	31				1	2	13			15	31		1			4	1	1		1
φ = 13° 04′ N ...	26–50																1	5	11		
λ = 80° 15′ E ...	51–75																1	1	4		
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	31						1	14	15	1	31	1						1	8	
φ = 20° 33′ N ...	26–50												1						2	17	
λ = 74° 32′ E ...	51–75																		1		
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	24	2	6	3			1		4	8	24	2				1	2	2	15	1
φ = 12° 52′ N ...	26–50																			1	
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	31				5	2	9		4	11	31	7	1	2	1		2	1	12	1
φ = 34° 01′ N ...	26–50												1							3	
λ = 71° 35′ E ...	51–75																				
H_s = 363 metres ...	>75																				
Poona ...	6–25	31						25	4		2	31	5							6	1
φ = 18° 32′ N ...	26–50												1						10	8	
λ = 73° 51′ E ...	51–75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	31		1		1	1	8	11	1	5	30			1		2		4	1	
φ = 11° 40′ N ...	26–50							3										10	11		
λ = 92° 43′ E ...	51–75																	1			
H_s = 87 metres ...	>75																				
Raj Samand (Kankroli)	6–25	19						8	9		1	19	1	1				1	2		
φ = 25° 03′ N ...	26–50								1										9	3	
λ = 73° 53′ E ...	51–75																	1	1		
H_s = 587 metres ...	>75																				

STATION.	1·0 km. a. s. l.										2·0 km. a. s. l.									
	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	31	2				1	1	2	5	1	31	1						4	9	
φ = 27° 08′ N ...								2	12									4	13	
λ = 78° 01′ E ...								2	3											
H_s = 182 metres ...																				
Ahmedabad ...	31						1	8	2		31	1					3	7	1	2
φ = 23° 02′ N ...							1	9	9							1	4	11		
λ = 72° 35′ E ...									1									1		
H_s = 55 metres ...																				
Bangalore ...	31						3	18	2		28	7	4	3	2				4	
φ = 12° 58′ N ...							2	6				3	2						3	
λ = 77° 35′ E ...																				
H_s = 936 metres ...																				
Bhuj ...	31							2			31	1					2	6	3	
φ = 23° 15′ N ...							2	18	3									12	4	
λ = 69° 48′ E ...								5	1									3		
H_s = 113 metres ...																				
Chittagong ...	30		1		2	2	11	1			27			2	1	1	3	9	3	
φ = 22° 21′ N ...						7	3								1		4	1		
λ = 91° 50′ E ...						2		1				1							1	
H_s = 21 metres ...																				
Dacca ...	26				3	3	7	1	1		22	1		1	4		1	6	1	
φ = 23° 43′ N ...						1	7	3									2	4	2	
λ = 90° 24′ E ...																				
H_s = 21 metres ...																				
Fort Sandeman ...											31	4	1		1		1	10	13	1
φ = 31° 21′ N ...																				
λ = 69° 27′ E ...																				
H_s = 1421 metres ...																				
Hyderabad (Begumpet).	31	2	2				1	2	1		31	6	1		1		3	2	2	1
φ = 17° 26′ N ...		3					2	2	5			6							6	
λ = 78° 27′ E ...		5							6			1	1							
H_s = 555 metres ...																			1	
Jubbulpore ...	31	2	3	1	1				3		31	4	2					1	7	
φ = 23° 10′ N ...			1						12			5						3	8	
λ = 79° 57′ E ...								4	4			1								
H_s = 402 metres ...																				
Lahore ...	31	5		1	1	2	4	4	8	1	31	2		1		3	2	5	8	3
φ = 31° 35′ N ...		2			1			1	1						1			1	5	
λ = 74° 20′ E ...																				
H_s = 221 metres ...																				
Madho Sagar (Gwalior).	29	2					1		4		28							4	7	
φ = 26° 13′ N ...								2	13			2						4	9	
λ = 78° 08′ E ...								2	4									1		
H_s = 233 metres ...								1											1	
Madras ...	31		2	3	3	1	4	1		1	31	5	3	3	1		1	2	5	2
φ = 13° 04′ N ...							3	8	5			1	5						2	
λ = 80° 15′ E ...													1							
H_s = 13 metres ...																				
Malegaon ...	31	1						1	7		31	4		1		1		5	4	
φ = 20° 33′ N ...		2						2	17									2	14	
λ = 74° 32′ E ...								1												
H_s = 443 metres ...																				
†Mangalore ...	24		1			2	2	4	14		21	5	2	1	2	1	1	2	4	
φ = 12° 52′ N ...									1			1	1						1	
λ = 74° 51′ E ...																				
H_s = 40 metres ...																				
Peshawar ...	31	10	2	1			1	2	10		31	8	1	1	1	1	1	2	8	
φ = 34° 01′ N ...		1							4				1					2	5	
λ = 71° 35′ E ...																				
H_s = 363 metres ...																				
Poona ...	31	2						2	9		31	4		1			1	1	10	
φ = 18° 32′ N ...								9	8			3					1	4	6	
λ = 73° 51′ E ...								1												
H_s = 588 metres ...																				
Port Blair ...	28	1		1	1	1	1	5			20	2		1			3	5	1	2
φ = 11° 40′ N ...							5	9								1	2	3		
λ = 92° 43′ E ...							2	2												
H_s = 87 metres ...																				
Raj Samand (Kankroli)	19	1	1					2			19	1	1		1	3	1	2	4	
φ = 25° 03′ N ...							1	9	8									4	2	
λ = 73° 53′ E ...							1	1												
H_s = 587 metres ...																				

Only on 29 days in the month pilot balloon ascents were made in the morning, on the remaining days ascents were made in the late night. Visibility observations were, however, recorded in the morning throughout the month.

Wind frequency table prepared from ascents made on 24 days in the morning.

Only on 19 days in the month pilot balloon ascents were made in the morning. On the remaining days ascents were made in the late night. Visibility observations were, however, recorded in the morning throughout the month.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
30	1	1				1	3 7	2 15		1 — 10									1	30					2	9	20				Agra
										9 or 10																					
27		1		2 1	4	1 1	2 7 2	1 4		1 — 10					1	6	1			23							4	27			Ahmedabad
			1							9 or 10					1	2				4											
35	5 1	2 11 1	2 2					1		1 — 10			2		9	6	4	4		6						1	17	10	2	1	Bangalore
										9 or 10			2		2					15											
34	1			1		4 1	4 6	4 3		1 — 10					16	3				12						1	16	14			Bhuj
										9 or 10																					
31	2 1		2	2			3 1	2 7 1		1 — 10					5	4	7			15							12	19			Chittagong
										9 or 10					1	1	3			19											
34	1			1	1	2	5	1 2 1		1 — 10				5	5	2	10	2	1	6							31				Dacca
										9 or 10				1		1				5											
31	3	2		2	2 1	1	2 1	11 5	1	1 — 10								4		27						1	10	20			Fort Sandeman
										9 or 10																					
29	7 1 1	6 3	3			1	1 3	2	1	1 — 10								2	2	27						1	1	12	16	1	Hyderabad (Begumpět)
										9 or 10																					
30	2 4	1					1 5	2 5		1 — 10									1	30							4	27			Jubbulpore
										9 or 10										3											
27	2	1		3	1 1	2 1	4 3	3 6		1 — 10										31						8	12	11			Lahore
										9 or 10																					
21	2					3	2 4	5 5		1 — 10									1	28					2	4	6	19			*Madho Sagar (Gwalior)
										9 or 10																					
31	2 3	10 9 2 1	1				1	1 1		1 — 10								1		30								1	30		Madras
										9 or 10										11											
30	1 1			1	3	1 3	6 9 1	4		1 — 10									3	28								24	7		Malegaon
										9 or 10																					
17	1 1	8 3	2 1				1			1 — 10					8	16	6	1									3	28			†Mangalore
										9 or 10					2		1			12											
31	2 1	3 1		1	3	3 3	4	8	2	1 — 10									3	28						1	5	2	5	18	Peshawar
										9 or 10										1											
30	3 1		1	3	4	3 3	4 5	1 1	1	1 — 10										31									31		Poona
										9 or 10										1											
11	2	4				1	1	3		1 — 10					14	3	14							1		1	17	12			Port Blair
										9 or 10					2					30											
19	1	2	2	1	1	3 1	1 3	3 1		1 — 10										19						1	2	22	6		‡Raj-Samand (Kankroli)
										9 or 10																					

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	N
Sambalpur ...	6–25	31		1	2	2					26	31	1	5	2	3	6	6	2			31	4	8	3			1	4			30	5						3	
ϕ =21° 28′ N ...	26–50													1				3	1	1			1	1				3	3	3			5						3	
λ =83° 58′ E ...	51–75																																							
H_s=153 metres ...	>75																																							
Tezpur ...	6–25	31		7	6	1		1			16	30	1	1	12	2		2	2		4	28		2	8	3	4	1	3	3	2	24	1	2	3	2		4	3	
ϕ =26° 37′ N ...	26–50														5				1						1			1							1				4	
λ =92° 47′ E ...	51–75																																							
H_s=80 metres ...	>75																																							
Trichinopoly ...	6–25	31					2	1	15	6	7	31					1	2	3			31	1				2		6	2	1	29	3	7	3	3	2	1	3	
ϕ =10° 49′ N ...	26–50																	2	11	1								2	15	2			2	2	1					
λ =78° 42′ E ...	51–75																		11																					
H_s=88 metres ...	>75																																							
Trivandrum ...	6–25	31	23	2						2	4	28							3	7		27	1						3	1		23	6	1				1	7	
ϕ = 08° 29′ N ...	26–50																		1	17								1	1	20				1					1	
λ =76° 57′ E ...	51–75																																							
H_s=76 metres ...	>75																																							
Vizagapatam ...	6–25	31						15	4	1	11	31			2		2	4	2			29	1		1		3	4	2	2		27	3	1	1		1	1	3	
ϕ =17° 42′ N ...	26–50																	10	3									5	5	1			3						4	
λ =83° 18′ E ...	51–75																	5	3									4												
H_s=56 metres ...	>75																											1											1	

TABLE 4—V

Allahabad (Bamrauli)	6–25	31		1	2	2	1	4	6	9	6	31	2	1		1	3	3	3	4	1	31	2				1	1	5	4	1	22						8	
ϕ =25° 26′ N ...	26–50												1		1			2	1	5									3	10			1						4	1
λ =81° 44′ E ...	51–75																		1	2										3										
H_s=98 metres ...	>75																													1										
Bahrain ...	6–25	31	4	1		2		7	2	15		31	2	2	2		3		5	3	2	31	6	1		2	2	1		3	1	31	9		2		2	1	1	
ϕ =26° 14′ N ...	26–50												7							1			6	1					1	4			3	1					1	
λ =50° 35′ E ...	51–75												4										2							1			1							
H_s=14 metres ...	>75																																							
Bombay (Juhu) ...	6–25	31	2					8	2	17	2	31	9					5	3	7		28	5					3	4	4	1	19	2						6	
ϕ =19° 07′ N ...	26–50												6					1					8							2			3					1	1	
λ =72° 50′ E ...	51–75																						1																	
H_s=5 metres ...	>75																																							
Calcutta (Dum Dum)	6–25	31		1	1	4	14	9			2	31		1	1	2	4	7				29	2			2	1	6	5	1		18	2		1	2			5	
ϕ =22° 39′ N ...	26–50															1	11	4								1	6	5										2		
λ =88° 27′ E ...	51–75																																							
H_s=5 metres ...	>75																																							
Gaya ...	6–25	31	1	1	8	2	1	2	4	3	9	31	1		2	3	5	9	6	4		31	1		2	2		5	6	6	1	31	2		1				3	
ϕ =24° 49′ N ...	26–50																			1								1	5	2									8	10
λ =85° 01′ E ...	51–75																																							1
H_s=117 metres ...	>75																																							
Jacobabad ...	6–25	31		1	2	3	1			9	15	31	1	2	1	3	2	2	1	2	1	31	6	1	2	1	1	1		4	2	28	4				1	5	3	6
ϕ =28° 17′ N ...	26–50												5		1					5			3		1					8						1			1	4
λ =68° 29′ E ...	51–75												3		1					1										1										
H_s=66 metres ...	>75																																							
Jiwani ...	6–25	31	1				4	17	4		5	31	1	2	2	2	3	5	4	5		30		4	2	1	1	2	5	6		28	4	2	2	1		2	3	6
ϕ =25° 10′ N ...	26–50																	1	3	3				2				1	4	1			1		1			2	2	
λ =61° 47′ E ...	51–75																													1										1
H_s= 5 metres ...	>75																																							
Jodhpur ...	6–25	31		1			1	16	2			31						3	4	1		31						4	7	1		29		1		2	3	2	8	1
ϕ =26° 18′ N ...	26–50							11										11	12									7	11								3	4	5	
λ =73° 01′ E ...	51–75																											1												
H_s=233 metres ...	>75																																							
Karachi (Drigh Road)	6–25	31						8	6	1		31							3	1		26	1							5		19		1				1	4
ϕ =24° 53′ N ...	26–50							2	13	1									19	6									7	9								6	5
λ =67° 07′ E ...	51–75																		2										2	2								1	1
H_s=29 metres ...	>75																																							
New Delhi ...	6–25	31			1	3		2	8	2	1	30				1			8	7		27	3						7	9		23						7	9
ϕ =28° 39′ N ...	26–50								10	1			1					1	7	4								1		7										6
λ =77° 15′ E ...	51–75								3										1																					1
H_s=227 metres ...	>75																																							
*Raj Samand (Kankroli)	6–25	13						5	2	1	1	13						2	7	2		13						1	6	3		12				1	1	2	3	2
ϕ =25° 03′ N ...	26–50								1	3									1	1									2	1									3	
λ =73° 53′ E ...	51–75																																							
H_s=587 metres ...	>75																																							
Sharjah ...	6–25	31		1		1	5	14	1	1	7	31	1	3	3	1	7	4	6	3	1	31	4	1	6		2		5	8	1	31	3	5	3	1		1	3	11
ϕ =25° 20′ N ...	26–50							1									1			1								2	1	1								2	2	
λ =55° 24′ E ...	51–75																																							
H_s=11 metres ...	>75																																							

* Only on 13 days in the month pilot balloon ascents were made in the forenoon. On the remaining days ascents were made in the afternoon.

JENCY (MORNING)

TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING)

TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
24	1						2	3	1	1 — 10								6	3	22								28	3		Sambalpur
	1						2	13																							
								1		9 or 10																					
16		1	3			6	1		1	1 — 10			1	3	5		5	4	4	9					1	3	13	14			Tezpur
							2																								
						1	1			9 or 10			1	1	4		2	1		14											
25		5	2	1	1	1	1	1		1 — 10						1	1	6	4	19							2	15	14		Trichinopoly
		11		1																											
		1								9 or 10										6											
19	1	3	1	2	2	2	2		1	1 — 10					2	18	2			9				2	2	5	20	2			Trivandrum
		3	2																												
										9 or 10					2	1			12												
15	3	2					1	3		1 — 10					11	6	2	1	1	10						1	18	12			Vizagapatam
	4	1					1																								
										9 or 10					2					12											

JENCY (FORENOON)

TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON)

TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

8										1 — 10									1	30						6	25				Allahabad (Bamrauli)
	1						1	3																							
	1							2		9 or 10																					
20	4	3	1	2	1	1	1	1	1	1 — 10									1	30							12	19			Bahrain
	3						1	1																							
										9 or 10										2											
17	1					7	3			1 — 10					1	15	7			8							14	16	1		Bombay (Juhu)
					1	3	1	1																							
										9 or 10						2				3											
6	1						2	2		1 — 10						22	3			6						4	27				Calcutta (Dum Dum)
								1																							
										9 or 10										3											
21								2		1 — 10									1	30						3	28				Gaya
	1						4	13																							
								1		9 or 10																					
22	1		1		3	6	5	2	1	1 — 10										31					1	2	16	12			Jacobabad
						3																									
										9 or 10										1											
18	2		2	1	2	2			2	1 — 10				1	1	9				20				1		3	26	1			Jiwani
							1																								
								1		9 or 10																					
17			2	1	1	5	3	1		1 — 10							1			30							8	23			Jodhpur
				1	1	1	1																								
										9 or 10																					
12			1			1	2	1	1	1 — 10					3	11	3			14						1	12	18			Karachi (Drigh Road)
		1					2	3																							
										9 or 10					1	4				5											
17							7			1 — 10									3	23						10	9	12			New Delhi
							2	7																							
								1		9 or 10																					
12		1		1	2	1		3		1 — 10										13											*Raj Samand (Kankroli)
				1			1	1																							
					1					9 or 10																					
29	6	4	5	3		1	3	2		1 — 10						2		1		28							4	20	7		Sharjah
			1		1	1	1	1																							
										9 or 10										1											

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	N
Agra ...	6–25	31	1	1				1	13	12	3	31	1					1	9	5	1	31	2						12	4		30	1					2	6	6
	26–50												1						4	2			1						5	7								1	6	5
	51–75																																						2	
	>75																																							1
Ahmedabad ...	6–25	31						16	7	7	1	31						6	14	2		31						3	12	4	1	30			1			1	7	4
	26–50																	5	3	1								5	6									1	15	
	51–75																																						1	
	>75																																							
Allahabad (Bamrauli)	6–25	31	4	2					6	18		31	2	1				1	3	10		31	1	1					4	9		20							4	5
	26–50									1									4	10									2	13									2	8
	51–75																												1											
	>75																																						1	
Bahrain ...	6–25	31	6	6	2	2			1	13	1	31	6		1	1	2	1	1	5	2	31	6	1		1	2	2		6	1	28	6	1	1	1		3	2	3
	26–50												6							2			6							3			3						1	4
	51–75												1							1			1							1										1
	>75												2										1										1							
Bangalore ...	6–25	31	2	4				2	5	14	3	31	2	2				1	5	14	1	29	2	2				2	13	10		31	7	2		1	1		4	7
	26–50									1									3	3													4	1					1	2
	51–75																																							
	>75																																							
Bhuj ...	6–25	31						12	12	3		31							3	1		31							3	3		30						2	8	1
	26–50							1	3									7	16	1								3	18	2								1	8	6
	51–75																		2	1									2										3	
	>75																																							
Bombay (Juhu) ...	6–25	31						6	5	20		31	2					2	7	8		28	4					1	4	8		23	4						1	8
	26–50												4					1	1	4			4							6			3						2	4
	51–75												2										1																	1
	>75																																							
Calcutta (Dum Dum)	6–25	31				7	10	11			3	31		1		1	8	3				31			2	3	8	4	3			27	3		2		1	2	6	7
	26–50															1	15	2									10	1										1	1	4
	51–75																																							
	>75																																							
Chittagong ...	6–25	31			1	2	7	15	2	1	3	31					5	14	1	2	1	28					9	7	1		2	25				1	3	8	6	2
	26–50																3	4									6	2									1	1	1	
	51–75																1										1													
	>75																																							
Dacca ...	6–25	31			2	11	4	2			12	31		1	2	5	11	3	1			30				2	11	7	2		2	21					1	3	7	1
	26–50															1	7										4	2										4	4	1
	51–75																																							
	>75																																							
Fort Sandeman ...	6–25	31			2	1	2	7	4	6	6	31				1	1	8	6	6	4											31				1	2	3	9	7
	26–50									1					1			1	1	1															1			2	2	
	51–75																1																				1			
	>75																																							
Gaya ...	6–25	31	4	5	2				3	11		31	8	5	1				4	4		31	4	5	1				4	2		28	1						6	7
	26–50		1							5			2							7			3						3	9									4	10
	51–75																																							
	>75																																							
Hyderabad (Begumpet).	6–25	31	9	4	1				4	6	7	31	10	5					2	8	2	31	10	5					2	7	3	31	7	7	1				2	6
	26–50													1					1	1				1					1	1			3						1	3
	51–75																			1										1										
	>75																																							
Jacobabad ...	6–25	31	1		2	1	2	1	3	5	16	31	1		1	5	3	3	4	7	3	31	1	2	1	3		3	6	6	6	30	5	1		1	1	5	7	4
	26–50												1							3										2							1		2	3
	51–75																						1																	
	>75																																							
Jiwani ...	6–25	31					4	23				31				3	5	13	1			31	1		1	3	2	8	8			30	4	3			2	1	9	4
	26–50							4										3	6									1	7				1					1	2	1
	51–75																																							
	>75																																							
Jodhpur ...	6–25	31				2		10	8	1		31				1	1	7	6			31					2	7	7		1	23					3	5	4	1
	26–50							8	2									14	2									13	1									6	4	
	51–75																																							
	>75																																							
Jubbulpore ...	6–25	31	1	1				4	7	12	6	31	6					2	8	5		31	4					2	6	9		31	3						9	12
	26–50												1						5	4			1					1	4	4									5	2
	51–75																																							
	>75																																							
Karachi (Drigh Road) ...	6–25	31										31							3			31	1						2	1		25	1					1	4	1
	26–50							25	5	1									24	1			1						13	6			2					1	7	6
	51–75																		3										7											
	>75																																						1	

Table 8—Frequency of low cloud heights (Afternoon)

Table 9—Frequency of Visibility (Afternoon)

Speed limits (km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	28						3	8	4		1 — 10							2	7	4	18					4	11	16				Agra
26–50		1					1	4	5																							
51–75								1			9 or 10																					
>75									1																							
6–25	25			1		4	1	5	2		1 — 10								3		28						1	4	26			Ahmedabad
26–50					1	1	1	6	1																							
51–75								2			9 or 10										2											
>75																																
6–25	7								1		1 — 10							1	3	2	25						8	23				Allahabad (Bamrauli)
26–50								5	1																							
51–75											9 or 10																					
>75																																
6–25	20	3	1	1	1	1		2	2	2	1 — 10										31						1	6	24			Bahrain
26–50		2						1	2																							
51–75									1		9 or 10										1											
>75								1																								
6–25	23	4	7	3						2	1 — 10							4	12	10	5							1	21	9		Bangalore
26–50		1	5	1																												
51–75											9 or 10										3											
>75																																
6–25	25						4	7	6		1 — 10					1					30						1	19	11			Bhuj
26–50							2	5	1																							
51–75											9 or 10																					
>75																																
6–25	19				1		6	5			1 — 10					1	9	7	1		13						5	25	1			Bombay (Juhu)
26–50						1	2	2	2																							
51–75											9 or 10						1				4											
>75																																
6–25	11								2		1 — 10						9	10	3	2	7						4	27				Calcutta (Dum Dum)
26–50									8																							
51–75									1		9 or 10										4											
>75																																
6–25	17				2	1	1	7	1		1 — 10					4	6	15	1		5							1	30			Chittagong
26–50								2	3																							
51–75											9 or 10						1				13											
>75																																
6–25	13				1	1			2		1 — 10					3	1	11	12	2	2							31				Dacca
26–50								3	2																							
51–75								1	3		9 or 10					1	1	1			13											
>75																																
6–25	27	2				1	4	9	3	5	1 — 10								19	4	8							5	25	1		Fort Sandeman
26–50							2																									
51–75					1						9 or 10								1		2											
>75																																
6–25	19							4			1 — 10						3	2	5	3	18						8	23				Gaya
26–50								5	7																							
51–75								1	2		9 or 10																					
>75																																
6–25	30	8	9	1				1	7	1	1 — 10								2	19	10									3	28	Hyderabad (Begumpet)
26–50		1						2																								
51–75											9 or 10																					
>75																																
6–25	20	2	2			2	2	5	2		1 — 10									2	29						2	14	15			Jacobabad
26–50						1	1	2	1																							
51–75											9 or 10										1											
>75																																
6–25	26	2	3	1	1		3	3	1	1	1 — 10						8	1			22						2	29				Jiwani
26–50		5						3	3																							
51–75											9 or 10										1											
>75																																
6–25	19	1				3	2	3			1 — 10								1	4	26						5	4	16	6		Jodhpur
26–50						3	3	4																								
51–75											9 or 10																					
>75																																
6–25	23	4					1	5	4		1 — 10									16	15						2	8	21			Jubbulpore
26–50								6	3																							
51–75											9 or 10																					
>75																																
6–25	10	1			1	1		1	1	1	1 — 10						6	6	1		18						2	14	15			Karachi (Drigh Road)
26–50								4																								
51–75											9 or 10										2											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Lahore ...	6–25	31	1	2		4	3	2	3	7	9	29	3	1	2	1	2	5	5	8	2	29	2		2		3	6	4	8	2	28	1			2	1	7	7	8
	26–50																											1	1								1	1		
	51–75																																							
	>75																																							
Madho Sagar (Gwalior)	6–25	31	1					5	13	11	1	31							12	7		31						2	14	7		29						3	7	9
	26–50																		10	2									7	1									6	4
	51–75																																							
	>75																																							
Madras ...	6–25	31	1		2	24		2	1			30	2	9	1		1	9	5	1		29	8	1		1		1	6	5		30	4	3	1		1	2	2	4
	26–50					1												1	1										7				1	4	1				3	3
	51–75																																							
	>75																																							
Malegaon ...	6–25	31	2	2				2	7	16	1	31	4					1	7	8	1	31	2					2	6	9	2	31	1		1			2	8	11
	26–50									1								1	2	7									2	8									2	5
	51–75																																							
	>75																																							
Mangalore ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
New Delhi ...	6–25	31	2	1		1		2	5	9		31					1		12	11		30							10	12		25						1	5	6
	26–50							1	6	4									2	5									4	4									6	7
	51–75																																							
	>75																																							
Peshawar ...	6–25	31	3	10	1	1				9	7	31	10	3	5					5	3	31	7	3	4					9	4	31	5			1	2	3	4	11
	26–50												1							4			2							2										9
	51–75																																							
	>75																																							
Poona ...	6–25	31				1		2	6	15		31				1			10	5		31				1			10	7		31	3				1		4	12
	26–50							2	3	2									5	9									5	8								1	2	7
	51–75																			1																				
	>75																																							
Port Blair ...	6–25	31		1	2	2		4	11			30			1	1	1	1	6			26			2		1	3	6			16	2	1		1		2	4	1
	26–50							8	2								1	7	8									5	5								1	1	1	
	51–75							1										4										3											1	
	>75																											1												
*Raj-Samand (Kankroli)	6–25	18				1		7	2	5	2	17		1	1		1	5	6			17	1		1		2	4	5			18				1	1	3	8	1
	26–50							1										2	1									3	1										3	
	51–75																																							
	>75																																							
Sambalpur ...	6–25	31		1	1			1	6	7	15	31	3				1	2	8	11	3	31	5	3				3	1	15	2	27	5	1					6	15
	26–50																			3										2				1						
	51–75																																							
	>75																																							
Sharjah ...	6–25	31	1					2	6	16		31	4					2	11	7		31	5	2			2	4	5	2	2	31		2	4	2	1	3	4	
	26–50							1		5									3	3								1	4	3				1		1			4	1	
	51–75																			1										1											
	>75																																							
Tezpur ...	6–25	31		4	7	3	1	4		1	11	31	1		10	4	2	1	5	1	3	31	2		4	4	6	7	4		3	25		1	2		2	7	2	
	26–50													1	3													1										4	3	
	51–75																																					1		
	>75																																							
Trichinopoly ...	6–25	31				1		3	12	13	2	31						4	8	6		31						4	11	5		31	5	4	1	1	1	4	3	
	26–50																1	1	10	1									11				3	1	1					
	51–75																																							
	>75																																							
Trivandrum ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
Vizagapatam ...	6–25	31				3	23	4			1	31			2	1	4	7	6			31	2	2	1			6	10	4		30	9		1				3	
	26–50																1	8	2				1					2	2	1			7						1	
	51–75																																							
	>75																																							

*Only on 18 days in the month pilot balloon ascents were made in the afternoon. On the remaining days ascents were made in the forenoon. Visibility observations were, however, re
in the afternoon throughout the month.

Speed limits (km./hr.).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
6-25	22				1	4	3	3	3	2	1 — 10								3	2	26						4	3	20	4		Lahore
26-50						1	1		4																							
51-75											9 or 10										3											
>75																																
6-25	21	1					2	4	7		1 — 10								2	13	16						1	5	24	1		Madho Sagar (Gwalior)
26-50								4	3																							
51-75											9 or 10																					
>75																																
6-25	24	3	6	3					2		1 — 10								4		27									31		Madras
26-50			6					1																								
51-75			3								9 or 10										6											
>75																																
6-25	29	1				1	1	10	3	2	1 — 10									11	20							2	15	14		Malegaon
26-50							1	6	3																							
51-75								1			9 or 10																					
>75																																
6-25											1 — 10																		26	4	1	Mangalore
26-50																																
51-75											9 or 10																					
>75																																
6-25	16							4	2	1	1 — 10							1	2	4	24						6	17	8			New Delhi
26-50								3	5																							
51-75									1		9 or 10																					
>75																																
6-25	31		2	1		2	7	4	5	2	1 — 10								1	10	20							3	6	2	20	Peshawar
26-50					1		3	1	3																							
51-75											9 or 10										3											
>75																																
6-25	29	2	1	1	1	4	4	6	5	1	1 — 10										31									31		Poona
26-50		1					1	1	1																							
51-75											9 or 10																					
>75																																
6-25	7	2					1		3		1 — 10					13	11	5			2				1		1	15	14			Port Blair
26-50								1																								
51-75											9 or 10					1					28											
>75																																
6-25	18				1	3	2	3		1	1 — 10									5	13							1	19	11		* Raj Samand (Kankroli)
26-50							2	5	1																							
51-75											9 or 10																					
>75																																
6-25	17						1	3	6		1 — 10								13	9	9						1	4	20	6		Sambalpur
26-50		3						1	3																							
51-75											9 or 10										1											
>75																																
6-25	30	6	2	3	4	2	4	2	1		1 — 10								5	4	22							9	22			Sharjah
26-50			1				1	2	1																							
51-75							1				9 or 10																					
>75																																
6-25	17	1		1		2	2	2	1	2	1 — 10							7	8	12	4						1		13	17		Tezpur
26-50							1	1																								
51-75							1	3			9 or 10								1	1	16											
>75																																
6-25	26	2	7	3	1	1		2	2		1 — 10								24	3	4								12	12	7	Trichinopoly
26-50			4	2																												
51-75		1									9 or 10										7											
>75		1																														
* 6-25											1 — 10															2	8	12	14			Trivandrum
26-50																																
51-75											9 or 10																					
>75																																
6-25	23	5	4		1			3	2	1	1 — 10					4		2			25							7	17	7		Vizagapatam
26-50		3	2						2																							
51-75											9 or 10										2											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)...	6–25	31		1	3	2		1	2	5	17	31			2	3	2	1	3	10		31	2		1	1		2	3	8		18						1	2
	26–50													1		1	1		2	5							1		4	9			2				1		7	4
	51–75																																								1
	>75																																								
Bahrain ...	6–25	31	4		1		1	9	3	7	6	31	7	2		1	3	1	1	2	3	31	10				2	1′	2	2	2	23	2		1	1	1	2		4
	26–50												7							2			5							4			5								5
	51–75												2										2																		4
	>75																													1											
Bombay (Juhu) ...	6–25	31	1	1				6		8	15	31	2					6	4	12		27	2					2	7	10		21	1					2	9	5
	26–50												5							2			5							1									1	3
	51–75																																								
	>75																																								
Calcutta (Dum Dum) ...	6–25	31				6	12	9			4	30				1	5	7	1			30				3	5	9	8		1	10		1		1		2	1	3
	26–50															2	5	9										4												2
	51–75																																								
	>75																																								
Gaya ...	6–25	31		2	8	6	4	3			8	31	1			6	8	2	5	7		31	2	1	2		2	4	4	7	2	23	1						1	2
	26–50												1							1										7									3	16
	51–75																																								
	>75																																								
Jacobabad ...	6–25	31	2			5	4	4		9	7	31	1		1		2	6	5	3		31	2		1		2	5	6	7		31		1			1	4	8	10
	26–50																3	2		8			1				1	2		4			1							1
	51–75																																								
	>75																																								
Jiwani ...	6–25	31				2	6	11	5		7	31	1				2	3	6	5		30	2					3	6	5	1	21	1		1		1	1	5	6
	26–50													1				1	10	2			1	1				1	7	3								1	2	3
	51–75																																								
	>75																																								
Jodhpur ...	6–25	31						16	5			31						1	3			31						2	4	1		24	1	1		3	1	1	7	4
	26–50							9	1									9	10	1								10	10								2		3	
	51–75																	2	5									2	2											
	>75																																								
Karachi (Drigh Road) ...	6–25	31						9	20		1	31							3			27							3			12			1			1	1	3
	26–50								1										22	4									18	3									2	3
	51–75																		2										2	1									1	
	>75																																								
*Madho Sagar (Gwalior).	6–25	2									2	2			1					1		2								1	1	2								1
	26–50																																								1
	51–75																																								
	>75																																								
New Delhi ...	6–25	31						4	17	4	5	31	5				1	1	4	5	1	30	1					1	4	13		25							9	4
	26–50							1					1			1			4	6									2	7									6	6
	51–75																		2											2										
	>75																																								
†Raj Samand (Kankroli).	6–25	12						1	8	2	1	12							4	3		12							4	3		12					2	3		3
	26–50																		5										5								1		1	1
	51–75																																								
	>75																																								
Sharjah ...	6–25	31		2	1	12	8	1			7	31	8	1	1	1	1	2	7	9		31	3	3	1		1	3	6	10	1	28	3	1	4	1	2	2	4	6
	26–50																			1									3									2	1	
	51–75																																								
	>75																																								

*Only on 2 days in the month pilot balloon ascents were made in the late night. On the remaining days ascents were made in the morning. Visibility observations in the late night recorded only on days of ascents.

