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GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

INDIA WEATHER REVIEW, 1940

ANNUAL SUMMARY

PART C

STORMS AND DEPRESSIONS

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UNDER THE DIRECTION OF

C. W. B. Normand, M.A., D.Sc., C.I.E.,

Director General of Observatories

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INDIA WEATHER REVIEW, 1940.

ANNUAL SUMMARY.

PART C.

STORMS AND DEPRESSIONS.

DEPRESSIONS AND CYCLONIC STORMS.

During the year under review, seven storms and seven depressions formed in the Bay of Bengal and two storms and one depression in the Arabian Sea. The periods of their existence and their estimated maximum barometric depths are summarised in the table below :—

TABLE 1.

Region.	Month.	Date.	Greatest barometric depth.
			"
1. Bay of Bengal .	May .	17th—25th .	0·50
2. Do. .	June .	23rd—27th .	0·50
3. Do. .	June-July	29th June—5th July.	0·50
4. Do. .	July .	6th—11th .	0·40
5. Do. .	August .	1st—9th .	0·25
6. Arabian Sea . .	October .	9th—20th .	At least 0·50
7. Bay of Bengal .	October .	19th—22nd .	0·50
8. Arabian Sea . .	November	3rd—13th .	At least 1·0
9. Bay of Bengal .	November	14th—24th .	0·30

The detailed descriptions of these storms and depressions are followed by lists of western disturbances and the more important local storms during the year.

1. Severe Bay storm of 17th to 25th May 1940.—A fall of pressure was noticeable in the neighbourhood of Ceylon on the morning of the 16th. On the next morning it extended to the Coromandel coast and by the same afternoon the upper winds over Vizagapatam turned to easterly with a further fall of pressure along the Coromandel coast. The unsettled conditions developed into a depression which was centred at 8 hrs. of the 18th within a degree of Lat. 12°N., Long. 83°E. The depression deepened during the next 24 hours and was centred at 8 hrs. of the 19th about 100 miles east-southeast of Madras. It intensified into a storm by the same afternoon and was centred at 17 hrs. near Lat. 13°N., Long. 81°E. At 8 hrs. of the 20th, the storm was severe and was centred near Nellore. At 9 hrs. on this day, Nellore recorded a pressure deficiency of 0·47". The storm crossed the coast north of Nellore on the same afternoon, and, weakening into a deep depression, lay over the southeast Deccan with its centre near Rentichintala on the morning of the 21st. The depression then recurved to northeast and passed out into the Bay of Bengal near Calingapatam as a shallow low on the morning of the 23rd. It again deepened and moved rapidly northeastwards ; its central region at 8 hrs. of the 24th was about 100 miles southwest of Chittagong. The depression weakened thereafter and became unimportant in the course of the next 24 hours.

In association with this storm, abnormally wet weather prevailed over most parts of the Peninsula and also in north-east India where a temporary extension of the monsoon took place. Rainfall was particularly heavy on the north Madras coast and the Madras Deccan and several breaches were reported in the M. & S. M. Railway. The noteworthy district averages of rainfall as well as the amounts of particularly heavy falls are given in the following table :—

TABLE 2.

District.	District averages recorded on						Particularly heavy falls.
	20th.	21st.	22nd.	23rd.	24th.	25th.	
	"	"	"	"	"	"	
Vizagapatam .	3·1	2·7	3·2	..	..	..	
East Godavari Agency.	..	2·8	2·5	..	..	..	
East Godavari Plains.	2·3	1·9	..	..	..	..	
West Godavari	1·7	1·7	..	..	..	..	
Nellore . .	4·0	2·5	..	..	..	..	Krishnapatam 10·3" on 20th.
Chingleput .	4·0	..	..	..	..	..	
South Kanara	..	3·5	..	..	..	..	
Cuddapah .	2·7	2·9	..	..	..	..	
Anantapur .	..	2·1	..	..	..	..	

District.	District averages recorded on						Particularly heavy falls.
	20th.	21st.	22nd.	23rd.	24th.	25th.	
	"	"	"	"	"	"	
Bellary . .	..	2·1	..	..	..	..	
Kurnool .	..	2·8	..	..	..	..	
Chittagong .	..	..	..	..	3·1	..	
Tippera .	..	..	1·7	2·4	1·6	..	
Noakhali .	..	..	..	..	2·9	..	
Chittagong Hill Tracts.	..	..	..	..	2·1	1·8	
Hyderabad .	..	2·2	..	..	..	..	
Mahbubnagar .	..	2·3	..	..	..	..	
Nalgonda .	..	4·4	3·4	..	..	..	
Warangal .	..	2·2	2·3	..	..	..	

2. Unsettled conditions of 4th to 6th June 1940 in the Arabian Sea.—With the strengthening of the monsoon in the southeast Arabian Sea and its advance towards Malabar, conditions became unsettled in the east central Arabian Sea off the Konkan-Kanara coast and a feeble cyclonic circulation was noticed there on the morning of the 4th June. The unsettled conditions persisted there for another 48 hours and became unimportant after causing widespread and locally heavy rain in Kathiawar and along the Kanara-Konkan coast, Surat reporting 6″ and Bombay and Marmagao 4″ each on the 5th morning.

3. Bay storm of 23rd to 27th June 1940.—With the strengthening of the monsoon in the south and central Bay, conditions became unsettled in the northwest Bay off the Orissa coast by the morning of the 22nd. The unsettled conditions developed into a depression centred at 17 hrs. of the 23rd about 100 miles east of Puri. The depression deepened and was centred about 30 miles eastsoutheast of Chandbali at 8 hrs. of the 24th. During the course of the same day it intensified into a storm but remained practically stationary near Chandbali till 14 hrs. of the 25th. Then it crossed the Orissa coast and weakening into a depression, lay with its centre about 100 miles to the west of Sambalpur at 8 hrs. of the 26th. Moving westnorthwestwards it lay over the northwest Central Provinces at 8 hrs. of the 27th and filled up in the course of the next 24 hours. A pressure deficiency of 0·50″ was recorded at Chandbali at 14 hrs. of the 25th.

In association with this cyclonic storm, there was widespread and locally heavy rain over the region from Orissa to the Konkan and Gujarat between the 24th and 28th. The noteworthy district averages of rainfall as well as the particularly heavy falls are given in the table below :—

TABLE 3.