†Only on 13 days in the month pilot balloon ascents were made in the late night. On the remaining days ascents were made in the morning. Visibility observations in the late night

...ENCY (LATE NIGHT)

TABLE 11—FREQUENCY OF LOW CLOUD HEIGHTS (LATE NIGHT)

TABLE 12—FREQUENCY OF VISIBILITY (LATE NIGHT)

...ed ...its ...).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	6							1			1 — 10							1		1	29							31				Allahabad (Bamrauli)
-50		1				1			2																							
-75								1			9 or 10																					
>75																																
-25	14	4		2		1		2		1	1 — 10										31						3	27	1			Bahrain
-50		2		1					1																							
-75											9 or 10										2											
>75																																
-25	15	1				4	1	2	1		1 — 10					2	16	3			10							31				Bombay (Juhu)
-50						2	3	1																								
-75											9 or 10					1	1				2											
>75																																
-25	1		1								1 — 10				1	3	4			3	20						24	7				Calcutta (Dum Dum)
-50																																
-75											9 or 10										2											
>75																																
-25	10	1									1 — 10					1			1		29							31				Gaya
-50		1						3	3																							
-75									2		9 or 10										2											
>75																																
-25	26	3	2	1		1	5	6	4	1	1 — 10									1	30							21	10			Jacobabad
-50						1		1	1																							
-75											9 or 10																					
>75																																
-25	6	1		1	1			1	1		1 — 10					3	4				24						7	24				Jiwani
-50									1																							
-75											9 or 10																					
>75																																
-25	19		2		1	1	2	6	2	2	1 — 10										31						4	14	13			Jodhpur
-50							1		2																							
-75											9 or 10																					
>75																																
-25	4	2	1				1				1 — 10					6	7				18							7	24			Karachi (Drigh Road)
-50																																
-75											9 or 10																					
>75																																
-25	1										1 — 10										2								2			*Madho Sagar (Gwalior).
-50									1																							
-75											9 or 10																					
>75																																
-25	10	1						4			1 — 10									1	30						3	19	9			New Delhi
-50								2	3																							
-75											9 or 10																					
>75																																
-25	6		1			2	2		1		1 — 10										12						2	4	4	2		†Raj Samand (Kankroli).
-50																																
-75											9 or 10																					
>75																																
-25	26	3	4	8	1	1		2	3		1 — 10										31		1			1	1		28			Sharjah
-50			1		1		1	1																								
-75											9 or 10										1											
>75																																

Y. P. P.—S 3405—260—9-40

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MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

June 1939

Supplement to the Monthly Weather Report, June 1939

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Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 10th October 1940.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U 61

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	30	1	2	3	1		9	4	1	9	30	3		1	2	1	1	2	1	
ϕ = 27° 08′ N ...	26–50														2			1	5	3	
λ = 78° 01′ E ...	51–75																	1	5	2	
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	30						21	1	1	7	30						2	5	1	
ϕ = 23° 02′ N ...	26–50																	10	12		
λ = 72° 35′ E ...	51–75																				
H_s = 55 metres ...	>75																				
Bangalore ...	6–25	30						14	9	1	1	28							1	2	
ϕ = 12° 58′ N ...	26–50							3	1	1									14	1	
λ = 77° 35′ E ...	51–75																		10		
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	30						25			3	30						1			
ϕ = 23° 15′ N ...	26–50							2										18	3		
λ = 69° 48′ E ...	51–75																	4	3		
H_s = 113 metres ...	>75																	1			
Chittagong ...	6–25	30	1			10			1		18	27			3		6	4			
ϕ = 22° 21′ N ...	26–50															2	8	1	1		
λ = 91° 50′ E ...	51–75																1				
H_s = 21 metres ...	>75															1					
Dacca ...	6–25	30		1	1	3	2	2			21	26			1	2	3	3	1		
ϕ = 23° 43′ N ...	26–50															1	7	6			
λ = 90° 24′ E ...	51–75															1					
H_s = 21 metres ...	>75																	1			
Fort Sandeman ...	6–25	30	2	5	3	1					19	29	5	3	2		2	8	4	1	3
ϕ = 31° 21′ N ...	26–50												3								
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	30						1	22	2	1	30									
ϕ = 17° 26′ N ...	26–50							1	3										15	4	
λ = 78° 27′ E ...	51–75																		7	4	
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	30				2	2	3	11		11	29					1	3	3	2	
ϕ = 23° 10′ N ...	26–50								1									4	9	3	
λ = 79° 57′ E ...	51–75																		2	1	
H_s = 402 metres ...	>75																		1		
Lahore ...	6–25	30			2	5					23	30	2		3	5	3		4	1	1
ϕ = 31° 35′ N ...	26–50														2	2	3	1	2		
λ = 74° 20′ E ...	51–75																1				
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6–25	30	1	3	1			8	8	1	7	29			2	1		2	2	2	
ϕ = 26° 13′ N ...	26–50							1					2						8	3	
λ = 78° 08′ E ...	51–75																		7		
H_s = 233 metres ...	>75																				
Madras ...	6–25	30						14	8		8	30						1	1		
ϕ = 13° 04′ N ...	26–50																		15	1	
λ = 80° 15′ E ...	51–75																		12		
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	30				1			21	5	3	30	1						5	1	1
ϕ = 20° 33′ N ...	26–50																		16	2	
λ = 74° 32′ E ...	51–75																		4		
H_s = 448 metres ...	>75																				
*Mangalore ...	6–25	22	1	1	6	2			7		5	22	1				1	2	2	5	
ϕ = 12° 52′ N ...	26–50																	3	7		
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	30		4		1			1	9	15	30	10	3	1	1		1	2	7	
ϕ = 34° 01′ N ...	26–50												1	1						3	
λ = 71° 35′ E ...	51–75																				
H_s = 363 metres ...	>75																				
Poona ...	6–25	30						10	15	2	1	30							9	1	
ϕ = 18° 32′ N ...	26–50								2									3	14		
λ = 73° 51′ E ...	51–75																		3		
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	30						10	10	2	2	28				1	1	1	1		
ϕ = 11° 40′ N ...	26–50							6										7	6		
λ = 92° 43′ E ...	51–75																	10	1		
H_s = 87 metres ...	>75																				
†Raj Samand (Kankroli)	6–25	19				1		7	9		2	19						2	8	1	1
ϕ = 25° 03′ N ...	26–50																	2	4		
λ = 73° 58′ E ...	51–75																	1			
H_s = 587 metres ...	>75																				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	N
Agra ...	6–25	30		2			4	1	6			29	1		1		1	2	2	
ϕ = 27° 08′ N ...	26–50				2			2	4	4			1						2	1
λ = 78° 01′ E ...	51–75								4	1									1	
H_s = 182 metres ...	>75																			
Ahmedabad ...	6–25	30						4	5		1	26		1	1	2	5	5	3	
ϕ = 23° 02′ N ...	26–50							3	12								1	3	2	
λ = 72° 35′ E ...	51–75							2	3											
H_s = 55 metres ...	>75																		1	
Bangalore ...	6–25	30						6	13	2		21	1						2	
ϕ = 12° 58′ N ...	26–50							2	7										5	
λ = 77° 35′ E ...	51–75																		5	
H_s = 936 metres ...	>75																		2	
Bhuj ...	6–25	30										22			1	3	5	4	3	
ϕ = 23° 15′ N ...	26–50						2	16	4									1	1	
λ = 69° 48′ E ...	51–75							5	2									1		
H_s = 113 metres ...	>75							1												
Chittagong ...	6–25	23	1		1		5	3	3			16		1			2	5	4	
ϕ = 22° 21′ N ...	26–50					1	3	5								1	1			
λ = 91° 50′ E ...	51–75						1													
H_s = 21 metres ...	>75																			
Dacca ...	6–25	17				1	4	3	2			12		1		1	1	1	2	
ϕ = 23° 43′ N ...	26–50						3	4										2	1	
λ = 90° 24′ E ...	51–75																			
H_s = 21 metres ...	>75																			
Fort Sandeman ...	6–25											29	5	5		1	2	4	3	
ϕ = 31° 21′ N ...	26–50												3							
λ = 69° 27′ E ...	51–75																			
H_s = 1421 metres ...	>75																			
Hyderabad (Begumpet).	6–25	30							16	4		29	1				2	2	4	
ϕ = 17° 26′ N ...	26–50								6	4			1					1	9	
λ = 78° 27′ E ...	51–75																		3	
H_s = 555 metres ...	>75																		1	
Jubbulpore ...	6–25	29					1	3	2	2		25	2				1		3	
ϕ = 23° 10′ N ...	26–50							1	11	3			1						4	
λ = 79° 57′ E ...	51–75								4	1									2	
H_s = 402 metres ...	>75								1											
Lahore ...	6–25	30	1		4	5	2	1	5	3	2	26	3		3	1	1	1	4	1
ϕ = 31° 35′ N ...	26–50					2	1	1	2						1					
λ = 74° 20′ E ...	51–75						1													
H_s = 221 metres ...	>75																			
Madho Sagar (Gwalior).	6–25	29	1	1			1	1	3	2	1	25					3			
ϕ = 26° 13′ N ...	26–50								3	6									4	
λ = 78° 08′ E ...	51–75								4											
H_s = 233 metres ...	>75								1											
Madras ...	6–25	30						2	1			30	1	1			2	2	5	
ϕ = 13° 04′ N ...	26–50							1	11	4									8	
λ = 80° 15′ E ...	51–75								8	3									3	
H_s = 13 metres ...	>75																			
Malegaon ...	6–25	30	1						4	2	1	28	2	2	3	2	3	4	5	
ϕ = 20° 33′ N ...	26–50							1	14	2									3	1
λ = 74° 32′ E ...	51–75								5										1	
H_s = 448 metres ...	>75																			
*Mangalore ...	6–25	21							4	3		12	1					1	2	
ϕ = 12° 52′ N ...	26–50								10	1									5	
λ = 74° 51′ E ...	51–75								3										2	
H_s = 40 metres ...	>75																			
Peshawar ...	6–25	29	12	2	1	1		1	1	3	2	29	5	1	2			1	4	
ϕ = 34° 01′ N ...	26–50		2		1					2			2							
λ = 71° 35′ E ...	51–75									1										
H_s = 363 metres ...	>75																			
Poona ...	6–25	30						2	8	2		26	2	1	1			1	8	
ϕ = 18° 32′ N ...	26–50							2	12										7	
λ = 73° 51′ E ...	51–75								4										4	
H_s = 588 metres ...	>75																		1	
Port Blair ...	6–25	25			1		1	2	1			16				2	1	3		
ϕ = 11° 40′ N ...	26–50							5	5									2	4	
λ = 92° 43′ E ...	51–75							3	6									1	1	
H_s = 87 metres ...	>75							1												
†Raj Samand (Kankroli)	6–25	19					1		9		1	19			1	1	4	4		
ϕ = 25° 03′ N ...	26–50							3	4				1					2		
λ = 73° 58′ E ...	51–75							1											1	
H_s = 587 metres ...	>75																		1	

* Wind frequency table prepared from 22 ascents made in the morning.

† Only on 19 days in the month ascents were made in the morning, on the remaining 11 days ascents were made in the late night. Visibility observations were, however, recorde morning throughout the month.

REQUENCY (MORNING)

TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING)

TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

Speed limits (km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	27	1	1	1				2	5		1 — 10					1	1		4	8	16					3	4	23				Agra
26–50		1				1		2	9																							
51–75								1	3		9 or 10					1	1				9											
>75																																
6–25	21	3	4	1	3	2		3	1		1 — 10						8	8	1	1	12							8	22			Ahmedabad
26–50		2			1		1																									
51–75											9 or 10						1	1	1		9											
>75																																
6–25	9		2			1		1		1	1 — 10			4	2	8	6	5	1		4							15	13	2		Bangalore
26–50						1																										
51–75								2	1		9 or 10			4	2	8					23											
>75																																
6–25	18	2	1	2	1	2		1	4		1 — 10					10	15	3			2							29	1			Bhuj
26–50		3					1		1																							
51–75											9 or 10					2	1				3											
>75																																
6–25	13	2		1		1	2	1	2	2	1 — 10				5	12	5	2			6						3	16	11			Chittagong
26–50					1				1																							
51–75											9 or 10				4	3	1	1			26											
>75																																
6–25	7					1	1	1	2		1 — 10				3	20	2	1	1		3							30				Dacca
26–50									2																							
51–75											9 or 10				1	10	1				18											
>75																																
6–25	25	2	2		1	1	2		4	1	1 — 10							1	3		26			3	6	3	8	6	4			Fort Sandeman
26–50		6						2	4																							
51–75											9 or 10										2											
>75																																
6–25	25	2		1	2	1	4	4	3	1	1 — 10					9	1		2	2	16								3	13	14	Hyderabad (Begumpet)
26–50							2	4																								
51–75								1			9 or 10					1					10											
>75																																
6–25	13	3					2	3	2		1 — 10							4	1	6	19							6	24			Jubbulpore
26–50		1				1			1																							
51–75											9 or 10							1		1	14											
>75																																
6–25	16	3	1		1			2	3		1 — 10								1	3	26					2	11	10	7			Lahore
26–50		1							5																							
51–75											9 or 10									1	4											
>75																																
6–25	15	2				1		2	2	2	1 — 10				1		3	6		6	14					1	4	1	21	3		Madho Sagar (Gwalior)
26–50		2						1	2																							
51–75		1									9 or 10				1			1			10											
>75																																
6–25	29	1	2	1		2	6	2	3	1	1 — 10								1	1	28								5	19	6	Madras
26–50		2						8																								
51–75									1		9 or 10										18											
>75																																
6–25	26	1		5	2	1	2	1	4	2	1 — 10							2	3	13	12							20	3	7		Malegaon
26–50				1		3	1	2	1																							
51–75											9 or 10							1			7											
>75																																
6–25	8				2	1	1				1 — 10					17	13									5	7	7	9	2		*Mangalore
26–50								3																								
51–75								1			9 or 10					11	2				26											
>75																																
6–25	22	4							5		1 — 10								2	1	27			1			5	13	2	2	7	Peshawar
26–50		2						4	4																							
51–75									2		9 or 10								1		1											
>75									1																							
6–25	23	1		3	4	2		1	3	2	1 — 10						7	8	2	2	11							4	10	16		Poona
26–50			1				3	2	1																							
51–75											9 or 10						3	3			16											
>75																																
6–25	5			1			1	1			1 — 10					24	1	5							2		3	24	1			Port Blair
26–50								2																								
51–75											9 or 10					2					30											
>75																																
6–25	15	2	3	1		1	1	2	1	3	1 — 10						4		1		14								30			†Raj Samand (Kankroli)
26–50								1																								
51–75											9 or 10										5											
>75																																

TABLE 1–

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Sambalpur ...	6–25	30			1			7	2		20	27	1			1	3	3	6		2	27		2		1		5	2	3		26			1			3	2
ϕ = 21° 28′ N ...	26–50																	5	6									3	9	1			2					1	10
λ = 83° 58′ E ...	51–75																												1										1
H_s = 153 metres ...	>75																																						
Tezpur ...	6–25	30		2	5	1		4	1		17	27	1		4	2		4	6		2	25		1	2	3	2	3	4	1		16			2			5	2
ϕ = 26° 37′ N ...	26–50														3			3	1						1			3	3									3	2
λ = 92° 47′ E ...	51–75																	1											2										1
H_s = 80 metres ...	>75																																						
Trichinopoly ...	6–25	30						2	25	1	2	30										30	1					1				29					1	1	3
ϕ = 10° 49′ N ...	26–50																		7	2									9	2								2	6
λ = 78° 42′ E ...	51–75																		20										11										6
H_s = 88 metres ...	>75																		1										6										6
*Trivandrum ...	6–25	27	12	1						8	6	27							1			24										13	1						
ϕ = 08° 29′ N ...	26–50																		11	12									8	9									6
λ = 76° 57′ E ...	51–75																		2	1									4	3									
H_s = 76 metres ...	>75																																						2
Vizagapatam ...	6–25	30						12	7	3	8	30						4	1			29						4		2		27							4
ϕ = 17° 42′ N ...	26–50																	9	9	1								4	8				1					1	8
λ = 83° 18′ E ...	51–75																	5	1									3	4	2									4
H_s = 56 metres ...	>75																											1	1										1

TABLE 4–

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Allahabad (Bamrauli)	6–25	30	2	1		2	1	6	8	5	4	29	1	1				3	4	2	2	27	1				2	1	3	4	1	19					1	2	5
ϕ = 25° 26′ N ...	26–50								1				2	1		1	1	1	5	2			1	1					7	2				1					4
λ = 81° 44′ E ...	51–75																		3										2	2									
H_s = 98 metres ...	>75																																						
Bahrain ...	6–25	30		1				2	1	25		30						2		1	1									1		23	4	3	1				
ϕ = 26° 14′ N ...	26–50									1			8								1	30	1			2				1			3						
λ = 50° 35′ E ...	51–75												10								2		6							4			2						
H_s = 14 metres ...	>75												5										9							3			1						
																							4																
Bombay (Juhu) ...	6–25	30				3	2	14	7	1	3	30					3	9	6	2	1	23				1	1	3	10	1		10			1	1	1	2	1
ϕ = 19° 07′ N ...	26–50																	2	7									1	6									2	2
λ = 72° 50′ E ...	51–75																																						
H_s = 5 metres ...	>75																																						
Calcutta (Dum Dum)	6–25	30				7	3	14	1		5	30		1		4	6	3	4	1		28			1	1	3	6	2	2	1	21	1				2	2	3
ϕ = 22° 39′ N ...	26–50																4	5	2					1		1	1	3	3	3									4
λ = 88° 27′ E ...	51–75																																						
H_s = 5 metres ...	>75																																						
Gaya ...	6–25	30		2	2	5	3	3	6	3	4	30	2		1	3	1	2	8	4	2	26		1	1	3	1	2	5	6	1	25		1	2	1	1	2	3
ϕ = 24° 49′ N ...	26–50			1					1						2	1			4							1			1	3			1			1			6
λ = 85° 01′ E ...	51–75																												1										
H_s = 117 metres ...	>75																																						
Jacobabad ...	6–25	30			3	13					14	30			2	6	9	5	3	2	2	30	4		1	7	6	5	3			30	5	1	3	1	3	1	4
ϕ = 28° 17′ N ...	26–50																1						1							3			1						
λ = 68° 29′ E ...	51–75																																						
H_s = 66 metres ...	>75																																						
Jiwani ...	6–25	30		1	5	5	3	9	2		4	30	2		9	5	6	1	3		1	29	3	7	1	1		1	5	5		28	6	6	1				3
ϕ = 25° 10′ N ...	26–50							1											2	1				3					1	2			2	3					1
λ = 61° 47′ E ...	51–75																																1						
H_s = 5 metres ...	>75																																						
Jodhpur ...	6–25	30		1		2		7				28						2	1			27					1	4				15		1	3			4	2
ϕ = 26° 18′ N ...	26–50							19	1								1	23										19	2					1				1	
λ = 73° 01′ E ...	51–75																	1										1											
H_s = 233 metres ...	>75																																						
Karachi (Drigh Road)	6–25	30						16	3		1	30					2	7	6			17	2				1	2	2	1		4		2					2
ϕ = 24° 53′ N ...	26–50							8	2									1	10									2	5	1									
λ = 67° 07′ E ...	51–75																		4										1										
H_s = 29 metres ...	>75																																						
New Delhi ...	6–25	30	1	3	2	3	2	2	4	1	3	25	1	1	2	2	1	3	3	2		24	1	1		4	1	1	4	2	1	19	3			2	1		5
ϕ = 28° 39′ N ...	26–50								5						1	3		1	1	4					1	2			1	4									1
λ = 77° 15′ E ...	51–75								4																				1										
H_s = 227 metres ...	>75																																						
†Raj Samand (Kankroli)	6–25	14					1	6	5		1	14	1					10				14						10	1	1		13	1	1			3	2	
ϕ = 25° 09′ N ...	26–50							1										1	2									2					1					2	1
λ = 73° 53′ E ...	51–75																																						
H_s = 587 metres ...	>75																																						
Sharjah ...	6–25	30				1	1	22			6	30	1		1	3	4	7	7	1	1	30			1	2	1	10	2	7	1	30	2	2	1	1		6	7
ϕ = 25° 20′ N ...	26–50																2	2	1								1	2	3									1	1
λ = 55° 24′ E ...	51–75																																						
H_s = 11 metres ...	>75																																						

* Wind frequency table prepared from 27 ascents made in the morning.

† Only on 14 days in the month ascents were made in the forenoon.

QUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

ed its n/).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	5	3						2			1 — 10					2	4	4	8		12							2	28			Sambalpur
-50																																
-75											9 or 10					1	1		1		11											
>75																																
-25	4			1			2	1			1 — 10			2	8	6	5	3	3	3						1		16	13			Tezpur
-50																																
-75											9 or 10			2	7	5	2	1			25											
>75																																
-25	23		1	2		3	2	2	1	1	1 — 10					3				7	20								7	19	4	Trichinopoly
-50							1	6	1																							
-75								2			9 or 10										15											
>75								1																								
-25	6		3						1		1 — 10						25	1			4				2	6	15	7				*Trivandrum
-50								1																								
-75								1			9 or 10						4	1			18											
>75																																
-25	17	4					2	3	4	1	1 — 10					7	4	2		2	15							16	14			Vizagapatam
-50								1	1																							
-75									1		9 or 10										18											
>75																																

QUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

-25	4			1			1				1 — 10					1	1	1	5	6	16						3	26	1			Allahabad (Bamrauli)
-50							1	1																								
-75											9 or 10							1	1	1	13											
>75																																
-25	11	2	1	1						1	1 — 10										30							10	20			Bahrain
-50		1							2																							
-75									3		9 or 10																					
>75																																
-25	6			1	2		2				1 — 10					5	22	3									1	21	6	2		Bombay (Juhu)
-50								1																								
-75											9 or 10						3				15											
>75																																
-25	9							3	3		1 — 10					7	15	5			3						9	21				Calcutta (Dum Dum)
-50									3																							
-75											9 or 10					1	2				11											
>75																																
-25	15			1				3	3		1 — 10				1	4	2	1	7	1	14						2	9	19			Gaya
-50				1			1	1	5																							
-75											9 or 10				1	1					11											
>75																																
-25	24	7		1		1		2	5	3	1 — 10										30						2	19	9			Jacobabad
-50		4							1																							
-75											9 or 10																					
>75																																
-25	16	5	1	2		2		1	2	1	1 — 10					2	9				19						15	15				Jiwani
-50		2																														
-75											9 or 10																					
>75																																
-25	10	2	1		1			2		2	1 — 10						2	10	2		16					2	3	8	17			Jodhpur
-50		1					1																									
-75											9 or 10							2			7											
>75																																
-25	1		1								1 — 10					1	27	2									3	12	15			Karachi (Drigh Road)
-50																																
-75											9 or 10					1	18				22											
>75																																
-25	11	1				1	1	1	3		1 — 10					2		1	8	2	17				2	3	2	13	10			New Delhi
-50		1					1		2																							
-75											9 or 10					1					12											
>75																																
-25	6		1	2					2		1 — 10							3	2		9											Raj Samand (Kankroli)
-50						1																										
-75											9 or 10																					
>75																																
-25	23	2	2		3	5		3	3	1	1 — 10						2		3	1	24						1	3	22	4		Sharjah
-50			1			1	2																									
-75											9 or 10																					
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.							
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W
Agra ...	6–25	30	4	4		1		3	5	5	7	30	1	4	1			3	4	5	1	30	1	3	1			3	2	6	1	28	2		1			2	3
	26–50								1				1						7	3			1						7	4			2						8
	51–75																												1										1
	>75																																						
Ahmedabad ...	6–25	30					2	23	2	1	1	30					5	12	2			30						15	2			27			1		3	3	4
	26–50							1										8	1									9	3									6	4
	51–75																		2									1											
	>75																																						
Allahabad (Bamrauli)	6–25	30	2	2	2	1		1	7	9	4	29	2		1		2		8	3	1	27	2	1	1		1		9	2	1	18					1	3	4
	26–50									2				1	1		1	1	4	2					1		1		3	3			1			1		1	2
	51–75																			2										1									
	>75																													1									
Bahrain ...	6–25	30	3	2	1	1				22		30	2				1	1		1	1	29	1				1		1			26	3	3	1				
	26–50									1			3							6			7							7			4	1					1
	51–75												7							4			2							7			2						
	>75												2							2			2							1			1						
Bangalore ...	6–25	30						3	3	3	1	30						1	6	1		30						1	10	1	1	30				1	1		5
	26–50							8	8	4									17	2								2	15									1	16
	51–75																		3																				3
	>75																																						
Bhuj ...	6–25	30						23	2			30						5				30						10				23			1		4	4	5
	26–50							5										15	5								2	7	4								1	2	1
	51–75																	4	1									3	4										1
	>75																																						
Bombay (Juhu) ...	6–25	30						21	7	1		30						5	9	2	1	26						5	10	1		17			1		4	6	1
	26–50							1										5	7									2	8									2	2
	51–75																		1																				1
	>75																																						
Calcutta (Dum Dum)	6–25	30			1	8	10	7			4	30			1	4	8	4				30	1	1	2	3	3	6	4	1		25	1			2		3	6
	26–50													1	1	1	7	3									4	5									3	1	1
	51–75																																						
	>75																																						
Chittagong ...	6–25	30				3	12	9	2	1	3	30					6	11	3			24					6	6	2	1	2	16	2				3	1	3
	26–50																5	2									1	3									1	1	1
	51–75																3										2	1											
	>75																																						
Dacca ...	6–25	30				10	7				13	29				2	7	4	1	1		22			1		5	2	1	1	1	9	1			1			1
	26–50														1	2	10									1	1	6								1		3	
	51–75															1											1	1											
	>75																									1													
Fort Sandeman ...	6–25	30	4	5		2	1	1		4	13	30	4	5	1	2	2	1	2	8	4											30	5	4	2	2	1	1	2
	26–50																1																				1		
	51–75																																						
	>75																																						
Gaya ...	6–25	30	5	1	1	1		2	3	6	6	30	2	1	5				4	6	2	29	4		3				6	6	2	23	2		1	1		3	5
	26–50					1			2	2					1	1	1		2	5			1	1	1	2				1							1		1
	51–75																												2										1
	>75																																						
Hyderabad (Begumpet)	6–25	30						2	14	4	5	30						6	4	4	1	30						6	5	2	1	29		1				5	7
	26–50							1	3	1									13	1									11	4									13
	51–75																			1										1									
	>75																																						
Jacobabad ...	6–25	30			2	6	2	1			19	30			2	7	12	3		2	2	29			2	7	10	2	1	5		26	5	2	2	2	2	3	4
	26–50														1	1									1	1													
	51–75																																						
	>75																																						
Jiwani ...	6–25	30				6	6	16				30			2	3	12	4	2			29	2	1	6	3	1	1	9	1	1	27	7	2				1	3
	26–50					1		1								1	1	1	4										4				1						1
	51–75																																						
	>75																																						
Jodhpur ...	6–25	30					1	15	1		2	29						9	4		1	27					2	11	5			17		1	1	1	1	8	4
	26–50							9										14										7											
	51–75							2										1										2											
	>75																																						
Jubbulpore ...	6–25	30	2	1			1	5	11	3	7	30	3					2	10	3		30	3					2	10	3		26	3					1	4
	26–50												1				1	1	7	2			1				1		8	2								3	4
	51–75																																						
	>75																																						
Karachi (Drigh Road) ..	6–25	30					1	10				30					1	6	1			22			1	1	3	6	6	2		12	3	1	1				1
	26–50							16										11	7										2					1					
	51–75							2	1										3										1										
	>75																		1																				

Speed limits km./hr.).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
6-25	21	2				1		1	1		1 — 10							2	9	8	11					8	4	12	6			Agra
26-50		1				1		6	5																							
51-75								2	1		9 or 10							1	1	2	9											
>75																																
6-25	10	1	1	1	3	1			2		1 — 10						2	10	10	4	4					1		1	28			Ahmedabad
26-50				1																												
51-75											9 or 10								1		4											
>75																																
6-25	8		1			1					1 — 10						3	5	11	6	5					1	4	24	1			Allahabad (Bamrauli)
26-50		1					4	1																								
51-75											9 or 10								1		9											
>75																																
6-25	12	1	3	1	2					1	1 — 10										30						1		29			Bahrain
26-50		1																														
51-75								1	2		9 or 10																					
>75																																
6-25	11	1	1	1	1			1			1 — 10							13	10	7								3	7	17	3	Bangalore
26-50					1			3	1																							
51-75								1			9 or 10							3	2		21											
>75																																
6-25	10	4	1	1					2		1 — 10						3	17	5	4	1					1	4	24	1			Bhuj
26-50			1				1																									
51-75											9 or 10										5											
>75																																
6-25	9				2	1	2		2		1 — 10					3	20	6			1						1	18	9	2		Bombay (Juhu)
26-50				1			1																									
51-75											9 or 10						3				16											
>75																																
6-25	5							1	2		1 — 10					4	13	9		2	2				1		1	28				Calcutta (Dum Dum)
26-50									1																							
51-75									1		9 or 10										14											
>75																																
6-25	8	1						2	3		1 — 10			1	1	16	5	6			1							4	26			Chittagong
26-50						1																										
51-75									1		9 or 10			1	1	3	1				26											
>75																																
6-25	5	1			1			1			1 — 10					15	8	6		1							1	29				Dacca
26-50				1				1																								
51-75											9 or 10					2					17											
>75																																
6-25	26	3	3	1		1	2	6	5	3	1 — 10							4	6	8	12			1	3	3	7	2	14			Fort Sandeman
26-50		1						1																								
51-75											9 or 10							1			3											
>75																																
6-25	16	1					1	4	4	2	1 — 10					1	3	11	8	3	4					1	2	13	13	1		Gaya
26-50								2	1																							
51-75									1		9 or 10						1				7											
>75																																
6-25	17	1				5	1	2	1		1 — 10							4	5	21								1	2	10	17	Hyderabad (Begumpet)
26-50								6																								
51-75								1			9 or 10								1	1	11											
>75																																
6-25	22	5	1				2	4	5	1	1 — 10									1	29						3	18	9			Jacobabad
26-50		1							1																							
51-75									2		9 or 10																					
>75																																
6-25	22	8	3			2			4	2	1 — 10					3	2				25				2		7	21				Jiwani
26-50		1							2																							
51-75											9 or 10																					
>75																																
6-25	14	3	1		2	1	1	2		2	1 — 10								7	3	20				2	3	3	12	10			Jodhpur
26-50							1	1																								
51-75											9 or 10										3											
>75																																
6-25	16						3	2	3		1 — 10					1		2	4	22	1						1	3	26			Jubbulpore
26-50		2				1		2	1																							
51-75								1	1		9 or 10										10											
>75																																
6-25	5	1	2	2							1 — 10						22	8							1		3	13	13			Karachi (Drigh Road)
26-50																																
51-75											9 or 10						2				2											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6–25	30		3	2	3	4	2	1	3	12	30		1	5	2	4	3	7	2	1	28		1	3	4	2	4	9	1	1	24	3		1			1	10	5	1
	26–50														1	3	1									2	1						1					1	1		
	51–75																																								
	>75																																								
Madho Sagar (Gwalior)	6–25	30	1	1				2	10	13	3	30	5						6	11		30	3						6	12		25	4		1			1	1	9	
	26–50												1						4	2	1								4	4	1								5	4	
	51–75																																								
	>75																																								
Madras ...	6–25	30			1	15		8	5	1		30	1		2	1	2	6	9	2		30						4	10	3		30			1			2	4		1
	26–50												1					3	2	1			2					1	9	1									16	5	
	51–75																																						1		
	>75																																								
Malegaon ...	6–25	30		3		2		4	8	4	4	29	2		1	2		2	8	1		29	1		1	2	1	1	8	2		27	2		1		1	1	10	4	
	26–50								5									1	12									1	12										6		
	51–75																																						2		
	>75																																								
Mangalore ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
New Delhi ...	6–25	30	1	2	3	2	1	3	3	4	3	24	2	3	1	2	1		4	8		24	3	1	1	2	1		4	8		18	1		1	1	1		4	6	
	26–50					1			5	1						1			2						1	1			2	1			2	1						1	
	51–75								1																																
	>75																																								
Peshawar ...	6–25	30	2	13		3				2	10	30	1	2	7	6			1	2	10	30	1	2	5	7	1			3	10	29				3	2	3	6	10	1
	26–50												1																	1										4	
	51–75																																								
	>75																																								
Poona ...	6–25	30						6	9	6		30						3	10			30						1	9	1		23		2				1	4	2	2
	26–50							4	4	1								2	15									3	16									3	8		
	51–75																																						1		
	>75																																								
Port Blair ...	6–25	30						4	7	2	3	29				1		3	2		1	24			1		1	1		1	1	10		1	1	1			1		1
	26–50							9	3									10	5									4	9										3		
	51–75							2										4	3									3	1										1	1	
	>75																											1	1												
Raj-Samand (Kankroli)	6–25	17					1	6	4	2	3	17	1				2	6	3		1	17	1				2	5	3		1	17	1	1			2	6	3	2	
	26–50								1									2	1	1								3	2									1	1		
	51–75																																								
	>75																																								
Sambalpur ...	6–25	30	1				1	18	3		7	30				1		10	8	3		28				1	1	3	12	5		23	1					3	4	6	1
	26–50												1						6				1					1	2	1									4	3	
	51–75																												1									1			
	>75																		1																						
Sharjah ...	6–25	30	1					4	9	9		30	2				1	8	10	1		30			1	1	6	6	6	3		30	1	2	1	2	4	4	4	6	
	26–50							5	2									6	2								1	1	3	2									3	3	
	51–75																																								
	>75																																								
Tezpur ...	6–25	30		1	5	1	3	6	1		13	30	1	2	4	3	4	3	4		2	27			3	4	2	5	4	1	2	20			1	1		8	2		1
	26–50														1			5	1									2	2									3	4		
	51–75																												2												
	>75																																								
Trichinopoly ...	6–25	30						3	19	7		30							7	1		30						1	4			29	1				1	1	5	1	
	26–50								1									1	17										19										12		
	51–75																		4										6										6		
	>75																																						2		
Trivandrum ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Vizagapatam ...	6–25	30					22	3	2		3	29				1	2	5	10		1	29	1	1				5	11	3	1	29	3				1	2	3	4	
	26–50						1											7	2									2	5				2					1	4	3	
	51–75																	1																					1		
	>75																																								

* Only on 17 days in the month ascents were made in the afternoon. Visibility observations were, however, recorded in the afternoon throughout the month.

ed its n./).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	15	1	1					2	6		1 — 10								4	4	22				1	1	8	8	12			Lahore
-50		2	1					1	1																							
-75											9 or 10										3											
75																																
-25	14				1	1	2		3		1 — 10						1	2	12	11	4						3	4	21	2		Madho Sagar (Gwalior)
-50							1	2	4																							
-75											9 or 10										8											
75																																
-25	23			2	1		2	3	2		1 — 10								9	15	6								1	21	8	Madras
-50		1					1	3																								
-75								2			9 or 10										15											
75																																
-25	14		1	1	2		3	4			1 — 10						1		9	19	1							3	17	10		Malegaon
-50						1	1	1																								
-75											9 or 10								1	1	9											
75																																
-25											1 — 10																3	10	14	3		Mangalore
-50																																
-75											9 or 10																					
75																																
-25	13				1	1			2		1 — 10					1		1	8	8	12				2	1	8	8	11			New Delhi
-50		2						1	4																							
-75		2									9 or 10					1					7											
75																																
-25	26	1					1	4	2		1 — 10									5	25					3	3	13	4	1	6	Peshawar
-50		1				1	1	5	10																							
-75											9 or 10																					
75																																
-25	11			1	1	2	1	2			1 — 10						3	13	4	7	3							2	2	26		Poona
-50							2	2																								
-75											9 or 10						1	2	1	2	16											
75																																
-25	5			3	1						1 — 10					25	1	4								1	4	22	3			Port Blair
-50								1																								
-75											9 or 10					1					30											
75																																
-25	14	2	3	2			2		2	1	1 — 10							4	2	6	5						1	3	26			* Raj Samand (Kankroli)
-50		1																														
-75											9 or 10										3											
75								1																								
-25	14	1						6	3		1 — 10					2	1	5	20		2							1	29			Sambalpur
-50							1	2	1																							
-75											9 or 10					2					6											
75																																
-25	30	4	3	3		3	4	4	3	1	1 — 10								1		29						1	2	26	1		Sharjah
-50		1			1		1		1																							
-75							1				9 or 10																					
75																																
-25	12				1	2	2	2			1 — 10				2	2	5	7	7	6	1							2	12	16		Tezpur
-50							1	4																								
-75											9 or 10				1		2	3			17											
75																																
-25	16	3				1	2	1	1		1 — 10								13	17								1	4	17	8	Trichinopoly
-50								6																								
-75								1			9 or 10										20											
75								1																								
-25											1 — 10														2	5	3	17	3			Trivandrum
-50																																
-75											9 or 10																					
75																																
-25	27	2	1	1		2	1	2	1	1	1 — 10					5		5			20						1	2	9	18		Vizagapatam
-50							1	7	7																							
-75								1			9 or 10										14											
75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6-25	30	1	1	2	1	3	4	6	2	10	30		2	4	2	1	3	1	1	1	28	2	2		4	1	1	7			15	1			1			8	1	
	26-50													2					7	2								1	4	3								1	1	2	
	51-75																		2	1									1	1											
	>75																		1										1												
Bahrain ...	6-25	30				2	1	2	8	16		30	3	1			1				1	30	2	1		1						17	5		2	1			1	1	
	26-50									1			7							4			13							6			1							3	
	51-75												7							6			1							5										3	
	>75																													1											
*Bombay (Juhu) ...	6-25	30				6		16	3		5	29					3	9	12			18						5	8	1		9		2			1	3	3		
	26-50																	1	4									1	3												
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	30			1	4	7	12			6	30		1		1	4	6	1			26				1	4	8	2	2	1	10	4						3	1	
	26-50																3	11	3								1	4	2	1									1		
	51-75																																								
	>75																																								
Gaya ...	6-25	30	1		5	5	2	8	1		8	29	1		2	1	5	4	5		1	29		1	2	2	1	2	7	2	2	21	1		1	1	1	2	6	6	
	26-50															1		1	8							1			8	1									2	1	
	51-75																																								
	>75																																								
Jacobabad ...	6-25	30		1	4	5	15				5	30			2	2	8	10	2			29	2		2	2	3	8	6	3	2	26	4	1		1	1	1	8	8	
	26-50																2	2	2											1											
	51-75																																								
	>75																																								
Jiwani ...	6-25	30			4	6	3	11			6	30			5	4	2	6	2	1		21	1		1	1	1	3	2	1	1	11		1					4	1	
	26-50														3			2	4	1				1				1	5	2								1	3		
	51-75																												1												
	>75																																								
Jodhpur ...	6-25	30				1	1	4	3	1	2	30					1		1			30					1	2	1			23		3	1		4	3	4	3	
	26-50							14	4									16	6	1								17	3	1			1					1		1	
	51-75																	5										5													
	>75																																								
Karachi (Drigh Road) ...	6-25	30						18	5	1	1	27						9	7			12	1					3	4		1	6	1		1			2		1	
	26-50							2	3									3	7									1	1											1	
	51-75																		1										1												
	>75																																								
New Delhi ...	6-25	30	2	1	1	5	2	6	3	2	4	28				4	3	3	2	3	3	26			1	1	2	6	5	2	2	20	4				3	1	2	4	
	26-50							1	3										3	4									1	4									2	4	
	51-75																		3										2												
	>75																																								
†Raj Samand (Kankroli).	6-25	11		1			1	7	1	1		11					1	2	2			11					1	2	2	1		11			2		1	3	1	2	
	26-50																	1	4	1								1	4										1	1	
	51-75																																								
	>75																																								
Sharjah ...	6-25	30				8	13	6			3	30			1	1		8	11	5		30	2					6	12	4		28	1			1	1	6	8	7	
	26-50																		4										5	1						1		2			
	51-75																																								
	>75																																								

* On one day cloud height was not determined.

ed its a./ .).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	7	1		1				1	1		1 — 10					1	2	4	4	8	11						2	28				Allahabad (Bamrauli)
-50								3																								
-75											9 or 10					1	2	3		1	11											
>75																																
-25	5			2	2						1 — 10										30						1	28	1			Bahrain
-50									1																							
-75											9 or 10																					
>75																																
-25	0										1 — 10					8	21											28	2			*Bombay (Juhu)
-50																																
-75											9 or 10					2	2				11											
>75																																
-25	4	2							1	1	1 — 10					9	4	1	3	4	9						27	3				Calcutta (Dum Dum)
-50																																
-75											9 or 10						1				8											
>75																																
-25	8			1		1	1	3	1		1 — 10				1	3	2	2	4	3	15						1	19	10			Gaya
-50								1																								
-75											9 or 10				1						13											
>75																																
-25	22	10	1	1			1		5		1 — 10										30					1	3	23	3			Jacobabad
-50		2							2																							
-75											9 or 10										1											
>75																																
-25	5	2	1		1						1 — 10					11	5	1			13					1	13	16				Jiwani
-50					1																											
-75											9 or 10					3	4	1			8											
>75																																
-25	17	4	3	2	2				2		1 — 10							2	1		27					1	3	14	12			Jodhpur
-50		4																														
-75											9 or 10										5											
>75																																
-25	0										1 — 10					7	21	1			1						1	12	17			Karachi (Drigh Road)
-50																																
-75											9 or 10					6	5				11											
>75																																
-25	6		3		1			1			1 — 10				1			1	6	2	20					3	4	19	4			New Delhi
-50									1																							
-75											9 or 10				1				2	1	6											
>75																																
-25	10	3		1	2			2	1		1 — 10							2		1	8						1	9	1			† Raj Samand (Kankroli).
-50									1																							
-75											9 or 10										2											
>75																																
-25	26	F	4	2	4	3	4	2	4		1 — 10						2		1	1	26							2	28			Sharjah
-50				1				1																								
-75											9 or 10																					
>75																																

Y. P. P.—S 3695—250—10-40

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

July 1939

Supplement to the Monthly Weather Report, July 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:—ϕ =Latitude of the station; λ =Longitude of the station; H_S=Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C=the number of observations when the speed of wind is 5 km./hr. or less and n=number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud=9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 5th November 1940.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U 73

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW
Agra ...	6–25	31		1	2	1		7	5	1	14	30	2			2		1	7	1		29	3			1		1	6	5		27	5	1	2		1	2	3	5
φ = 27° 08′ N ...	26–50															2	1	1	9	1						3	1		4	3			2						1	2
λ = 78° 01′ E ...	51–75																		3										2											
H_s = 182 metres ...	>75																																							
Ahmedabad ...	6–25	31						25	1	2	3	31							1		1	30	2									22			2				1	1
φ = 23° 02′ N ...	26–50																	10	8	4									11						2			2	8	1
λ = 72° 35′ E ...	51–75																	4	3									1	14										3	
H_s = 55 metres ...	>75																																						1	
Bangalore ...	6–25	31						15	10			25										31						4	7			11							1	
φ = 12° 58′ N ...	26–50							3	2	1									7									6	14										2	1
λ = 77° 35′ E ...	51–75																	1	16																				6	1
H_s = 936 metres ...	>75																		1																					
Bhuj ...	6–25	31						24	1	1	2	31					1		2			29				1			3	1		11			1	1	3			
φ = 23° 15′ N ...	26–50							3										3	7									3	5						1				3	1
λ = 69° 48′ E ...	51–75																	8	8									7	9										1	
H_s = 113 metres ...	>75																	2																						
Chittagong ...	6–25	31				18					13	26				1	1	1				18					3	1				12				1	5	2		
φ = 22° 21′ N ...	26–50															5	11	3								3	7	2								3	1			
λ = 91° 50′ E ...	51–75															1	3									1	1													
H_s = 21 metres ...	>75																																							
Dacca ...	6–25	31			2	7		2			20	20				2	3	2				13				2	6	1				7			1	3	3			
φ = 23° 43′ N ...	26–50															3	4	2	1							1	2		1											
λ = 90° 24′ E ...	51–75															2		1																						
H_s = 21 metres ...	>75																																							
Fort Sandeman ...	6–25	31		5	2			2			22	31	2	5	2	1	2	6	3	2	8											31	3	3	2	1		9	3	3
φ = 31° 21′ N ...	26–50																																							
λ = 69° 27′ E ...	51–75																																							
H_s = 1421 metres ...	>75																																							
Hyderabad (Begumpet).	6–25	31						1	26			30										30										18							1	
φ = 17° 26′ N ...	26–50								4										3	3									5	3								1	6	2
λ = 78° 27′ E ...	51–75																		19	1									19	1									3	2
H_s = 555 metres ...	>75																		4										2										2	1
Jubbulpore ...	6–25	31						3	15	1	12	22					1	1	1			20					2		2			13	2		2	1		1		3
φ = 23° 10′ N ...	26–50																1		12	1							1		7	2										4
λ = 79° 57′ E ...	51–75																		5										5	1										
H_s = 402 metres ...	>75																																							
Lahore ...	6–25	31	1	1	4	4		2		1	18	30	2			5	5	4	3	2		30		1		2	3	9	4	2	2	29		4	1		2	1	11	7
φ = 31° 35′ N ...	26–50													2	1	3		1	1				1	1		2	1		2									1	1	1
λ = 74° 20′ E ...	51–75												1																											
H_s = 221 metres ...	>75																																							
Madho Sagar (Gwalior).	6–25	31		1	1	1		14	4			27	1		2		1		4	2		26	1		2		3		1	5		22	2	2	3	1	2	2	1	2
φ = 26° 13′ N ...	26–50							1			9							1	7	4			1						4	3			3						1	1
λ = 78° 08′ E ...	51–75																		5										5	1										1
H_s = 233 metres ...	>75																																							
Madras ...	6–25	31						3	8		20	31						1		1		31										31							3	2
φ = 13° 04′ N ...	26–50																	2	17	1									7	8									5	3
λ = 80° 15′ E ...	51–75																		9									1	13	1									10	3
H_s = 13 metres ...	>75																												1										5	
Malegaon ...	6–25	31				1		1	17	4	8	31	1						6	3		31		1					4	3		18	1		1	1		1	1	1
φ = 20° 33′ N ...	26–50																		12										12	1			1						3	1
λ = 74° 32′ E ...	51–75																		9										10										5	
H_s = 443 metres ...	>75																																						1	
*Mangalore ...	6–25	28			3	1		4	14	3	3	27							7			20							2			11							2	
φ = 12° 52′ N ...	26–50																	1	16										12										7	1
λ = 74° 51′ E ...	51–75																		3										6										1	
H_s = 40 metres ...	>75																																							
Peshawar ...	6–25	31								9	22	31	6	7	1		1	1	3	7	4	31	4	4	2	1	2	3	4	5	5	31	2	2	2	1	5	7	3	4
φ = 34° 01′ N ...	26–50													1										1											1				1	
λ = 71° 35′ E ...	51–75																																							
H_s = 363 metres ...	>75																																							
Poona ...	6–25	31						17	10		1	31						1	1	2		31						1	1	2		20				1		1		
φ = 18° 32′ N ...	26–50							3										3	15									3	15				1						2	
λ = 73° 51′ E ...	51–75																		9										9										11	
H_s = 588 metres ...	>75																																						4	
Port Blair ...	6–25	31						12	9	1		30							1			26							1			12						1	2	
φ = 11° 40′ N ...	26–50							7	1									8	7									4	7									2	3	
λ = 92° 43′ E ...	51–75							1										13	1									5	7										4	
H_s = 87 metres ...	>75																											2												
†Raj Samand (Kankroli)	6–25	19						12	5	1	1	19							5	2		19							6	1		18	2	1	2	1	2	1	2	1
φ = 25° 03′ N ...	26–50												1					8	2				1					8	2					1				1	1	1
λ = 73° 53′ E ...	51–75																	1										1											1	
H_s = 587 metres ...	>75																																							

* Wind frequency table prepared from 28 ascents made in the morning.

† Only on 19 days in the month pilot balloon ascents were made in the morning; on the remaining days ascents were made in the late night. Visibility observations were, how recorded in the morning throughout the month.

Table 2—Frequency of low cloud heights (Morning)

Table 3—Frequency of Visibility (Morning)

ed its 1/).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
·25	23	2	2		2		2	1	6		1 — 10					3	4		5	2	17				1		5	19	6			Agra
·50		1	4					1	2																							
·75											9 or 10						3				17											
·75																																
·25	7		1					1			1 — 10					1	4	10	2	8	6							10	21			Ahmedabad
·50			1	3				1																								
·75											9 or 10					1	1	5	2	6	25											
·75																																
·25	6	1							1		1 — 10		3	4	3	13	6				2							27	8	1		Bangalore
·50								1	1																							
·75								1			9 or 10		3	4	2	7	3				28											
·75								1																								
·25	7		1	1				1	1		1 — 10					3	19	4	1		4							31				Bhuj
·50			1	1	1																											
·75											9 or 10						1				13											
·75																																
·25	11			1	1	5	1				1 — 10				4	11	4	4	2	1	5						6	13	12			Chittagong
·50					2		1																									
·75											9 or 10				4	8	2	2	1		30											
·75																																
·25	4				2		2				1 — 10			1	13	13		1			3					1	1	29				Dacca
·50																																
·75											9 or 10			1	7	3					27											
·75																																
·25	30	2				1		4	6	9	1 — 10									2	29				1	3	13	13	1			Fort Sandeman
·50								1	13																							
·75											9 or 10										1											
·75																																
·25	9	1	1					1	3		1 — 10					17	2	2	3		7								2	19	10	Hyderabad (Begumpet)
·50							1	1	1																							
·75								1			9 or 10					5	1		1		21											
·75																																
·25	6	1	1	1					2		1 — 10			2	2	9	4	3	1	3	7					4	6	6	15			Jubbulpore
·50								1																								
·75											9 or 10			2	2	7	2				22											
·75																																
·25	21	6	2		1		1	1	6		1 — 10								6	2	23				1	1	8	19	8			Lahore
·50		1	1					1	1																							
·75											9 or 10								1		6											
·75																																
·25	10	4	2	1		1		1	1		1 — 10		1	1		5	2	2	1	4	15						2	3	18	8		Madho Sagar (Gwalior)
·50																																
·75											9 or 10					1					20											
·75																																
·25	28							5			1 — 10									1	30							1	19	10	1	Madras
·50								15	1																							
·75								5			9 or 10										27											
·75								1	1																							
·25	8			3		1					1 — 10						6	14	6	5							7	16	5	3		Malegaon
·50				1					3																							
·75											9 or 10						4	2		1	26											
·75																																
·25	1							1			1 — 10				1	16	14									8	6	15	2			Mangalore
·50																																
·75											9 or 10				1	9	2				21											
·75																																
·25	25	2		2		1	1	6	8	3	1 — 10					1			4	7	21					2	3	6	9	8	3	Peshawar
·50								2																								
·75											9 or 10										3											
·75																																
·25	8				1						1 — 10						22	8	5								3	14	12	2		Poona
·50				1				2	2																							
·75								1	1		9 or 10						9	2	1		26											
·75																																
·25	1							1			1 — 10					29											5	26				Port Blair
·50																																
·75											9 or 10					1					29											
·75																																
·25	13	1	3	1			1	2			1 — 10						3	6	2		8							1	29	1		Raj Nandgaon (Kankroli)
·50			4							1																						
·75											9 or 10										11											
·75																																

TABLE 1—W

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW
Sambalpur ...	6–25	31			1			18	1	1	10	23	1		1	2	1		3	1		19	1		1	2			1		1	11	1		2	1			1	1
φ = 21° 28′ N ...	26–50																	5	8	1								1	10	2							1		4	
λ = 83° 58′ E ...	51–75																																							
H_s = 153 metres ...	>75																																							
Tezpur ...	6–25	31		2	6		2				1	22			5	3	3	4	3		1	18			3	1	2	3	3		2	10			2		3		1	
φ = 26° 37′ N ...	26–50														1				2						1				3									1	3
λ = 92° 47′ E ...	51–75																																							
H_s = 80 metres ...	>75																																							
Trichinopoly ...	6–25	31						1	25	2	2	31							1			31										30							6	1
φ = 10° 49′ N ...	26–50								1									1	7									1	9	1									5	1
λ = 78° 42′ E ...	51–75																		19										13										10	
H_s = 88 metres ...	>75																		3										7										7	
Trivandrum ...	6–25	31	11						5	14	1	28						1				22										11								
φ = 08° 29′ N ...	26–50																	1	7	13								1	2	8									1	6
λ = 76° 57′ E ...	51–75																		2	4									5	6									2	2
H_s = 76 metres ...	>75																																							
Vizagapatam ...	6–25	31						11	10	2	8	31	1	1				1		1		31	1	1								27	1		1					1
φ = 17° 42′ N ...	26–50																	4	10									4	8	2								1	5	3
λ = 83° 18′ E ...	51–75																	4	8										13										8	1
H_s = 56 metres ...	>75																		1										2										5	1

TABLE 4—W

Allahabad (Bamrauli)	6–25	31		3	2			5	9	1	11	27		2	3		1	2	3	6	1	19	1		2			1	1	3	4	14	5	1	2			1	1	2
φ = 25° 26′ N ...	26–50													2	1				5	1					2				2	3									1	
λ = 81° 44′ E ...	51–75																																							
H_s = 98 metres ...	>75																																							
Bahrain ...	6–25	31	1	1				2	7	17	3	31	4	1						5		31	4	1						2		24	1	2						2
φ = 26° 14′ N ...	26–50												4	1						3			5	1						3			9	1						4
λ = 50° 35′ E ...	51–75												8							3			8							5			2							3
H_s = 14 metres ...	>75												2										1							1										
Bombay (Juhu) ...	6–25	31				3	1	23	1	2	1	24		1					1	1	1	11	1	1						1		4		1	1					
φ = 19° 07′ N ...	26–50																	4	8										5										1	
λ = 72° 50′ E ...	51–75																	3	5									1	2											
H_s = 5 metres ...	>75																																							
Calcutta (Dum Dum)	6–25	31		2	1	5	3	10	2	1	7	30		1	2	3	2	9	3	1	1	25			2	1	4	4	5			12	1	2		2	2	1	2	
φ = 22° 39′ N ...	26–50														2			1	4						2		2	1	2	2									1	
λ = 88° 27′ E ...	51–75																		1																					
H_s = 5 metres ...	>75																																							
Gaya ...	6–25	31	2	3	5	2	1	8	2	3	4	27	2	3	2	2		2	1	2	1	22	2	3	2	2			2	2		15	2	5	1	2				2
φ = 24° 49′ N ...	26–50					1									2	3		1	2	3				1	1	2				2						2				
λ = 85° 01′ E ...	51–75														1										2					1										
H_s = 117 metres ...	>75																																							
Jacobabad ...	6–25	31		1	6	10	1				13	31		1	7	5	9	2	2	1	2	30	3	2	3	5	4	1	2	3	5	28	4				1	4	5	11
φ = 28° 17′ N ...	26–50														1		1								1		1						2							1
λ = 68° 29′ E ...	51–75																																							
H_s = 66 metres ...	>75																																							
Jiwani ...	6–25	31			6	9	3	9			4	31			7	11	4	2	5			26	4	2	1	3	1	3	5	3	1	20	5		2				1	5
φ = 25° 10′ N ...	26–50														1	1													2	1			2							5
λ = 61° 47′ E ...	51–75																																							
H_s = 5 metres ...	>75																																							
Jodhpur ...	6–25	31		1				7	1		1	31			1			7			1	29		1				6		1	8	1	1	1			1		1
φ = 26° 18′ N ...	26–50							21										19	2									17	3				1				1			
λ = 73° 01′ E ...	51–75																	1										1												
H_s = 233 metres ...	>75																																							
Karachi (Drigh Road)	6–25	31						7		2		31							2	1		9		1		1				2		2			1					
φ = 24° 53′ N ...	26–50							17	5										16										5						1					
λ = 67° 07′ E ...	51–75																		12																					
H_s = 29 metres ...	>75																																							
New Delhi ...	6–25	31	1	2	7	3	1	2	6	1	4	31	1	1	4	3	1	1	6	2	2	30			2	3	1	2	4	3	2	24	3	2				4	5	5
φ = 28° 39′ N ...	26–50								4							2			7							2			5	4			1							3
λ = 77° 15′ E ...	51–75																			1									1	1										
H_s = 227 metres ...	>75																																							
*Raj Samand (Kankroli)	6–25	13	1	1				5	1	3	1	13	1				1	1	4	2		13	1				1	1	3	2		10		2	1		2			1
φ = 25° 03′ N ...	26–50							1										4										5					1							3
λ = 73° 53′ E ...	51–75																																							
H_s = 587 metres ...	>75																																							
Sharjah ...	6–25	31				1	3	18	2	2	5	31	1		1	4	11	5	3		3	31	1		2	3	5	8	5	3	2	30	1	2	2	3	4	6	5	4
φ = 25° 20′ N ...	26–50																	1	2										2							1		1		
λ = 55° 24′ E ...	51–75																																							
H_s = 11 metres ...	>75																																							

* Only on 13 days in the month pilot balloon ascents were made in the forenoon.

EQUENCY (MORNING)

peed nits m./ r.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C
6–25	4		1	1					1	
6–50								1		
1–75										
>75										
3–25	4			1						
3–50							2			
1–75								1		
>75										
3–25	19						2	2	1	2
3–50								5		
1–75								5		
>75								2		
1–25	4							1	1	
1–50										
–75								1	1	
>75										
1–25	9							1	1	
1–50								1	2	
–75								2	1	
>75								1		

TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING)

Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9
1 — 10				2	8	8	8	3		2
9 or 10				2	6	8	3			28
1 — 10			4	3	12	2	1	3	1	5
9 or 10			4	2	10	2		2	1	30
1 — 10					1			1	11	18
9 or 10										20
1 — 10					2	25				4
9 or 10					1	6				20
1 — 10					2	5	2		4	18
9 or 10										23

TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
						11	20			Sambalpur
				1	3	19	8			Tezpur
							15	14	2	Trichinopoly
			1	18	14	8				Trivandrum
					1	4	24	2		Vizagapatam

QUENCY (FORENOON)

-25	8	4		2					1	
-50		1								
-75										
>75										
-25	11	1	1						2	1
-50								2	2	
-75									3	
>75										
-25	3			1	1					
-50					1					
-75										
>75										
-25	5		1	1	2		1			
-50										
-75										
75										
25	12	3	4		1	1				
50				2				1		
75										
75										
25	22	5	1						7	
50		5						1	3	
75										
75										
25	7	1		1					1	2
50		2								
75										
75										
25	4	2							1	
50			1							
75										
75										
25	2									
50		1	1							
75										
75										
25	14	1	1	2				3	2	
50		1					1	1	1	
75									1	
75										
25	9	2	1	1		1			1	1
50			1						1	
75										
75										
25	26	2	2	4	3	4	2	2	4	1
50				1	1					
75										
75										

TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON)

Amounts of low cloud.	0	1	2	3	4	5	6	7	8	9
1 — 10				1	9	5	5	1	2	8
9 or 10				1	7	1			1	17
1 — 10										31
9 or 10										
1 — 10					15	14	1			1
9 or 10					4					26
1 — 10					14	12	4	1		
9 or 10					4	1				22
1 — 10			1		10	6	8	1		5
9 or 10			1		3	1	1			22
1 — 10										31
9 or 10										1
1 — 10					12	11				8
9 or 10					3	2				5
1 — 10				1		12	9			9
9 or 10						3	3			15
1 — 10					7	21	1			2
9 or 10					3	19	1			28
1 — 10							3	7	4	17
9 or 10										11
1 — 10						4	3	1		5
9 or 10						2				6
1 — 10						1	1	1	1	27
9 or 10										

TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

0	1	2	3	4	5	6	7	8	9	STATION.
					1	30				Allahabad (Bamrauli)
					1	13	17			Bahrain
					4	26	1			Bombay (Juhu)
				2	9	20				Calcutta (Dum Dum)
					2	8	18	3		Gaya
				1	3	20	7			Jacobabad
				1	18	12				Jiwani
						15	16			Jodhpur
					6	25				Karachi (Drigh Road)
				1	1	16	13			New Delhi
										Raj Samand (Kankroli)
				1	1	1	26	2		Sharjah

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6-25	31	3	3	3			7	5	4	6	31	4	4	2			2	7	6	1
	26-50												1						3		
	51-75														1						
	>75																				
Ahmedabad ...	6-25	31						24	1	3	3	31					1	2	2	3	1
	26-50																	15	5	1	
	51-75																	1			
	>75																				
Allahabad (Bamrauli)	6-25	31	1	4	4			7	5	6	4	29	1	2	2	1		2	5	5	1
	26-50													3	2				4		
	51-75																		1		
	>75																				
Bahrain ...	6-25	31	5	4	2					12		31	5		2						
	26-50									1			10	1						6	
	51-75												4							2	
	>75												1								
Bangalore ...	6-25	31						1	2	4		31							2		
	26-50							10	11	2									19		
	51-75								1									1	9		
	>75																				
Bhuj ...	6-25	31						19		1		31						1	3	1	
	26-50							11										8	6		
	51-75																	8	3		
	>75																	1			
Bombay (Juhu) ...	6-25	31						23	1	3	2	25					1		3		
	26-50								1	1			1					9	6		
	51-75																	1	4		
	>75																				
Calcutta (Dum Dum)	6-25	31			2	9	4	11	1	1	3	30			2	6	4	6	1		
	26-50															2	2	4	1	1	
	51-75																		1		
	>75																				
Chittagong ...	6-25	31				8	17	4			2	26					6	3			
	26-50															1	12	4			
	51-75																				
	>75																				
Dacca ...	6-25	31			2	19		2			8	30				7	7				
	26-50															4	4	3	1		
	51-75															4					
	>75																				
Fort Sandeman ...	6-25	31	1	3		1	1	3	2		19	31	4	5	2	2	3	4	5		4
	26-50				1											2					
	51-75																				
	>75																				
Gaya ...	6-25	31	1	5	3	3		4	2	6	2	30	2	4	5	1			4		1
	26-50		1	3					1					2	4	1			5	1	
	51-75																				
	>75																				
Hyderabad (Begumpet).	6-25	31						3	12	6	1	30	1						2	1	
	26-50							1	8										20	1	
	51-75																		5		
	>75																				
Jacobabad ...	6-25	31			1	15	1				14	31			2	8	19			1	
	26-50														1						
	51-75																				
	>75																				
Jiwani ...	6-25	31				9	7	15				31				12	8	7			
	26-50															1		2	1		
	51-75																				
	>75																				
Jodhpur ...	6-25	31				1		8		1	4	31	2				1	7	1	1	
	26-50							17									1	16	2		
	51-75																				
	>75																				
Jubbulpore ...	6-25	31	1	1	2			2	17	3	5	24	1	2	2			1	4		2
	26-50																	1	11		
	51-75																				
	>75																				
Karachi (Drigh Road) ...	6-25	31						2				31						1	3		
	26-50							28	1									1	23		
	51-75																		2		
	>75																		1		

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6-25	30	5	2	2		1	4	7	3		28	5	2	2		1	2	1	10	2
	26-50		2						3				1	1	1						
	51-75			1																	
	>75																				
Ahmedabad ...	6-25	31	1						4	3		21	1	3					3		
	26-50							15	7									3	8		
	51-75								1									2	1		
	>75																				
Allahabad (Bamrauli)	6-25	28	1	2	1	2			3	6	1	19	1	3	4	1			2	3	
	26-50			3	3				4	1			1		1				2		
	51-75								1					1							
	>75																				
Bahrain ...	6-25	31	4	1						2		28	2		2						
	26-50		6	1						7			7						1	8	
	51-75		5							4			1							6	
	>75									1			1								
Bangalore ...	6-25	31							3	2		24							1		
	26-50							2	22										12	1	
	51-75								2										9		
	>75																		1		
Bhuj ...	6-25	31						1	3	1		5		1	3			1			
	26-50							9	10												
	51-75							2	4												
	>75							1													
Bombay (Juhu) ...	6-25	15			1					1		5					1				1
	26-50								7	1									3		
	51-75							2	3												
	>75																				
Calcutta (Dum Dum)	6-25	28			2	6	1	8	1		1	20	1		2	3	2	3	2	1	
	26-50					1	2	2	2								1	1	3		
	51-75								1	1											
	>75																				
Chittagong ...	6-25	19					7	2				12				2	3	2			
	26-50					2	7	1									1	3	1		
	51-75																				
	>75																				
Dacca ...	6-25	16				3	4					6					4				
	26-50				1	4	2	2							1	1					
	51-75																				
	>75																				
Fort Sandeman ...	6-25											31	5	6	1	2	3	4	4		
	26-50															2					
	51-75																				
	>75																				
Gaya ...	6-25	28	3	3	3	2			2		1	16	4	2	1	3				1	
	26-50			3	4	1		1	4	1					3				1		
	51-75														1						
	>75																				
Hyderabad (Begumpet).	6-25	30	1						2	1		21		1						1	
	26-50								22										8	1	
	51-75								4										6	1	
	>75																		3		
Jacobabad ...	6-25	30	1	1	3	4	16	1	1	1	2	28	6	2	1		3	3	1	8	
	26-50																				
	51-75																				
	>75																				
Jiwani ...	6-25	30		1	1	3	1	7	8	1	5	28	6	4					2	10	
	26-50								3				3							2	
	51-75																				
	>75																				
Jodhpur ...	6-25	28						5	1	3		21	1	1	2	3	2	4	1	1	
	26-50						1	16	2							1		1	2		
	51-75																				
	>75																	1			
Jubbulpore ...	6-25	24	1	2	2		1	1	4	1	1	14	2	2					2	1	
	26-50							1	9					1	1				2	3	
	51-75								1												
	>75																				
Karachi (Drigh Road) ...	6-25	19	1	1		1			3	2		11	1	1		1					
	26-50								9	2			1	1					2	4	
	51-75																				
	>75																				

eed nits n./ r.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6-25	22	2	1		3		1	4	2	2	1 — 10				1		2	3	9	8	8					1	4	18	8			Agra
6-50		1		1			2	1	2																							
1-75											9 or 10				1		1		1		14											
>75																																
6-25	6			1			1	1			1 — 10						1	7	19	4								4	27			Ahmedabad
6-50				3																												
1-75											9 or 10							2	6	2	22											
>75																																
6-25	6	1	2		1						1 — 10					7	5	4	8	6	1						2	27	2			Allahabad (Bamrauli)
6-50				1				1																								
1-75											9 or 10					4					22											
>75																																
6-25	15			1					2		1 — 10										31							4	27			Bahrain
6-50								3	3																							
1-75		1						1	3		9 or 10																					
>75									1																							
6-25	4							1	1		1 — 10					1	4	14	11	1							1	12	17	1		Bangalore
6-50								1	1																							
1-75											9 or 10						2	4			24											
>75																																
6-25	4		1								1 — 10						4	22	3	1	1						4	27				Bhuj
6-50			1	2																												
1-75											9 or 10						1	2			13											
>75																																
6-25	1								1		1 — 10					10	17	1	2		1						3	28				Bombay (Juhu)
6-50																																
1-75											9 or 10					6					28											
>75																																
6-25	7			1	2		2	1	1		1 — 10					19	7	4	1							1	2	28				Calcutta (Dum Dum)
6-50																																
1-75											9 or 10					2	2				26											
>75																																
6-25	9			1	4	1	3				1 — 10				2	21	4	3	1									6	24	1		Chittagong
6-50																																
1-75											9 or 10				2	4					26											
>75																																
6-25	3							1		1	1 — 10				8	11	6	5		1							2	29				Dacca
6-50				1																												
1-75											9 or 10				3						18											
>75																																
6-25	27	1	2			4	5	4	5	4	1 — 10							1	11	4	15					2	4	16	9			Fort Sandeman
6-50					1		1																									
1-75											9 or 10							1			2											
>75																																
6-25	5		2				1	1			1 — 10					7	11	10	3									6	19	6		Gaya
6-50				1																												
1-75											9 or 10					1	3				24											
>75																																
6-25	4										1 — 10					2	1	3	14	11						1			3	18	9	Hyderabad (Begumpet)
6-50								1																								
1-75								2	1		9 or 10					1	2	2	7	3	23											
>75																																
6-25	19	7	1				1	1	3		1 — 10									1	30					1	3	19	8			Jacobabad
6-50		3	2					1																								
1-75											9 or 10										1											
>75																																
6-25	23	9						2	5		1 — 10					7	5				19					2	8	21				Jiwani
6-50		2	1					1	3																							
1-75											9 or 10																					
>75																																
6-25	14	4	2		1	1			3		1 — 10							5	4	5	17						5	9	17			Jodhpur
6-50		3																														
1-75											9 or 10										10											
>75																																
6-25	5		2			1		1			1 — 10				1	6	2	9	4	9						1	6	6	18			Jubbulpore
6-50									1																							
1-75											9 or 10				1	3	1	3			24											
>75																																
6-25	4		1		1						1 — 10					1	24	4			2						6	25				Karachi (Drigh Road)
6-50			1																													
1-75			1								9 or 10					1	10	1			14											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6-25	31		2	3	6	3	2	1	5	9	31	1	1	2	6	5	2	5	2	4	28	1		2	8	3	1	6	2	4	23	3			1	2	3	7	3	4
	26-50														1	1		1									1														
	51-75																																								
	>75																																								
Madho Sagar (Gwalior)	6-25	31	4	4		1		5	6	6	4	29	5	4	1				7	6	2	28	5	2	2			1	3	5	2	22	3	4	1		1	1	4	2	2
	26-50							1											8	1									5	3			1	1	1					1	
	51-75																																								
	>75																																								
Madras ...	6-25	31			5	3		8	11		4	31	2			1		2	6	2	1	31							7			31							1		
	26-50																		14										19	1									17	2	
	51-75																		3									1	3										11		
	>75																																								
Malegaon ...	6-25	31		2				8	8	9	1	30	1	1	1				1	3		30	1	1		1				2		11			2						
	26-50								8									2	12	1								2	13	2									6		
	51-75																		8										8										3		
	>75																																								
Mangalore ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
New Delhi ...	6-25	31		3	4	8	1	1	5		10	31	3	2	3	3	3	3	7	2	2	31	2	2	2	3	3	1	6	4	3	21	2	2	2		1	2	4	3	
	26-50							1	3									1	2										5										2	3	
	51-75																																								
	>75																																								
Peshawar ...	6-25	31		19	1	1		1			9	31		6	12	6	3	1	1		2	31		5	7	11	3	1	1		3	31				2	10	9	6	3	
	26-50																																							1	
	51-75																																								
	>75																																								
Poona ...	6-25	31	1					10	4			31	1						1			31	1						1			18	1		1			1			
	26-50							10	6									3	17									3	17	1									2	1	
	51-75																	1	8									1	7										9		
	>75																																					1	2		
Port Blair ...	6-25	31						3	6			31						1				17										4							1		
	26-50							14	2									12	8									2	8									1	2		
	51-75							6										10										3	2												
	>75																											2													
*Bai Samand (Kankroli)	6-25	21					2	13	1	4	1	21	2				1	6	5	1		21	2				1	8	2	2		19	1	1	3		1	2	5	2	1
	26-50																	5	1									5	1					1					2		
	51-75																																								
	>75																																								
Sambalpur ...	6-25	31		1				13	7	1	8	25		1	2			3	8	2	1	20	2	2	1		1	2	4			9		2					2		
	26-50								1									1	5										7					1					2	1	
	51-75																	1	1										1										1		
	>75																																								
Sharjah ...	6-25	31	2					3	7	18		31			1		1	8	10	6		31	1			3	5	7	4	2	3	31	2	1	4	1	4	4	3	2	3
	26-50								1									1	4									4	2							2	1	3	1		
	51-75																																								
	>75																																								
Tezpur ...	6-25	31		3	6		1	4	1		16	30	1	2	5	3	4	7	2		3	29		1	2	2	7	6	1		2	25		1	7			4	1		
	26-50														3										4			1	3						4			6	2		
	51-75																																								
	>75																																								
Trichinopoly ...	6-25	31						3	10	7		31							2			31										28						1	1		
	26-50								11									1	15									2	16										13		
	51-75																		13										10									1	10		
	>75																												3										2		
Trivandrum ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
Vizagapatam ...	6-25	31		1		1	5	10	7	1	2	30			1			1	5	1		30						1	2	2		23							2		
	26-50						1	2	1					1				2	15					2				1	15	2				1	1			1	4	5	
	51-75																	3	1									1	4										4	3	
	>75																																						2		

* Only on 21 days in the month pilot balloon ascents were made in the afternoon. Visibility observations were, however, recorded in the afternoon throughout the month.

eed nits m./ t.).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	13	1	1	1	1	1	1	1	5		1 — 10						1		5	6	19				2	2	15	7	4	1		Lahore
-50								1																								
-75											9 or 10								1	1	5											
>75																																
-25	8	1	1				1		1	1	1 — 10				2	5	1	8	6	7	2					1	3	2	12	13		Madho Sagar (Gwalior)
-50		1	1						1																							
-75											9 or 10					2				1	19											
>75																																
-25	16							1			1 — 10								3	21	7									9	22	Madras
-50								9																								
-75								5			9 or 10									3	26											
>75								1																								
-25	3										1 — 10						4	16	10	1							2	12	16	1		Malegaon
-50				1				1	1																							
-75											9 or 10						1	3	1		25											
>75																																
-25											1 — 10														1	2	3	10	15			Mangalore
-50																																
-75											9 or 10																					
>75																																
-25	11	1	1	1			2	2	2		1 — 10						1		10	12	8						3	14	14			New Delhi
-50							1		1																							
-75											9 or 10										10											
>75																																
-25	26	3		1		2	1	7	7		1 — 10								4	11	16					1	3	8	10	6	3	Peshawar
-50						1		1	3																							
-75											9 or 10										1											
>75																																
-25	5	1									1 — 10						18	10	2	1							1	4	16	10		Poona
-50				1				2																								
-75								1			9 or 10						8		1		24											
>75																																
-25											1 — 10					26	3	2									2	27	2			Port Blair
-50																																
-75											9 or 10					2					30											
>75																																
-25	13		2	2				2	2		1 — 10						1	9	5	3	3							1	30			* Raj Samand (Kankroli)
-50		2							3																							
-75											9 or 10							1			12											
>75																																
-25	5		1					1		1	1 — 10				1	8	12	6	4									9	22			Sambalpur
-50			1					1																								
-75											9 or 10				1	7	7				23											
>75																																
-25	29	2	2	3	3	4	4	3	2	3	1 — 10								2	2	27						2	2	27			Sharjah
-50				1		2																										
-75											9 or 10																					
>75																																
-25	13		3	2		1	1				1 — 10			1	1	1		5	9	12	2							2	16	13		Tezpur
-50				3			1	1																								
-75							1				9 or 10			1	1	1		1			19											
>75																																
-25	11							4			1 — 10								17	12	2						1	3	10	10	7	Trichinopoly
-50								2	1																							
-75								2			9 or 10										18											
>75								2																								
-25											1 — 10															4	3	18	6			Trivandrum
-50																																
-75											9 or 10																					
>75																																
-25	14					1		1	1		1 — 10					4		11	6	4	6						1	1	11	16	2	Vizagapatam
-50			1					6	2																							
-75								2			9 or 10									3	23											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)...	6-25	31		4	2			4	4	1	16	26	1	2	1	1	1	1	6	1	1	26		3	2		2		7	2	2	14	3	1	1		1		1	4
	26-50													2	2	1			4	2			1	1	1	1			4					1	1					
	51-75																																								
	>75																																								
Bahrain ...	6-25	31					1	2	14	9	5	31	3	1					2	1		31	3							4		14	1		1			1	1	
	26-50												11							8			6							12			2							6
	51-75												4							1			3							3										2
	>75																																								
Bombay (Juhu) ...	6-25	31				2		21	4	2	2	22					1	1		1		10									1	1				1				
	26-50																	7	12									3	6											
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	31		1	1	4	3	12	1	2	7	29		1		3	4	5	3	1	2	25		2	1	4	3	7	3			6	1	1		1			1	1
	26-50																1	5	3	1								1	4											
	51-75																																								
	>75																																								
Gaya ...	6-25	31	2	5	4	1	3	4	3	2	7	24		2	1	5	3		2	4	1	21		2	2	6	1	1	1	5	2	13	2	3	2					2
	26-50														1		1	1	2	1									1							1			1	1
	51-75																																								
	>75																																								
Jacobabad ...	6-25	31		1	4	16	4				6	31				3	9	11	2		2	30	1	1	1	1	2	6	11	3	3	29	3	1			3	2	12	6
	26-50														1		3										1													
	51-75																																								
	>75																																								
Jiwani ...	6-25	31			4	7	7	8			5	31			5	4	5	5	7		2	22	2			1	1	2	6	2	1	12	4	1					3	
	26-50														1				2						1				6				1						1	1
	51-75																																						1		
	>75																																								
Jodhpur ...	6-25	31		1				7	1		1	31		1				3	1			29	1	1				2	1			17	1	5	1	2	1	3	1	
	26-50							21										20	2								1	18	2								1			
	51-75																	3	1									3												
	>75																																								
Karachi (Drigh Road) ...	6-25	31						11	9	1		28							7			5		2		1			1			3		2	1					
	26-50							6	3	1									19	1									1											
	51-75																		1																					
	>75																																								
New Delhi ...	6-25	31		1	1	4	1	4	6	1	12	31		1	2	2	3	4	7		1	30			2		3	2	7	4	1	23	6	4			1	2	2	4
	26-50							1					1				2		5				1				2		3	4										3
	51-75																		3										1											
	>75																																								
*Raj Samand (Kankroli).	6-25	12				1		7	3		1	12		1					6			12		1				1	5			10	1	3	1					3
	26-50																1	3	1								1	2	2										1	
	51-75																																								
	>75																																								
Sharjah ...	6-25	31		3	2	6	10	4			6	31	2	3	3		1	5	8	3	4	31	1		3	2		3	10	6	1	31	2	1		1	3	6	7	3
	26-50																		2										3	2							2	1	2	1
	51-75																																								
	>75																																								

ed its 1./).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	O		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	5	2							1	1	1 — 10					8		3	2	3	15						2	29				Allahabad (Bamrauli)
-50				1																												
-75											9 or 10					3		1		1	9											
>75																																
-25	4			2	1	1					1 — 10										31						5	26				Bahrain
-50																																
-75											9 or 10										1											
>75																																
-25											1 — 10					17	14										7	24				Bombay (Juhu)
-50																																
-75											9 or 10					3	2				25											
>75																																
-25	4			2	1		1				1 — 10					17	5	3	2	1	4					2	28	1				Calcutta (Dum Dum)
-50																																
-75											9 or 10					4					21											
>75																																
-25	6	2		2	1						1 — 10				1	8	5	1	1	2	13						2	10	19			Gaya
-50				1																												
-75											9 or 10				1	3	1	1			13											
>75																																
-25	21	4		1		1	1	1	7	1	1 — 10									1	30					1	3	15	12			Jacobabad
-50		3							2																							
-75											9 or 10										4											
>75																																
-25	3		1					1			1 — 10					12	6				18						17	14				Jiwani
-50		1																														
-75											9 or 10					3	2				9											
>75																																
-25	11	5	1	1		1		1		1	1 — 10						1	6			24					1	2	7	21			Jodhpur
-50			1																													
-75											9 or 10							4			8											
>75																																
-25	1	1									1 — 10			1		14	14				2						2	29				Karachi (Drigh Road)
-50																																
-75											9 or 10			1		12	9				23											
>75																																
-25	13	1	4				1	2	2	1	1 — 10						2	2	6	1	20						1	26	4			New Delhi
-50		1							1																							
-75											9 or 10								1		11											
>75																																
-25	8	3	1	2							1 — 10						2	1		1	8							5	7			Raj Samand (Kankroli)
-50		1							1																							
-75											9 or 10										2											
>75																																
-25	28	1	1	3	5	6	1	3	1	2	1 — 10			1							30							2	29			Sharjah
-50			1		2	1			1																							
-75											9 or 10																					
>75																																

Y. P. P.—S 3746—950—11-40

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

August 1939

Supplement to the Monthly Weather Report, August 1939

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Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ..	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 26th November 1940.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas]

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31		4	5		1	3	4		14	31	1		2	4			3	3	
φ = 27° 08′ N ...	26–50														7				2	6	
λ = 78° 01′ E ...	51–75														1				1	1	
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	31						20	3		8	29	1						10	1	
φ = 23° 02′ N ...	26–50																	1	14	2	
λ = 72° 35′ E ...	51–75																				
H_s = 55 metres ...	>75																				
Bangalore ...	6–25	31						7	11	4		27	1							2	
φ = 12° 58′ N ...	26–50							4	5										5	6	
λ = 77° 35′ E ...	51–75																		9		
H_s = 936 metres ...	>75																		3	1	
Bhuj ...	6–25	31						27	4			31						1	1		
φ = 23° 15′ N ...	26–50																	6	18		
λ = 69° 48′ E ...	51–75																		5		
H_s = 113 metres ...	>75																				
Bombay (Juhu) ...	6–25	23			2			4	6	7	4	21						1	6	1	
φ = 19° 07′ N ...	26–50																		11		
λ = 72° 50′ E ...	51–75																		2		
H_s = 5 metres ...	>75																				
Chittagong ...	6–25	31			1	5	2	1			22	30	2	1	1	1	7	1	1		1
φ = 22° 21′ N ...	26–50															4	6	1			
λ = 91° 50′ E ...	51–75															2	2				
H_s = 21 metres ...	>75																				
Dacca ...	6–25	31			1	13				1	16	28	1	1	2	4	3		1		
φ = 23° 43′ N ...	26–50														1	3	4	4			2
λ = 90° 24′ E ...	51–75															1	1				
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25	31	1	3	3	1					23	31	3	3	3			9	3	3	7
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	31						1	18	6	3	30					1		1		1
φ = 17° 26′ N ...	26–50							1	2				1						3	5	
λ = 78° 27′ E ...	51–75																		14	4	
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	31					1	1	12	3	14	27	1	1	2	1			1	1	
φ = 23° 10′ N ...	26–50												1	2					7	5	
λ = 79° 57′ E ...	51–75																		2	3	
H_s = 402 metres ...	>75																				
Lahore ...	6–25	31			3	2					26	31			4	2	9	2	5	1	3
φ = 31° 35′ N ...	26–50													1		2		1	1		
λ = 74° 20′ E ...	51–75																				
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6–25	31		6		1	2	11	3	1	5	31	3	1	2	2	1		1	2	
φ = 26° 13′ N ...	26–50							2						1	4				4	6	
λ = 78° 08′ E ...	51–75																		3	1	
H_s = 233 metres ...	>75																				
Madras ...	6–25	31						8	7	1	15	31						4	1		
φ = 13° 04′ N ...	26–50																	2	13	4	
λ = 80° 15′ E ...	51–75																		7		
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	31							22	4	5	28							4		
φ = 20° 33′ N ...	26–50																		22	1	
λ = 74° 32′ E ...	51–75																		1		
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	20	2		2	1		1	9	1	4	20							4	1	
φ = 12° 52′ N ...	26–50												3						7	3	
λ = 74° 51′ E ...	51–75																		2		
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	31	1	1						5	24	31	4	5	2	1		1	1	10	5
φ = 34° 01′ N ...	26–50														2						
λ = 71° 35′ E ...	51–75																				
H_s = 363 metres ...	>75																				
‡Poona ...	6–25	8						4	4			8							1	1	
φ = 18° 32′ N ...	26–50																		5		
λ = 73° 51′ E ...	51–75																		1		
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	31						6	3	1	5	31				1	1	1	1		1
φ = 11° 40′ N ...	26–50							12	2									4	6		
λ = 92° 43′ E ...	51–75							2										11	3		
H_s = 87 metres ...	>75																	1	1		

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S-	SW	W	NW	C
Agra ...	6–25	31	1		4	2		1	2	4		30	2		3	1			3	2	
φ = 27° 08′ N ...	26–50				6				2	6			3	2	6	1			1	5	
λ = 78° 01′ E ...	51–75				1					2					1						
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	26						2	5	1		19	1				5	2	1		
φ = 23° 02′ N ...	26–50		1						15	1					1		2	6			
λ = 72° 35′ E ...	51–75								1										1		
H_s = 55 metres ...	>75																				
Bangalore ...	6–25	31	1					1	11	2		11	1							2	
φ = 12° 58′ N ...	26–50							6	10				1						1	4	
λ = 77° 35′ E ...	51–75																		2		
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	29						3	3	1		17	2		1		1		2		1
φ = 23° 15′ N ...	26–50							4	13	1			2	2			1	5			
λ = 69° 48′ E ...	51–75								4												
H_s = 113 metres ...	>75																				
Bombay (Juhu) ...	6–25	16						1	4	1		6						1	2		
φ = 19° 07′ N ...	26–50								9									1	2		
λ = 72° 50′ E ...	51–75								1												
H_s = 5 metres ...	>75																				
Chittagong ...	6–25	29	2	2			8	2			1	23		1	5	1	4	4			1
φ = 22° 21′ N ...	26–50			1		4	3	2								4	1	1			
λ = 91° 50′ E ...	51–75					2	1	1								1					
H_s = 21 metres ...	>75																				
Dacca ...	6–25	21		1	4	3	2	1	1			16		1	2	1	3	1		1	
φ = 23° 43′ N ...	26–50					2	2	3						1	1		2	2			
λ = 90° 24′ E ...	51–75					1		1								1					
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25											31	2	4	2			7	5	4	7
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	30					1		1		1	21	2	2					1	2	
φ = 17° 26′ N ...	26–50		1						5	5				1					3	3	
λ = 78° 27′ E ...	51–75								13	3									4		
H_s = 555 metres ...	>75																		1	2	
Jubbulpore ...	6–25	22	1	1	2	1			1			15		1	1	1				5	
φ = 23° 10′ N ...	26–50			2					3	6			1	1						5	
λ = 79° 57′ E ...	51–75								2	3											
H_s = 402 metres ...	>75																				
Lahore ...	6–25	31			1	1	4	1	8	2	9	30	2	3	2	1		2	9	6	4
φ = 31° 35′ N ...	26–50		1			1	1		2											1	
λ = 74° 20′ E ...	51–75																				
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6–25	30	5	1	1	3		1				28	3		2	1		1	1	2	
φ = 26° 13′ N ...	26–50				4				1	10			8	2	6					1	
λ = 78° 08′ E ...	51–75			1					1	2					1						
H_s = 233 metres ...	>75																				
Madras ...	6–25	31					1		1	1		30	1						2	7	
φ = 13° 04′ N ...	26–50								9	8			1	1					1	3	
λ = 80° 15′ E ...	51–75								11										9	4	
H_s = 13 metres ...	>75																		1		
Malegaon ...	6–25	28							1	2		22	1				2	1	7	3	
φ = 20° 33′ N ...	26–50								23	1			1						4	2	
λ = 74° 32′ E ...	51–75								1										1		
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	18							2			8	3						2		
φ = 12° 52′ N ...	26–50		1						8	4									1		
λ = 74° 51′ E ...	51–75								3										2		
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	31	3	5	3			1	2	8	7	30	3	2			2	7	8	2	5
φ = 34° 01′ N ...	26–50		1		1													1			
λ = 71° 35′ E ...	51–75																				
H_s = 363 metres ...	>75																				
‡Poona ...	6–25	8							1	1		6									
φ = 18° 32′ N ...	26–50								5										3	1	
λ = 73° 51′ E ...	51–75								1										2		
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	29			1		1	1	1			12		1		1			2	1	
φ = 11° 40′ N ...	26–50					1		3	7							1	1	1	2		
λ = 92° 43′ E ...	51–75							8	3										1		
H_s = 87 metres ...	>75							2	1										1		

* Only on 23 days in the month pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the forenoon.