District.	District averages recorded on								Particularly heavy falls.
	23rd.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	
	″	″	″	″	″	″	″	″	
Champaran	..	..	..	..	..	..	..	3·0	
Cuttack	..	..	1·6	2·2	..	..	..	..	
Puri	1·7	3·7	3·2	..	..	..	..	..	
Sambalpur	..	..	2·0	1·6	..	..	..	..	
Ganjam	..	2·0	2·6	2·7	..	..	..	..	
Koraput	..	..	2·1	3·1	..	..	..	..	
Drug	..	..	..	2·5	3·3	..	..	..	
Raipur	..	..	2·4	3·3	..	..	..	..	Maram Silli 10·2″ on 26th.
Chanda	..	..	..	3·7	4·4	..	..	..	
Bhandara	..	..	..	4·1	3·0	..	..	..	
Balaghat	..	..	..	2·3	..	..	..	..	
Nimar	..	..	..	..	4·3	..	..	..	
Betul	..	..	..	..	3·1	..	..	..	
Chhindwara	..	..	..	2·4	5·8	..	..	..	
Nagpur	..	..	1·8	3·5	3·3	..	..	..	
Amraoti	..	..	..	..	3·4	..	..	..	
Buldana	..	..	..	..	2·1	..	..	..	
Yeotmal	..	..	..	..	2·9	..	..	..	
Wardha	..	..	..	2·4	5·8	..	..	..	
Akola	..	..	..	..	2·4	..	..	..	
Gwalior	..	..	..	..	..	..	..	..	
Indore	..	..	..	2·8	..	..	..	..	
Southern C. I. States Agency.	..	..	..	2·4	..	..	..	..	
Surat	..	..	..	..	..	2·5	..	..	

TABLE 3—*contd.*

District.	District averages recorded on								Particularly heavy falls.
	23rd.	24th.	25th.	26th.	27th.	28th.	29th.	30th.	
	"	"	"	"	"	"	"	"	
Rajpipla	..	1·8	2·2	..	..	..	..	..	
Lunavada	..	..	..	..	1·5	1·8	..	..	
Sant	..	..	..	..	2·9	..	..	..	
Chhota Udaipur	..	..	..	..	..	2·2	..	..	
Balasinor	..	..	..	..	2·7	..	..	..	
Dharampur	..	..	..	..	2·1	3·5	3·0	..	
Sachin	4·3	..	2·1	2·3	4·3	..	..	..	
Sadra	..	..	..	..	..	2·3	..	..	
Bayad	..	..	..	..	..	2·0	..	..	
Morvi	..	..	..	..	..	3·5	..	..	
Navanagar	..	..	..	..	..	2·9	..	..	
Gondal	..	..	..	..	..	4·0	..	..	
Jetpur	..	..	2·7	..	..	6·5	..	..	
Junagad	..	..	..	..	3·9	11·5	..	..	Junagad 14·4" on 28th.
Porbandar	..	..	..	..	3·7	2·5	..	..	
Mahua	..	..	..	3·3	..	..	..	..	
Palitana	..	..	..	2·2	..	..	..	..	
Jasdan	1·8	2·9	..	..	2·0	..	..	..	
Wadhwan	..	2·0	..	..	..	..	..	..	
Dhrangadhra	..	..	..	..	..	3·9	..	..	
Vankaner	..	..	..	..	..	2·3	..	..	
Mandvi	..	..	..	..	..	3·0	..	..	
Thana	2·0	4·7	2·0	2·1	3·5	2·4	..	..	Dahanu 10·2" on 24th.
Bombay Observatory	3·5	5·6	1·8	3·6	1·9	..	..	..	
Bombay Suburban, Kurla	..	5·1	..	..	5·1	..	..	..	
Colaba	2·1	5·3	2·1	5·8	3·6	2·7	..	..	Roha 9·5" on 26th.
Ratnagiri	4·6	1·6	1·8	2·1	2·1	2·0	..	..	Ratnagiri 9·3" and Guhagar 10·4" on 23rd.
Kanara	2·1	1·8	2·1	..	..	..	..	..	
Savantwadi	2·7	1·9	3·8	3·8	2·1	2·1	..	..	

4. Severe Bay storm of the 29th June to 5th July 1940.—A marked fall of pressure was noticeable on the afternoon of the 29th at the head of the Bay of Bengal and the upper winds over Calcutta, which were mainly from a westerly direction on the previous day, changed to easterly indicating that weather was unsettled at the head of the Bay. Pressure then fell rapidly over this region and a deep depression formed with centre at 2 hrs. of the 30th about 50 miles southeast of Saugor Island. The depression remained practically stationary and intensified into a storm by 8 hrs. of the same day. By the same afternoon the storm became severe and was centred at 17 hrs. about 50 miles southeast of Calcutta. It moved towards Calcutta and was centred near it at 8 hrs. of the 1st. At this hour, the pressure deficiency at Calcutta was 0·42".

The storm then weakened into a depression and lay with its centre near Ranchi on the morning of the 2nd and near Pendra next morning. It then moved to east Central India and filled up in the course of the next two days.

In association with this storm, widespread and locally heavy rain fell in Orissa, the Central Provinces and Central India. According to newspaper reports, disastrous floods occurred in the Baitarani, Brahmani and other rivers of

Orissa. Some of the rivers burst their embankments breaching the railway lines and causing considerable dislocation of traffic. The floods are also reported to have caused extensive damage to property, rendering several thousands of people homeless.

The noteworthy district averages of rainfall as well as the amounts of particularly heavy falls are given in the table below :—

TABLE 4.

District.	District averages recorded on						Particularly heavy falls.
	30th June.	1st July.	2nd July.	3rd July.	4th July.	5th July.	
	"	"	"	"	"	"	
Balasore	3·7	4·3	..	..	..	..	Balasore 13·7" on 1st July.
24-Parganas	..	2·0	..	..	..	..	
Midnapore	..	2·4	..	..	..	..	
Howrah	..	2·3	..	..	..	..	
Chittagong	..	1·7	2·6	3·3	3·6	..	
Drug	..	..	2·0	1·5	..	..	
Bilaspur	..	..	2·1	..	..	..	
Saugor	..	2·3	2·0	2·2	1·7	1·6	
Jubbulpore	..	1·9	2·4	..	..	..	
Mundla	..	..	..	2·2	2·7	1·9	
Chanda	..	..	2·9	2·3	..	..	
Bhandara	..	..	2·7	3·0	2·7	3·4	
Balaghat	..	..	2·5	3·2	3·0	2·1	
Hoshangabad	..	1·7	2·1	3·8	3·3	..	
Betul	..	1·8	2·1	4·3	..	..	

TABLE 4—*contd.*

District.	District averages recorded on						Particularly heavy falls.
	30th June.	1st July.	2nd July.	3rd July.	4th July.	5th July.	
	"	"	"	"	"	"	
Chhindwara	..	..	2·1	3·8	2·2	..	
Wardha	..	..	..	2·3	..	..	
Nagpur	..	..	1·8	2·8	..	..	
Yeotmal	..	..	2·2	..	..	..	
Gwalior	..	..	..	..	..	..	Kolaras 9·3" on 30th June.
Bhopal	...	1·7	1·9	1·8	..	..	

5. Severe Bay storm of 6th to 11th July 1940.—On the morning of the 6th, a closed circulation of the surface winds and concentrated negative pressure departures at the head of the Bay of Bengal indicated that weather was unsettled there. By the same afternoon the unsettled conditions developed into a depression centred at 17 hrs. about 110 miles southeast of Calcutta. Pressure fell further and the depression intensified into a storm centred at 2 hrs. of the 7th about 60 miles east of Saugor Island. At 8 hrs. on the 7th it was centred about 50 miles southeast of Calcutta. The storm became severe by 14 hrs. of the same day and at that hour it had its centre at a distance of about 25 miles to the southsoutheast of Calcutta. The pressure-deficiency at the centre of the storm at this stage must have been about 0·40". The severe storm then weakened into one of moderate intensity and was centred at 17 hrs. close to Calcutta. It remained practically stationary till the morning of the 8th and then moving westwards weakened further and lay as a depression with centre about 100 miles to the eastsoutheast of Pendra on the morning of the 9th and about 80 miles northwest of Raipur next morning. The depression filled up in the course of the next 36 hours.

The storm was responsible for widespread and locally heavy rain in Orissa, the Central Provinces and Berar. The noteworthy district averages of rainfall as well as the specially heavy falls are given in the table below :—

TABLE 5.

District.	District averages recorded on								Particularly heavy falls.
	7th.	8th.	9th.	10th.	11th.	12th.	13th.	14th.	
	"	"	"	"	"	"	"	"	
Cuttack	2·8	..	..	..	..	2·0	..	..	
Balasore	4·1	4·4	..	..	..	..	..	..	
Puri	3·4	2·2	..	..	..	..	..	..	—
Sambalpur	..	3·6	5·6	..	..	..	..	..	
Midnapore	2·0	..	..	..	..	..	..	..	
Darjeeling	..	2·6	..	..	..	..	..	..	
Drug	..	..	3·8	3·5	..	..	3·4	..	

TABLE 5—*contd.*

District.	District averages recorded on								Particularly heavy falls.
	7th.	8th.	9th.	10th.	11th.	12th.	13th.	14th.	
	"	"	"	"	"	"	"	"	
Raipur	..	..	5·4	2·3	..	..	1·8	..	Dhamtari 11·3" and Rudri 12·7" on 13th.
Chanda	..	..	..	3·3	..	..	4·6	2·1	
Bhandara	..	..	..	7·9	..	..	3·4	..	Pangree 10·2" and Gomdho 10·4" on 10th.
Balaghat	..	..	1·6	1·9	..	1·6	2·1	..	
Betul	..	..	..	1·8	3·0	..	2·8	..	
Wardha	..	..	..	..	..	..	3·0	2·5	
Nagpur	..	..	..	2·4	..	..	3·5	2·6	
Amraoti	..	..	..	2·9	2·6	..	1·8	1·7	

This severe storm following closely in the wake of the preceding one which flooded large tracts of Orissa, added to its troubles by causing further heavy downpour. Many villages were submerged and river embankments burst in the Balasore District rendering many people homeless. Railway traffic was also disorganised in some parts of the east Central Provinces due to heavy rain causing breaches on the railway track.

6. Unsettled conditions of 18th to 20th July 1940 in the Arabian Sea.—Weather became unsettled off the Kathiawar-Konkan coast on the morning of the 18th and by the evening of the same day an area of low pressure appeared over that region. Moving slightly northwestwards it became unimportant by the 20th morning.

Under the influence of this low pressure area, extension of the monsoon took place into Kathiawar, Rajputana, Sind and Baluchistan.

7. The Bay of Bengal storm of 1st to 11th August 1940.—Conditions became unsettled at the head of the Bay of Bengal on the morning of the 1st. The unsettled conditions concentrated into a depression by the same afternoon with centre at 17 hrs. about 60 miles southeast of Calcutta. The depression intensified into a storm by 5 hrs. of the 2nd and remained practically stationary till 8 hrs. of the same day. The pressure deficiency at the centre of the storm at this stage must have been about 0·25". The storm then took a northwesterly course, weakening at the same time, and lay as a deep depression centred at 8 hrs. of the 3rd about 90 miles to the north-northwest of Calcutta. Then it moved in a direction between west and northwest and lay over Chota Nagpur on the 4th, the east United Provinces between the 5th and 7th and the west United Provinces between the 8th and 10th. It filled up near Bareilly (west U. P.) by the morning of the 11th.

The depression was responsible for widespread and locally heavy rain along and near its track. The noteworthy district averages of rainfall as well as the particularly heavy falls are given below :—

TABLE 6.

District.	District averages recorded on									Particularly heavy falls.
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	
	"	"	"	"	"	"	"	"	"	
Balasore	2·4	1·7	..	..	..	..	..	..	..	
24-Parganas	1·5	1·5	1·6	..	..	..	..	..	..	Saugor Island 11·3" in 48 hours ending at 8 hrs. on 2nd.
Bankura	..	..	2·0	..	..	..	..	..	..	
Midnapore	2·2	2·8	1·7	..	..	..	..	..	..	
Hooghly	..	1·7	1·9	..	..	..	..	..	..	
Howrah	..	..	2·6	..	..	..	..	..	..	
Dinajpur	..	..	..	..	1·7	1·6	..	..	..	