† Wind frequency tables were prepared only from 20 observations made in the morning.

‡ Only on 8 days in the month, pilot balloon ascents were made in the morning. Visibility observations were, however, recorded in the morning throughout the month.

d s /	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures 0	1	2	3	4	5	6	7	8	9	STATION.
15	26	5		1				1	3		1 — 10						1	2	6	9	13						2	18	11			Agra
50		2	1	9				1	1																							
75			1	1							9 or 10						1				15											
75																																
15	12	1		1		3		2	1	1	1 — 10				1	3	5	6	4	3	9					1	1	4	25			Ahmedabad
50			1			1																										
75						1					9 or 10					2	3	4	1		22											
75																																
15	4		2						1		1 — 10	1	3	1	2	14	3	2	1	3	1							14	11	6		Bangalore
50																																
75								1			9 or 10	1	3	1	1	9	1	1	1	2	23											
75																																
15	9	1	3			1					1 — 10					2	10	13	2	3	1							30	1			Bhuj
50		2	2																													
75											9 or 10						1	4	1	1	15											
75																																
15	2					1	1				1 — 10					7	13	3														*Bombay(Juhu)
50																																
75											9 or 10					2					19											
75																																
15	18		1	1	2	2	2	1		2	1 — 10			2	2	7	2	5	1		12						3	10	18			Chittagong
50					4	1																										
75				1	1						9 or 10			1	2	4	1				27											
75																																
15	8			2	2	2					1 — 10			2	6	15		2	4		2						1	30				Dacca
50				1			1																									
75											9 or 10				2	2					20											
75																																
15	29	5			1			3	11		1 — 10									1	30				2	3	5	16	5			Fort Sandeman
50								2	6																							
75									1		9 or 10									1	1											
75																																
25	15		2					1	5		1 — 10					11	5		3	2	10								12	18	1	Hyderabad (Begumpet)
50								2																								
75								3	1		9 or 10					4	2				20											
75								1																								
25	8	2	1	1					1		1 — 10				1	13	2	4	2	3	6						1	7	23			Jubbulpore
50		1	1	1																												
75											9 or 10				1	9	1	1			23											
75																																
25	27	6	3	1				5	6	1	1 — 10							1	3	7	20						6	12	13			Lahore
50		3						1	1																							
75											9 or 10							1			6											
75																																
25	12	3		1		1		1	2		1 — 10					5	3	4	7	6	6								15	16		Madho Sagar (Gwalior)
50		1	1	2																												
75											9 or 10					1	1				20											
75																																
25	22	1						4	4		1 — 10							1	1	2	27								8	20	3	Madras
50			1					8	1																							
75								3			9 or 10										19											
75																																
25	15	2					5	1	2		1 — 10						2	8	3	10	8				1	1	1	7	20	1		Malegaon
50			1				2		1																							
75								1			9 or 10						1	3	1	1	19											
75																																
25	5		1	1							1 — 10					21	10								1	1	4	19	6			†Mangalore
50								2	1																							
75											9 or 10					13	2				25											
75																																
25	29					1	6	6	9		1 — 10								4	3	24					1	1	12	5	5	7	Peshawar
50							1	1	5																							
75											9 or 10										1											
75																																
25	3										1 — 10						1	5	1		1							5	18	8		‡Poona
50		1						1	1																							
75											9 or 10						1		1		4											
>75																																
25	6			1	1			2			1 — 10					24	1	6									1	28	2			Port Blair
50					1			1																								
75											9 or 10										30											
>75																																

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C
*Raj Samand (Kankroli)	6–25	19	1			1		4	5	2	6	18	2					2	10	2	1	19	1		1			1	11	3	2	17		1	2	2	5				1
φ = 25° 03′ N ...	26–50														1																			2	1	1	1	1			
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sambalpur ...	6–25	31					4	12	1		14	24	2		1	2	1	3	2	2		20	2		1	1			2	2		11	1			1			1	2	
φ = 21° 28′ N ...	26–50																	4	6	1								3	4	3									2	3	
λ = 83° 58′ E ...	51–75																												2										1		
H_s = 153 metres ...	>75																																								
Tezpur ...	6–25	31		3		1		1			26	26	1		4	2		3	3		3	25		3	3			2	2	1	3	20	1	1	3	1		1	2		2
φ = 26° 37′ N ...	26–50														6			1	3						6			1	4						5				3		
λ = 92° 47′ E ...	51–75																																		1						
H_s = 80 metres ...	>75																																								
Trichinopoly ...	6–25	31						1	25	3	1	31										31								3		30	1	1				2	1	4	
φ = 10° 49′ N ...	26–50								1										6	3									8	3			1	1					6		
λ = 78° 42′ E ...	51–75																		18										13										9		1
H_s = 88 metres ...	>75																		4										4										3		
†Trivandrum ...	6–25	29	13						2	13	1	28										17										8								1	
φ = 08° 29′ N ...	26–50												1						3	15										8			1						3	
λ = 76° 57′ E ...	51–75												1						1	1									3	6									3	
H_s = 76 metres ...	>75																		1																						
Vizagapatam ...	6–25	31						6	3	9	12	31	1	2				5	4	1		30	1					2	3	5		28	4	1					1	4	
φ = 17° 42′ N ...	26–50							1										2	10				1						8	4									3	5	
λ = 83° 18′ E ...	51–75																	2	3									2	3										4	3	
H_s = 56 metres ...	>75																	1											1										3		

TABLE 4—WIN

Allahabad (Bamrauli)	6–25	31		6	5	1	1	2	7	1	8	28	1	2	3	2		1	2	2		24	2	1	3	1	1		1	2		15			3	1				2	
φ = 25° 26′ N ...	26–50													4	3	1			3	3				1	4				3	3			1		1					1	5	
λ = 81° 44′ E ...	51–75														1										1	1															
H_s = 98 metres ...	>75																																								
Bahrain ...	6–25	31							1	29	1	31	4	1	1					4		31	3	3						1		26	1	3			2			3	
φ = 26° 14′ N ...	26–50												13							1			15	2						1			5	2						4	
λ = 50° 35′ E ...	51–75												6							1			4							1			4							2	
H_s = 14 metres ...	>75																						1																		
‡Bombay (Juhu) ...	6–25	8						5	1	1	1	8						1				4										4							1		
φ = 19° 07′ N ...	26–50																	2	5									1	3										3		
λ = 72° 50′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	31		3	2	8	3	5		2	8	30		3	4	2	3					24		2	2	1	2				2	14			3	3		1			1
φ = 22° 39′ N ...	26–50													1	2	1	6	5		1				2	1		6	5							1	1	2	1			
λ = 88° 27′ E ...	51–75														1																				1						
H_s = 5 metres ...	>75																			1					1																
Gaya ...	6–25	31	1	3	6	2	1	5	3	1	6	28	1	1	4	4	2		2	1	2	24		1	2	2	3			2		16			4	1	1			2	
φ = 24° 49′ N ...	26–50			2	1										4	2	1	1		1					1	3	1	1	1	2					2	3	1			1	
λ = 85° 01′ E ...	51–75													1	1										2	3									1						
H_s = 117 metres ...	>75																																								
Jacobabad ...	6–25	31				12	1				18	30		2	2	4	14	6	1		1	31		3	6	4	6	2			10	31	6	3	1	2			2	13	4
φ = 28° 17′ N ...	26–50																																								
λ = 68° 29′ E ...	51–75																																								
H_s = 66 metres ...	>75																																								
Jiwani ...	6–25	31			4	10	3	10			4	31		1	6	16	6	1			1	15	1	3		3	1	1	2	3		18	4			1	1			3	2
φ = 25° 10′ N ...	26–50																							1																2	
λ = 61° 47′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Jodhpur ...	6–25	31		2			1	14	2		2	30	2	3			1	3	6			29	1	1	3		1	2		3		20		2	2		5	3	1		
φ = 26° 18′ N ...	26–50							10										14	1									17	1					3	2			2			
λ = 73° 01′ E ...	51–75																																								
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	31						12	11	1		31							6	1		14	3						3	1		7	2	2						1	
φ = 24° 53′ N ...	26–50							4	3										21										7				1	1							
λ = 67° 07′ E ...	51–75																		3																						
H_s = 29 metres ...	>75																																								
New Delhi ...	6–25	31			2	10	3		4	1	5	30			2	7	1	1	2	2	2	28			4	5		1	2	4	1	26	1	2	7	1	1			4	
φ = 28° 39′ N ...	26–50								5						1				5	4						2			1	7			2		1					6	
λ = 77° 15′ E ...	51–75								1							1			2							1									1						
H_s = 227 metres ...	>75																																								
§Poona ...	6–25	20						6	10	1		20							4			20							4			6									
φ = 18° 32′ N ...	26–50								3										11										12										2		
λ = 73° 51′ E ...	51–75																		5										4										2		
H_s = 588 metres ...	>75																																						2		
‖Raj Samand (Kankroli)	6–25	13						3		6	3	12	2		1			4	3			12	2			1		3	3			11		1	1		5	1	1		
φ = 25° 03′ N ...	26–50									1								1		1								2		1			1						1		
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sharjah ...	6–25	31		1		6	7	8			9	31		1	4	3	9	3	2	1		31		1	2	4	6	2	3	2	4	30	3	2	3	4	2	3	6	3	2
φ = 25° 20′ N ...	26–50														1		5	1			1				1	2	2	1	1					1					1		
λ = 55° 24′ E ...	51–75																																								
H_s = 11 metres ...	>75																																								

* Only on 19 days in the month, pilot balloon ascents were made in the morning. Visibility observations were however recorded in the morning throughout the month.
† Wind frequency tables were prepared only from 29 observations made in the morning.
‡ Only on 8 days in the month, pilot balloon ascents were made in the forenoon; on the remaining days the ascents were made in the morning. Visibility observations were however recorde in the forenoon throughout the month.
§ Only on 22 days in the month, pilot balloon ascents were made in the forenoon.
‖ Only on 17 days in the month, pilot balloon ascents were made in the forenoon.

EQUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

Speed limits km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	13		2	2	2	1	2		1	1	1 — 10					2	1	1	2	2	11							2	26	3		*Raj Samand (Kankroli)
26–50			1	1																												
51–75											9 or 10					1					9											
>75																																
6–25	6	1						1	1		1 — 10				3	11	7	3	3	1	3						2	6	23			Sambalpur
26–50								2	1																							
51–75											9 or 10				3	8	5	2			20											
>75																																
6–25	10			4	1		2				1 — 10		1	3	4	5		4	5	6	3					2	3	11	13	2		Tezpur
26–50				3																												
51–75											9 or 10			3	1	3		2	1		21											
>75																																
6–25	23		1					4	4		1 — 10					1			4	13	13								5	22	4	Trichinopoly
6–50			1					9	2	1																						
51–75								1			9 or 10										15											
>75																																
6–25	5		1					1	1		1 — 10				1	4	17	1		1	7				1	3	22	5				†Trivandrum
6–50		1																														
51–75								1			9 or 10					3	3				15											
>75																																
6–25	19	5							5		1 — 10					1	2	3	2	3	20							1	30			Vizagapatam
6–50		1						5	2																							
51–75									1		9 or 10										21											
>75																																

EQUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

6–25	5	1		1							1 — 10				1	10	5	5	2	3	5						4	27				Allahabad (Bamrauli)
6–50		2																														
51–75									1		9 or 10					1	1				20											
>75																																
6–25	18	2	3	1	1	2		1	1		1 — 10										31							13	18			Bahrain
6–50					1			1																								
51–75											9 or 10																					
>75																																
6–25	1						1				1 — 10					1	6	1									2	27	2			‡Bombay (Juhu)
6–50																																
51–75											9 or 10										7											
>75																																
6–25	7				1						1 — 10				1	16	11	2			1						4	27				Calcutta (Dum Dum)
6–50			1	1	3																											
51–75				1							9 or 10				1	2					20											
>75																																
6–25	11		1	1	1	1		1			1 — 10				2	10	14	1			4						1	4	22	4		Gaya
6–50			1	2		1			1																							
51–75				1							9 or 10				2	1	2				17											
>75																																
6–25	29	16	2					1	6		1 — 10										31						1	21	9			Jacobabad
6–50		4																														
51–75											9 or 10																					
>75																																
6–25	8	3			1				3	1	1 — 10					5	20				6						2	28				Jiwani
6–50																																
51–75											9 or 10					4	10				14											
>75																																
6–25	17			3	2	3					1 — 10					3	4	12	1		11						1	3	23	4		Jodhpur
6–50			5	1		1	1																									
51–75				1							9 or 10					2	1	1			11											
>75																																
6–25	6	1									1 — 10					3	25	2			1							31				Karachi (Drigh Road)
6–50			5																													
51–75											9 or 10					3	18				25											
>75																																
6–25	21	1	3	4	1			2	2		1 — 10					1		3	4	4	19						1	7	23			New Delhi
6–50		5		2					1																							
51–75											9 or 10										8											
>75																																
6–25											1 — 10					1	15	4														§Poona
6–50																																
51–75											9 or 10						9	1			19											
>75																																
6–25	6			2	2		1		1		1 — 10					1	1	2	7	2												‖Raj Samand (Kankroli)
6–50																																
51–75											9 or 10						1				7											
>75																																
6–25	29	8	4	2	1	3	1		4	2	1 — 10					1	2	1	2		25							1	26	4		Sharjah
6–50			1		2																											
51–75		1									9 or 10																					
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31	1	5	6	2	1		5	5	6	31	6	1	7	2		1	3	4	1	31	5		4	3			5	6	1	30	4	2	3	3		1	2	3
	26–50														3				1	2			1		5					1			1		5	1				5
	51–75																																								
	>75																																								
Ahmedabad ...	6–25	31						23	1	2	5	29						15	6	1		27						8	8	2		19		1				4	3	2
	26–50																		6	1								5	4									5	4	
	51–75																																								
	>75																																								
Allahabad (Bamrauli)	6–25	31	1	8	4	1	1		7	2	7	28	1	2	2	1	1		3	4		27	2	1	2	2	1		2	2		19			3					1
	26–50													4	4	1			4					4	5	1			4	1					4	1					6
	51–75														1																				2	1			1		
	>75																																								
Bahrain ...	6–25	31	6	1	2					22		31	4		2		1			1		31	6		2	1				1		27	3	3	1		1		1	2	1
	26–50												12							4			11							2			5							8	
	51–75												3							3			1							6										1	
	>75												1																	1										1	
Bangalore ...	6–25	31	2						3	11		31	2						2	4		31	2						5	6		22	1	1						3	
	26–50							1	12	2									14	4			1						16				1						5		
	51–75																		5										1										11		
	>75																																						1		
Bhuj ...	6–25	31						27	4			31						4	7	2		31	1					4	8	1		14	2	3	1			3	1	1	1
	26–50																	13	5									9	8					1					1		
	51–75																																								
	>75																																								
Bombay (Juhu) ...	6–25	31						11	14	6		29							7	1		21							3	2		11					1	1	6		
	26–50																	2	15	1									11	1								1	2		
	51–75																		2	1									4												
	>75																																								
Calcutta (Dum Dum)	6–25	31	2			8	5	6	1	1	6	30		1	4	4	3	1			1	30	1		4	3	3	1	1		2	23		2		3	3		2	
	26–50					1		1							1	1	11			1						1	7	4								3	2	3	5			
	51–75																													1											
	>75															1				1						1				1											
Chittagong ...	6–25	31				3	7	10	3		8	29	1	1			4	8	1	1	1	27		2	1	4	4	5		1	2	22		2	2	2	2	4	1		1
	26–50															1	7	3								1	1	3								2	2	3				
	51–75																1									1	2										1				
	>75																																								
Dacca ...	6–25	31		2	1	12	2				13	29	2		2	4	6	2	1			23		1	2	1	4	3			2	14					3	3			
	26–50							1								5	5	1							1	3	2	3								3	1		4		
	51–75															1										1															
	>75																																								
Fort Sandeman ...	6–25	31		2	2	3	1	4		2	17	29		3	2	1	2	5	5	3	8											29	2	2	2	1	3	3	3	4	9
	26–50																																								
	51–75																																								
	>75																																								
Gaya ...	6–25	31	3	9	3	2	1	3	3	4	1	28	3	3	2	2	1	1	4		1	26	2	2	1	4		1	3		1	19	1	2		2		2	1	
	26–50				2									1	5	3		1		1					3	6	1			2						1	3				2
	51–75																																		2	2				1
	>75																																								
Hyderabad (Begumpet).	6–25	31	1	1					13	2	3	31	3						1	3		31	2						2	8		22	3	1						2
	26–50								5										12	2									12	2									4	6
	51–75																		5										5										4	1
	>75																																						1		
Jacobabad ...	6–25	31		1		9	3				18	31				6	21	4				31	1		2	5	14	6			3	30	11	5	2	1	2		2	5	2
	26–50																																								
	51–75																																								
	>75																																								
Jiwani ...	6–25	31				8	12	11				31		1	1	4	14	6	1		1	27	3		1	3		3	8	5	4	26	7	4					10	1
	26–50																2	1															1	1					1	1	
	51–75																																								
	>75																																								
Jodhpur ...	6–25	31		2	1			12	2	1	3	31		4	1		2	10	2	3		31	2	4	1	1	1	9	2	1		27		1	1	3	4	7	1		1
	26–50		1	1				8										9										10					1	3			2	3			
	51–75																																								
	>75																																								
Jubbulpore ...	6–25	31	4	1		2	1		10	9	4	31	2	2		2	1		6	6	1	30	2	2	1	1	1		3	5	1	14	1			1			3	2	
	26–50												2						3	4			2						5	6			2		1					4	
	51–75																	1	1									1													
	>75																																								
*Karachi (Drigh Road)...	6–25	30						8				30						1	3			27		2	1	1	1	2	5	3	2	16	4	7						1	
	26–50							21	1									6	16										8	1			1	1	1					1	
	51–75																	1	3										1												
	>75																																								

* Wind frequency tables were prepared only from 30 observations made in the afternoon.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
5	2 4		4 1	2 1		1	3	4 3		1 — 10							3	12	9	7						1	20	10			Agra
										9 or 10							1			11											
4	1				1		1		1	1 — 10					2	2	7	13	7								3	28			Ahmedabad
										9 or 10					2	2		6	4	21											
7		1	1 2 1	2						1 — 10				1	5	3	10	5	1	6					1		30				Allahabad (Bamrauli)
										9 or 10					3		2			23											
7	5 1 2	2	1		1	2		2 1		1 — 10										31							5	26			Bahrain
										9 or 10																					
8	1	1					2 2 1	1		1 — 10						9	18	2	2							2	5	18	5	1	Bangalore
										9 or 10						2	1			20											
5	1	1 2	1							1 — 10						4	19	8									30	1			Bhuj
										9 or 10						2	2			12											
4					1	1	1	1		1 — 10					11	15	5									5	19	7			Bombay (Juhu)
										9 or 10					2					26											
14		1	1 2	2 2	1 1	2 1	1			1 — 10			1		9	13	6	1		1					1	1	28	1			Calcutta (Dum Dum)
										9 or 10			1			1				20											
13		1	2 3	1	1	4	1			1 — 10				2	8	7	12	2								1	3	27			Chittagong
										9 or 10				1	1					23											
7			1		2 2	1 1				1 — 10			1	1	8	9	8	3		1					1	1	29				Dacca
										9 or 10					2					17											
30	3	2	3		1	1	4	11	5	1 — 10								17	8	6						5	11	14			Fort Sandeman
										9 or 10																					
5			1 2	1				1		1 — 10				1	8	12	4	2	1	3					1	1	4	19	6		Gaya
										9 or 10				1	2	1		1		22											
8	2	1					1 1 1	2		1 — 10						6	7	14	4									1	25	5	Hyderabad (Begumpet)
										9 or 10						2	2	2		18											
18	6 1	1 4					1	4	1	1 — 10										31						1	23	7			Jacobabad
										9 or 10										1											
20	5 4	2 1					1	2 5		1 — 10					5	14				12						3	28				Jiwani
										9 or 10					1	1				2											
17	1	3 1	1	1 1	4 1	2		1	1	1 — 10							10	6	3	12				1			3	13	14		Jodhpur
										9 or 10							2			10											
3								1 2		1 — 10					5	4	10	1	9	2							3	28			Jubbulpore
										9 or 10					2	1	1			24											
14	1 3 1	2 6						1		1 — 10						15	8			8							20	11			Karachi (Drigh Road) *
										9 or 10						6	7			13											

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6–25	31	1	2	3	1	2	1	2	1	18	30	2	3	4	4		4	3	4	6	31	2	2	1	4	1	4	9	1	7	27	5	1			1	3	7	6	4
	26–50																																								
	51–75																																								
	>75																																								
Madho Sagar (Gwalior)	6–25	31		5	2	2	1	4		6		31	5	2	5	2			1	6		31	4		5	1			1	6	1	25	2		2	1	1		1	5	
	26–50			2				2			7		1	3	1				4	1			3	3	2				4	1			3	2	2	1			1	1	
	51–75																																	2	1						
	>75																																								
Madras ...	6–25	31	1	1	6	1	1	5	8	4	4	31	3	2	1			1	4	3	2	31	3						7	6		30	2	2					1	2	
	26–50												1					1	12	1									13	2									16	4	
	51–75																																						3		
	>75																																								
Malegaon ...	6–25	31						3	14	10	1	29							10	1		29	1						7	1		19						2	7	2	
	26–50								2	1									16	1									18	1									4		
	51–75																		1										1										3		
	>75																																						1		
Mangalore ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
New Delhi ...	6–25	31		2	11	2		1	4	3	6	31	2	2	10	1			6	3	4	31	1	3	5	3	1		5	7		26	1	1	5	2			3	4	
	26–50								1	1									2	1					1	1			2	2			1		2	1			3	3	
	51–75																																								
	>75																																								
Peshawar ...	6–25	31		25	1					2	3	31		11	12	5					3	31	1	5	11	8	1				5	31			1	2	7	10	7	3	1
	26–50																																								
	51–75																																								
	>75																																								
Poona ...	6–25	31						4	17	3		30						1	4			30							4			14						1	3	2	
	26–50							2	5										22										23										4	1	
	51–75																		3										3										3		
	>75																																								
Port Blair ...	6–25	31		2		1	1		2	2		31			1			2	4	1		21					2		2			7				1	1		1	1	
	26–50							13	2								2	9	3									4	3							1				1	
	51–75							8										6	2									6	3										1		
	>75																	1										1													
*Raj-Samand (Kankroli)	6–25	22	1			5	1	6		5	4	22	3		3	2	4	5	3			22	3	1	1	4	4	5	1	1		21		4	1	1	2	7	1	1	1
	26–50													2										1				1					1	2							
	51–75																																								
	>75																																								
Sambalpur ...	6–25	31					4	9	6	2	10	28			1	1		3	9	4	2	27	1	1	2	2		3	3	3		15	1	1	2	1				1	
	26–50																1	3	2	1			1					2	4	3			1		1				3	4	
	51–75																1											2													
	>75																																								
Sharjah ...	6–25	31		1					4	25		31	1	3				3	10	7	2	31	1		2	5	10	7	2	3		30	5	2	2	2	3	4	4	6	1
	26–50									1																			1								1					
	51–75																																								
	>75																																								
Tezpur ...	6–25	31		1	3	1	1	3	1		21	31		7	6	2	2	3	3		4	31		3	7	3	1	5	3		3	27			8	5		2	1		1
	26–50														3			1							3			2							4			3	3			
	51–75																								1																
	>75																																								
Trichinopoly ...	6–25	31							21	7		31							3	2		31	1						1	3		30	3	1					4	1	
	26–50								3										17	1									18		1								12		
	51–75																		8										7										8		
	>75																																						1		
Trivandrum ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Visagapatam ...	6–25	31	2		1	1	7	6	8	1	2	31			1	1		5	7		1	31	1	1				2	5	5	2	29	4	3					1	4	
	26–50							3										3	9									1	10	1			2						6	6	
	51–75																	3	1										3										3		
	>75																																								

* Only on 22 days in the month pilot balloon ascents were made in the afternoon. Visibility observations were, however, recorded in the afternoon throughout the month.

3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
21	6				1	1	2	6	2	1 — 10							2	12	7	10						3	4	24			Lahore
	1							2																							
										9 or 10							1			2											
12	1		2	3			1	1		1 — 10					1	3	8	10	5	4								18	12	1	Madho Sagar (Gwalior)
	2	1																													
		1								9 or 10						1				16											
18		3					2	2		1 — 10							1	5	17	8									19	12	Madras
		1					7	1																							
							2			9 or 10								1	3	17											
5							3			1 — 10						2	12	9	8							3	1	16	11		Malegaon
							1																								
							1			9 or 10							3			21											
										1 — 10															1	2	7	19	2		Mangalore
										9 or 10																					
14		4		1	1			2		1 — 10						2	4	8	14	3						1	9	21			New Delhi
	1			1			1	3																							
										9 or 10										6											
31	2					2	8	12		1 — 10								8	9	14						1	11	10	5	4	Peshawar
							4	3																							
										9 or 10																					
3						1	1			1 — 10					3	8	14	6									2	13	16		Poona
						1																									
										9 or 10					2	2	1	1		20											
1										1 — 10					29	1	1									1	29	1			Port Blair
				1																											
										9 or 10										30											
13			2	2	5			1		1 — 10					1	1	4	10	6									26	5		* Raj Samand (Kankroli)
		2	1																												
										9 or 10								1		6											
8			2				1	2		1 — 10					6	9	8	7		1							6	25			Sambalpur
							3																								
										9 or 10					5	3	2			28											
29	6	1	7	1			2	7	3	1 — 10								5	9	17							8	23			Sharjah
	1				1																										
										9 or 10																					
14			5	2		2	1			1 — 10					1	1	4	10	15									11	20		Tezpur
			4																												
										9 or 10								1		13											
19	1	1	1				2	5		1 — 10								15	16									8	9	14	Trichinopoly
		1					4																								
							4			9 or 10								1		12											
										1 — 10																7	22	2			Trivandrum
										9 or 10																					
19		3					3	5		1 — 10					2	2	9	6	3	9								12	18	1	Vizagapatam
							3	2																							
							2			9 or 10										18											
							1																								

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	N
Allahabad (Bamrauli)...	6-25	31	1	6	3	1	1		3	1	15	27	1	1	3	1	2		3	4		25	1	3	1	4			3	2	1	11	1		2	1	1			
	26-50													2	3	2			3					1	3	1			2	2			1		2				1	
	51-75														1				1						1															
	>75																																							
Bahrain ...	6-25	31		1	1			2	6	16	5	30	3	1						2		31	4							3		15	1	1	2		1			
	26-50												14							3			15							4								1			
	51-75												5							2			3							3											
	>75																																							
*Bombay (Juhu) ...	6-25	8				1		5	2			8							4			8						2	2	1		1							1	
	26-50																	2	2										3											
	51-75																																							
	>75																																							
Calcutta (Dum Dum) ...	6-25	31	1	3		5	3	7	1	2	9	26	3	1	2	1	1	4		1		22	1	4		1	2	3	1		1	12			3	3	3		1	
	26-50													1	1		6	4	1					1			5	3										1		
	51-75																																							
	>75																																							
Gaya ...	6-25	31	1	6	4	4	3	5	1	1	5	28		2	6	4	2	2	2	1		25		1	5	6		1	1	1		12		3	1	2	1		1	
	26-50				1									1	3	1	2			2					4	1	3			2						2	2				
	51-75																																							
	>75																																							
Jacobabad ...	6-25	31			1	14	7				9	31			1	7	8	11			4	31	1	2	1	1	1	6	6	5	8	29	3	3	1		1	2	8	
	26-50																																						1	
	51-75																																							
	>75																																							
Jiwani ...	6-25	31		1	3	14	5	3			5	28		2	7	8	3	3	1	2	2	10	1			2			2	5		9	1	1				2	
	26-50																																							
	51-75																																							
	>75																																							
Jodhpur ...	6-25	31						16	4		4	30		1	2	1	1	4	2	1		30	1	2	3	2		8	1	1		27		5	7	3	5	2	1	
	26-50							7										15	3									10	1					4						
	51-75																											1												
	>75																																							
Karachi (Drigh Road) ...	6-25	31						10	17	3		30						1	12	3		11	1		1				2	4	1	6		4	2					
	26-50							1											14										2											
	51-75																																							
	>75																																							
New Delhi ...	6-25	31			5	4	2	2	4		14	31			1	6	4	5	3	3	1	31	1		3	8	1		4	3	1	23	2	4	4	1			1	
	26-50															1	1		4	1					1	1			4	4			2		1					
	51-75																		1																					
	>75																																							
†Poona ...	6-25	24						10	12	1		21						1	3			23						2	1			10	1				1	5	1	
	26-50							1											16	1									20										1	
	51-75																																						1	
	>75																																							
‡Raj Samand (Kankroli).	6-25	14						10	2		2	13	1	1		1			6	2		13	1	1		1			6	2		13		2	2	2	3		1	
	26-50																	2										2						2						
	51-75																																							
	>75																																							
Sharjah ...	6-25	31		5	2	4	6	3			11	31	2	3	1	3	5	4	4	4	3	31	3	2	2	2	2	6	6	4	1	31	1	2	2	3	2	5	6	
	26-50																	1		1							1	1		1								1	2	
	51-75																																							
	>75																																							

*Only on 8 days in the month pilot balloon ascents were made in the late night; on the remaining days the ascents were made in the morning.
† Only on 21 days in the month, pilot balloon ascents were made in the late night; but no visibility observations were recorded.
‡ Only on 14 days in the month, pilot balloon ascents were made in the late night.

Speed limits (km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	4	1		1	1					1	1 — 10				1	4	2	3	3		18					1	1	29				Allahabad (Bamrauli)
26–50																																
51–75											9 or 10				1	2	1	1	2		19											
>75																																
6–25	7		2	2		1					1 — 10										31						1	30				Bahrain
26–50				1	1																											
51–75											9 or 10																					
>75																																
6–25	1					1					1 — 10					3	2	2	1									8				*Bombay (Juhu)
26–50																																
51–75											9 or 10								1		5											
>75																																
6–25	2				2						1 — 10					16	2	2	2		9					2	25	4				Calcutta (Dum Dum)
26–50																																
51–75											9 or 10					2					12											
>75																																
6–25	5				3	1					1 — 10				1	6	8	2			14						2	11	18			Gaya
26–50					1																											
51–75											9 or 10					2					15											
>75																																
6–25	21	4	3			1		1	6		1 — 10										31							21	10			Jacobabad
26–50		6																														
51–75											9 or 10																					
>75																																
6–25	5	1	3	1							1 — 10					13	10				8						4	27				Jiwani
26–50																																
51–75											9 or 10					10	10				20											
>75																																
6–25	24	2	4	3	2	1		3		2	1 — 10					1	2	5	1		22							2	29			Jodhpur
26–50			6	1																												
51–75											9 or 10					1	1	1			6											
>75																																
6–25											1 — 10					12	17				2							30	1			Karachi (Drigh Road)
26–50																																
51–75											9 or 10					11	12				24											
>75																																
6–25	15	3	3	2	2			1	1	3	1 — 10							2		3	26							19	12			New Delhi
26–50																																
51–75											9 or 10										4											
>75																																
6–25	7					1	4	2			1 — 10				1	4	9	4			6											†Poona
26–50																																
51–75											9 or 10				1	2	4				11											
>75																																
6–25	12	1	2	3	2	2		1			1 — 10							1	5		8							7	7			‡Raj Samand (Kankroli).
26–50		1																														
51–75											9 or 10										5											
>75																																
6–25	29	3	1	6	3	1		2	3		1 — 10					1					30							1	27	3		Sharjah
26–50				1	1		2	1		5																						
51–75											9 or 10																					
>75																																

Y. P. P.—S 3342—350—11-40

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

September 1939

Supplement to the Monthly Weather Report, September 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 14th December 1940.

C. W. B. NORMAND,

Director-General of Observatories.