TABLE 6—*contd.*

District.	District averages recorded on									Particularly heavy falls.
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	
	"	"	"	"	"	"	"	"	"	
Jalpaiguri	..	..	..	..	..	2·2	1·9	..	..	
Darjeeling	..	..	..	..	..	..	2·6	..	..	
Dacca	..	..	2·3	..	..	..	..	..	..	
Backerganj	..	..	3·3	1·5	..	..	..	..	..	
Chittagong	..	2·4	3·5	..	..	..	..	..	..	
Palamau	..	..	..	2·9	..	..	..	..	..	
Malwa Agency	1·5	1·5	..	..	..	..	..	..	..	
Rewa State	..	..	..	1·9	1·5	..	..	..	..	
Bundelkhand	..	..	..	..	2·6	..	..	..	..	
Bulandshahr	..	..	..	..	..	..	..	3·0	..	
Aligarh	..	..	..	..	..	..	..	2·5	1·7	
Agra	..	..	..	..	..	..	1·7	3·1	..	
Mainpuri	..	..	..	..	..	..	1·7	2·7	4·2	
Etah	..	..	..	..	..	..	..	3·7	6·2	
Bareilly	..	..	..	..	..	..	..	3·1	1·6	
Budaun	..	..	..	..	..	..	..	3·6	2·8	
Moradabad	..	..	..	..	..	..	..	..	2·0	
Shahjahanpur	..	..	..	..	..	..	..	3·9	2·5	
Farrukhabad	..	..	..	..	..	..	..	4·0	2·5	
Cawnpore	..	..	..	..	..	..	1·7	2·4	..	
Jalaun	..	..	..	..	..	..	3·3	..	..	
Hamirpur	..	..	..	..	..	2·7	..	..	..	
Banda	..	..	..	1·7	2·4	..	..	..	..	
Ballia	..	..	..	..	..	..	1·5	3·5	..	
Lucknow	2·5	..	..	..	..	..	3·6	..	..	
Unao	..	..	..	..	..	..	..	..	3·2	
Sitapur	..	..	..	..	..	..	..	1·9	1·5	
Hardoi	..	..	..	..	..	..	1·9	3·7	..	
Kheri	3·3	..	..	..	..	..	..	..	..	
Fyzabad	..	..	..	..	..	1·7	1·6	..	..	
Bahraich	..	..	..	..	..	..	..	2·1	..	
Sultanpur	..	..	..	..	..	2·2	..	..	..	
Batul	..	..	2·1	..	..	..	..	..	..	

8. Depression of 11th to 16th August 1940 in the Bay of Bengal.—The upper winds over Calcutta and Sambalpur on the afternoon of the 11th indicated that weather was unsettled off the Orissa-Circars coast. The unsettled conditions became more marked on the 12th morning and by 22 hrs. of the same day a depression had developed with centre close to the coast near Puri. The depression crossed the coast soon afterwards and was centred about 50 miles to the westsouthwest of Puri at 2 hrs. of the 13th. It then moved westnorthwest and lay with its centre midway between

Chanda and Kankar on the morning of the 13th and about 20 miles west of Khandwa at 8 hrs. on the next day. The depression merged into the seasonal trough of low pressure over northwest India by the 15th morning but regenerated into a shallow low over Sind and west Rajputana on the morning of the 16th. The low became unimportant within the next 24 hours.

The depression was responsible for widespread rain with locally heavy falls over the region from the east Central Provinces to Gujarat and northeast Baluchistan between the 12th and 16th.

The noteworthy district averages of rainfall as well as the specially heavy falls are given in the table below :—

TABLE 7.

District.	District averages recorded on					Particularly heavy falls.
	12th.	13th.	14th.	15th.	16th.	
	"	"	"	"	"	
Jubbulpore	..	..	..	..	2·1	
Mandla	..	..	..	..	2·2	
Nagpur	2·3	..	..	..	..	
Ahmedabad	..	..	..	2·7	..	
Broach and Panch Mahals.	..	..	2·6	2·0	..	
Surat	..	..	4·1	..	..	
Rajpipla State	..	..	5·6	..	..	Valia 10·2" on 14th.
Jambhughoda	..	..	2·3	..	..	
Dharampur	..	..	5·0	7·7	..	
Sachin	..	..	8·1	..	..	
Bansda	..	..	..	3·0	..	
Cambay	..	..	..	2·8	..	
Baroda State	..	..	..	..	..	Mangrol 9·2" on 13th.
Rajkot	..	..	..	2·6	..	
Navanagar	..	..	..	2·2	2·8	
Gondal	..	..	2·3	2·9	..	

TABLE 7—*contd.*

District.	District averages recorded on					Particularly heavy falls.
	12th.	13th.	14th.	15th.	16th.	
	"	"	"	"	"	
Jetpur	..	..	..	4·5	..	
Jafarabad	..	..	3·6	..	..	
Songad	..	..	2·3	3·4	..	
Bhavnagar	..	..	2·3	3·3	..	
Mahua	..	2·5	..	..	..	
Palitana	..	..	..	2·5	..	
Jasdan	..	..	2·1	..	..	
Dhrangadhra	..	..	..	..	2·1	
Bajana	..	..	..	3·1	..	
Palanpur	..	..	..	2·1	..	
Shahpura	..	..	..	..	5·1	
Partabgarh	..	..	3·1	..	..	

9. Depression of 18th to 26th August 1940 in the Bay of Bengal.— A low pressure system appeared over the east Central Provinces and Orissa on the morning of the 17th. It extended into the Bay of Bengal off the Orissa-Circars coast by the next morning causing markedly unsettled weather there. The unsettled conditions persisted during the next two days and by 8 hrs. of the 20th, a depression developed with centre about 100 miles to the southeast of Puri. The depression remained practically stationary till the morning of the 21st. It then moved northwestwards, and after passing inland across the Orissa coast the same afternoon it was centred about 50 miles to the northwest of Chandbali at 8 hrs. of the 22nd. Thereafter the depression took a westnorthwesterly course across the central parts of the country and lay with its centre near Kotah (east Rajputana) at 8 hrs. on the 26th. It became unimportant by the morning of the 27th.

The depression was responsible for causing locally heavy rainfall in Orissa, the Central Provinces, Central India and Rajputana and active monsoon in the north Deccan, the Konkan and Malabar during its movement.

The district averages of rainfall as well as the specially heavy falls are given in the table below :—

TABLE 8.

District.	District averages recorded on									Particularly heavy falls.
	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.	26th.	
	"	"	"	"	"	"	"	"	"	
Sambalpur	..	..	..	..	1·6	2·0	..	..	..	
Ganjam	..	..	..	2·9	3·9	..	..	..	..	Balandapara 10·3" on 22nd.
Koraput	..	..	..	2·5	..	..	..	..	..	