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	30	5	1	1	1	1	3	3	1	14	26	2	1		2		1	3	2	
φ = 27° 08′ N ...	26–50													1	3		1		5	5	
λ = 78° 01′ E ...	51–75																				
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	30						17	1		12	30	1				1		7	1	
φ = 23° 02′ N ...	26–50																		11	7	
λ = 72° 35′ E ...	51–75																	1	1		
H_s = 55 metres ...	>75																				
*Bangalore ...	6–25	29				1		7	14	4	1	22	1						4	3	
φ = 12° 58′ N ...	26–50								1	1									6	4	
λ = 77° 35′ E ...	51–75																		4		
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	30						20	5	1	4	30						1	3		
φ = 23° 15′ N ...	26–50																	9	13	1	
λ = 69° 48′ E ...	51–75																	1	2		
H_s = 113 metres ...	>75																				
Bombay (Juhu) ...	6–25	30				2		6		5	17	29						7	6	9	
φ = 19° 07′ N ...	26–50																	2	4	1	
λ = 72° 50′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Chittagong ...	6–25	30		1	1	7					21	28	3	1	2		7		1	1	1
φ = 22° 21′ N ...	26–50															2	10				
λ = 91° 50′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Dacca ...	6–25	30			1	2		1			26	27	3			1	5	1	4	2	2
φ = 23° 43′ N ...	26–50												1			3	5				
λ = 90° 24′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25	30			1	2	1	1			25	30	3	2	2			3	11	6	3
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	30	1					1	9	8	11	29	3					2	1	3	
φ = 17° 26′ N ...	26–50												2						2	13	
λ = 78° 27′ E ...	51–75																		2	1	
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	30					3		9		18	25	2				1		2	3	1
φ = 23° 10′ N ...	26–50																	1	5	6	
λ = 79° 57′ E ...	51–75																	1	2	1	
H_s = 402 metres ...	>75																				
Lahore ...	6–25	30	2	3		2	2				21	30	1	4	1	4	4	4	2	1	1
φ = 31° 35′ N ...	26–50												1		2		1		2		
λ = 74° 20′ E ...	51–75																		1		
H_s = 221 metres ...	>75													1							
Madho Sagar (Gwalior).	6–25	30	1	3			1	10	4	4	5	25	1	1	3			1	3	1	
φ = 26° 13′ N ...	26–50							2											5	6	3
λ = 78° 08′ E ...	51–75																		1		
H_s = 233 metres ...	>75																				
Madras ...	6–25	30					1	2	2	1	24	29					1	1	3	1	
φ = 13° 04′ N ...	26–50																1	6	9	5	
λ = 80° 15′ E ...	51–75																				
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	30							15	2	13	29							3	7	
φ = 20° 33′ N ...	26–50																		14	5	
λ = 74° 32′ E ...	51–75																				
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	26	1	2	3			1	5		14	26	3						4	11	
φ = 12° 52′ N ...	26–50												1						4	3	
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	30	1		1			3		2	23	30	9	5	1	1				8	4
φ = 34° 01′ N ...	26–50																1			1	
λ = 71° 35′ E ...	51–75																				
H_s = 368 metres ...	>75																				
Port Blair ...	6–25	30						15	2	1	7	27						5	4	1	
φ = 11° 40′ N ...	26–50							4	1									7	4		
λ = 92° 43′ E ...	51–75																	3	2		
H_s = 87 metres ...	>75																	1			
‡Raj Samand (Kankroli)	6–25	18				1		8	2	3	4	28				1			5	4	1
φ = 25° 03′ N ...	26–50																		3	4	
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				

STATION.	Speed limits (km./hr.).	1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	26	1	2	1	1	2		3	3		25	3	3	1	1					
φ = 27° 08′ N ...	26–50				3	1			1	8			5	1	2					4	
λ = 78° 01′ E ...	51–75																			5	
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	27	2					2	8	1		26	1	2	4	2	2	3	1	2	1
φ = 23° 02′ N ...	26–50							1	11	2			1	1				5	1		
λ = 72° 35′ E ...	51–75																				
H_s = 55 metres ...	>75																				
*Bangalore ...	6–25	29				1		2	21	1		13	1			1			4		2
φ = 12° 58′ N ...	26–50							1	2	1									1	1	
λ = 77° 35′ E ...	51–75																		3		
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	29	1			1		8	1			23		1	4	2	3	2	1	3	1
φ = 23° 15′ N ...	26–50							11	3						1	2	1	1	1		
λ = 69° 48′ E ...	51–75							1	3												
H_s = 113 metres ...	>75																				
Bombay (Juhu) ...	6–25	20							9	8		7	1						2	1	1
φ = 19° 07′ N ...	26–50								2	1									2		
λ = 72° 50′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Chittagong ...	6–25	25	4		1	3	5	2	1		1	21	1	1	3	2	5	1	2	1	
φ = 22° 21′ N ...	26–50		1				7						1			1	2				
λ = 91° 50′ E ...	51–75																	1			
H_s = 21 metres ...	>75																				
Dacca ...	6–25	22	3	1	1	2	3	2	3	3		19	2	2		2	5			1	1
φ = 23° 43′ N ...	26–50		1				1	1						2				1		3	
λ = 90° 24′ E ...	51–75					1															
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25											30	4	2	1	1		3	10	7	2
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	29	3					2	2	2		28	9	1					4	5	
φ = 17° 26′ N ...	26–50		2						1	13			2						1	2	
λ = 78° 27′ E ...	51–75								3	1			1						2	1	
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	23	2				1		2	3	1	16	1		1	1			4	1	1
φ = 23° 10′ N ...	26–50							1	4	4			3	1					2	1	
λ = 79° 57′ E ...	51–75							1	1	3											
H_s = 402 metres ...	>75																				
Lahore ...	6–25	30	3	2	2	2	3	1	5	3	5	28	3	3		1		2	3	11	
φ = 31° 35′ N ...	26–50								2				1						2	2	
λ = 74° 20′ E ...	51–75			1					1												
H_s = 221 metres ...	>75																				
Madho Sagar (Gwalior).	6–25	21	2	2	1	1			3	4		17	4	3	3				1	3	
φ = 26° 13′ N ...	26–50		2		1				3	5			2							1	
λ = 78° 08′ E ...	51–75																				
H_s = 233 metres ...	>75																				
Madras ...	6–25	28						3	6	5		27	4					1	4	11	
φ = 13° 04′ N ...	26–50						1	1	4	7									2	5	
λ = 80° 15′ E ...	51–75									1											
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	29	1						2	6		25	2	2	3			3	6	4	1
φ = 20° 33′ N ...	26–50		1						14	5			2						1		
λ = 74° 32′ E ...	51–75																		1		
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	24							4	10		19				1	1	1	1	6	1
φ = 12° 52′ N ...	26–50								4	6									4	4	
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	30	11	4	1	2				7	4	30	3	1	1		2	2	4	12	3
φ = 34° 01′ N ...	26–50									1									1	1	
λ = 71° 35′ E ...	51–75																				
H_s = 368 metres ...	>75																				
Port Blair ...	6–25	21					1	5	2	2		15				1		7	1	3	
φ = 11° 40′ N ...	26–50							5	3									2			
λ = 92° 43′ E ...	51–75							2	1									1			
H_s = 87 metres ...	>75																				
‡Raj Samand (Kankroli)	6–25	18				1			6	3	1	18	3	1	1	2	1	1	1	1	
φ = 25° 03′ N ...	26–50							1	3	3			3	2				1		1	
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				

* Wind frequency tables were prepared only from 29 observations made in the morning.

† Wind frequency tables were prepared only from 26 observations made in the morning.

‡ Only on 18 days in the month, pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the late night. Visibility observations were, however recorded in the morning throughout the month.

Table 2—Frequency of low cloud heights (Morning)

Table 3—Frequency of Visibility (Morning)

Speed units m./s.	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	20	5	2	1					2		1 — 10					5	2	1	5		17						2	12	16			Agra
-50		5							3																							
-75		1									9 or 10					5	1		2		14											
>75		1																														
-25	20	1	1	3				3	2		1 — 10					3	1	2	1	1	22							2	28			Ahmedabad
-50		1	7	1			1																									
-75											9 or 10					2	1	1			21											
>75																																
-25	7			1				1	2	2	1 — 10		1	6	4	12	3				4					1		11	15	3		*Bangalore
-50									1																							
-75											9 or 10		1	6	3	7					28											
>75																																
-25	15	1	1	2		1			1		1 — 10					2	10	9	3		6							19	11			Bhuj
-50		1	1	5			1																									
-75				1							9 or 10					1	1				6											
>75																																
-25	3	1		1							1 — 10					6	21	2	1								1	15	14			Bombay(Juhu)
-50									1																							
-75											9 or 10							1			17											
>75																																
-25	14	1	1	3	2	4		2			1 — 10			1	6	5	2	3	1	2	10						4	7	17	2		Chittagong
-50						1																										
-75											9 or 10				4	2	1			1	25											
>75																																
-25	12	2		3	1	2	1	1	1		1 — 10				2	19	3	1			5					1		29				Dacca
-50			1																													
-75											9 or 10					1					19											
>75																																
-25	30	3						1	17	1	1 — 10										30						2	16	12			Fort Sandeman
-50							1		7																							
-75											9 or 10																					
>75																																
-25	19	2	2	1			2	6	3		1 — 10				1	5			4	5	15							1	7	20	2	Hyderabad (Begumpet)
-50		1						1	1																							
-75											9 or 10				1	1			1	1	13											
>75																																
-25	12		2		1			2			1 — 10				3	6	6	1	2		12						1	5	24			Jubbulpore
-50		3						2																								
-75		2									9 or 10				3	4	1				16											
>75																																
-25	25	4	2					1	10		1 — 10							1	1	4	24						1	16	13			Lahore
-50		5							1																							
-75											9 or 10							1	1		5											
>75																																
-25	7	2	3	1					1		1 — 10				3	4	5	2	1	2	13					1	1	1	6	21		Madho Sagar (Gwalior)
-50																																
-75											9 or 10				1	1	1				12											
>75																																
-25	25	2		2				5	6	1	1 — 10						4		1	2	23								10	16	4	Madras
-50								4	5																							
-75											9 or 10						1			1	21											
>75																																
-25	25	2	4	1		1	1	8	2		1 — 10						1	5	5		19						1	7	17	5		Malegaon
-50		1	3				1	1																								
-75											9 or 10										8											
>75																																
-25	13	1	1		1	2			4	2	1 — 10					15	15									1	3	16	10			†Mangalore
-50									2																							
-75											9 or 10					8	3				21											
>75																																
-25	30				1	2	4	4	8	1	1 — 10								3	2	25						2	3	7	8	10	Peshawar
-50									8																							
-75									2		9 or 10										1											
>75																																
-25	8				1	2	4			1	1 — 10				1	20		9									5	23	2			Port Blair
-50																																
-75											9 or 10				1	1					29											
>75																																
-25	14	1	4	1	1			2			1 — 10						1	2	2		13								26	4		‡Raj Samand (Kankroli)
-50		2	2			1																										
-75											9 or 10						1	1			5											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Sambalpur ...	6–25	30					1	4			25	25	2	1		2		4	4	6		28	2	2		1	2		2	5		18	2		3			2	1	4
φ = 21° 28′ N ...	26–50																1	3	2									1	5	2			1					4	1
λ = 83° 58′ E ...	51–75																												1										
H_s = 153 metres ...	>75																																						
Tespur ...	6–25	30			6			1			23	22			5	2	2	7	2		1	16			3	1	1	2	4			8			3	1		2	
φ = 26° 37′ N ...	26–50														3										3				2								1	1	
λ = 92° 47′ E ...	51–75																																						
H_s = 80 metres ...	>75																																						
Trichinopoly ...	6–25	30						2	12	10	6	30						1	4			30	1						9			30		2		1		5	6	10
φ = 10° 49′ N ...	26–50																		11	3									17	1									1	1
λ = 78° 42′ E ...	51–75																		11										1	1										1
H_s = 88 metres ...	>75																																						
Trivandrum ...	6–25	30	13	1						11	5	29							1	2		26								3		20	1		1		2			3
φ = 08° 29′ N ...	26–50												3							20										20									1	10
λ = 76° 57′ E ...	51–75																			3										3										2
H_s = 76 metres ...	>75																																						
Vizagapatam ...	6–25	30							4	3	23	30	1	4				7	9	1	1	30	1	3	1			6	6	7	1	30	3	2	2			2	4	6
φ = 17° 42′ N ...	26–50																	3	4									2	3				3					1	2	5
λ = 83° 18′ E ...	51–75																																						
H_s = 56 metres ...	>75																																						

TABLE 4—W

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)	6–25	30			3	2	3	6	4	3	9	26	3	1	4		2	5	2	1	1	19	3	1	2	1	2	2			16	3		1				2	2
φ = 25° 26′ N ...	26–50														2			1	3	1			1					2	2	2					1	2	3		1
λ = 81° 44′ E ...	51–75																																				1			
H_s = 98 metres ...	>75																												1											
Bahrain ...	6–25	30				4	1	1	7	16	1	30	4	1	3		2	1	1	6	1	30	7	3	3				2	1		26	3	2	1		1	1	3	5
φ = 26° 14′ N ...	26–50												5			1							5						1	3			2	1						1
λ = 50° 35′ E ...	51–75												2							1			2							2			2							2
H_s = 14 metres ...	>75												2																											
Calcutta (Dum Dum)	6–25	30	1	1	1	7	4	3	1	3	9	30	5	2	1	3	1	5	1	3	1	29	2	1	3	2	1	3	1	1	2	22	4		1	2	1		2	3
φ = 22° 39′ N ...	26–50												1			2	3	2					2		1	2	3	3	1	1			1	2		2	1	2		
λ = 88° 27′ E ...	51–75																																							
H_s = 21 metres ...	>75																																							
Gaya ...	6–25	30	3	1	4		2	8	2	1	9	26		2	4	3	2	1	4	1	1	25	1	2	4	3		1	4		2	21		3	2		3	1	3	2
φ = 24° 49′ N ...	26–50													1		2			4	1				1	1	2			1	3					1	1				2
λ = 85° 01′ E ...	51–75																																	1						
H_s = 117 metres ...	>75																																							
Jacobabad ...	6–25	30			3	10	1				16	30	2	1	1	1	3	9	4	2	3	30	2	1	1	4		13	2	2	1	30	7	2	1		2	4	2	6
φ = 28° 17′ N ...	26–50												1					3					2					2												1
λ = 68° 29′ E ...	51–75																																							
H_s = 66 metres ...	>75																																							
Jiwani ...	6–25	30			3	6	1	9			11	30	1		5	10	2	5	6		1	19		4	3	1			4	3	3	13	3	4	2			1	1	
φ = 25° 10′ N ...	26–50																							1										1						
λ = 61° 47′ E ...	51–75																																	1						
H_s = 5 metres ...	>75																																							
Jodhpur ...	6–25	30						15	5			29						2	2			25	1				1	2				22	4	1	1	1	1	2	3	2
φ = 26° 18′ N ...	26–50							10					1					14	9	1			1					9	6	3			1	2	1			1		1
λ = 73° 01′ E ...	51–75																											1	1											
H_s = 233 metres ...	>75																																							
Karachi (Drigh Road)	6–25	30						8	8	3	1	30						1	10	2		18				1		1	9	3		12	1	2	3	4				
φ = 24° 53′ N ...	26–50								7	3									13										3						1					
λ = 67° 07′ E ...	51–75																		4										1											1
H_s = 29 metres ...	>75																																							
New Delhi ...	6–25	30	2		3	1	1		3	6	5	29	2	1	4	1		3	4	1	1	29	1	1	2	1	2	1	3		2	25	1	2	1				4	7
φ = 28° 39′ N ...	26–50								7	2									5	4			1		2				2	10			3	1						6
λ = 77° 15′ E ...	51–75												1						1	1				1																
H_s = 227 metres ...	>75																																							
Poona ...	6–25	30						4	20	4	2	30						2	14	6		30						2	19	2		15	1	2			2	2		3
φ = 18° 32′ N ...	26–50																		5	1									4	1									1	1
λ = 73° 51′ E ...	51–75																		2										2										3	
H_s = 588 metres ...	>75																																							
*Raj Samand (Kankroli)	6–25	9						3		1		8	1					2	2	2		8	1					2	1	2		8		1	1		1	1	1	
φ = 25° 03′ N ...	26–50									1	4									1										1	1		2		1					
λ = 73° 53′ E ...	51–75																																							
H_s = 587 metres ...	>75																																							
Sharjah ...	6–25	30		1	1	2	6	10			9	30	3	1	3	4	3	5	5		3	30	2	1	2	1	7	3	2	9	1	30	3	3	4	1	3	5	3	4
φ = 25° 20′ N ...	26–50						1										2	1											2								2			1
λ = 55° 24′ E ...	51–75																																							
H_s = 11 metres ...	>75																																							

* Only on 9 days in the month, pilot balloon ascents were made in the forenoon.

QUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

ed its n./ .).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	12	1	2		2	1		2	3		1 — 10				2	12	1	6	3	3	3							3	27			Sambalpur
-50		1																														
-75											9 or 10				2	5		1	1		21											
>75																																
-25	2							2			1 — 10		1	1	8	7	3	1	6	2	1						8	12	9	1		Tezpur
-50																																
-75											9 or 10		1	1	4	6	2		1		25											
>75																																
-25	25	1	3	1		1	2	6	7	1	1 — 10					8	2		1	11	8								3	24	3	Trichinopoly
-50								1	2																							
-75											9 or 10										16											
>75																																
-25	10	1	1					1	3		1 — 10						15		1		14					6	21	3				Trivandrum
-50									4																							
-75											9 or 10						2				11											
>75																																
-25	26	3		2	1		1	6	4	1	1 — 10					1	1	5	1	1	21								30			Vizagapatam
-50								4	3																							
-75							1				9 or 10										20											
>75																																

QUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

-25	12	2	1	1			1		2		1 — 10			1		9	4	2	4	4	6						1	18	11			Allahabad (Bamrauli
-50					1	2	2																									
-75											9 or 10			1		5	2		1		13											
>75																																
-25	15	1			3	1		1	1		1 — 10										30							13	17			Bahrain
-50		1						1	3																							
-75		1							1		9 or 10																					
>75		1																														
-25	14		4	1			1	3	3	1	1 — 10					9	11	4	1		5					1	4	25				Calcutta (Dum Dum)
-50						1																										
-75											9 or 10										14											
>75																																
-25	11		1	1		2	2	1	1	2	1 — 10					12	7	2			9					1	1	8	17	3		Gaya
-50							1																									
-75											9 or 10					2	1				10											
>75																																
-25	28	5	3	2	1			2	5	5	1 — 10					1					29							10	20			Jacobabad
-50		4							1																							
-75											9 or 10																					
>75																																
-25	6		1						1		1 — 10					7	21	1			1						2	28				Jiwani
-50			3	1																												
-75											9 or 10					1	6	1			9											
>75																																
-25	17	3	1	2	1		1		1	3	1 — 10					3	10	2		1	14								14	16		Jodhpur
-50		2	2	1																												
-75											9 or 10					1	4				8											
>75																																
-25	11		3	3							1 — 10					2	26				2							15	15			Karachi (Drigh Road)
-50			2	2																												
-75		1									9 or 10					2	18				20											
>75																																
-25	22	2						2	5		1 — 10					1	4	1	2	1	21						1	3	26			New Delhi
-50		6	1						6																							
-75											9 or 10						1		1		8											
>75																																
-25	8			2			1	3	1		1 — 10					1	19	9			1							2	10	18		Poona
-50						1																										
-75											9 or 10					1	4	1			13											
>75																																
-25	6		2	1				1			1 — 10							1	2		6											*Raj Samand (Kankroli)
-50			1																													
-75			1								9 or 10							1			3											
>75																																
-25	28	2	2	3	3	2	1	2		2	1 — 10						4	1	3	1	21							1	25	4		Sharjah
-50		1		2	4	4																										
-75											9 or 10																					
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6-25	30	3	2	4		1	3	2	6	8	28	3	3	2	2		1	7	4	1	27	3	1	2	1	1	1	5	6	1	23	3		1				2	2	
	26-50													1	1				1	2			1	1	2					2			6		1				2	3	
	51-75																																								
	>75																																								
Ahmedabad ...	6-25	30	1					15	5	3	6	30						10	11	1	3	29		1				7	9	2	1	23		2	2	1	2	2	2	3	1
	26-50																	2	3									4	4	1			1					2	5		
	51-75																																								
	>75																																								
Allahabad (Bamrauli)	6-25	30	2	1	2	2	3	5	5	4	6	26	2	4		2	2	4	4	4	1	24	3	3		1	2	2	2	4	1	20	3	1	1	1	1		1	4	
	26-50														1				1	1						1		1	2	2					1	1		1	2	2	
	51-75																																								
	>75																																								
Bahrain ...	6-25	30	6	5	4					13	1	30	4	1	2	2			2	5	1	30	2	3		1	2		2	6		27	1	2			1	2	1	6	
	26-50									1			4							5			4						1	4			3	1				1	1	6	
	51-75												2							2			3							1			1							1	
	>75																						1																		
Bangalore ...	6-25	30						5	5	15		30						2	7	10		30	1					2	14	8		26						4	6	8	
	26-50								5										7	4			1						3	1									4	4	
	51-75																																								
	>75																																								
Bhuj ...	6-25	30						23	5		2	30						7	5	1		30					1	5	8	1	1	18	1	1	2	5	1	2	2	2	1
	26-50																	9	8									9	4								1				
	51-75																												1												
	>75																																								
Bombay (Juhu) ...	6-25	30						13	8	8	1	30						3	12	9		28						2	10	6	1	19		3			2	4	6	1	1
	26-50																	1	2	1									3	1			1								
	51-75																	2																							
	>75																																								
Calcutta (Dum Dum)	6-25	30	1		1	5	8	1		4	10	30	2		2	4	3	2	2	5	1	30	1	1	1	2	6	2		5	1	23		3	2	3	2	2	1	3	
	26-50														1		7	1					1		1	1	4	3		1			2		2	1	1	3	1	2	
	51-75																																								
	>75																																								
Chittagong ...	6-25	30	1			3	3	6	3	1	8	29	2				5	1	3	3	3	25	3	1	1	1	3	3		3	1	23	1	2	1	2	5	2	1	3	1
	26-50																9	2					1			1	7							1		1	1	2			
	51-75															1																									
	>75																																								
Dacca ...	6-25	30				5	5	2			18	30	1	1	1	4	5	1	3	2	2	27	3	1		1	5	3	1	2	1	19	3	1	1	1	6	1	1	1	1
	26-50															1	7								1	2	5										1			1	
	51-75																1										1											1			
	>75																																								
Fort Sandeman ...	6-25	30	1			2		3	4	3	17	30	1	1				6	9	8	3											30	1	1			2	3	11	7	4
	26-50																		2																				1		
	51-75																																								
	>75																																								
Gaya ...	6-25	30	6	5	1	1		4	4	1	8	26	3	4	2	2	2	1	7	1	1	25	1	4	2	2	1	2	3	3	3	22		2		3	5	2	1	2	3
	26-50														1	1			1						1		1		2							2			1	1	
	51-75																																								
	>75																																								
Hyderabad (Begumpet).	6-25	30	4					1	9	12	4	30	7					1	5	8	1	30	7					1	5	8	1	23	2	1				1	6	3	
	26-50																		6	2									6	2			1						7	2	
	51-75																																								
	>75																																								
Jacobabad ...	6-25	30			1	8		2			19	30			1	1	13	9		2	3	30	2	1	2		9	2	2	1	4	29	3	2	1	2		2	9	7	2
	26-50																1																							1	
	51-75																																								
	>75																																								
Jiwani ...	6-25	30				5	6	19				30		1		7	11	4	4			27		7	1	2	1	3	2	4	7	24	2	4	2				3	10	1
	26-50															1		2															1	1							
	51-75																																								
	>75																																								
Jodhpur ...	6-25	30		2				13	1		1	30		2			1	13	6			30		2			1	11	3	2		22	6	2	2	1			7	1	
	26-50							13										8										6	5				1							2	
	51-75																																								
	>75																																								
Jubbulpore ...	6-25	30	1					1	16	4	8	28	1	1					8	8	1	25	2		1			1	4	10		17	4	1	1			2	1	1	
	26-50																	1	5	1								1	3	1			2						1	4	
	51-75																	1	1									1	1												
	>75																																								
*Karachi (Drigh Road)...	6-25	27						8				27						4	5	1		23		1			2	2	6	2	1	18	4	2	1	4			1	2	
	26-50							16	1	2								4	11									1	5	3					1	2			1		
	51-75																	1	1																						
	>75																																								

* Wind frequency tables were prepared only from 17 observations made in the afternoon.

eed nits n./ :).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	19	2	1					3	2		1 — 10					3	3	3	6	7	8					1	1	10	18			Agra
-50		5		1			1	1	2																							
-75		1									9 or 10					3	2				12											
>75																																
-25	11			4	1			1			1 — 10					1	7	13	5		4								30			Ahmedabad
-50		1	3	1																												
-75											9 or 10						3	1	1		13											
>75																																
-25	11	3	1			1		1		1	1 — 10					7	4	3	7	5	4						2	17	11			Allahabad (Bamrauli)
-50				1		1		1	1																							
-75											9 or 10					4			1		16											
>75																																
-25	18	1			1	1	1		1	1	1 — 10										30							3	27			Bahrain
-50		4				1			5																							
-75								1	1		9 or 10																					
>75																																
-25	7			1		1	1	1	2		1 — 10					1	4	22	3									4	16	8	2	Bangalore
-50								1																								
-75											9 or 10					1	2	5			23											
>75																																
-25	14	1			2			2	1		1 — 10						2	16	7		5							19	11			Bhuj
-50			2	4	2																											
-75											9 or 10							2			8											
>75																																
-25	11		1		1		3	3			1 — 10					7	13	8	1		1							8	22			Bombay (Juhu)
-50				1					2																							
-75											9 or 10					3	1				13											
>75																																
-25	20	2	1	2	1	2		3	2	2	1 — 10					6	16	7	1									30				Calcutta (Dum Dum)
-50				2	1	2																										
-75											9 or 10						1				18											
>75																																
-25	13	1		1	3	4	1	1	2		1 — 10					17	4	9										2	27	1		Chittagong
-50																																
-75											9 or 10					3					20											
>75																																
-25	9		1	2	1	2	1	1			1 — 10					9	14	6	1								1	29				Dacca
-50								1																								
-75											9 or 10					1	1				11											
>75																																
-25	29	3				2	7	9	3	4	1 — 10								4		26							6	16	8		Fort Sandeman
-50							1																									
-75											9 or 10																					
>75																																
-25	10		1		2	3		1	1		1 — 10					5	16	4		1	4						1	4	23	2		Gaya
-50							1		1																							
-75											9 or 10					1				1	16											
>75																																
-25	13	1	1					2	1		1 — 10						2	7	6	15									2	28		Hyderabad (Begumpet)
-50		2						5	1																							
-75											9 or 10							1			14											
>75																																
-25	22	3	1	3			1	6	4	2	1 — 10									1	29						1	11	18			Jacobabad
-50		1						1																								
-75											9 or 10																					
>75																																
-25	10	3	2	1				1			1 — 10					6	10				14							29	1			Jiwani
-50		2		1																												
-75											9 or 10						1				1											
>75																																
-25	16	3	2		1	1		1	3	1	1 — 10						3	6	4	5	12								12	18		Jodhpur
-50		1	2					1																								
-75											9 or 10							1			6											
>75																																
-25	10	1	1	1		1		2			1 — 10				1	5	3	9	3	6	3							3	27			Jubbulpore
-50		2							1																							
-75		1									9 or 10				1		1	1			13											
>75																																
-25	18	4	2						1		1 — 10						14	5			11							7	28			Karachi (Drigh Road) *
-50		1	5	4				1																								
-75											9 or 10						4	3			7											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6–25	30		3	1	5	3	1		3	14	28	2		5	5	2	5	4	3	2	30	2		3	5	3	4	5	4	4	30	5	1				3	5	10	2
	26–50																																1					1		2	
	51–75																																								
	>75																																								
Madho Sagar (Gwalior).	6–25	30	1	3				7	5	8	5	27	3		3		1		6	10		25	1	1	1				5	11		20	6	1	1		1	1	1	4	
	26–50							1						1					2				2		2					1			1					1		3	
	51–75																		1					1																	
	>75																																								
Madras ...	6–25	30	1	1	6	5	1	5	1	3	7	28	3	2			3	2	9	5	1	28						5	9	8	1	26		1			1	1	5	6	1
	26–50																1		1	1									2	3										8	3	
	51–75																																								
	>75																																								
Malegaon ...	6–25	30	3	2				1	9	12	2	29	4			1		1	9	5		29	2					1	8	9	1	26	2	1				3	7	4	1
	26–50								1										8	1									7	1			1						6	1	
	51–75																																								
	>75																																								
Mangalore ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
New Delhi ...	6–25	30	5	3	3	3			4	3	7	28	2	4	3				4	8	3	27		3	2				5	12		24	1	1	1				3	8	
	26–50		1							1					2					2					1	1			3				2	1	2				3	2	
	51–75																																								
	>75																																								
Peshawar ...	6–25	30	1	9	3	2	1			1	13	30	1	2	14	6	1				5	30		4	10	5	4				6	30			1		8	4	11	3	3
	26–50																1										1														
	51–75																																								
	>75																																								
Poona ...	6–25	30						1	17	10		30							8	1		30							7	1		13		1			1	3	3	2	
	26–50								2									1	16	4									17	4									2		
	51–75																												1										1		
	>75																																								
Port Blair ...	6–25	30				1		4	9	1	1	27					1	1	9			21					1	1	7	2		8					1	2	2	1	
	26–50							11	1									9	2									4	3											2		
	51–75							2										4	1									1	2													
	>75																																								
*Raj-Samand (Kankroli)	6–25	22	1				1	10	1	7		22	1	1				9	8	1		22		2				8	8	2		20	2	3		1	1	3	6		1
	26–50									2									1	1									1	1			1							2	
	51–75																																								
	>75																																								
Sambalpur ...	6–25	30					1	4	9	1	15	28	3	1	1	1		4	10	3		26	1	2	3		2		9	5		20	2	2	3		1		1	6	
	26–50																	1	3	1									4				1					1	2	1	
	51–75																																								
	>75																																								
Sharjah ...	6–25	30						1	2	25		30	7				1	2	9	6		30	3	1	2	1	5	5	4	8		30	3		2	3	3	2	3	6	1
	26–50									2									3	2									1				1				2	1		1	
	51–75																																								
	>75																																								
Tezpur ...	6–25	30		4	5			4			17	28	2	3	6	1		6	4		5	28			5	3	4	7	4		3	24			7		4	5	2		1
	26–50														1										1			1									1	4			
	51–75																																								
	>75																																								
Trichinopoly ...	6–25	30						1	8	19	2	30						3	11		1	30					2	5	5	2		30				1		4	9	3	3
	26–50																		13	2									16										7	3	
	51–75																																								
	>75																																								
Trivandrum ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Vizagapatam ...	6–25	30			3	5	5	7	3	2	2	30		3	2	1	1	4	4	2	2	30	1	6	1			2	6	2	3	27	5	2				1	4	5	1
	26–50							3						2				4	5									2	7				1	2					4	2	
	51–75																																								
	>75																																								

* Only on 23 days in the month, pilot balloon ascents were made in the afternoon. Visibility observations were, however, recorded in the afternoon throughout the month.

Speed units m./sr.)	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	26	8					1	2	7		1 — 10								2	6	22							10	17	3		Lahore
6–50		2						1	5																							
1–75											9 or 10																					
>75																																
6–25	15	1	3			1	1	2	2		1 — 10				1	5	9	3	5	1	6								10	20		Madho Sagar (Gwalior)
6–50		3							1																							
1–75		1									9 or 10				1	2	2				14											
>75																																
6–25	24						1	10	4	1	1 — 10						1	2	13	4	10								2	10	18	Madras
6–50								4	1																							
1–75								2	1		9 or 10						1		1		19											
>75																																
6–25	15	1	2					4	1	1	1 — 10					1		3	17	3								1	17	12		Malegaon
6–50			2					3																								
1–75		1									9 or 10					1		2	1		9											
>75																																
6–25											1 — 10																1	1	28			Mangalore
6–50																																
1–75											9 or 10																					
>75																																
6–25	18	2	1	2				3	1		1 — 10					2	1	4	9	6	8						1	9	20			New Delhi
6–50		2	1	1				1	1																							
1–75											9 or 10					2					8											
>75																																
6–25	29				1	2	4	9	2		1 — 10								5	11	14						1	5	9	7	8	Peshawar
6–50							1	4	5																							
1–75								1			9 or 10										3											
>75																																
6–25	4			1			3				1 — 10						8	22											7	23		Poona
6–50																																
1–75											9 or 10						7	1			11											
>75																																
6–25	2							1	1		1 — 10					25		5								1	5	20	3	1		Port Blair
6–50																																
1–75											9 or 10					4					27											
>75																																
6–25	14	4	3		2		1	1	1		1 — 10						1	6	7	5	3								26	4		* Raj Samand (Kankroli)
6–50		1	1																													
1–75											9 or 10						1	3	1		10											
>75																																
6–25	17	2		2		1	2	3	2	2	1 — 10				1	2	8	9	10									2	28			Sambalpur
6–50							1		2																							
1–75											9 or 10				1	2	3	1			21											
>75																																
6–25	28			3	4	6	1	4	1	2	1 — 10								5	12	13							2	24	4		Sharjah
6–50		1			1	3	1	1																								
1–75											9 or 10																					
>75																																
6–25	18			2	2	3	5	4		1	1 — 10			1	1	1		9	12	5	1							2	8	20		Tezpur
6–50							1																									
1–75											9 or 10			1	1				1		11											
>75																																
6–25	25	1				1	1	6	7	2	1 — 10								19	11										26	4	Trichinopoly
6–50								2	5																							
1–75											9 or 10										14											
>75																																
6–25											1 — 10																	17	13			Trivandrum
6–50																																
1–75											9 or 10																					
>75																																
6–25	23		4	2			2	3	6		1 — 10					6	1	5	6	1	11							2	9	16	3	Vizagapatam
6–50		1						4	1																							
1–75											9 or 10										23											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6-25	30	1		1	1	2	2	3		20	26	1	2	1	1	2	3	3	4	1	23	2	1	1	1		1	3	3	3	16		1		2		2	4	5	
	26-50												1		1			2	3	1			1		1		1		3	1							1			i	
	51-75																											1													
	>75																																								
Bahrain ...	6-25	30		1		4		5	8	9	3	30	3	3	4			2	1	5	1	29	3	3	1			1		6		17	3	1		1	2	1		3	
	26-50												6							3			7							6							2			4	
	51-75												2										1							1										1	
	>75																																								
Calcutta (Dum Dum) ...	6-25	30	1			4	4	2	1	3	15	20	1	1			5	5	4	5	2	27	4		2	1	3	2	4	4	1	10	3			1	2	1	1	1	
	26-50															1	2	1	1								3	2		1										1	
	51-75																																								
	>75																																								
Gaya ...	6-25	30	2		4	1	1	6	1	1	14	23		3	1	4		2	5	1	5	26	1	2	1	5	1	1	5	2	5	14			1	2	1		2	2	4
	26-50															1			1	3									1	2							2					
	51-75																																								
	>75																																								
Jacobabad ...	6-25	30			3	13	5	1			8	30				1	10	13	1	1		30		1		1	3	14	4	2	5	26	5	2	1		1		5	10	4
	26-50																1	3																							
	51-75																																								
	>75																																								
Jiwani ...	6-25	30		1	1	6	2	11			9	29			1	8	2	6	3	6	3	17	2		1	1			4	3	3	7	2	1	2					2	
	26-50																													3											
	51-75																																								
	>75																																								
Jodhpur ...	6-25	30						20	5		1	30					1	3	1			30					2	7	4	2		28	8	3		2		3	3	2
	26-50							4										14	10									8	4	3				2			1			
	51-75																	1																							
	>75																																								
*Karachi (Drigh Road) ...	6-25	29						7	14	5	1	27						2	14			14					2	3	4		2	7	1	1		3		1			
	26-50								2										10										2	1											
	51-75																		1																						
	>75																																								
New Delhi ...	6-25	30		1	1	2	3	3	8		10	29	1		1	4	5		2	1	1	29	3	3	3	1	1		1	3	2	25	5	1					7	
	26-50								2						2	1			9	2					1	1			3	7			3		2	1				6	
	51-75																																								
	>75																																								
†Poona ...	6-25	30						10	13		7	28							5	11		30						1	9	8		18	1	3			2	3	3	3	2
	26-50																		11	1									11	1			1								
	51-75																																								
	>75																																								
‡Raj Samand (Kankroli).	6-25	12				1		8	1	1	1	12	1					2	6	3		12	1					2	6	2		11	1	1	2	2	1		1		1
	26-50																													1			1	1							
	51-75																																								
	>75																																								
Sharjah ...	6-25	30			2	8	3	1			16	30	2	4	3		3	1	7	8		30	3	1	2	3	2	2	5	7	1	27	4	1	5	1	3	4	2	3	
	26-50																1			1							1		1	2								3	1			
	51-75																																								
	>75																																								

*Only on 29 days in the month, pilot balloon ascents were made in the late night.

†Visibility observations were not recorded in the late night.

ed its ./).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	6	1			1		1	2		1	1 — 10				1	5	3	1	3		17					1	2	22	5			Allahabad (Bamrauli)
-50																																
-75											9 or 10				1	3	3				10											
>75																																
-25	4	1		1	1		1				1 — 10										30							30				Bahrain
-50																																
-75											9 or 10																					
>75																																
-25	5	1	1		1		1			1	1 — 10					13	1		2		14					2	21	7				Calcutta (Dum Dum)
-50																																
-75											9 or 10					2					8											
>75																																
-25	5		1		2	1				1	1 — 10				1	3	4	1	2		19						2	6	22			Gaya
-50																																
-75											9 or 10				1						9											
>75																																
-25	21	8	3	1				1	3	1	1 — 10										30							17	13			Jacobabad
-50		3							1																							
-75											9 or 10																					
>75																																
-25	1		1								1 — 10					15	6				9						1	29				Jiwani
-50																																
-75											9 or 10					6	5				10											
>75																																
-25	21	2	12	1	1					1	1 — 10					2					28							1	29			Jodhpur
-50		2	1	1																												
-75											9 or 10										1											
>75																																
-25											1 — 10					11	14				4							24	5			*Karachi (Drigh Road)
-50																																
-75											9 or 10					11	4				16											
>75																																
-25	10	1	2						3		1 — 10					2		1	5	2	20						2	16	12			New Delhi
-50		1		1					1																							
-75									1		9 or 10					2				1	4											
>75																																
-25	14		1	2		3	2	2	3		1 — 10						9	8		1	12											†Poona
-50		1																														
-75											9 or 10						4	1			7											
>75																																
-25	8	1	2	2				1			1 — 10							1	1	1	9							2	10			‡Raj Samand (Kankroli).
-50			2																													
-75											9 or 10										2											
>75																																
-25	19		2	5	3	1	2				1 — 10					1	2				27							1	26	3		Sharjah
-50				1		1	2		1																							
-75							1				9 or 10																					
>75																																

Y. P. P.—S 3923—960—12-40

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

October 1939

Supplement to the Monthly Weather Report, October 1939

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Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 26th December 1940.

C. W. B. NORMAND,

Director-General of Observatories.