TABLE 8—*contd.*

District.	District averages recorded on									Particularly heavy falls.
	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.	26th.	
	"	"	"	"	"	"	"	"	"	
Sonepur	..	..	..	..	2·3	3·5	..	..	..	
Dhenkanal	..	..	..	..	1·9	1·8	..	..	..	
Keonjhar	..	..	..	..	..	2·6	..	..	..	
Ranpur	..	..	..	4·3	3·7	..	..	..	..	
Athmallik	..	..	..	..	1·9	1·9	..	..	..	
Hindol	..	..	..	1·5	2·3	..	..	..	..	
Baudh	..	..	..	..	2·6	..	..	..	..	
Khandpara	..	..	..	..	2·2	..	..	..	..	
Daspalla	..	..	..	..	..	2·6	..	..	..	
Gangpur	..	..	..	..	..	..	..	..	2·3	
Drug	..	..	..	..	..	3·8	1·5	..	..	
Bilaspur	..	..	..	..	1·6	4·0	2·6	..	..	Bilaspur 10·7" on 23rd.
Saugor	..	..	..	..	..	..	2·9	..	..	
Jubbulpore	..	..	..	..	..	..	2·6	..	..	
Mandla	..	..	..	..	..	..	2·7	..	..	
Chanda	2·3	..	..	..	..	..	..	..	..	
Bhandara	..	..	..	..	..	2·4	2·3	..	..	
Balaghat	..	..	..	..	..	1·9	3·3	..	..	
Hoshangabad	..	..	..	..	..	1·7	3·0	..	..	
Chhindwara	..	..	..	..	..	1·5	4·1	..	..	
Gwalior	..	..	..	..	..	..	2·4	..	..	
Indore	..	..	..	..	..	..	3·4	..	..	Mahidpur 11·0" on 24th.
Bhopal	..	..	..	..	..	..	1·9	1·7	..	Talen 11·1" on 25th.
Malwa Agency	..	..	..	..	..	..	3·0	2·9	..	
Bundelkhand	..	..	..	..	..	1·9	2·1	..	..	
Kotah	..	..	..	..	..	..	..	2·9	..	
Tonk	..	..	..	..	..	..	..	4·1	..	Pirawa 10·0" on 25th.
Shahpura	..	..	..	..	..	..	4·2	1·5	..	
Bundi	..	..	..	..	..	..	3·0	..	..	
Jhalwar	..	..	..	..	1·7	2·5	..	8·8	..	Dug 13·6" on 25th.
Partapgarh	..	..	..	..	..	..	5·4	4·9	..	
Sirohi	..	..	..	..	..	..	..	..	3·7	Abu Observatory 10·8" on 26th.
Udaipur	..	..	..	..	..	..	..	..	2·7	

According to press reports, the heavy rainfall near Bilaspur caused breaches in the railway track between Bilaspur and Raipur and the mail trains had to be diverted. A large part of Bilaspur was also reported to have been under water and many houses collapsed.

10. Depression of 26th August to 1st September 1940 in the Bay of Bengal.—In association with a low pressure wave which travelled westwards across central Burma, a depression formed at the head of the Bay of Bengal on the 26th with centre at 8 hrs. about 100 miles eastsoutheast of Calcutta,

The depression moved in a westerly direction and was centred about 40 miles to the eastnortheast of Saugor Island at 8 hrs. on the 27th and near Krishnagar next morning. Weakening thereafter, the depression took a westnorthwesterly course and was centred in the neighbourhood of Benares at 8 hrs. on the 30th. It then became diffused and lay as a shallow low extending from Patna to Naya Dumka on the morning of the 31st. It became unimportant within the next 24 hours.

The depression was responsible for widespread and locally heavy rain along and near its track. It also activated the monsoon in Gujarat, east Rajputana, west Central India and the west Central Provinces.

The noteworthy district averages of rainfall as well as the exceptionally heavy falls are given in the table below :—

TABLE 9.

District.	District averages recorded on								Particularly heavy falls.
	26th Aug.	27th Aug.	28th Aug.	29th Aug.	30th Aug.	31st Aug.	1st Sept.	2nd Sept.	
	"	"	"	"	"	"	"	"	
Bankura . .	..	2·4	2·8	..	..	..	..	..	
Midnapore . .	..	3·4	2·2	..	..	..	..	..	Nayabasan 11·5" on 27th and Goaltore 11·5" on 28th August.
Jalpaiguri . .	..	..	..	..	..	..	2·1	3·0	
Fatehpur . .	..	..	..	..	2·3	..	..	..	
Allahabad . .	..	..	..	2·2	3·2	..	..	..	
Benares . . .	..	..	..	7·6	3·3	..	..	..	
Mirzapur . .	..	..	..	..	5·5	4·3	..	..	
Jaunpur . . .	..	..	..	4·0	5·9	1·9	..	..	
Ghazipur . .	..	..	..	11·8	..	..	..	..	Saidpur Bhitari 16·9" and Ghazipur 13·7" on 29th August.
Azamgarh . .	..	..	..	2·6	1·7	..	..	..	
Fyzabad . .	..	..	..	..	2·5	..	..	..	
Sultanpur . .	..	..	..	1·9	2·2	1·7	..	..	
Partabgarh . .	..	..	..	2·2	2·2	..	..	..	
Gaya . . .	..	1·8	4·5	..	5·0	..	..	..	Sherghati 10·7" on 28th and Sherghati 16·0" and Aurangabad 13·5" on 29th August.
Shahabad . .	..	..	2·5	4·7	..	..	..	..	Mahania 10·1" on 28th and Sasaram 10·5" and Chand 15·0" on 29th August.
Hazaribagh . .	..	2·3	2·3	2·0	..	..	..	..	Hunterganj 10·9" on 29th August.
Palamau . .	..	..	1·8	2·9	..	..	..	..	
Manbhum . .	..	2·2	2·9	..	..	..	..	..	
Singbhum . .	..	2·6	1·9	..	..	..	..	..	
Balasore . . .	1·8	2·1	..	..	..	..	..	..	

11. Depression of the 14th to 24th September 1940 in the Bay of Bengal.—Weather became unsettled in the north and west central Bay of Bengal on the morning of the 14th, and a depression formed by 8 hrs. of the 15th with central region about 300 miles east of Cocanada*. The depression remained practically stationary during the next 24 hours and then moving westnorthwestwards crossed the coast between Vizagapatam and Calingapatam at about 2 hours of the 17th. Continuing to move westnorthwest, it lay at 8 hrs. of the same day with its centre about 60 miles southwest of Jagdalpur and at 8 hrs. of the 19th about 100 miles to the northeast of Surat. It then took an unusual course. Moving southwestwards it lay on the morning of the 20th with its centre near Surat. Thereafter it moved eastnortheast and weakened

* Position cannot be given more definitely due to lack of ships' observations.

By the morning of the 21st its central region was near Khandwa and the next morning it lay as a shallow low over east Central India. The shallow low moved into the United Provinces by the morning of the 23rd and became unimportant in the course of the next 24 hours.

The depression strengthened the Arabian Sea current of the monsoon and caused fairly widespread heavy rain along the west coast and widespread and locally heavy rain in the tract from east Gujarat to the United Provinces. The noteworthy district averages of rainfall as well as the particularly heavy falls are given below :—

TABLE 10.

District.	District averages recorded on								Particularly heavy falls.
	17th.	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	
	"	"	"	"	"	"	"	"	
Purnea . . .	..	..	..	..	..	..	..	2·2	Gondwara 9·7" on 24th.
Shahjahanpur . .	3·1	..	..	..	..	..	..	..	
Farrukhabad . .	2·0	..	..	..	..	..	..	..	
Allahabad . .	..	..	..	..	..	2·0	..	..	
Banda . . .	..	..	..	..	..	2·1	..	..	
Sitapur . . .	2·1	..	..	..	..	..	..	..	
Kheri . . .	2·0	..	..	..	..	..	..	..	
Azamgarh . .	..	..	..	..	..	..	1·9	..	
Surat . . .	..	..	..	..	6·7	4·3	..	..	Bulsar 13·7" on 20th; Surat 9·6" and Mandvi 9·8" on 21st.
Rajpipla . . .	..	..	..	1·9	3·9	..	..	..	
Dharampur . .	..	..	1·7	5·0	1·8	..	..	..	
Sachin . . .	..	..	4·1	7·7	3·7	2·1	..	..	
Bansda . . .	..	..	2·1	6·6	7·5	2·9	..	..	
Chota Udaipur. .	..	..	..	..	2·4	..	..	..	
Baria . . .	..	..	..	..	..	2·5	..	..	
Jambughoda . .	..	..	..	..	2·1	..	..	..	
Saugor . . .	..	..	..	..	..	2·1	..	..	
Thana . . .	..	..	2·6	7·0	..	..	..	..	Mahim 11·3", Dahanu 12·7" and Thana 9·6" on 20th.
Colaba . . .	..	1·5	5·2	4·8	..	..	..	..	
Ratnagiri . .	..	1·9	2·5	..	..	..	..	..	
Savantvadi . .	..	1·8	2·8	..	..	..	..	..	
Bombay Observatory	..	..	3·5	4·5	..	..	..	..	
Bombay Suburb Kurla.	..	..	2·1	13·4	..	..	..	..	Kurla 13·4" on 20th.
Poona . . .	..	2·5	..	..	..	..	..	..	
Savnur . . .	2·1	..	..	..	..	..	..	..	
Bhor . . .	..	..	..	2·0	..	..	..	..	
Aundh . . .	..	2·1	..	..	..	..	..	..	

12. Depression of 17th to 21st September 1940 in the Andaman Sea and the Bay of Bengal.—In association with a low pressure wave which travelled westwards across Lower Burma, weather became unsettled in the Andaman Sea on the evening of the 17th. The unsettled conditions concentrated into a depression by 8 hrs. of the 18th with central region about 180 miles south of Rangoon. The depression remained practically stationary till 17 hrs. of the 19th, and then moving

northwestwards, was centred at 2 hrs. of the 20th about 30 miles south of Diamond Island. It then passed into the east central Bay of Bengal and was centred at 8 hrs. of the same day about 100 miles westsouthwest of Gwa. At 8 hrs. of the 21st the depression lay with its centre about 180 miles westsouthwest of Akyab. It then weakened and filled up by the same evening.

The depression stimulated the Bay of Bengal branch of the monsoon and caused widespread and locally heavy rain in Burma between the 19th and 24th and fairly widespread thundershowers in Bengal and Assam from the 21st to 25th. The noteworthy district averages of rainfall are given in the table below :—

*TABLE 11.

District.	District averages recorded on									Particularly heavy falls.
	17th.	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.	
	"	"	"	"	"	"	"	"	"	
Mergui	..	1·6	1·6	..	..	..	..	..	..	
Tavoy	..	..	2·1	..	..	..	..	..	..	
Amherst	..	..	1·8	1·8	..	..	..	..	..	
Thaton	..	..	1·8	1·5	..	..	..	..	..	
Sandoway	..	..	..	2·4	2·1	..	..	..	..	
Kyaukpyu	..	..	..	..	2·2	1·6	..	..	..	
Akyab	..	..	..	..	2·8	1·9	1·6	2·3	1·6	
Arakan Hill Tracts	..	..	..	..	..	2·2	1·9	1·9	..	