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Agra ...	6–25	31					1		1	2	27	31	4	1	1	3	6	3	4	2		31	5	1	3	1	6	1	5	4		31	2	2	1	1			3	7
ϕ = 27° 08′ N ...	26–50																1	2		3							1	1		2			5						2	6
λ = 78° 01′ E ...	51–75																			1										1										
H_s = 182 metres ...	>75																																							
Ahmedabad ...	6–25	31	2	3	2						24	31	4	1	3	4			1	6		31	9	2	3	3		2	1	7	1	31	2	5	8	6	2	2	2	
ϕ = 23° 02′ N ...	26–50												5	2	1	1				3				1	2											1			1	
λ = 72° 35′ E ...	51–75																																							
H_s = 55 metres ...	>75																																							
Bangalore ...	6–25	31		2	4	2	1	4	8	6	4	26	2	5	4		2	3	1	2		30		3	6	3		3	11	4		20	2	2	3	1		3		
ϕ = 12° 58′ N ...	26–50												1		2	1		1		2													3	3				1		
λ = 77° 35′ E ...	51–75																																							
H_s = 936 metres ...	>75																																							
Bhuj ...	6–25	31						1	2	2	26	31	5	1	2			1	5	3		30	1	5	2	2	3	2	6	1	1	29	1	3	3	5	2	9	1	2
ϕ = 23° 15′ N ...	26–50													3	2				5	3			1	1	1			2	2					1		1		1		
λ = 69° 48′ E ...	51–75													1																										
H_s = 118 metres ...	>75																																							
Bombay (Juhu) ...	6–25	31		1	2						28	31	5	3	6	2	1			4	1	30	4	6	7				1	1		29		7	10			1		1
ϕ = 19° 07′ N ...	26–50												1	3	4	1								4	5	2								2	6	2				
λ = 72° 50′ E ...	51–75																																							
H_s = 5 metres ...	>75																																							
Chittagong ...	6–25	31	3	1						1	26	30	10	8		3	2	1		1	2	30	4	4		1	6	2	2	1	7	29		3	2	2	5	7	4	1
ϕ = 22° 21′ N ...	26–50																2										2										2			
λ = 91° 50′ E ...	51–75																1																				1			
H_s = 21 metres ...	>75																										1													
Dacca ...	6–25	31		1	1						29	28	11	4	1	1	1	3	1	1	4	27	8	2	4		1	3	2	3	3	24	3				3	6	7	
ϕ = 23° 43′ N ...	26–50																1											1												
λ = 90° 24′ E ...	51–75																																							
H_s = 21 metres ...	>75																																							
Fort Sandeman ...	6–25	31		1	1	2		1			26	31	6	2	1		2	6	4	6	4											31	7	2	1		2	5	5	7
ϕ = 31° 21′ N ...	26–50																																							
λ = 69° 27′ E ...	51–75																																							
H_s = 1421 metres ...	>75																																							
Hyderabad (Begumpet).	6–25	31	2	3	3	1		1	1	3	17	27	2	4	5	2			2		2	27	2	4	5	2			2		2	22	1	7	2					1
ϕ = 17° 26′ N ...	26–50												1	5		2		1					1	5		2		1					4	5	2					
λ = 78° 27′ E ...	51–75														1										1															
H_s = 555 metres ...	>75																																							
Jubbulpore ...	6–25	31				3	2	2			24	31	1	5	11	3	1	1	3	2	1	31	4	8	7	1	1	1	4	2		31	9	4	3	1				2
ϕ = 23° 10′ N ...	26–50														1				1	1					1	1				1			8	2	2					
λ = 79° 57′ E ...	51–75																																							
H_s = 402 metres ...	>75																																							
Lahore ...	6–25	31		2	1	3					25	31	5	2	2	3	2	4	1	6	2	31	4	2	1	4		1	5	5	5	31	4	1	1	5	4	3	7	4
ϕ = 31° 35′ N ...	26–50													1		2								1		1	1													
λ = 74° 20′ E ...	51–75																1										1													
H_s = 221 metres ...	>75																																							
Madho Sagar (Gwalior).	6–25	31		1			7	14		1	8	31	5	1	1	3	3	2	5	6	4	31	5	2	2	3		2	4	9	3	21	7	3				1	1	7
ϕ = 26° 13′ N ...	26–50																			1			1										1						1	
λ = 78° 08′ E ...	51–75																																							
H_s = 233 metres ...	>75																																							
Madras ...	6–25	31							1		30	31		4	6	1	2	6	1	3	1	31	4	2	5	1	3	3	3	5		31	5	3	2	2	2	4		1
ϕ = 13° 04′ N ...	26–50																2	2	2	1				1			2	1		1			6	1	1			1	1	
λ = 80° 15′ E ...	51–75																																							
H_s = 13 metres ...	>75																																							
Malegaon ...	6–25	31							8	5	18	31	5	7	6	1						31	3	8	6	1				1		31		11	8				1	
ϕ = 20° 33′ N ...	26–50												1	1	4	3				3			2	2	5	3								6	5					
λ = 74° 32′ E ...	51–75																																							
H_s = 443 metres ...	>75																																							
*Mangalore ...	6–25	25	1	5	9	2	3				5	25	6	1	1	3	6	1		2	2	22	5	2	3	3	1	1	2	3	1	22	1	5	3	4	2			1
ϕ = 12° 52′ N ...	26–50												2			1										1								3	1	1				
λ = 74° 51′ E ...	51–75																																							
H_s = 40 metres ...	>75																																							
Peshawar ...	6–25	31						8			23	31	12	5		1			1	7	5	31	10	4	2	1				10	4	31	8	1		1	3	2	3	6
ϕ = 34° 01′ N ...	26–50																																				2			
λ = 71° 35′ E ...	51–75																																							1
H_s = 363 metres ...	>75																																							
†Poona ...	6–25	16			2	1				1	12	16		2	5	1						16		2	5	1						15	1	1	1					
ϕ = 18° 32′ N ...	26–50													1	7									1	6	1								5	7					
λ = 73° 51′ E ...	51–75																																							
H_s = 588 metres ...	>75																																							
Port Blair ...	6–25	31	1	1	6		1	6	6	2	8	29		2	5	2	1	4	8	1	1	28	1	2	4	3	2	2	5	3	1	18	2	2	5			2	4	
ϕ = 11° 40′ N ...	26–50													1		3			1						1	2			2						1				1	
λ = 92° 43′ E ...	51–75																																							
H_s = 87 metres ...	>75																																							

* Wind frequency tables were prepared only from 25 observations made in the morning.

† Only on 16 days in the month, pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the forenoon. Visibility observations were, how recorded in the morning throughout the month.

QUENCY (MORNING) | TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) | TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

ed ts ./ .	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
·25	29	4	1					2	7		1 — 10									2	29						9	18	4			Agra
·50		4						3	8																							
·75											9 or 10																					
·75																																
·25	30	2	6	3	6	1	3	1	1	3	1 — 10										31								31			Ahmedabad
·50			2	2																												
·75											9 or 10																					
·75																																
·25	18	1	1	1	1	1	1	1		1	1 — 10		5	7	1	6	5				7					1	2	12	10	6		Bangalore
·50		3	3		1		2		1																							
·75											9 or 10		5	4	1	2	1				21											
·75																																
·25	29	2	3	6	4	2		2		2	1 — 10					7	1	1			22			1				7	23			Bhuj
·50		1	1	2	1	2	1																									
·75											9 or 10																					
·75																																
·25	27	6	5	5	2	1	2		3		1 — 10					1	8	2	1	1	18							8	23			Bombay(Juhu)
·50				2	1																											
·75											9 or 10									1	11											
·75																																
·25	22	1			3	1	10	4	2		1 — 10	1	1	5	2	1	3	3	2	1	12						5	10	16			Chittagong
·50						1																										
·75											9 or 10	1	1	1	1						12											
·75																																
·25	19					3	4	5	3		1 — 10				4	5	3	3		1	15						3	28				Dacca
·50							2	2																								
·75											9 or 10				2						11											
·75																																
·25	31	5	2				2	6	7	1	1 — 10								1	2	28							15	16			Fort Sandeman
·50							1	3	4																							
·75											9 or 10																					
·75																																
·25	19	2	7	4							1 — 10			1	1	8	1			4	16			1				3	16	11		Hyderabad (Begumpet)
·50		2	3	1																												
·75											9 or 10			1	1	4	1			1	11											
·75																																
·25	25	4		1			3	1			1 — 10						1	1	1	2	26					1		11	19			Jubbulpore
·50		12	1	1																												
·75		1	1								9 or 10										4											
·75																																
·25	29	4			2	3	2	4	4	2	1 — 10									2	29					2	10	17	2			Lahore
·50		1					2	2	3																							
·75											9 or 10																					
·75																																
·25	9	2	1				1	2	3		1 — 10								1	1	29						1		11	19		Madho Sagar (Gwalior)
·50																																
·75											9 or 10																					
·75																																
·25	29	4	4	1	1	1	1	1	3		1 — 10						1	5	2	2	21							6	8	10	7	Madras
·50		4	3	1	1	1	3																									
·75											9 or 10									1	18											
·75																																
·25	31	5	6	5	1				3	2	1 — 10									2	29								12	19		Malegaon
·50		1	4	3	1																											
·75											9 or 10										4											
·75																																
·25	16	1	4	4	1	2					1 — 10			1	1	12	14		2	1							3	10	15	3		*Mangalore
·50		1	2		1																											
·75											9 or 10			1	1	4					16											
·75																																
·25	31	2	1	1	1	3	2	9	4		1 — 10								3	1	27							1	10	3	17	Peshawar
·50		1				1	2	1	3																							
·75											9 or 10										2											
·75																																
·25	15	1	5	3				3	1		1 — 10	2					2			1	11			1				1	2	27		†Poona
·50			1	1																												
·75											9 or 10	2					1				5											
·75																																
·25	3			1			1				1 — 10					23		8										5	26			Port Blair
·50				1																												
·75											9 or 10										24											
·75						—																										

TABLE 1—W

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW
*Raj Samand (Kankroli)	6–25	22						3	8	8	3	21	4		2		1	2	3	5	2	21	4		2		2	2	3	4	1	22	1	1	2	3	4	3		4
φ = 25° 08′ N ...	26–50																		1	1									1	2										
λ = 73° 53′ E ...	51–75																																							
H_s = 587 metres ...	>75																																							
Sambalpur ...	6–25	31									31	31	2	6	7	4	2	1	2	2	5	30	5	12	2	3	1	2	1	2	1	30	4	8	4	1	1	2		3
φ = 21° 28′ N ...	26–50																									1							1				1		1	
λ = 83° 58′ E ...	51–75																																							
H_s = 153 metres ...	>75																																							
Tezpur ...	6–25	31		10	5						16	26			14	1	2	3	1		3	24		2	11	2		2	2		2	15	1	1	5	1	1	1	4	
φ = 26° 37′ N ...	26–50														2										3										1					
λ = 92° 47′ E ...	51–75																																							
H_s = 80 metres ...	>75																																							
Trichinopoly ...	6–25	31	1						7	1	22	31	3	2		1	2	2	4	4	1	31	2	3	1		4	2	7	4	2	29	6	3	2	1	3	2	2	4
φ = 10° 49′ N ...	26–50																		10	1									3	3			3					1		
λ = 78° 42′ E ...	51–75																		1																					
H_s = 88 metres ...	>75																																							
†Trivandrum ...	6–25	29	19	2						1	7	27	1				1		3	10	1	25	1	1		3			3	4	1	22	4	3	4	2			1	1
φ = 08° 29′ N ...	26–50												1					1	1	8								1	1	10								1	2	4
λ = 76° 57′ E ...	51–75																																							
H_s = 76 metres ...	>75																																							
Vizagapatam ...	6–25	31	2	6							23	29		4	4	2	1	5	1		4	28	1	5	8	2	2	1	3		2	25	2	5	8		2			3
φ = 17° 42′ N ...	26–50													6	2									1	3									1	2		1	1		
λ = 88° 18′ E ...	51–75																																							
H_s = 56 metres ...	>75																																							

TABLE 4—W

STATION.	Speed limits (km./hr.).	Surface. n	N	NE	E	SE	S	SW	W	NW	C	0·5 km. above Surface. n	N	NE	E	SE	S	SW	W	NW	C	1·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	2·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW
Allahabad (Bamrauli)	6–25	31		1	2			5	3	2	18	31	1		4	5	4	2	6	3	6	28	3	2	3	5			3	8	4	27	13	1	1				1	3
φ = 25° 26′ N ...	26–50																																4	2							1
λ = 81° 44′ E ...	51–75																																							
H_s = 98 metres ...	>75																																							
Bahrain ...	6–25	31		1	1	1		5	3	14	6	31	6	3	2	1		1	3	8	1	31	8	1	2	2	2	3	2	4	1	29	3	2	1	2	2	2	4	3
φ = 26° 14′ N ...	26–50												4						1	1			3						1	2			2	1		1	1	1		3
λ = 50° 35′ E ...	51–75																																							
H_s = 14 metres ...	>75																																							
Calcutta (Dum Dum)	6–25	31	1	7	1	2		2			18	31	3	10	5	4		1	1		5	31	5	7	6	3	1	2	1	1	3	29	2		4	3	6	4	5	1
φ = 22° 39′ N ...	26–50																1	1						1				1										2		
λ = 88° 27′ E ...	51–75																																							
H_s = 21 metres ...	>75																																							
Gaya ...	6–25	31	1	2	4	3	4	1	1		15	30	3	3	6	5	2	1	1	3	5	28	3	9	4	1				6	4	26	6	1	2	1		1	3	6
φ = 24° 49′ N ...	26–50														1										1								1		1					2
λ = 85° 01′ E ...	51–75																																							
H_s = 117 metres ...	>75																																							
Jacobabad ...	6–25	31	1	1	1	3	2			4	19	31	3			7	3	9	3	1	1	31	1	1	1	1	9	8	3	2	1	31	2	1	1	1	2	6	9	3
φ = 28° 17′ N ...	26–50												2		1					1			2					1		1			1							1
λ = 68° 29′ E ...	51–75																																							
H_s = 56 metres ...	>75																																							
Jiwani ...	6–25	31	1	5			1	11	1	1	11	31	2	2	1	3	5	6	4	4	2	30	1	4	4	2	7	1	5	4	1	24	8	4	1		3	1	1	3
φ = 25° 10′ N ...	26–50													2										1												1				
λ = 61° 47′ E ...	51–75																																							
H_s = 5 metres ...	>75																																							
Jodhpur ...	6–25	31		7		1	2	4	6	1	9	31		5	3		1	3	6	1	1	30	2	2	1	1	1	9	5	2		31	1	1	1	4	5	9	5	3
φ = 26° 18′ N ...	26–50							1						1				5	5					1				4	2											
λ = 73° 01′ E ...	51–75																																							
H_s = 233 metres ...	>75																																							
Karachi (Drigh Road)	6–25	31	1	3				4	5	3	10	31		2	1	2		1	9	2		29		1	3		2	1	4	3	2	28	2	3	3	3	1	2	3	7
φ = 24° 53′ N ...	26–50			1				1	3					5					8	1				1			2	1	8	1						1	1		1
λ = 67° 07′ E ...	51–75																																							
H_s = 29 metres ...	>75																																							
New Delhi ...	6–25	31	1	1	5	4	2		10	2	3	30			2	3	4	3	4	3	1	30			1	4	4	4	4	8	1	29	3	1			1	4	4	8
φ = 28° 39′ N ...	26–50								3								2		2	5									1	2			1						2	4
λ = 77° 15′ E ...	51–75																		1										1											
H_s = 227 metres ...	>75																																							
‡Poona ...	6–25	15		4				2	1		8	15	2	5	1	2			1	2		15	4	3	1	1	1		2	1		15	1	1	4		1			1
φ = 18° 32′ N ...	26–50													1	1									1	1										7					
λ = 73° 51′ E ...	51–75																																							
H_s = 588 metres ...	>75																																							
§Raj Samand (Kankroli)	6–25	8					2		1	2	2	8					2	1	2	2	1	8					2	1	2	2	1	8			1		5			1
φ = 25° 03′ N ...	26–50									1																														
λ = 73° 53′ E ...	51–75																																							
H_s = 587 metres ...	>75																																							
Sharjah ...	6–25	31		1	1	1	6	5			17	31	1	1	3	4	6	5	1	3	4	30	3	1	6	4	4	3	3	4	1	30	2	3	2	2	3	1	2	7
φ = 25° 20′ N ...	26–50															1	1	1												1				1			2	2	1	
λ = 55° 24′ E ...	51–75																																							
H_s = 11 metres ...	>75																																							

* Only on 23 days in the month, pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the late night. Visibility observations were, howe recorded in the morning throughout the month.

† Wind frequency tables were prepared only from 29 observations made in the morning.

‡ Only on 15 days in the month, pilot balloon ascents were made in the forenoon; on the remaining days the ascents were made in the morning.

QUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

d s /	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
25	21	2	3	4	3	2	3	4			1 — 10								1		21								3	28		*Raj Samand (Kankroli)
50																																
75											9 or 10																					
75																																
25	24			1	6	2	5	4	4	2	1 — 10					1	6		9		15								31			Sambalpur
50																																
75											9 or 10					1	1				11											
75																																
25	7		1					3	1		1 — 10			2	2	4	2	3	7	7	4						2	13	16			Tezpur
50								2																								
75											9 or 10			2	2	4	1	2	2		15											
75																																
25	24	4	3		2	1	4	3	3	2	1 — 10					7	1	2		12	9						1	2	9	16	3	Trichinopoly
50		2																														
75											9 or 10										19											
75																																
25	14	2	4		2	1		1	2		1 — 10					1	19		1		10				1	2	16	10	2			†Trivandrum
50									2																							
75											9 or 10					1	1				18											
75																																
25	23	6	3	7		2			1		1 — 10					2	4	3			22						2	2	27			Visagapatam
50				1	1	1	1																									
75											9 or 10						1	1			11											
75																																

QUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

5	21	7	3			1		2	1		1 — 10					3		1	2		25						1	26	4			Allahabad (Bamrauli)
0		5	1					1																								
5											9 or 10					2					2											
5																																
5	20	3	3		2			3	1		1 — 10					1	2	2			26						1	7	23			Bahrain
0		2	2	1		1		1	1																							
5											9 or 10																					
5																																
5	17				1	5	3	4		2	1 — 10					3	19	4	1	2	2						3	28				Calcutta (Dum Dum)
0							2																									
5											9 or 10					1	1	1			7											
5																																
5	28	3	1	1		2	4	6	2	2	1 — 10					3	7	1	1		19			1				11	19			Gaya
0							1	1																								
5											9 or 10					1	1				5											
5																																
5	23	5	3	2			7	1	3		1 — 10										31						2	7	22			Jacobabad
0		1					1																									
5											9 or 10																					
5																																
5	13	5			1		1			1	1 — 10					4	17				10							20	11			Jiwani
0		2	1	2																												
5											9 or 10						3				3											
5																																
5	31	3	6	5		3	6	4	4		1 — 10									1	30							2	20	9		Jodhpur
0																																
5											9 or 10																					
5																																
5	25	4	5	2				1	2	2	1 — 10	2				1	15				13		1	1			2	5	16	6		Karachi (Drigh Road)
0		1	5	2		1																										
5											9 or 10	2									2											
5																																
5	29	3	1				2	7	5	1	1 — 10					1			1	1	28							8	23			New Delhi
0								2	8																							
5											9 or 10																					
5																																
5	15		4	3	3	2			1		1 — 10							2			13											‡Poona
0			1	1																												
5											9 or 10										3											
5																																
5	8			4	1	2				1	1 — 10									1	7											§Raj Samand (Kankroli)
0																																
5											9 or 10																					
5																																
5	30		3	3	6	4	2	3			1 — 10					1	1	2	2	1	24								26	5		Sharjah
0				5		1		2	1																							
5											9 or 10																					
5																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Agra ...	6-25	31	2	1		1		2	2	9	14	31	4	3		1	2	2	3	12	2	31	6	1			4	1	4	10	3	31	4		1		3	1	5	7
	26-50																			2										2			4						1	4
	51-75																																								
	>75																																								
Ahmedabad ...	6-25	31		5	4	1	2	2	1	6	10	31	6	7	4	1	2	1	4	5	1	31	4	6	5	1	1		5	6	3	31		6	4	5	4	2	3	1
	26-50																																	2					2		
	51-75																																								
	>75																																								
Allahabad (Bamrauli)	6-25	31	7	4	3			2	2	5	8	30	5	4	3		1		4	11	2	31	4	5	2			3	4	10	3	28	8	1	1		1		3	9
	26-50																																								3
	51-75																																								
	>75																																								
Bahrain ...	6-25	31	6	5	3	3				14		31	5	1	1	3	2	2	3	5	2	31	4	2	1	5	1	2	5	5	1	31	4	2		3	3	2	1	3
	26-50												5							2			3							2			2	2			2	2	2	2
	51-75																																								
	>75																																								
Bangalore ...	6-25	31	3	8	3	2		5	1	4	5	31	8	3	5	2		3	3	5	1	31	7	4	4	3		4	5	2	1	24	6	3	2	2		3	2	3
	26-50																	1					1										2						1	
	51-75																																								
	>75																																								
Bhuj ...	6-25	31	3	4	1	1		4	6	2	10	31	1	8	1		2	1	10	2	3	31	2	4	4		2	3	10	2	2	29	2	4	3	3	3	7	4	2
	26-50													1				1	1					1					1					1						
	51-75																																								
	>75																																								
Bombay (Juhu) ...	6-25	31		2				1	2	26		31	11	8	2				1	7		31	5	16	7					1	1	27	2	6	4	3	1		1	2
	26-50												1	1											1										3	4					
	51-75																																								
	>75																																								
Calcutta (Dum Dum)	6-25	31	5	5	2	6		3		1	8	31	5	6	2	4	6	2	2	2		31	3	3	4	4	3	3	1	4	3	25		1	1	4	2	5	3	1
	26-50						1						1			1							1			1		1						1					2	1	
	51-75																																								
	>75																																								
Chittagong ...	6-25	31					1	2	6	5	17	31	11	2	1		1	4	2	3	6	30	3	7	2	3	4	4		2	5	28	2	1	1	1	3	7	2	
	26-50																1																				1	2			
	51-75																																								
	>75																																								
Dacca ...	6-25	31			2		2			2	25	28	9		3	2	1		3	3	5	25	7		1	3	4	1		3	6	20		1			3	2	7	2
	26-50															1	1																						1	
	51-75																																								
	>75																																								
Fort Sandeman ...	6-25	31						3	3		25	30	3				2	3	6	2	7											30	3				2	9	4	3
	26-50																	1	1																			1	1	
	51-75																																								
	>75																																								
Gaya ...	6-25	31	11	4	1				3	7	5	31	5	8	2				2	7	7	30	3	5	1	1		1	4	9	6	26	1			1	2	3	5	6
	26-50																																								1
	51-75																																								
	>75																																								
Hyderabad (Begumpet)	6-25	31	3	6	8	3	1			2	8	30	7	3	3				1	2		30	6	8	3		1		1	2		23	3	6	2				1	2
	26-50													2	5	1	1						1	2	5	1								1	3	4		1			
	51-75																																								
	>75																																								
Jacobabad ...	6-25	31	2			8	3		1	2	15	31	2			2	12	7	2	3	3	31	4	1		1	6	2	5	1	4	31	2	1	1	2	2	8	9	3
	26-50																																1						1		
	51-75																																								
	>75																																								
Jiwani ...	6-25	31		1		1	3	26				31	1	1	1	2	10	13	2			31	2	5	2		1	7	5	4	4	29	12	2			1	2	2	5
	26-50																	1						1									1			1	1				
	51-75																																								
	>75																																								
Jodhpur ...	6-25	31	3	1				13	4	2	6	31	5	1			1	12	8	1		31	3	2				12	8	1	2	31	1	2			2	10	8	3
	26-50							2										3										3												
	51-75																																								
	>75																																								
Jubbulpore ...	6-25	31	4	8						5	14	31	10	3	2				2	5	2	31	9	11	2				3	4	2	28	5	7	4	2			1	3
	26-50													1																			3	3						
	51-75																																								
	>75																																								
Karachi (Drigh Road) ...	6-25	31		2		4		9	3		2	31		3	2		2	3	7			31	1	1	2	1	1	4	1	1	3	31	7	3	1	1	5	2	3	1
	26-50							7	1	3									11	1	2		1	1				3	11						1				2	1	3
	51-75																																								
	>75																																								

eed its n./ .).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	31	1	1				1	9	6		1 — 10								1	9	21						2	16	13			Agra
-50		7						2	4																							
-75											9 or 10																					
>75																																
-25	30	4	4	2	3	3	5	3			1 — 10								5	1	25								31			Ahmedabad
-50			2	4																												
-75											9 or 10																					
>75																																
-25	19	5					1	1	6	1	1 — 10							3	14	3	11							14	17			Allahabad (Bamrauli)
-50		3						1	1																							
-75											9 or 10																					
>75																																
-25	26	4	2	1	4		1	4	1		1 — 10								1		30								31			Bahrain
-50		3			2		1	1	2																							
-75											9 or 10																					
>75																																
-25	8		2	1			1	2			1 — 10						6	17	6	2						1		8	13	8	1	Bangalore
-50		1	1																													
-75											9 or 10						1		2	1	14											
>75																																
-25	24	1	1	4	3	4	2	3	2	1	1 — 10						2	10	3		16					1	1	4	24	1		Bhuj
-50			1	1		1																										
-75											9 or 10																					
>75																																
-25	21	3	2	4	2	1	2		3	1	1 — 10						1	12	4		14								29	2		Bombay (Juhu)
-50		1		1	1																											
-75											9 or 10								1		7											
>75																																
-25	18					3	5	6	2	1	1 — 10					3	17	7	2		2						2	29				Calcutta (Dum Dum)
-50								1																								
-75											9 or 10										16											
>75																																
-25	26	1	1		2	6	9	4		1	1 — 10					3	15	11			2							3	28			Chittagong
-50					1		1																									
-75											9 or 10										9											
>75																																
-25	11						3	5	1		1 — 10				3	4	13	5	3		3						2	29				Dacca
-50								2																								
-75											9 or 10					1					10											
>75																																
-25	31	5				5	7	6	3	3	1 — 10								5	1	25							3	25	3		Fort Sandeman
-50							1	1																								
-75											9 or 10										2											
>75																																
-25	16	1	1				2	1	6		1 — 10					1	16	5	3		6							6	25			Gaya
-50							1	3	1																							
-75											9 or 10										6											
>75																																
-25	15	2	4	5				1			1 — 10				1	2	1	6	8	12	1								10	18	3	Hyderabad (Begumpet)
-50		1	1						1																							
-75											9 or 10				1	2	1	2		1	8											
>75																																
-25	22	3	1	3			5	2	1	1	1 — 10										31					1	1	5	24			Jacobabad
-50		1						3	2																							
-75											9 or 10																					
>75																																
-25	18	2	5	2	1	1		2	1		1 — 10					2	11				18							16	14	1		Jiwani
-50		1	1	2																												
-75											9 or 10																					
>75																																
-25	30	3	2	1		2	5	3	6	3	1 — 10								3	5	23							2	6	23		Jodhpur
-50						1	2	2																								
-75											9 or 10																					
>75																																
-25	25	2	2	1	1		2	2	1	2	1 — 10							3	4	7	17							1	29	1		Jubbulpore
-50		6	4	1																												
-75			1								9 or 10										3											
>75																																
-25	28	3	6	1	5			1	3		1 — 10						6	1			24							4	15	12		Karachi (Drigh Road)
-50		1	2	3		1		1																								
-75			1								9 or 10																					
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6–25	31	3	2		5		1	1	4	15	29	3	3	2	3	3	2	4	2	6	30	1	4	1	6	3	5	2	2	5	31	1	1	2	1		6	7	5	5
	26–50															1										1										1	1	1			
	51–75																																								
	>75																																								
Madho Sagar (Gwalior)	6–25	31	1	2				2		8	18	30	9	2	2		1	2	2	8		30	10	2	1		2		4	8		30	4	1	2	1	1		6	10	
	26–50												1							2	1		1							1	1		2							2	1
	51–75																																								
	>75																																								
*Madras ...	6–25	31	1	5	4	7	1			2	11	31	2	6	5	2	5	1		1	2	29	4	2	2	1	2	4	3	5		27	5	4	2	2	1	5		3	
	26–50												2	4						1			3	1	2								3		1	1					
	51–75																																								
	>75																																								
Malegaon ...	6–25	31	4	18	4	1					4	31	6	15	5	1						31	7	14	5	1						31	4	10	7	1				2	1
	26–50													1	3									1	3									2	3					1	
	51–75																																								
	>75																																								
Mangalore ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
New Delhi ...	6–25	31	4	2	1	2	1		3	9	8	31	3	2	2	2	1		4	10	6	31	1	1	2	4			6	13	3	31	1			2	1	3	5	7	1
	26–50									1										1										1							1		4	6	
	51–75																																								
	>75																																								
Peshawar ...	6–25	31	2	9	2	1					17	31	7	7	6	5				2	4	31	7	4	5	6	2			3	4	31	3		1		6	10	3	4	3
	26–50																																				1				
	51–75																																								
	>75																																								
Poona ...	6–25	31	1	8	7	3		2	2	7	1	31	3	5	9	1		2	1	4	1	31	2	5	10			2	3	3	1	30	4	4	6		1		2	4	2
	26–50														3	1				1					3	1				1					2	5						
	51–75																																								
	>75																																								
Port Blair ...	6–25	31		2	8	5		1	6	1	2	30		2	8	5		4	5		1	26	1	2	5	3		2	5		2	16	1	1	6			1	1		1
	26–50				2	2			1	1					1	1			3						3	2			1						3	2					
	51–75																																								
	>75																																								
†Raj-Samand (Kankroli)	6–25	23			1	2		3	1	9	7	22	1		2	4	1	2	4	1	7	22	1	1	2	3	1	2	4	1	7	23	1	2	1	3	2	4	4		6
	26–50																																								
	51–75																																								
	>75																																								
Sambalpur ...	6–25	31	1	6	2	2	1	1	1	2	15	28	7	6	4	2	1	1	1	3	3	31	7	10	3	3		2	1	3	2	26	5	4	1	1	1	3	2	4	4
	26–50																																					1			
	51–75																																								
	>75																																								
Sharjah ...	6–25	31	1						8	22		31	6	1	1			1	11	8		31	5	2	1	3	1	2	4	6	2	31	3	3	2	4	2	3		7	1
	26–50																		2	1								2	1	2							3		1	1	
	51–75																																							1	
	>75																																								
Tezpur ...	6–25	31		1	7			2			21	27		2	9			2	2		11	26			8	1	2	8			6	23			1		2	5	8	1	
	26–50														1													1										3	1		
	51–75																																								
	>75																																								
Trichinopoly ...	6–25	31			1	1			6	7	16	31		2	1	1	3	2	3	7	6	31	2	3	1		5	3	8	5	3	29	5	2	2	1		3	5	4	
	26–50													1										1									4						2			
	51–75																																								
	>75																																								
Trivandrum ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Visagapatam ...	6–25	31		5	8	10	3		1		4	29		2	9	4	3	1				28	2	7	5	2	1	1			2	27	4	7	6	1	1	1			
	26–50													5	3		1	1						4	3			1					1	1	4			1			
	51–75																																								
	>75																																								

* Visibility observation was not recorded on one day in the month.

Speed limits (km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	29	5			1	1	4	3	7	3	1 — 10								1	1	29							14	17			Lahore
26–50						1		1	2																							
51–75						1					9 or 10								1		2											
>75																																
6–25	24	5		1			1	3	6		1 — 10								10	5	16					1		2	13	15		Madho Sagar (Gwalior)
26–50							1	2	3																							
51–75		1							1		9 or 10										1											
>75																																
6–25	22	4	3	4	1		2	2	1		1 — 10					1	4	5	4	2	15								1	13	16	*Madras
26–50		1	1			1	2																									
51–75											9 or 10					1					18											
>75																																
6–25	25	4	5	7		2			3		1 — 10								7	18	6							2	8	21		Malegaon
26–50		1		2	1																											
51–75											9 or 10								1		4											
>75																																
6–25											1 — 10																1	1	27	2		Mangalore
26–50																																
51–75											9 or 10																					
>75																																
6–25	27	1				1		4	6	1	1 — 10							1	9	2	19							6	25			New Delhi
26–50							2	1	10																							
51–75								1			9 or 10																					
>75																																
6–25	31	1	1		1	3	6	7	3	1	1 — 10								8	5	18								13	3	15	Peshawar
26–50						1	2	2	2																							
51–75						1					9 or 10									1	5											
>75																																
6–25	22	4	4	4				2	1		1 — 10						1	6	4	17	3								2	29		Poona
26–50			2	3	1		1																									
51–75											9 or 10						1	1			8											
>75																																
6–25	3			2							1 — 10					22		9									4	7	20			Port Blair
26–50				1																												
51–75											9 or 10					2					18											
>75																																
6–25	23	1	2	4	3	1	4	3	3	1	1 — 10								3	6	14								1	30		† Raj Samand (Kankroli)
26–50									1																							
51–75											9 or 10																					
>75																																
6–25	17	1		1	1	1	5	6	1	1	1 — 10							5	23	2	1							1	30			Sambalpur
26–50																																
51–75											9 or 10							1			6											
>75																																
6–25	25		4	2	3	5	2	3	1		1 — 10							4	8	8	11							1	28	2		Sharjah
26–50				2	1	1			1																							
51–75											9 or 10																					
>75																																
6–25	16						2	3	3		1 — 10					4	1	1	5	19	1							5	25	1		Tezpur
26–50								8																								
51–75											9 or 10					4	1				6											
>75																																
6–25	25	4	2	1		1	2	3	5	2	1 — 10					1		1	12	17									4	22	5	Trichinopoly
26–50		3		1			1																									
51–75											9 or 10										11											
>75																																
6–25											1 — 10															2		6	22	1		Trivandrum
26–50																																
51–75											9 or 10																					
>75																																
6–25	24	1	5	9	2			1		2	1 — 10					5	10				16						4	3	12	11	1	Vizagapatam
26–50		2		1			1																									
51–75											9 or 10						1				13											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6-25	31				1		1	1		28	31	1		5	6	5	3	2	4	5	31	7	4	1	2	2	1	3	7	4	24	8	1				1		6	1
	26-50																																4	1					1	1	
	51-75																																								
	>75																																								
Bahrain ...	6-25	31	3	1		1		1	5	5	15	30	11	1			3	4	1	6	2	31	8				1	4	5	7	1	19	2	1		1	2	1	2	3	
	26-50												1							1			2							3			4				1			2	
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	31	2	6		2	1	1		4	15	31	6	2	2		6	3	1	3	6	31	3	4	2	2	2	7	1	3	5	19		1	1		6	7	1		3
	26-50												1					1					2																		
	51-75																																								
	>75																																								
Gaya ...	6-25	31		2	2	1	7	1	1		17	28		2	3	1	1	1	3	5	12	28	8	1	2	1			2	10	4	24	2	1		2		2	8	6	3
	26-50																																								
	51-75																																								
	>75																																								
Jacobabad ...	6-25	31	2		1	3	1	2			22	31	1		1	3	6	8	1	1	5	31	1	1			5	13	4	3	2	29	3	1			1	8	7	5	1
	26-50												1					2		2								1		1									2	1		
	51-75																																								
	>75																																								
Jiwani ...	6-25	31	1	2	1			9	2		16	31		2		2	1	9	7	7	2	28	2	3		1	2	1	8	7	4	13	6		1		2	1		1	2
	26-50																		1																						
	51-75																																								
	>75																																								
Jodhpur ...	6-25	31	2	6				5	10	1	6	31	3	6			1	3	10		1	31	1	2			4	7	11	3	1	29	4	2	1	1	4	5	6	1	4
	26-50			1										1				5	1									2											1		
	51-75																																								
	>75																																								
Karachi (Drigh Road) ...	6-25	31	1	4				1	11	6	8	29	1	1	3		3	1	5		1	29	1	1	2	1	4	5	6	3		23	5	3	4	2	1		1	4	3
	26-50																		13	1									5	1											
	51-75																																								
	>75																																								
New Delhi ...	6-25	31				10	1		10	1	9	31	3		3	3	3	2	4	9		31	3	2	1	1	2	2	2	14	1	28	1	1					8	6	1
	26-50															1	2		1								2			1									2	9	
	51-75																																								
	>75																																								
*Poona ...	6-25	15						8	1	1	5	15	2	3	2					3		15	2	5	2					4		15	1	3	4	1					
	26-50												1	2	2									1	1										3	3						
	51-75																																								
	>75																																								
Raj Samand (Kankroli).	6-25	9						1	2	4	2	9			2				5	2		9			2				5	2		9	2		2	1	3				1
	26-50																																								
	51-75																																								
	>75																																								
Sharjah ...	6-25	31	1	8	3	3	2	3			16	31	5	1	4	2	1	2	5	10	1	31	1	1	2	3	3	2	7	9		31		3	6	2	2	3	4	5	3
	26-50																												1	2							1	1	1		
	51-75																																								
	>75																																								

*Only on 15 days in the month, pilot balloon ascents were made in the late night. Visibility observations were not recorded in the late night.

ed its n./ :).	3.0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
-25	14	3			1	1		2	3	1	1 — 10							1	1		29						1	27	3			Allahabad (Bamrauli)
-50		2							1																							
-75											9 or 10										1											
>75																																
-25	5		1	1					3		1 — 10										31							31				Bahrain
-50																																
-75											9 or 10																					
>75																																
-25	12					2	6	3		1	1 — 10					6	4	1	4	1	15			1		1	21	8				Calcutta (Dum Dum)
-50																																
-75											9 or 10										7											
>75																																
-25	8		1			1	4			2	1 — 10				1	2			1		27						1	14	16			Gaya
-50																																
-75											9 or 10				1	2					6											
>75																																
-25	15	4	3			1			3		1 — 10										31						1	22	8			Jacobabad
-50		1	1					1	1																							
-75											9 or 10																					
>75																																
-25	1				1						1 — 10					9	8	1			13							31				Jiwani
-50																																
-75											9 or 10					2	1				3											
>75																																
-25	17	4	1	2		3	1	3	1		1 — 10							1	1		29						1	2	28			Jodhpur
-50								2																								
-75											9 or 10																					
>75																																
-25	9	4		1				1		2	1 — 10	1				3	12				15				1		1	10	19			Karachi (Drigh Road)
-50		1																														
-75											9 or 10	1				1					2											
>75																																
-25	18	2					1	5	9		1 — 10							1			30							17	14			New Delhi
-50								1																								
-75											9 or 10										1											
>75																																
-25	12		2	3	3	1		1	1	1	1 — 10							2			13											*Poona
-50																																
-75											9 or 10										5											
>75																																
-25	9			2		1	1	1	1	1	1 — 10								1		8								7	2		†Raj Samand (Kankroli).
-50			2																													
-75											9 or 10																					
>75																																
-25	24		2	5	3		3	1	2	1	1 — 10							1		2	23								30	1		Sharjah
-50			1	4			1	1																								
-75											9 or 10																					
>75																																

Y. P. P.—S 4011—960—12-40

Registered No. B-3919

MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

November 1939

Supplement to the Monthly Weather Report, November 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 20th January 1940.