13. Severe storm of 9th to 20th October 1940 in the Arabian Sea.—Pressure started falling along the Konkan-Kanara coast on the morning of the 6th, and on the morning of the 7th an area of negative pressure departures appeared off the Malabar-Kanara coast with relatively high positive departures over the Peninsula and the central parts of the country. By the morning of the 8th the monsoon had strengthened in the southeast Arabian Sea as evidenced by the increase in speed of the upper winds over Colombo and Mannar and the moderate to heavy rain reported from Minicoy and Colombo. With a further strengthening and northward extension of the monsoon, a shallow low appeared over the southeast Arabian Sea on the 9th with central region at 8 hrs. about 80 miles to the east northeast of Amini Devi. Minicoy had 4" of rain during the 24 hours ending at 8 hrs. on the 9th and rainfall extended into the south Deccan during this period. After an initial movement towards the northwest, the shallow low took a northerly course and was centred near Lat. 14½° N. and Long. 70½° E. at 8 hrs. of the 12th. At this time the cyclonic circulation extended at least up to 6 kms. Continuing to move slowly northwards the depression lay with its centre at 8 hrs. on the 14th near Lat. 15½°N. and Long. 70½°E. Then followed an incursion of northerly land air into the field of the depression between 3 and 4 kms. This apparently resulted in the intensification of the depression which became deep by 8 hrs. of the 15th when it was centred near Lat. 16°N. and Long. 70½°E. Moving northeastwards the depression rapidly developed into a storm by the 15th evening. Bombay then had a negative pressure departure from normal of 0·17". The following morning at 2 hrs. Bombay recorded a further fall of pressure, the departure from normal reaching 0·26". The microseisms at Bombay and Calcutta show that the depression developed into a storm by the evening of the 15th and that it became a cyclone of severe intensity during the night of the 15th-16th. The surface wind at Bombay was blowing in an eastnortheasterly direction with force 6 on the Beaufort Scale at 2 hrs. This indicated the approach of the storm towards the Bombay coast. The storm intensified further and by early morning when it struck Bombay, it had become a severe cyclone with a ring of hurricane winds around the centre. Colaba observatory recorded gales from 4 A.M. (Standard Time) until about 2 P.M., the maximum wind force being at about 8 A.M. when a gust of 75 miles per hour was recorded. From 8 A.M. to 9·30 A.M. the mean wind speed approached 60 miles per hour. The pressure deficiency at the centre of the cyclone on the 16th morning, as can be judged from the Bombay observations, was at least 0·50". The microseisms at Colaba were the strongest ever recorded there and at as far a distance as Calcutta the ground shook in quite strong microseisms. The centre of the cyclone passed inland north of Bombay on the 16th afternoon and weakened thereafter. It persisted near Surat till the 19th and blew itself out by the next day.

The gales and high seas raised by the cyclone did much damage to countrycraft and fishing boats and to standing crops along the whole coast line between Ratnagiri and Surat. The loss of life among the fishermen was heavy. The estimate of total damage exceeds 25 lakhs of rupees.

14. Storm of 19th to 22nd October 1940 in the Bay of Bengal.—Weather became unsettled over the central Bay of Bengal on the morning of the 19th and a depression formed off the Orissa coast by 2 hrs. of the 20th with central region about 150 miles southeast of Puri. Remaining practically stationary till 17 hrs. of the same day, the depression deepened. The deep depression then moved northnortheastwards intensifying at the same time and was centred about 45 miles southsouthwest of Sandheads at 5 hrs. of the 21st. At 8 hrs. of the same day the deep depression lay with its

*Taken from the monthly rainfall tables of the Government of Burma.

centre close to Sandheads. It intensified into a storm by 19* hrs. of the 21st without appreciable movement. Subsequently it moved northnortheastwards and at 23 hrs. of the 21st, its centre was about 45 miles to the southeast of Saugor Island. At 2 hrs. of the 22nd it was centred about 30 miles southwest of Khulna, which recorded a pressure departure of —0·42″, and at 8 hrs. of the same day the storm was centred near Narayanganj. Thereafter it weakened rapidly while moving in the same direction and filled up over southeast Bengal by 17 hrs. of the same day.

The storm caused widespread and locally heavy rain in Assam, south and east Bengal and along the Orissa coast. The noteworthy district averages as well as the particularly heavy falls are given below :—

TABLE 12.

District.	District averages recorded on				Particularly heavy falls.
	20th.	21st.	22nd.	23rd.	
	″	″	″	″	
Nowgong	..	..	2·2	..	
Sibsagar	..	..	1·9	..	
Lakhimpur	..	..	..	1·9	
Khasi and Jaintia Hills.	..	2·1	4·3	4·7	Mawsynram 8·5″ on 21st, Mawsynram 6·9″ and Cherrapunji 5·5″ on 22nd and Cherrapunji 7·6″ and Shillong 6·0″ on 23rd.
Cachar	..	..	2·2	.	
Sadiya Frontier Tract.	..	..	..	3·2	Denning 6·6″ on 23rd.
Baliapara Frontier Tract.	..	..	..	1·8	
Lushai Hills	..	..	..	1·5	
24-Parganas	..	..	1·8	..	
Jessore	..	2·1	..	..	Narail 5·7″ on 21st.
Khulna	..	1·8	2·7	..	
Dacca	..	..	3·4	..	
Faridpur	..	1·8	2·2	..	Faridpur (Observatory) 7·6″ on 22nd.
Backerganj	..	2·0	..	..	
Chittagong	..	..	2·2	..	
Balasore	2·0	1·9	..	..	Soro 7·3″ on 20th.

15. Severe storm of 3rd to 13th November 1940 in the Arabian Sea.—On the morning of the 31st October, the nature of the pressure chart and the widespread and locally heavy rainfall reported from the stations along the Coromandel coast indicated that conditions were becoming unsettled in the southwest Bay of Bengal in the neighbourhood of Ceylon. The unsettled conditions persisted in the southwest Bay till the evening of the 1st. By the next morning the upper winds over Trivandrum, which had been light westsouthwest to westnorthwest up to 1 km. on the previous evening, had changed to southeast or south and were blowing with force 3 to 5 on the Beaufort Scale up to 2 kms. These observations suggested that the unsettled conditions in the southwest Bay of Bengal had moved into the southeast Arabian Sea. By the morning of the 3rd, the unsettled weather had concentrated into a depression, the central region at 8 hrs. being in the neighbourhood of Lat. 10°N. and Long. 74°E. and the cyclonic circulation extending up to 4 kms. The depression moved in a westerly direction, intensifying at the same time, and by 17 hrs. of the 4th developed into a storm of small extent with centre near Lat. 10°N., Long. 71°E. Moving in a westnorthwesterly direction initially, and northwestwards later, the storm intensified and was centred near Lat. 13°N., Long. 58°E. on the 9th morning as a severe cyclone. Intensifying further as it moved northwestwards, it was most severe at about 16 hrs. on the 10th, when it was centred near Lat. 14½°N., Long. 57½°E. The pressure deficiency at the centre of the cyclone at this stage must have been at least 1″. The cyclone then curved to northeast and lay with centre near Lat. 15°N., Long. 58°E. on the morning of the 11th. During the subsequent northeasterly movement, it weakened rapidly and became unimportant by the 13th. In association with this disturbance the northeast monsoon was active in south Madras on the first five days of November. Negapatam had 10″ of rain on the 5th.