C. W. B. NORMAND,

Director-General of Observatories.

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.								
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW
Agra ...	6–25	30	1	1					6	3	19	30	3	1	2	2			3	7		30	1	3		1	1		2	10	2	30	3	1				2	3	3
φ = 27° 08′ N ...	26–50												3				1		1	7			3							6									2	15
λ = 78° 01′ E ...	51–75																													1										1
H_s = 182 metres ...	>75																																							
Ahmedabad ...	6–25	30		2	3	1					24	30	2	5	11	4				1	2	30	1	10	16	4					4	25	7	5	4	1	1	4	1	
φ = 23° 02′ N ...	26–50													1	2	2									1										2						
λ = 72° 35′ E ...	51–75																																							
H_s = 55 metres ...	>75																																							
Bangalore ...	6–25	30	2	14	4	1		2		1	5	24	3	2	3	1			1	4		30	6	12	6	1		1	1	1	1	19	1	2	6				1	4
φ = 12° 58′ N ...	26–50			1									1	3	5			1					1											3		1					1
λ = 77° 35′ E ...	51–75																																							
H_s = 936 metres ...	>75																																							
Bhuj ...	6–25	30									30	28	6	8	6					3		29	8	6	9	3				1		29	4	3	5	1	2	2	1	2
φ = 23° 15′ N ...	26–50												2	2	1										1	1							2		2					
λ = 69° 48′ E ...	51–75																																							
H_s = 113 metres ...	>75																																							
*Bombay (Juhu) ...	6–25	15		1	2						12	15		5	7	3						15		2	11	1						15	3	5	2	4				
φ = 19° 07′ N ...	26–50																									1										1				
λ = 72° 50′ E ...	51–75																																							
H_s = 5 metres ...	>75																																							
Chittagong ...	6–25	30	15	2						2	11	30	12	9	1	2				1	5	30	2	3	2	2	11	4		1	5	27					2	7	5	1
φ = 22° 21′ N ...	26–50																																			1	5	5	1	
λ = 91° 50′ E ...	51–75																																							
H_s = 21 metres ...	>75																																							
Dacca ...	6–25	30									30	30	7	8	4	1			2	6	2	30	10	2	1	5	2	1	2	5	2	28	1		1	1		5	11	2
φ = 23° 43′ N ...	26–50																																				2	4	1	
λ = 90° 24′ E ...	51–75																																							
H_s = 21 metres ...	>75																																							
Fort Sandeman ...	6–25	30						1			29	30	4				1	4	7	6	7											30	4	2			1	3	7	7
φ = 31° 21′ N ...	26–50																		1																			1	
λ = 69° 27′ E ...	51–75																																							
H_s = 1421 metres ...	>75																																							
Hyderabad (Begumpet).	6–25	30	1	2							27	30	2	12	5		1					30	2	12	5		1					28	4	7	4	3			1	
φ = 17° 26′ N ...	26–50													6	3	1								6	3	1								3	2					1
λ = 78° 27′ E ...	51–75																																		1					
H_s = 555 metres ...	>75																																							
Jubbulpore ...	6–25	30				11	2				17	29	9	8	3	1	3	3				30	9	10	2		4	2		1		30	11	5	2		1		1	1
φ = 23° 10′ N ...	26–50												1		1								1		1								5	2						2
λ = 79° 57′ E ...	51–75																																							
H_s = 402 metres ...	>75																																							
Lahore ...	6–25	30									30	29	3	1				1	2	14	3	30	2	1					4	18	1	30	2					1	3	14
φ = 31° 35′ N ...	26–50																			5										4			3.						1	5
λ = 74° 20′ E ...	51–75																																							
H_s = 221 metres ...	>75																																							
Madho Sagar (Gwalior).	6–25	30	1					13			16	30	10		5				2	8	4	30	5	1		1		2	3	13	3	26	4	3			1	1		14
φ = 26° 13′ N ...	26–50													1									1	1																2
λ = 78° 08′ E ...	51–75																																							
H_s = 233 metres ...	>75																																							
Madras ...	6–25	30	3							2	25	29	3	6	2	1			1	1	1	25	2	4	1	1			1	2		20	1	2	3	2		1	1	3
φ = 13° 04′ N ...	26–50												5	6		1		1					3	7	1			1		1				2	2	1			2	
λ = 80° 15′ E ...	51–75													1												1														
H_s = 13 metres ...	>75																																							
Malegaon ...	6–25	30							12	5	13	30		4	14	7						30		5	13	7						30	3	9	3	2	1	1	4	2
φ = 20° 33′ N ...	26–50													1	4									2	3											1	1			
λ = 74° 32′ E ...	51–75																																							
H_s = 443 metres ...	>75																																							
†Mangalore ...	6–25	26	1	1	20		1				3	26	12	3	6	2						25	7	1	13	1				1		24	4	4	5	2	1		2	
φ = 12° 52′ N ...	26–50												1			1									1	1								3	1	1				
λ = 74° 51′ E ...	51–75																1																							
H_s = 40 metres ...	>75																																							
Peshawar ...	6–25	30				1		12			17	30	10	1					2	8	7	30	7	1	1				2	11	4	30	4	1				1		15
φ = 34° 01′ N ...	26–50																			2										4			1							3
λ = 71° 35′ E ...	51–75																																							2
H_s = 363 metres ...	>75																																							
Poona ...	6–25	30			2			6			22	30		1	7	7						30		1	14	4						30		8	8	5	3	1		
φ = 18° 32′ N ...	26–50														9	6									6	5									3	2				
λ = 73° 51′ E ...	51–75																																							
H_s = 588 metres ...	>75																																							
Port Blair ...	6–25	30	1	3	4	2	1	3	3	3	10	30	3	7	2	2	1	1	2	1	1	29	3	2	4	2		4	1	3		24	3	3	1	3	2	2		2
φ = 11° 40′ N ...	26–50														3	3		4							3	4		3							4	1		2	1	
λ = 92° 43′ E ...	51–75																																							
H_s = 87 metres ...	>75																																							

* Only on 15 days in the month, pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the forenoon.

† Wind frequency tables were prepared only from 26 observations made in the morning.

Frequency (Morning)

Table 2—Frequency of low cloud heights (Morning)

Table 3—Frequency of Visibility (Morning)

Speed (units km./hr.)	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	30	2	1				2	5	5	1	1 — 10										30					3	16	11				Agra
6–50									14																							
1–75											9 or 10																					
>75																																
6–25	18	5	2		2		2	1	3		1 — 10										30								30			Ahmedabad
6–50		2	1																													
1–75											9 or 10																					
>75																																
6–25	14	1	1	3	1	1			3		1 — 10		1	6	2	3	2	1	1		14					2	3	12	7	3	3	Bangalore
6–50				3				1																								
1–75											9 or 10		1	6	2	3					17											
>75																																
6–25	27	9	3	2	2	2	2	2	3	1	1 — 10					2			2	2	24						1	5	24			Bhuj
6–50		1																														
1–75											9 or 10					1					3											
>75																																
6–25	14	1	5	4	3						1 — 10								1		14											*Bombay (Juhu)
6–50		1																														
1–75											9 or 10										4											
>75																																
6–25	23					2	3	4	1		1 — 10	1		1		1		1	4	2	20			1		1	2	18	8			Chittagong
6–50								13																								
1–75											9 or 10	1				1			3	2	12											
>75																																
6–25	21					1	3	5	2		1 — 10					2	1	5	3	1	18						3	27				Dacca
6–50		1					1	5	3																							
1–75											9 or 10										4											
>75																																
6–25	30	3	1		1	1	1	6	8		1 — 10										30							2	28			Fort Sandeman
6–50		2						2	3																							
1–75									2		9 or 10																					
>75																																
6–25	26	2	12	3	4	1					1 — 10					4			2	1	23						1	14	14	1		Hyderabad (Begumpet)
6–50		1		2	1																											
–75											9 or 10					1					5											
>75																																
6–25	24	3	3	1		2	1	1	5	1	1 — 10							1		1	28							4	26			Jubbulpore
6–50		3							4																							
1–75											9 or 10																					
>75																																
6–25	29	4	1			1	2	6	8	1	1 — 10										30					17	11	2				Lahore
6–50									6																							
–75											9 or 10																					
>75																																
6–25	12	2					1	2	4		1 — 10										30								25	5		Madho Sagar (Gwalior)
6–50									3																							
–75											9 or 10																					
>75																																
6–25	13	2	1		1			1	1		1 — 10					4	8	6		1	11							11	18	1		Madras
6–50				3	3			1																								
1–75											9 or 10					1	2	1			22											
>75																																
6–25	30	9	5	7		1		1	3	2	1 — 10								3		27								23	7		Malegaon
6–50					1	1																										
1–75											9 or 10										3											
>75																																
6–25	24		8	7	2			1	2		1 — 10					6	9		2	4	9						2	4	19	5		†Mangalore
6–50				2				2																								
1–75											9 or 10					4					13											
>75																																
6–25	30	2	2	1	1		2	3	11	2	1 — 10									1	29								1	1	28	Peshawar
6–50		1							4																							
1–75									1		9 or 10										1											
>75																																
6–25	30	7	10	3	2	1			1	1	1 — 10						2				28							1	1	28		Poona
6–50		1	2			2																										
1–75											9 or 10										3											
>75																																
6–25	9	1	2	1	1		2		1		1 — 10					16		14										8	22			Port Blair
6–50							1																									
1–75											9 or 10										23											
>75																																

TABLE 1—WI

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
*Raj Samand (Kankroli)	6-25	22	2						1	17	2	21		2	7	1	4	1	2	1	1	21		2	7	2	4	1	2	1	1	22	5	1	1	2	1	2	2	5	
φ =25° 03′ N ...	26-50													1	1									1									1							1	
λ =73° 53′ E ...	51-75																																								
H_s =587 metres ...	>75																																								
Sambalpur ...	6-25	30	1							1	28	28	6	11	5				1	1	2	28	7	7	5					2	1	26	3	6	1	1		3		6	
φ =21° 28′ N ...	26-50													2									2	3	1								2	2						2	
λ =83° 58′ E ...	51-75																																								
H_s =153 metres ...	>75																																								
Tezpur ...	6-25	30		15	1						14	30		2	20	2						29		3	18						1	26		1	14	5	1	1	3		
φ =26° 37′ N ...	26-50														6										7										1						
λ =92° 47′ E ...	51-75																																								
H_s =80 metres ...	>75																																								
Trichinopoly ...	6-25	30	2	3				2	1	3	19	29	1	4	3			1	1	1	1	28	2	1	1			2	3	3	1	20	2	4	1				5	1	
φ =10° 49′ N ...	26-50												1	12	1				2	1				10	2			1	1					2	2			1		1	
λ =78° 42′ E ...	51-75																							1										1							
H_s =88 metres ...	>75																																								
†Trivandrum ...	6-25	28	5	5					1	1	16	24		1	3	1	2	3	2	7	3	24	3	3	4	1	1	1		5	1	16	3	3	2	1	1		1	2	
φ = 08° 29′ N ...	26-50																		1						1			1	1	1				1	1				1		
λ =76° 57′ E ...	51-75																		1										1												
H_s =76 metres ...	>75																																								
Vizagapatam ...	6-25	30	4	12							14	30	3	8	2							29	1	16		2			1			22	2	3	3	1	1	3			
φ =17° 42′ N ...	26-50												2	12	1									6	2								2	3							
λ =83° 18′ E ...	51-75													2											1										1						
H_s =56 metres ...	>75																																								

TABLE 4—WI

Allahabad (Bamrauli)	6-25	30			3			4	5	4	14	30	2		4	2		2	6	9		30	3	1	4	2			6	11	1	29	3	2	1			5	5	
φ =25° 26′ N ...	26-50														1				2	1	1									2			4			1			6	
λ =81° 44′ E ...	51-75																																								
H_s =98 metres ...	>75																																								
Bahrain ...	6-25	30	1	1		3	1	3	3	13	5	30	5	1		2	3	2	1		1	30	2	4		1	2	4	1	1		27	1	2	3		1	1	1	4
φ =26° 14′ N ...	26-50												6				1	4					3			1	2	2		3			2		1	1	2	4	1	2
λ =50° 35′ E ...	51-75												1				1	1		1			2					2												1
H_s =14 metres ...	>75																																								
‡Bombay (Juhu) ...	6-25	15		6	5	1					3	15	1	2	7	3						15	1	5	6	1					2	15	2	2			7	1	1	1
φ =19° 07′ N ...	26-50												1		1																										
λ =72° 50′ E ...	51-75																																								
H_s =5 metres ...	>75																																								
Calcutta (Dum Dum)	6-25	30	4	3					1	7	15	30	12	10	2				1	2	1	30	12	4	2	2	1		1	2	3	28	3	1	1		1	5	5	5
φ =22° 39′ N ...	26-50												2										3										1					2		2
λ =88° 27′ E ...	51-75																																								
H_s =21 metres ...	>75																																								
Gaya ...	6-25	30			2	1	1	11	4		11	30	4	1	7	1	1		5	9	2	30	5	4	2			1	4	7	5	30	1	2	2			1	3	10
φ =24° 49′ N ...	26-50																													2			2						1	5
λ =85° 01′ E ...	51-75																																								
H_s =117 metres ...	>75																																								
Jacobabad ...	6-25	30		1		1				4	24	30	3	3	6	1	1	2	5	1	6	29	3	2	2	2	1	5	5	3	3	27	7	1	2	1		7	2	4
φ =28° 17′ N ...	26-50												1							1										2			1							
λ =68° 29′ E ...	51-75																						1																	
H_s =56 metres ...	>75																																								
Jiwani ...	6-25	30	3	12				1	1		13	30	3	2	1	2	2	1	3	6	3	30	2	3	6	1	2	2	1	3	3	29	1	7	5	3	2	1		4
φ =25° 10′ N ...	26-50													5	1				1					5					1						1				2		
λ =61° 47′ E ...	51-75																												1												
H_s = 5 metres ...	>75																																								
Jodhpur ...	6-25	30		23							7	30	6	5	5	7	1	1	2	1	1	30	3	10	2	4	1	2	3	4	1	30	7	4				2	7	4
φ =26° 18′ N ...	26-50														1																		1							3
λ =73° 01′ E ...	51-75																																								
H_s =233 metres ...	>75																																								
Karachi (Drigh Road)	6-25	30	3	9						3	15	30		1	5			2	3	8	1	30	4	5	4		1	2	5	6		30	2	8	5	2	2	2	5	
φ =24° 53′ N ...	26-50												1	4	1				2	2					1				1	1			2	1						
λ =67° 07′ E ...	51-75																																								
H_s =29 metres ...	>75																																								
New Delhi ...	6-25	30				1		1	18	3	7	30	3		2	1		1	3	8	2	30	1	3				1	3	7	1	30	2	1				2	4	3
φ =28° 39′ N ...	26-50															1				9			1			1				12			1							11
λ =77° 15′ E ...	51-75																																								
H_s =227 metres ...	>75																																								
§Raj Samand (Kankroli)	6-25	9	1								8	8		1	3	1	1			1	1	8		1	3		1			1	2	9	3		2			1		3
φ =25° 03′ N ...	26-50																																								
λ =73° 53′ E ...	51-75																																								
H_s =587 metres ...	>75																																								
Sharjah ...	6-25	30		1	1	4	2	1			20	30	2	3	7	4	1	2	2	6		30	2	1	8	4	3	1	4	3	1	30		2	3	4	3	1	3	3
φ =25° 20′ N ...	26-50							1									1		2										2	1			1		1	1		1	1	4
λ =55° 24′ E ...	51-75																																								
H_s =11 metres ...	>75																																								

* Only on 21 days in the month, pilot balloon ascents were made in the morning; on the remaining days the ascents were made in the late night. Visibility observations were, howev recorded in the morning throughout the month.

REQUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

peed mits km./ ar.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	21	3	1	2		1	2	3	6	1	1 — 10										22						1	3	26		*Raj Samand (Kankroli)
26–50									2																							
51–75											9 or 10																					
>75																																
6–25	17	1	1			1	1	3	4		1 — 10					1	1		5	1	22							30			Sambalpur
26–50		1		1			1		3																							
51–75											9 or 10					1					5											
>75																																
6–25	17	1	1	3	2	3	2	1			1 — 10				1				4	9	16						1	20	9		Tezpur
26–50							1	3																								
51–75											9 or 10				1						2											
>75																																
6–25	14	2		4	1				3		1 — 10				1	4	1	2	4	2	16						4	2	19	4	1	Trichinopoly
26–50								2																								
51–75				2							9 or 10						1	1			17											
>75																																
6–25	6							2	2		1 — 10						16	1	1	2	10					9	10	10	1			†Trivandrum
26–50				1				1																								
51–75											9 or 10						4	1	1	1	17											
>75																																
6–25	10		1			1	2	2			1 — 10					1	8	2	1		18						2	21	7		Vizagapatam
26–50		1	1	2																												
51–75											9 or 10								1		12											
>75																																

REQUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

6–25	24					2	2	3	3	1	1 — 10										30							29	1			Allahabad (Bamrauli)
26–50		2		1					8																							
51–75									2		9 or 10																					
>75																																
6–25	21	1	3	1	1		2	1	1		1 — 10					2					28						1	17	12			Bahrain
26–50		2		1		1	3		4																							
51–75											9 or 10																					
>75																																
6–25	15	5	1	2	1	1		1		1	1 — 10										15							12	16	2		‡Bombay (Juhu)
26–50			2	1																												
51–75											9 or 10										2											
>75																																
6–25	25	1				1		8	2		1 — 10						1	2	3	2	22						10	20				Calcutta (Dum Dum)
26–50		1					2	5	5																							
51–75											9 or 10										5											
>75																																
6–25	29		1	1				4	6	1	1 — 10							2			28							21	9			Gaya
26–50		1						3	11																							
51–75									1		9 or 10										1											
>75																																
6–25	20	4	3		2	2	1	3	4		1 — 10										30				1	2	5	15	7			Jacobabad
26–50									1																							
51–75											9 or 10																					
>75																																
6–25	21	6	2		2			2	5	3	1 — 10					1	8				21				1	1	1	15	12			Jiwani
26–50								1																								
51–75											9 or 10																					
>75																																
6–25	28	1	5	3			3	2	7	2	1 — 10										30								30			Jodhpur
26–50		1						2	2																							
51–75											9 or 10																					
>75																																
6–25	30	3	5	2		3	1	6	1		1 — 10							4			26								10	20		Karachi (Drigh Road)
26–50		1	3	2		1	1	1																								
51–75											9 or 10																					
>75																																
6–25	28	2						6	5		1 — 10										30						1	6	23			New Delhi
26–50				1			1	2	10																							
51–75									1		9 or 10																					
>75																																
6–25	8		1				1		3	1	1 — 10										9											§Raj Samand (Kankroli)
26–50		1							1																							
51–75											9 or 10																					
>75																																
6–25	28	2	2	2	3		3	4	1	1	1 — 10							1	4	5	20								26	4		Sharjah
26–50		2		1	1			3	2																							
51–75									1		9 or 10										1											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	30	2	2	1				1	13	11	30	5	2		1	1		3	14	2	30	5			1		2	2	13	3	30	4		2			3	8	
	26–50																			2										4			2					1	8	
	51–75																																						1		
	>75																																								
Ahmedabad ...	6–25	30	1	2	5		2				20	30	1	7	13	1				1	6	30	2	12	11	1	1			1	2	30	9	7	5	2		1	1	2
	26–50													1																				2	1						
	51–75																																								
	>75																																								
Allahabad (Bamrauli)	6–25	30	2	2					3	14	9	30	2	4				1	5	17	1	30	2	2	3			1	5	15	1	28	3	1				3	9	
	26–50																													1								1	10	
	51–75																																								
	>75																																								
Bahrain ...	6–25	30	4	4		3	3	1		14	1	30	3			2	1	2	3	4	2	30	2	4	1			5	4		1	29	2	2	2	2	1	2	2	5
	26–50												4				2	2		4			2				3	1	1	5				1			1	4	1	3
	51–75																1													1										
	>75																																								
Bangalore ...	6–25	30	7	9	5	3		3		2	1	28	3	8	6			2		4		30	8	5	9			1	2	1		25	3	9	2				2	4
	26–50													2	1	1			1				1	2	1										1	1				1	
	51–75																																								
	>75																																								
Bhuj ...	6–25	30		10	1	1				2	16	30	3	9	6		1			2	8	30	5	11	3	1	1	2			6	30	2	8	3	2		1	3	3
	26–50														1										1								1	2	1					
	51–75																																								
	>75																																								
Bombay (Juhu) ...	6–25	30		1				2	6	19	2	29	8	10	3					1	7	30	5	15	8	1					1	28	2	7	7	2	1			1
	26–50																																	4	1						
	51–75																																								
	>75																																								
Calcutta (Dum Dum)	6–25	30	3	1						11	15	30	17	3	1					7	2	30	16	3		1	2		1	5	1	29	5					4	6	6
	26–50																													1			1					1	1	1
	51–75																																								
	>75																																								
Chittagong ...	6–25	30	3					1	5	5	16	30	13	1			1	3	1	2	9	29	5	1			8	4	4	3	4	29				1	4	12	4	1
	26–50																																				1	5	1		
	51–75																																								
	>75																																								
Dacca ...	6–25	30								2	26	30	5	3	2				5	10	5	30	4	5		3		1	5	9	2	29	1	1			3	5	6	5
	26–50																																				1	4	2		
	51–75																																								
	>75																																								
Fort Sandeman ...	6–25	30						4	1	6	19	30	2				3	8	7	6	3											30	2	1			2	8	8	4
	26–50																			1																				1
	51–75																																								
	>75																																								
Gaya ...	6–25	30	4	3					5	10	8	30	4	3	1				5	13	4	30	2	2					3	14	7	30	1	1	1		1	1	5	7
	26–50																													1			2							3	8
	51–75																																								
	>75																																								
Hyderabad (Begumpet)	6–25	30	4	9	11	1					5	30	3	13	4	1					1	30	3	18	5	1					1	26	7	8	4			1		2
	26–50														3										2								1		2						
	51–75																																								
	>75																																								
Jacobabad ...	6–25	30	1	1		1		4	3	6	14	30	5	1	5	1		7	1	5	5	30	3	2	4	1	2	4	1	7	2	29	3	3	1	1	2	4	6	4
	26–50																													1			1					1	1		
	51–75																																								
	>75																																								
Jiwani ...	6–25	30	1	2		2		24			1	30	2	5	2	4	4	3	5	1	3	30	5	8	3	2	4	1	2	2	1	29	3	4	4	1	1	2	3	2
	26–50																		1										2				2	2					1		
	51–75																																								
	>75																																								
Jodhpur ...	6–25	30	3	5	2	1	1		2	2	13	29	2	6	4	1			5	5	5	30	4	6	3				5	7	4	29	2	7	4				6	4
	26–50			1									1										1															1		1
	51–75																																								
	>75																																								
Jubbulpore ...	6–25	30	9	5			1			3	12	29	18	6		1		1		1	2	29	19	6		1		1			2	30	15	4	3		1	1	1	4
	26–50																																								1
	51–75																																								
	>75																																								
Karachi (Drigh Road) ...	6–25	30		7	1	3		14	1	2	2	30	1	5	6		3	4	3	2	1	30	6	6	6		1	2	5	2	2	30	1	8	4		1	3	4	4
	26–50													1			1		3														2	2	1					
	51–75																																								
	>75																																								

eed nits n./ r.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	30	4		1		1		4	7		1 — 10										30							12	18			Agra
6–50		1					1		10																							
1–75									1		9 or 10																					
>75																																
6–25	24	6	3	1	1		2	1	5	2	1 — 10								3		27								23	7		Ahmedabad
6–50		2				1																										
1–75											9 or 10										1											
>75																																
6–25	24						2	5	3		1 — 10								1		29							27	3			Allahabad (Bamrauli)
6–50		1						2	8																							
1–75		1							2		9 or 10																					
>75																																
6–25	25	2	2	1		2	1	2	4		1 — 10							1	1	1	27							2	28			Bahrain
6–50				1			2	2	4																							
1–75								2			9 or 10																					
>75																																
6–25	14	2		5			2		2	1	1 — 10				1	1	3	13		3	9						2	8	14	5	1	Bangalore
6–50			1	1																												
1–75											9 or 10				1	1	1	4			16											
>75																																
6–25	28	6	2	2	4	1	2	5	5		1 — 10							3	4		23							1	29			Bhuj
6–50		1																														
1–75											9 or 10										1											
>75																																
6–25	22	2	7	2	4	1		1	1	2	1 — 10						1	2	1		26								27	3		Bombay (Juhu)
6–50			1	1																												
1–75											9 or 10										5											
>75																																
6–25	27	1				1		9	5		1 — 10						1	9	1	4	15						1	29				Calcutta (Dum Dum)
6–50								8	3																							
1–75											9 or 10						1				7											
>75																																
6–25	27						5	7	1		1 — 10					1		9	1	1	18						1	1	27	1		Chittagong
6–50							5	9																								
1–75											9 or 10					1				1	10											
>75																																
6–25	22		1				2	5			1 — 10					1	5	11	3	1	9							30				Dacca
6–50							4	8	1																							
1–75							1				9 or 10										6											
>75																																
6–25	30	1				1	4	12	3	2	1 — 10										30								17	13		Fort Sandeman
6–50			1				2	1	3																							
1–75											9 or 10																					
>75																																
6–25	24		1				1	3	4		1 — 10							2	3	1	24							12	18			Gaya
6–50		1						5	7																							
1–75									2		9 or 10																					
>75																																
6–25	22	5	7	3	3			2	1		1 — 10						1	3	1	5	20								5	25		Hyderabad (Begumpet)
6–50				1																												
1–75											9 or 10						1	1	1		5											
>75																																
6–25	23		1	2	2	1	3	4	5	1	1 — 10										30							6	24			Jacobabad
6–50							1	2																								
1–75							1				9 or 10																					
>75																																
6–25	13	2	3				2	1	3		1 — 10						9				21						3	16	11			Jiwani
6–50							1		1																							
1–75											9 or 10																					
>75																																
6–25	28	1	1	1	1	3	3	3	6	2	1 — 10										30							1	4	25		Jodhpur
6–50		1						1	5																							
1–75											9 or 10										1											
>75																																
6–25	27	5	1			2	1	6	3		1 — 10									2	28								25	5		Jubbulpore
6–50		3				1		3																								
1–75									2		9 or 10																					
>75																																
6–25	29	4	4		1		1	3	9		1 — 10						2	4			24								3	27		Karachi (Drigh Road)
6–50		2		1				3	1																							
1–75											9 or 10																					
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6-25	30	1						2	14	13	30	3					1	5	17	4	30	2					2	4	19	1	29	4	1			2		4	12	1
	26-50																													2										5	
	51-75																																								
	>75																																								
Madho Sagar (Gwalior).	6-25	30		5					1	11	13	30	7	3	1			1	3	14	1	30	8	2	1*			1	3	14	1	30	2	2	3			2	5	8	
	26-50																						1										1						1	5	1
	51-75																																								
	>75																																								
Madras ...	6-25	30	6	12	2	2	1			3	4	29	6	7		1	1	1				21	3	4		1			2	1	1	15	2	3	1	1			1	2	
	26-50												5	6									2	4				1		2					3			1	1		
	51-75																																								
	>75													1																											
Malegaon ...	6-25	30	1	10	5	1					13	30	1	10	12		1				6	30	2	9	12	1					6	28	6	9	7	1	1		1	1	1
	26-50																																	1							
	51-75																																								
	>75																																								
Mangalore ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
New Delhi ...	6-25	30	6	1	1	1			3	13	1	30	3	1	1	1			1	18		30	3	1	1	1			1	16		29	3	1	2				4	8	
	26-50									4										4										6									1	10	
	51-75																			1										1											
	>75																																								
Peshawar ...	6-25	30	1	1						2	26	30	6	1	1		2	1	2	5	10	30	3					1	4	12	9	30	2	1			4	2	4	6	2
	26-50																			2																			3	6	
	51-75																													1											
	>75																																								
Poona ...	6-25	30	3	16	5	3			1		2	30	3	7	15	2			1		2	30	4	9	13				1		2	29		9	7	6	2			1	1
	26-50																									1										2	1					
	51-75																																								
	>75																																								
Port Blair ...	6-25	30		10	5	5		4	1		5	29	2	6	1	6		1	2	2	1	27	5	3	1	3		2	2	2		22	2	3		4	2	1	1	2	1
	26-50													2	1	2		2	1					1	2	3		1	1					2	2	1					
	51-75																											1										1			
	>75																																								
*Raj-Samand (Kankroli)	6-25	21	1		1	4	1			2	12	21	1	1	5	3	1	2	2		5	21	1	1	3	3	1	1	1		8	21	2	1	3				6	4	3
	26-50																			1									1	1									1	1	
	51-75																																								
	>75																																								
Sambalpur ...	6-25	30	4	4	2				3	7	10	30	11	6	2					4	6	30	15	7	4					3	1	25	6	2	1	2		1	1	4	
	26-50												1																				2	2				1		3	
	51-75																																								
	>75																																								
Sharja ...	6-25	30	7						7	14	1	30	7	2				4	7	6	1	30	3	2	3	1	7	3	4	2		30	2	2	1	6	5	1	1	3	
	26-50								1										2	1									3	2			1		1	2	1	1	1	2	
	51-75																																								
	>75																																								
Tezpur ...	6-25	30		8	10	1					11	30		3	22						3	30		1	24	2	1			1	1	29		1	7	7	4	4	2		1
	26-50														1																								3		
	51-75																																								
	>75																																								
Trichinopoly ...	6-25	30	4	8				1	3	1	13	28	1	10				3	3	2	2	27	3	7				3	3	3		20	2	3	1				1	3	
	26-50												1	5					1				1	6					1						4	2				2	2	
	51-75																																								
	>75																																								
Trivandrum ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
Visagapatam ...	6-25	30		15	14						1	25	4	16	2						1	27	9	9			1			2		25	3	6		1	2		2	3	
	26-50													5									2	3	1								2	2	2					2	
	51-75																																								
	>75																																								

*Only on 21 days in the month, pilot balloon ascents were made in the afternoon; on the remaining days the ascents were made in the forenoon. Visibility observations were, howev recorded in the afternoon throughout the month.

ed its L/).	3·0 km. a. s. l.										Amounts of low cloud.	No. of observations with Code figures.										No. of observations with Code figures.										STATION.
	n	N	NE	E	SE	S	SW	W	NW	C		0	.1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	
-25	28	4				2	3	5	7		1 — 10										30						1	16	13			Lahore
-50							1	3	3																							
-75											9 or 10										1											
.75																																
-25	25	5		1		1	2	5	5		1 — 10								1		29								26	4		Madho Sagar (Gwalior)
-50								2	3																							
-75								1			9 or 10																					
>75																																
-25	13	2		1	2	2					1 — 10					4	13	4			9								2	18	10	Madras
-50		1		3			1	1																								
-75											9 or 10					1	3				20											
>75																																
-25	26	5	6	3	3			1	2	3	1 — 10							2	1		27								16	14		Malegaon
-50		2				1																										
-75											9 or 10										2											
>75																																
-25											1 — 10																1	1	13	14	1	Mangalore
-50																																
-75											9 or 10																					
>75																																
-25	25	2		1			1	5	2		1 — 10										30							2	28			New Delhi
-50		1				1	1		10																							
-75									1		9 or 10																					
>75																																
-25	30	3	1			2	7	5	4		1 — 10								2	1	27								7	9	14	Peshawar
-50								2	5																							
-75									1		9 or 10										1											
>75																																
-25	28	5	5	8	3				1	2	1 — 10							1	2	4	23									30		Poona
-50			2	1		1																										
-75											9 or 10							1			4											
>75																																
-25	7		2		1		1				1 — 10					18		12									1	7	22			Port Blair
-50				1	1																											
-75				1							9 or 10					1					20											
>75																																
-25	21	2	1	2	1	1	3	3	5	1	1 — 10										21								5	25		* Raj Samand (Kankroli)
-50								1	1																							
-75											9 or 10																					
>75																																
-25	19	2	2	1	1		1	2	5		1 — 10						1	1	8		20								30			Sambalpur
-50		1							4																							
-75											9 or 10										6											
>75																																
-25	26	3	1	1	1	4	5	4	2	1	1 — 10							7	6	1	16								28	2		Sharjah
-50				1			1	3	1																							
-75											9 or 10																					
>75																																
-25	27	1		4	1	1	5	6		1	1 — 10							1	1	17	11								21	6		Tezpur
-50							3	5																								
-75											9 or 10									1	2											
>75																																
-25	13		1		2				2	1	1 — 10					4	2	10	9	2	3						2	3	5	5	15	Trichinopoly
-50				4				1	2																							
-75											9 or 10					2			1		18											
>75																																
-25											1 — 10														4	2	2	9	13			Trivandrum
-50																																
-75											9 or 10																					
>75																																
-25	22	3	5		1		2	2	3	1	1 — 10					4	4	3			19						2	3	25			Visagapatam
-50		1	3		1																											
-75											9 or 10					1					9											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6–25	30			1				1		28	30	4		5	1	1	1	4	13		30	2		2	2	1		4	15	1	28	3	2				1	5	7
	26–50																			1										3									1	8
	51–75																																								
	>75																																								
Bahrain ...	6–25	30		3		1	2	5	1	10	8	30	3	2	3	1	1	1	2	3	1	30	8		1	1	1	4	3	2		20	3		3	1		1	1	6
	26–50												4				2	3		3			1				2	1		4								1	1	2
	51–75															1										1		1													
	>75																																								
*Bombay (Juhu) ...	6–25	15		1	1	1					12	15	6	3	5	1						15	4	2	7						2	12	4	1	1	2	2			
	26–50																																								
	51–75																																								
	>75																																								
Calcutta (Dum Dum) ...	6–25	30	9	4						7	10	30	16	4	2			1		3	3	29	11	3	2	1	1		1	8	2	20	1	1			1	5	7	3
	26–50												1																										1		
	51–75																																								
	>75																																								
Gaya ...	6–25	30				6	4	5		1	14	30	5	3	2			1	1	11	7	30	4	2	2				4	14	3	20	3					1	3	7
	26–50																													1										6
	51–75																																								
	>75																																								
Jacobabad ...	6–25	30								1	29	30	2	2	4	1		4	9	4	3	30	1		1	1	2	9	7	3	5	28	4	1	1	1		2	5	11
	26–50																																							1	
	51–75																			1										1											
	>75																																								
Jiwani ...	6–25	30	2	6					2	1	19	30	1	2	1	1	1	2	6	8	2	30	4	3	2	2	2		5	2	6	20	1	4	5	2		1	3	1
	26–50												3	1					1					2						2					2	1					
	51–75																																								
	>75																																								
Jodhpur ...	6–25	30	1	22	1						6	29	3	4	9	3		2	4	3	1	30	3	6	3	2	1	1	4	7	3	26	9	2				5	3	4
	26–50																																							2	
	51–75																																								
	>75																																								
Karachi (Drigh Road) ...	6–25	30	2	12						6	10	30	3	1	7			4	9	3	2	30	2	4	5	1	1	2	7	4	4	30	3	7	3	1	2	5	3	2
	26–50													1																			1		1					1
	51–75																																								
	>75																																								
New Delhi ...	6–25	30	1						10	6	13	30	5	3		1				11	1	30	5			1			4	12		29	4					1	6	6
	26–50												1							8										8									2	10
	51–75																																								
	>75																																								
†Raj Samand (Kankroli).	6–25	8								7	1	8	2	1	1	1	1			1	1	8	2	1	1	1	2			1		8	1	1				3		2
	26–50																																1								
	51–75																																								
	>75																																								
Sharjah ...	6–25	30	2		5	4	2	4		1	11	29	7	5	3	2	1		4	5	2	29	3	5	7		1	1	4	4	2	25		4	2	2	3	1	4	4	1
	26–50								1				1		1																					1	1			2	
	51–75																																								
	>75																																								

*Only on 15 days in the month, pilot balloon ascents were made in the late night.

peed mits km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6-25	15	2					1	1	6		1 — 10								1		29							29	1			Allahabad (Bamrauli)
26-50								3	2																							
51-75											9 or 10																					
>75																																
6-25	7	1			1		1	2			1 — 10							1			29							30				Bahrain
26-50								1	1																							
51-75											9 or 10										1											
>75																																
6-25	7	1				1	1		3	1	1 — 10										15							9	6			*Bombay (Juhu)
26-50																																
51-75											9 or 10										1											
>75																																
6-25	8					1		3		2	1 — 10					2		1	2	1	24						21	9				Calcutta (Dum Dum)
26-50								1	1																							
51-75											9 or 10								1		4											
>75																																
6-25	9		1					3	2		1 — 10							1			29							29	1			Gaya
26-50									2																							
51-75									1		9 or 10																					
>75																																
6-25	20	2	2	1	1	1	1	5	6		1 — 10										30							30				Jacobabad
26-50									1																							
51-75											9 or 10																					
>75																																
6-25	9			1			1	1	6		1 — 10					3					27							30				Jiwani
26-50																																
51-75											9 or 10																					
>75																																
6-25	22	1	2	1		2	2	4	6		1 — 10										30								30			Jodhpur
26-50									4																							
51-75											9 or 10																					
>75																																
6-25	10	2	1		1		1	2	1		1 — 10						1	1			28							1	29			Karachi (Drigh Road)
26-50		2																														
51-75											9 or 10																					
>75																																
6-25	23						1	7	6		1 — 10										30							11	19			New Delhi
26-50							1		7																							
51-75									1		9 or 10																					
>75																																
6-25	7		1				1	2	1		1 — 10										8								4	4		†Baj Samand (Kankroli)
26-50		1							1																							
51-75											9 or 10																					
>75																																
6-25	25	1	1	2	2		4	8	3		1 — 10							3	4	2	21								30			Sharjah
26-50							1		3																							
51-75											9 or 10																					
>75																																

Y. P. P.—S 4074—250—1-41

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MONTHLY FREQUENCY TABLES

of

Horizontal Visibility, Height of Base of Low Cloud and Surface and Upper Winds at Pilot Balloon Stations

December 1939

Supplement to the Monthly Weather Report, December 1939

Published by authority of the Government of India

Tables of Wind Frequency:—Data for tables 1, 4, 7 and 10 are obtained from pilot balloon ascents. They are classified under four sets of tables according to the times of their commencement. Ascents in day light starting before 0830 hrs. I. S. T. have been classified under "morning". Most of these ascents begin about 10-15 minutes before sunrise; thus the actual time of ascent will be different at different stations. Ascents starting at hours varying from 0830 to 1200 hrs. are classified as "forenoon" and those from 1200 to 1700 hrs. as "afternoon". Night ascents with lanterns which start after 0300 hrs. are classified as "late night". The most frequent times of commencement of the ascents which have been classified as "forenoon", "afternoon", and "late night" are 0900, 1400 and 0330 hrs. I. S. T. respectively.

The symbols used in the tables of wind frequency have the following meaning:— ϕ = Latitude of the station; λ = Longitude of the station; H_S = Height of the anemometer head (i.e. to which the values of the surface wind relate) above mean sea level; C = the number of observations when the speed of wind is 5 km./hr. or less and n = number of observations.

Tables of Frequency of Heights of base of Low cloud:—Tables 2, 5, 8 and 11 are based on observations made at the hours of pilot balloon flights or within half an hour of the same. Heights which are either measured or estimated are given.

In the first row of these tables, for amounts of low cloud 1-10, the number under code figure 9 gives occasions when there was no low cloud, and in the second row, for amount of low cloud = 9 or 10, the number under this code figure gives all occasions when the total amount of cloud (whether low, medium or high) was 9 or 10.

Tables of Frequency of Horizontal Visibility:—Data for tables 3, 6, 9 and 12 are obtained from observations near the times of the pilot balloon ascents.

The Code figures used in the tables Nos. 2, 3, 5, 6, 8, 9, 11 and 12 have the following meaning:—

Code figure ...	0	1	2	3	4	5	6	7	8	9
Cloud height ...	Less than 50 m.	50 to 99 m.	100 to 199 m.	200 to 299 m.	300 to 599 m.	600 to 999 m.	1000 to 1499 m.	1500 to 1999 m.	2000 to 2500 m.	No Low cloud / Total amount of cloud = 9 or 10
Visibility ...	Less than 50 m.	50 to 200 m.	200 to 500 m.	500 to 1000 m.	1000 to 2000 m.	2000 to 4000 m.	4000 to 10000 m.	10000 to 20000 m.	20000 to 50000 m.	Greater than 50000 m.

POONA:

The 15th February 1941.

C. W. B. NORMAND,

Director-General of Observatories.

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31		1					4	4	22	31	14		3	1				7		31	10	1	2	1				10	1	31	1			1		1	2	6	2
φ =27° 08′ N ...	26–50																			6			2							4			1						2	15	
λ =78° 01′ E ...	51–75																																								
H_s =182 metres ...	>75																																								
Ahmedabad ...	6–25	31		9	2						20	31	2	6	4	4	1					31	3	4	15	5				1	2	27	3	3	4	2	3	3	4	3	1
φ =23° 02′ N ...	26–50														10	4									1														1		
λ =72° 35′ E ...	51–75																																								
H_s =55 metres ...	>75																																								
Bangalore ...	6–25	31		17	13							31	1	4	7	3						31		6	20	1						28	1	7	8						
φ =12° 58′ N ...	26–50			1											13										4										9	2					
λ =77° 35′ E ...	51–75													1	2																				1						
H_s =936 metres ...	>75																																								
Bhuj ...	6–25	31		1							30	31		10	5	3	2	1				31	1	6	12	3	2					31	2	1	2	5	3	5	3	5	4
φ =23° 15′ N ...	26–50												1	8	1								2	4					1					1								
λ =69° 48′ E ...	51–75																																								
H_s =113 metres ...	>75																																								
Chittagong ...	6–25	31	5	12							14	31	13	8	4	2				1	2	31	5	3	1	7	7			1	4	30	2			2	1	5	8	4	4
φ =22° 21′ N ...	26–50													1									2							1							1	1	2		
λ =91° 50′ E ...	51–75																																								
H_s =21 metres ...	>75																																								
Dacca ...	6–25	31									31	31	11	11	1	1				4	3	31	4	4	5	1	1	2		8	5	29	3	1	2	2	1	3	7	6	
φ =23° 43′ N ...	26–50																													1						1			1	2	
λ =90° 24′ E ...	51–75																																								
H_s =21 metres ...	>75																																								
Fort Sandeman ...	6–25	31						2	2			27	30	3	1			4	6	9	1	6										30	3	1			3	5	7	6	5
φ =31° 21′ N ...	26–50																																								
λ =69° 27′ E ...	51–75																																								
H_s =1421 metres ...	>75																																								
Hyderabad (Begumpet).	6–25	31	1			4					26	31		6	17	4						31		6	18	5						31	1	8	8	2					
φ =17° 26′ N ...	26–50														1	3										2							1	2	9						
λ =78° 27′ E ...	51–75																																								
H_s =555 metres ...	>75																																								
Jubbulpore ...	6–25	31		2	1	11	3				14	31	6	13	9	1	2					31	9	11	6	1	3			1		31	6	5	1		1	2	4	4	1
φ =23° 10′ N ...	26–50																																3						2	2	
λ =79° 57′ E ...	51–75																																								
H_s =402 metres ...	>75																																								
Lahore ...	6–25	31									31	31	1							26	3	31	2						5	20	3	31	1				1	1	3	15	
φ =31° 35′ N ...	26–50																			1										1									2	3	
λ =74° 20′ E ...	51–75																																								
H_s =221 metres ...	>75																																								
Madho Sagar (Gwalior).	6–25	31							11		20	31	14	8	1					6	2	31	8	4						17	2	28	2				1	5	3	12	
φ =26° 13′ N ...	26–50																																						3	2	
λ =78° 08′ E ...	51–75																																								
H_s =233 metres ...	>75																																								
*Madras ...	6–25	31		3						2	26	31	1	9	1							30	1	6	2							18	1	2	4						
φ =13° 04′ N ...	26–50												3	15	2								1	18	2									7	4						
λ =80° 15′ E ...	51–75																																								
H_s =13 metres ...	>75																																								
Malegaon ...	6–25	31							9	5	17	31			16	12						31		1	13	13	1					31	2	1	4	7	4	3	1		
φ =20° 33′ N ...	26–50														2	1									2	1									4						
λ =74° 32′ E ...	51–75																																								
H_s =443 metres ...	>75																																								
†Mangalore ...	6–25	23		1	21						1	23	4	1	5	1						23		2	9	3						23	1	5	7	6				1	
φ =12° 52′ N ...	26–50														9										7	1								1	1	1					
λ =74° 51′ E ...	51–75														3										1																
H_s =40 metres ...	>75																																								
Peshawar ...	6–25	31			1	1	2	10			17	31	10		1	1	2	2		5	10	31	7	1	1		1	2	3	8	8	31	10	2		3	2		1	10	
φ =34° 01′ N ...	26–50																																1								
λ =71° 35′ E ...	51–75																																								
H_s =363 metres ...	>75																																								
Poona ...	6–25	31		4				9			18	31		2	8	4						31		3	10	3						31	1	3	6	12	1			1	
φ =18° 32′ N ...	26–50														8	9									4	11									7						
λ =73° 51′ E ...	51–75																																								
H_s =588 metres ...	>75																																								
Port Blair ...	6–25	31	2	18	2	1						30		6	1							29		3	3							14	2	5	2		1			3	
φ =11° 40′ N ...	26–50			5	1									14	6	1								10	8	1								1							
λ =92° 43′ E ...	51–75			1	1										2									2	1																
H_s =87 metres ...	>75																								1																
‡Raj Samand (Kankroli)	6–25	24					1		1	20	2	24		1	7	8	4	3				24		2	5	11	5	1				24	2	3	1	1		3	5	8	
φ =25° 03′ N ...	26–50															1																							1		
λ =73° 53′ E ...	51–75																																								
H_s =587 metres ...	>75																																								

* Visibility observations were not recorded on 4 days in the month.

† Wind frequency tables were prepared only from 23 observations made in the morning.

Frequency (Morning)

Table 2—Frequency of low cloud heights (Morning)

Table 3—Frequency of Visibility (Morning)

Speed limits (km./hr.)	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	31					1	2	2	2		1 — 10										31					21	10					Agra
6–50		1					2	5	13																							
1–75									3		9 or 10										4											
>75																																
6–25	25		2			2	6	4	3	1	1 — 10										31								31			Ahmedabad
6–50					1		1	4	1																							
1–75											9 or 10										3											
>75																																
6–25	20	1	6	3	1	1				1	1 — 10	2		3	1	5	3	6			11							24	7			Bangalore
6–50			2	5																												
1–75											9 or 10			3		1		1			10											
>75																																
6–25	31	1			1	5	2	13	2	2	1 — 10					1					30							10	21			Bhuj
6–50						2		3																								
1–75											9 or 10										3											
>75																																
6–25	26	1			1		2	5	2		1 — 10							2	1		28			1			4	23	3			Chittagong
6–50							1	7	5																							
1–75									2		9 or 10										4											
>75																																
6–25	26	1	2	2	1			6		1	1 — 10					2	1		2		26						14	17				Dacca
6–50								3	3																							
1–75								2	5		9 or 10										5											
>75																																
6–25	30	2				2	6	4	2	3	1 — 10	1								7	23		1					1	29			Fort Sandeman
6–50							3	4	4																							
–75											9 or 10	1								2	12											
>75																																
6–25	27	2	4	3	4	1				1	1 — 10					4		1			26						10	14	7			Hyderabad (Begumpet)
6–50		2	4	6																												
–75											9 or 10					1					3											
>75																																
6–25	27	2	2	1			1	2	5	1	1 — 10									2	29						1	18	12			Jubbulpore
6–50		2	1				1	3	6																							
–75											9 or 10																					
>75																																
6–25	30	2		1		1	3	5	8	2	1 — 10										31					25	6					Lahore
6–50					2	1	1	3	1																							
–75											9 or 10										3											
>75																																
6–25	13						2	4	2		1 — 10										31								31			Madho Sagar (Gwalior)
6–50							1	3	1																							
–75											9 or 10																					
>75																																
6–25	13		3	5	1		1			1	1 — 10						11	12	1	1	6							1	25	1		*Madras
6–50			1	1																												
–75											9 or 10							3	1		13											
>75																																
6–25	28	1	1	3	3	2	5	5	3	1	1 — 10									2	29								29	2		Malegaon
6–50				1	1	1		1																								
–75											9 or 10										3											
>75																																
6–25	23	2	5	5	1	1					1 — 10					5	10		1	1	14								10	21		†Mangalore
6–50			1	6	2																											
–75											9 or 10										1											
>75																																
–25	31	3	4	3	1	3	2	1	9	5	1 — 10								1	1	29						1	1	4	9	16	Peshawar
–50																																
–75											9 or 10										7											
>75																																
–25	31	2	3		4	4	2	1	2	3	1 — 10									1	30								4	27		Poona
–50			1	4	4	1																										
–75											9 or 10										1											
>75																																
–25	3	1							1		1 — 10					14		17										4	27			Port Blair
–50			1																													
–75											9 or 10					1					17											
>75																																
–25	20					1	2	6	4	1	1 — 10										24								12	19		‡Raj Samand (Kankroli)
–50							2	4																								
–75											9 or 10										1											
>75																																

TABLE 1—WIN

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Sambalpur ...	6–25	31	2							2	27	31	6	14	4	3			1	1	1	31	7	9	5	3	1			1	2	28	7	3	2	1				5	1
ϕ = 21° 28′ N ...	26–50												1											1	1					1			5	1	1					2	
λ = 83° 58′ E ...	51–75																																								
H_s = 153 metres ...	>75																																								
Tezpur ...	6–25	31		20	1						10	31		4	25						1	31		3	23						2	29		3	13	3			1		4
ϕ = 26° 37′ N ...	26–50														1										3									1	4						
λ = 92° 47′ E ...	51–75																																								
H_s = 80 metres ...	>75																																								
Trichinopoly ...	6–25	31		15							16	31	1	1								31	4	4								29	1	6	2	2				2	
ϕ = 10° 49′ N ...	26–50												1	27									1	20	2									10	6						
λ = 78° 42′ E ...	51–75													1																											
H_s = 88 metres ...	>75																																								
*Trivandrum ...	6–25	27	2	6						1	18	27	2	2	4	2	1	3	3	5	4	27	2	5	10	2		1	1		5	25	2	5	6	2	1	1	3	4	
ϕ = 08° 29′ N ...	26–50														1									1											1						
λ = 76° 57′ E ...	51–75																																								
H_s = 76 metres ...	>75																																								
Vizagapatam ...	6–25	31	9	7					4	3	7	31		12	5							31	1	13	7							25	1	8	4						1
ϕ = 17° 42′ N ...	26–50			1									1	12	1									8	1								1	7	3						
λ = 83° 18′ E ...	51–75																							1																	
H_s = 56 metres ...	>75																																								

TABLE 4—WIN

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)	6–25	31				1		2	12		16	31	1	2	1	4			5	13	3	31	3		3	1		1	3	15	2	29	4		2				4	
ϕ = 25° 26′ N ...	26–50																			2										3			3		1			1	2	11	
λ = 81° 44′ E ...	51–75																																							1	
H_s = 98 metres ...	>75																																								
Bahrain ...	6–25	31	2		1	3	3	1	3	15	3	29	6	1		1	2	1	2	2	2	29	2			1	1	2	4	5	1	29	2			1	2	1	5	3	1
ϕ = 26° 14′ N ...	26–50												5				2	3		2			4				1	4	1	2			2				1	2	6	3	
λ = 50° 35′ E ...	51–75																																								
H_s = 14 metres ...	>75																																								
Bombay (Juhu) ...	6–25	31		9	9	1					12	31		2	9	7						31		4	10	9	2	1				31	2	4	6	6	5	2		2	3
ϕ = 19° 07′ N ...	26–50													1	4	8									3	1	1								1						
λ = 72° 50′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	31	7	7							17	31	16	11	1				1	1	1	31	13	5	3	2				8		31	2	5	1		1	1	6	5	1
ϕ = 22° 39′ N ...	26–50																																2							7	
λ = 88° 27′ E ...	51–75																																								
H_s = 21 metres ...	>75																																								
Gaya ...	6–25	31					6	4	1		20	31	2	1	5	1			7	9	6	31	6	1	6	1			8	8		31	5	6		1			2	4	1
ϕ = 24° 49′ N ...	26–50																												1										2	10	
λ = 85° 01′ E ...	51–75																																								
H_s = 117 metres ...	>75																																								
Jacobabad ...	6–25	31	2		3				1	1	24	31	1	4	11	3		1	5	2	3	31	4	4	3	2	2	6	3	1	5	31	3	5			2	12	6	1	1
ϕ = 28° 17′ N ...	26–50												1										1															1			
λ = 68° 29′ E ...	51–75																																								
H_s = 56 metres ...	>75																																								
Jiwani ...	6–25	31	3	12		1				1	14	31	4	6	2		2		8	3	6	31	5	3	2	2	3	2	8	3	2	31		4	3	2	2	5	4	5	
ϕ = 25° 10′ N ...	26–50																												1				1					1	3	1	
λ = 61° 47′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Jodhpur ...	6–25	31		30							1	31		4	15	5	1			1	1	31	1	8	12	3	1		1		3	31	2	5			3	3	9	6	
ϕ = 26° 18′ N ...	26–50													1	2	1									2														1		
λ = 73° 01′ E ...	51–75																																								
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	31	3	15						1	12	31	2	5	4		2		2		2	31	4	7	4	3	3		2	1	4	31	7	5	3	2	3	4	2	1	
ϕ = 24° 53′ N ...	26–50													4	6				1					1	1				1								1		1		
λ = 67° 07′ E ...	51–75													3																											
H_s = 29 metres ...	>75																																								
New Delhi ...	6–25	31						3	17	3	8	31			5	1		1	3	9		31			2	1		1	2	10		31	1		1		1	1	4	10	
ϕ = 28° 39′ N ...	26–50																			14									1	14										13	
λ = 77° 15′ E ...	51–75																																								
H_s = 227 metres ...	>75																																								
†Raj Samand (Kankroli)	6–25	8			2	1					5	8			3	4					1	8			3	5						8		3	1	1			1	1	
ϕ = 25° 03′ N ...	26–50																																								
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sharjah ...	6–25	31		2	3	6	4	1		2	13	31	4	4	3	1	1	3	6	5	3	31	4	2	3	1	1	1	8	6	2	26		1	1	2	2	2	1	7	
ϕ = 25° 20′ N ...	26–50												1												1				2				1.					1	6	1	
λ = 55° 24′ E ...	51–75																																								
H_s = 11 metres ...	>75																																								

* Wind frequency tables were prepared only from 27 observations made in the morning.

EQUENCY (MORNING) — TABLE 2—FREQUENCY OF LOW CLOUD HEIGHTS (MORNING) — TABLE 3—FREQUENCY OF VISIBILITY (MORNING)

Speed units km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	15		1	1					3		1 — 10						1	2	5		23							6	25			Sambalpur
6–50		7							3																							
1–75											9 or 10						1	2	1		5											
>75																																
6–25	16		2	6	3	2		1			1 — 10	2							1	1	27					1	18	10	2			Tezpur
6–50			1					1																								
1–75											9 or 10	2									2											
>75																																
6–25	21		5	6	1				1	2	1 — 10						1	3	5	7	15								10	16	5	Trichinopoly
6–50			2	3																												
1–75				1							9 or 10						1		1		7											
>75																																
6–25	21	1	6	7	1	1	1	1	2	1	1 — 10						14	3			14					15	14	1	1			*Trivandrum
6–50																																
1–75											9 or 10										3											
>75																																
6–25	8	2	3						1		1 — 10					1	5	4	1		20						1	29	1			Vizagapatam
6–50		1	1																													
1–75											9 or 10							1			9											
>75																																

EQUENCY (FORENOON) — TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (FORENOON) — TABLE 6—FREQUENCY OF VISIBILITY (FORENOON)

6–25	23		1			2		2	1		1 — 10										31					2	4	25				Allahabad (Bamrauli)
6–50		4		1				4	6																							
1–75									2		9 or 10										4											
>75																																
6–25	22	1	1				1	4			1 — 10	1					2	1	3		24						1	14	16			Bahrain
6–50		2					2	4	4																							
1–75								3			9 or 10	1									6											
>75																																
6–25	31	2		3	4	5	3	3	2		1 — 10								4		27							20	11			Bombay (Juhu)
6–50			1	5	2	1																										
1–75											9 or 10										3											
>75																																
6–25	29	1	1	1			1	1	3	2	1 — 10							1	5		25					3	13	15				Calcutta (Dum Dum)
6–50		1					1	2	11																							
1–75									4		9 or 10								1		5											
>75																																
6–25	27	2	1					2		1	1 — 10								1		30							30	1			Gaya
6–50		2						3	7																							
1–75		2						1	6		9 or 10										1											
>75																																
6–25	27	1	1	1		1	6	6	4		1 — 10									1	30			1	3	3	4	10	10			Jacobabad
6–50							2	4	1																							
1–75											9 or 10										4											
>75																																
6–25	26	1	1	1		2	2	4	4	2	1 — 10						16				15							7	24			Jiwani
6–50				1		1	2	5																								
1–75											9 or 10										3											
>75																																
6–25	31	2				3	3	9	2	1	1 — 10										31							1	30			Jodhpur
6–50						1	4	5	1																							
1–75											9 or 10										4											
>75																																
6–25	31	2	1	1		2	4	7	3		1 — 10							2			29								14	17		Karachi (Drigh Road)
6–50		1		1		1	5	2	1																							
1–75											9 or 10										9											
>75																																
6–25	27	1			1	2	1	4	1		1 — 10										31						1	4	26			New Delhi
6–50							3	4	9																							
1–75									1		9 or 10																					
>75																																
6–25	8					1	1	2	1		1 — 10										8											†Raj Samand (Kankroli)
6–50								2	1																							
1–75											9 or 10										1											
>75																																
6–25	23	1					1	3	6	1	1 — 10					1	1	2	11	4	12								6	25		Sharjah
6–50		2					1	2	4																							
1–75							1	1			9 or 10								1		5											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Agra ...	6–25	31			1	1		2	6	7	14	31	3	1	2				7	13	3	31	6		2				1	15	3	31	1			1	1	3	3	8	
	26–50																			2										4			1						1	12	
	51–75																																								
	>75																																								
Ahmedabad ...	6–25	31		12	7	1				1	10	31		7	18	1				1	2	31		6	17	1	1			1	4	31	5	3	6	2	2	2	4	2	4
	26–50														2									1									1								
	51–75																																								
	>75																																								
Allahabad (Bamrauli)	6–25	31			1				8	13	9	31	3	1	2				4	19	2	31	4	1	3				3	15	1	31	3		2		1		3	5	
	26–50																													4			3							2	11	
	51–75																																								1	
	>75																																								
Bahrain ...	6–25	31	1	3		7	1			19		31	8		1	1	4	2		1	2	31	3	1		1		3	3	7		29	1	1	1	1	1	4	4	3	
	26–50												5		1		1	1		4			4				2	4		3			2						2	7	2	
	51–75																																								
	>75																																								
Bangalore ...	6–25	31	1	14	10	3					2	31		8	14							31	1	8	16	1					2	29		5	12	1					
	26–50			1											9										3									1	9	1						
	51–75																																								
	>75																																								
Bhuj ...	6–25	31	4	18	3	1	1		1	1	2	31	3	12	10	2					2	31	2	7	13	3	2		1			31	2	5	4	3		5		5	6
	26–50													1					1					2					1										1		
	51–75																																								
	>75																																								
Bombay (Juhu) ...	6–25	31		1				6	4	18	2	31	5	8	8	2		2		1	4	31		15	7	1	2	1			3	29	2	6	5	5	3	2	1		1
	26–50													1										2										1	2	1					
	51–75																																								
	>75																																								
Calcutta (Dum Dum)	6–25	31	4	1						9	17	31	17	4						9	1	31	10	6		1				14		31	2	4			1	1	6	5	
	26–50																																						1	11	
	51–75																																								
	>75																																								
Chittagong ...	6–25	31		2				1	9	4	15	31	8		1	1	2	4	2	5	8	31	5	1	2		7	3	1	2	9	29	1	2		1	1	4	9	7	1
	26–50																													1								1	1		1	
	51–75																																								
	>75																																								
Dacca ...	6–25	31				1			1	3	26	31	5	1		1	1	2		16	5	31	5	2	1	2	1	1	2	11	6	27	1	2	3			3	6	4	2
	26–50																																					1	3	2	
	51–75																																								
	>75																																								
Fort Sandeman ...	6–25	31		1				1	2		27	31				1	2	4	13	1	9											31				3	5	12	2	9
	26–50																	1																						
	51–75																																								
	>75																																								
Gaya ...	6–25	31	4	1					8	9	9	31	3	1	3				6	13	4	31	1	1	2		1		10	11	5	30		4	2			1		9	
	26–50																		1																				4	8	
	51–75																																							2	
	>75																																								
Hyderabad (Begumpet).	6–25	31		4	3	7					17	31	1	12	12	4					2	31	1	11	12	5					2	31		11	8	2		1			3
	26–50																																	2	4						
	51–75																																								
	>75																																								
Jacobabad ...	6–25	31	1	4		1			3	6	16	30		4	5	2		3	5	1	9	30	1	2	5	4	2	1	6	3	6	31	1	1	1	2		7	7	5	3
	26–50																			1																		3	1		
	51–75																																								
	>75																																								
Jiwani ...	6–25	31				1	5	24			1	31	1	1	1	4	6	6	7	2	3	31	4	5	1	2	3	2	6	5	2	31	5	4	3	1		3	8	2	
	26–50																												1										4	1	
	51–75																																								
	>75																																								
Jodhpur ...	6–25	31	3	12	2	2	1				11	30	3	12	6			1	1	1	6	31	3	11	7	1	1		1	1	6	30	4	5	2	1		4	7	3	4
	26–50																																								
	51–75																																								
	>75																																								
Jubbulpore ...	6–25	31	13	8						2	8	31	19	6					1	2	3	31	16	8					1	3	3	31	8	4	2		1	2	4	7	
	26–50																																1					1		1		
	51–75																																								
	>75																																								
Karachi (Drigh Road) ...	6–25	31	3	10	2	3	2	3		1	7	31	2	7	5	1	2	2	2	1	5	31	3	9	7		2	2	2	1	3	31	3	8	1	2	2	6	3	2	1
	26–50													3	1									1	1									1	1						
	51–75																																								
	>75																																								

Speed limits (km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6-25	31	1					3	3	4		1 — 10										31						1	11	19			Agra
26-50							1	8	10																							
51-75								1			9 or 10										4											
>75																																
6-25	31		1	1	1	4	6	7		3	1 — 10										31								25	6		Ahmedabad
26-50		1				2	3	2																								
51-75											9 or 10										4											
>75																																
6-25	27		1	1		1		3	2		1 — 10										31							30	1			Allahabad (Bamrauli)
26-50		3						5	6																							
51-75								2	3		9 or 10										4											
>75																																
6-25	24	2					1	3			1 — 10					1		6	2		22							1	30			Bahrain
26-50		1					3	5	5																							
51-75		1					1	2			9 or 10							1			5											
>75																																
6-25	25	1	7	11				1			1 — 10						2	3	3	12	11							10	9	10	2	Bangalore
26-50				4	1																											
51-75											9 or 10						2				2											
>75																																
6-25	29		1		1	7	13	2	1		1 — 10										31								31			Bhuj
26-50							1	1	2																							
51-75											9 or 10										2											
>75																																
6-25	26	1		6	3	5	4	1	1	1	1 — 10							1	1		29								31			Bombay (Juhu)
26-50			1	1	2																											
51-75											9 or 10										5											
>75																																
6-25	25	1				1	1	2	1		1 — 10							6	8	1	16							31				Calcutta (Dum Dum)
26-50		1						3	11																							
51-75									4		9 or 10									1	5											
>75																																
6-25	22					1	1	4	3	2	1 — 10						1	6	5	2	17							2	28	1		Chittagong
26-50							1	3	6																							
51-75									1		9 or 10										6											
>75																																
6-25	23						2	3	3		1 — 10							12	7	1	11							31				Dacca
26-50			1					4	7																							
51-75									3		9 or 10										4											
>75																																
6-25	31					3	6	3	8	2	1 — 10							2	4		25							1	15	15		Fort Sandeman
26-50							3	5	1																							
51-75											9 or 10										10											
>75																																
6-25	29	3					3	1			1 — 10							1			30							24	7			Gaya
26-50		2						3	9																							
51-75		1					1	1	4		9 or 10										3											
>75									1																							
6-25	29	4	6	5	4		2		1		1 — 10							1	7	2	21									23	8	Hyderabad (Begumpet)
26-50			3	4																												
51-75											9 or 10																					
>75																																
6-25	23			1	2		2	8	1		1 — 10										31					1		4	26			Jacobabad
26-50		1					6	5	2																							
51-75											9 or 10										1											
>75																																
6-25	14					3	2	4			1 — 10						22			1	8							1	28	2		Jiwani
26-50		1						4																								
51-75											9 or 10										3											
>75																																
6-25	27					1	6	8	2		1 — 10										31								12	19		Jodhpur
26-50							3	7																								
51-75											9 or 10										7											
>75																																
6-25	28	2	2			1	1	6	4		1 — 10							1		3	27								20	11		Jubbulpore
26-50		3						5	4																							
51-75											9 or 10										3											
>75																																
6-25	31	3	2			2	4	4	5		1 — 10						1	2			28								4	27		Karachi (Drigh Road)
26-50		1					3	4	2																							
51-75						1					9 or 10										5											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Lahore ...	6-25	31							3	16	12	31							10	17	3	31	1					1	5	17	4	31				1	4		5	14	3
	26-50																			1									1	2								1	1	2	
	51-75																																								
	>75																																								
Madho Sagar (Gwalior).	6-25	31	3	2				3	1	6	16	31	7	4	3				2	10	5	31	11	5	2				3	9	1	31	3	1		1	3	1	6	9	
	26-50																																2						1	4	
	51-75																																								
	>75																																								
*Madras ...	6-25	31	4	23	2					2		31	4	6	1							29	3	7								11		1							
	26-50												4	14	2								2	14	3								1	7	2						
	51-75																																								
	>75																																								
Malegaon ...	6-25	31		5	8	5				2	11	31		4	13	5	4				5	30		5	14	3	4				4	30	1	5	5	4	2	3	5	1	2
	26-50																																		2						
	51-75																																								
	>75																																								
Mangalore ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
New Delhi ...	6-25	31	1		8				2	17	5	31	1		1	2			2	16	1	31				3			3	17		30		1			2	1	4	6	1
	26-50									3										8			1							7			1						1	13	
	51-75																																								
	>75																																								
Peshawar ...	6-25	31	1	1		3				1	25	31	6				1	1	5	9	9	31	4				1		2	15	9	31	3	2	2		3	2	3	14	2
	26-50																																								
	51-75																																								
	>75																																								
*Poona ...	6-25	31		15	10	4					2	31		4	19	4						31		3	18	4					1	31		1	9	8	3			1	3
	26-50														4										5										5	1					
	51-75																																								
	>75																																								
Port Blair ...	6-25	31		18	1							31		4	2							27	1	7	3	1						14	3	2	1	3	1	1		1	1
	26-50			9	3									16	6	2								10	5										1						
	51-75															1																									
	>75																																								
†Raj-Samand (Kankroli)	6-25	24			4	3	1			2	14	23	2	1	5	5	1	2			7	23	1	1	5	5	2	1			8	24	4	1	1	1		2	6	5	3
	26-50																																					1			
	51-75																																								
	>75																																								
Sambalpur ...	6-25	31	3	5	2			1	2	2	16	31	10	10	3				1	3	4	30	10	8	2	1	1			6	2	28	8	1		2	1			7	
	26-50																																7	1						1	
	51-75																																								
	>75																																								
Sharjah ...	6-25	31	3	1				2	7	18		31	6	1	1			1	9	10		31	1	4	2	2	3	2	8	2	2	31	2	2	1	2	1	3	3	5	1
	26-50													1					2					1				1	2	1								1	3	5	2	
	51-75																																								
	>75																																								
Tezpur ...	6-25	31		11	7						13	31		7	20	2					2	31		2	16	6				1	5	31		1	12	6	1	4	3		3
	26-50																								1										1						
	51-75																																								
	>75																																								
Trichinopoly ...	6-25	31		23	1				1		6	31	1	13	1					1		31	3	11								27	5	6	2					1	
	26-50													15										16									1	9	3						
	51-75																							1																	
	>75																																								
Trivandrum ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
Vizagapatam ...	6-25	31		16	13					1		31	2	15	3							31	9	17								26	4	10	1					1	
	26-50			1									2	6	2								1	2	1								4	3	3						
	51-75													1										1																	
	>75																																								

*Visibility observations were not recorded on 5 days in the month.

peed imits km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	30	1				7	1	8	7		1 — 10										31							26	5			Lahore
26–50						1	1	2	2																							
51–75											9 or 10										3											
>75																																
6–25	27					2	1	3	3		1 — 10										31								31			Madho Sagar (Gwalior)
26–50							1	10	7																							
51–75											9 or 10										7											
>75																																
6–25	3		1								1 — 10						8	21			2									24	2	*Madras
26–50				2																												
51–75											9 or 10										7											
>75																																
6–25	28	2	1	3	4	5	7	2	1	1	1 — 10							1		6	24								26	5		Malegaon
26–50			1					1																								
51–75											9 or 10										3											
>75																																
6–25											1 — 10																		1	17	13	Mangalore
26–50																																
51–75											9 or 10																					
>75																																
6–25	25					2	4	2	1		1 — 10										31							2	29			New Delhi
26–50							2	6	7																							
51–75								1			9 or 10										2											
>75																																
6–25	30	3				6		11	4	3	1 — 10								2	3	26					1		2	10	9	9	Peshawar
26–50						1	1	1																								
51–75											9 or 10										7											
>75																																
6–25	30	1	2	3	4	7		4		1	1 — 10								1	6	24								1	30		Poona
26–50			1	5	2																											
51–75											9 or 10										2											
>75																																
6–25	9	1		4				1	1		1 — 10					13		18										7	24			Port Blair
26–50		1	1																													
51–75											9 or 10										14											
>75																																
6–25	24					2	4	8	1		1 — 10										24								7	24		†Raj Samand (Kankroli)
26–50						2	4	3																								
51–75											9 or 10										4											
>75																																
6–25	21	1		1				1	2		1 — 10							2	12		17								31			Sambalpur
26–50		5							11																							
51–75											9 or 10								1		7											
>75																																
6–25	29	1	1					5	2		1 — 10							6	10	6	9								9	22		Sharjah
26–50		3					2	8	6																							
51–75								1			9 or 10										4											
>75																																
6–25	28	3	5	4		2	6	3	1	2	1 — 10								1	7	23								24	7		Tezpur
26–50								1																								
51–75								1			9 or 10										1											
>75																																
6–25	19	3	6	5		1					1 — 10							5	14	8	4								2	8	21	Trichinopoly
26–50				3																												
51–75				1							9 or 10									1	7											
>75																																
6–25											1 — 10																	4	27			Trivandrum
26–50																																
51–75											9 or 10																					
>75																																
6–25	17	3	3				1	1	2		1 — 10						2	7			22							29	2			Vizagapatam
26–50			5																													
51–75		1	1								9 or 10										7											
>75																																

STATION.	Speed limits (km./hr.).	Surface.										0·5 km. above Surface.										1·0 km. a. s. l.										2·0 km. a. s. l.									
		n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C	n	N	NE	E	SE	S	SW	W	NW	C
Allahabad (Bamrauli)...	6-25	31									31	31	5		3	2	1		1	12	3	31	6	1					3	14	4	30	2	2				1	5	2	1
	26-50																			4										3			2						1	14	
	51-75																																								
	>75																																								
Bahrain ...	6-25	31	1		2	1	4	1		15	7	31	7				4	6		4		29	1				1	7	6	7		23	2	1			1	1	1	4	
	26-50												5				1	1		3			3					1		3			2					2	7	2	
	51-75																																								
	>75																																								
Bombay (Juhu) ...	6-25	31		2	2	2					25	31	4	4	14	7					1	31	2	5	12	11					1	20	2		2	2	5	4			1
	26-50														1																				1	2	1				
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	31	9	11						4	7	31	18	7	1					3	2	31	9	6	2				1	10		22	3				1	1	5	5	1
	26-50																						1							2										5	
	51-75																																							1	
	>75																																								
Gaya ...	6-25	31				6		1	1		23	31	5		4				3	15	4	31	5	1	2			1	6	13	3	23	2	1				3	3	1
	26-50																																						1	11	
	51-75																																							1	
	>75																																								
Jacobabad ...	6-25	31									31	31	2	3	4		2	2	7	2	9	31	2	2			6	9	5	3	4	29	3	2	1			9	11	3	
	26-50																																								
	51-75																																								
	>75																																								
Jiwani ...	6-25	31		5	2				2	4	18	31		1	1		2	3	9	9	4	30	1	1	1		3	6	7	8	3	10	1	1		1	1		1	2	
	26-50																			2																			3		
	51-75																																								
	>75																																								
Jodhpur ...	6-25	31		30	1							31	1	6	15	5					4	31	2	5	9	5	1	2		3	4	28	3			1	1	4	9	6	1
	26-50																																					1	2		
	51-75																																								
	>75																																								
*Karachi (Drigh Road) ...	6-25	31	14	7						5	5	31	3	10	6	3	1	2	4		2	31	1	11	2	2	4		3	1	7	31	6	5		1	1	5	2	3	3
	26-50																																1				1	3			
	51-75																																								
	>75																																								
New Delhi ...	6-25	31						1	11	9	10	31	6		1	1				11	2	31	1		2				1	16	1	29				1	2	2	5	8	
	26-50																			10										10			1						2	8	
	51-75																																								
	>75																																								
*Raj Samand (Kankroli).	6-25	8	2							5	1	8			3	3	1				1	8			2	4	1					8	2	1	1				2		2
	26-50																								1																
	51-75																																								
	>75																																								
Sharjah ...	6-25	31		4	4	1	1	2	1	3	15	28	4	2	2	1	1		6	7	4	31	2	1	2		2	6	7	7	2	31	3		1	2		2	5	9	
	26-50																		1										2									1	6	1		
	51-75																																						1		
	>75																																								

*Only on 8 days in the month, pilot balloon ascents were made in the late night.

TABLE 11—FREQUENCY OF LOW CLOUD HEIGHTS (LATE NIGHT)

TABLE 12—FREQUENCY OF VISIBILITY (LATE NIGHT)

Speed limits km./hr.).	3·0 km. a. s. l. n	N	NE	E	SE	S	SW	W	NW	C	Amounts of low cloud.	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	No. of observations with Code figures. 0	1	2	3	4	5	6	7	8	9	STATION.
6–25	11						1	1	1	1	1 — 10										31						5	26				Allahabad (Bamrauli)
26–50								4	3																							
51–75											9 or 10																					
>75																																
6–25	10	1					1				1 — 10						2	3	1		25						1	30				Bahrain
26–50							1	2	2																							
51–75								3			9 or 10										5											
>75																																
6–25	15		2		1	1	4	3	1		1 — 10							1	1		29							24	7			Bombay (Juhu)
26–50				1		1	1																									
51–75											9 or 10																					
>75																																
6–25	5							1		1	1 — 10							1	3		27						22	9				Calcutta (Dum Dum)
26–50									3																							
51–75											9 or 10										2											
>75																																
6–25	17	1				1		2	2		1 — 10										31							30	1			Gaya
26–50									7																							
51–75								2	2		9 or 10																					
>75																																
6–25	21					1	2	8	3		1 — 10										31							31				Jacobabad
26–50				1			2	3																								
51–75							1				9 or 10																					
>75																																
6–25	3		1						1		1 — 10					1	9				21							31				Jiwani
26–50									1																							
51–75											9 or 10										2											
>75																																
6–25	21					1	3	9	5		1 — 10										31								31			Jodhpur
26–50						1		2																								
51–75											9 or 10										1											
>75																																
6–25	12					1	3		2		1 — 10										31								31			Karachi (Drigh Road)
26–50							2	4																								
51–75											9 or 10										2											
>75																																
6–25	24						4	6	5		1 — 10										31							5	26			New Delhi
26–50							1	6	2																							
51–75											9 or 10										1											
>75																																
6–25	6	1				1	1	1	1		1 — 10										8								7	1		*Raj Samand (Kankroli)
26–50								1																								
51–75											9 or 10																					
>75																																
6–25	25	1					1	3	7		1 — 10							2	6	4	19								28	3		Sharjah
26–50		1					1	3	6																							
51–75								1	1		9 or 10										1											
>75																																

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