16. Unsettled conditions of 7th to 9th November 1940 in the Arabian Sea.—Conditions became temporarily unsettled in the southeast Arabian Sea on the morning of the 7th when a feeble cyclonic circulation was noticed to the west of Ceylon. There was, however, no further development of the unsettled conditions and they became unimportant by the 9th.

In association with this unsettled weather widespread and locally heavy precipitation occurred in the extreme south of the Peninsula and in Ceylon. Trincomalee reported 4″ of rain on the 7th morning and Negapatam and Pamban 3″ each on the 8th.

17. Depression of 11th to 18th November 1940 in the Bay of Bengal and the Arabian Sea.—Weather became unsettled in the southwest Bay of Bengal on the morning of the 11th and a depression formed by 17 hrs. of the same day with its central region about 170 miles southeast of Madras. Moving in a westerly direction the depression crossed the Coromandel coast during the night and was centred about 50 miles southwest of Cuddalore at 8 hrs. on the 12th. It then passed out into the Arabian Sea across Malabar and was centred near Lat. 11°N., Long. 74°E. on the 13th morning. By this time the cyclonic circulation had extended at least up to 4 kms. Moving in a westerly direction the depression apparently deepened a little during the course of the day and was centred near Lat. 11°N., Long. 72°E. at 8 hrs. on the 14th. Amini Devi experienced vigorous squalls at 1730 hrs. and again at 21 hrs. on the 13th. The depression remained practically stationary for the next three days and became unimportant by the 18th.

Associated with this depression there was widespread and locally heavy rain in the Madras Presidency and Mysore between the 10th and 15th. Some of the noteworthy amounts are Madras and Nellore 5″ each and Vellore 4″ on the 11th, Nellore 6″ and Bangalore 3″ on the 12th and Cochin 4″ on the 13th.

18. Bay of Bengal storm of 14th to 24th November 1940.—The track of this storm is very difficult to determine owing to the absence of ships' observations. The storm was for most of its life, well away from the coast, so that none of the coastal observations could help to gauge its intensity or its exact direction of movement. In fact, it is not even certain whether the disturbance reached the storm-stage during any part of its life. Hence the account of the storm as given below may require considerable alteration if and when data from ships are available.

*Hourly observations are available for this storm. The wind force at Sandheads first rose to 8 B. S. at 19 hrs. only.

On the morning of the 13th, in association with a depression over the southeast Arabian Sea, the upper winds over Madras were blowing from eastsoutheast to southsoutheast at all levels up to 3 kms. The winds over Vizagapatam on this morning were from an easterly or northeasterly direction. By the afternoon of the 14th, the depression in the Arabian Sea had moved away westwards and the upper winds over Madras had backed to east or northeast at least up to 1·5 km., while the winds over Car Nicobar and Port Blair, which had been northeasterly or easterly on the 13th morning, changed to southsoutheast up to 3 km. It was also observed that there had been widespread rain with thunderstorms along the Coromandel and Ceylon coasts since the afternoon of the 13th. These observations suggested that, with the westward movement of the depression in the Arabian Sea, the northeast monsoon air swept into the south Bay of Bengal and conditions became unsettled there on the afternoon of the 14th. Next morning, a marked fall of pressure was noticed in the west central Bay of Bengal and an area of significant negative pressure departures appeared off the Coromandel-Circars coast. At the same time, the speed of the upper winds over Vizagapatam had increased generally at all levels and was 30-40 m.p.h. above 1·0 km. These facts indicated that the cyclonic circulation had moved northwards and concentrated into a depression with its central region at 8 hrs. near Lat. 13°N. and Long. 85°E. The depression then moved north and was centred at 8 hrs. of the 16th within a degree of Lat. 14°N. and Long. 85°E. By this time there was also a further strengthening of the upper winds over Vizagapatam and Madras, suggesting that the depression had probably intensified into a storm. Curving northeastwards, the storm lay with its centre near Lat. 16°N. and Long. 87°E. at 8 hrs. on the 17th and near Lat. 19°N. and Long. 89°E. at 8 hrs. on the 19th. The pressure deficiency at the centre of the storm at this stage may have been about 0·30″.

The subsequent history of this storm is obscure on account of the lack of ships' observations. Perhaps the storm steadily weakened in the north Bay after the 19th and the seasonal trough of low pressure gradually re-established itself over the south Bay of Bengal by the 24th. The coastal observations given below also suggest an alternative view :—

(1) The negative pressure departures of about 0·25″ or more in the north and central Bay of Beng a which existed on the morning of the 19th decreased gradually but shifted southwards and on the 22nd and 23rd were fairly concentrated and close to the south Circars and Coromandel coasts. They became diffused and unimportant by the 24th morning.

(2) The upper winds over Madras which were northerly or northeasterly below 1·5 kms. on the 19th changed to north or northwest on the 20th.

(3) The isobaric charts of the 21st and 22nd showed a feeble cyclonic circulation off the coast between Cocanada and Cuddalore.

(4) On the morning of the 21st the stations around the head of the Bay of Bengal were clear or partly clouded while along the Circars-Coromandel coast skies were becoming overcast.

(5) Widespread rain fell along the coast from Nellore to Pamban during the 24 hours ending at 8 hrs. on the 23rd. Nellore reported 3″ on the 23rd morning.

These observations suggest that some low pressure system from the north Bay of Bengal began to move southwestwards on the 19th or 20th, weakening at the same time and became unimportant over the southwest Bay of Bengal on the 24th. The track of this low pressure system is shown with question marks in *Plate I*. Such a retrograde motion of a depression would however be most unusual and can therefore be accepted as a fact only when data from ships are available.

19. Depression of 19th to 23rd December 1940 in the Bay of Bengal.—With a strengthening of the northeast monsoon in the Andaman Sea and the southeast Bay of Bengal on the morning of the 18th, conditions became unsettled there. A depression formed by 8 hrs. of the 20th with centre about 50 miles to the southwest of Port Blair. The depression moved northnortheastwards and at 8 hrs. of the 21st, its centre was about 80* miles to the southwest of Diamond Island. It then moved northwards and was centred at 8 hrs. of the 22nd within a degree of Lat. 18°N., Long. 93°E. Thereafter moving to the northeast, the centre of the depression lay close to the Arakan coast between Kyaukpyu and Sandoway at 2 hrs. of the 23rd. It then crossed the Arakan coast and, at 8 hrs. of the same day, lay as a shallow depression over central Burma. It filled up by the same evening.

The depression caused widespread rain and a few heavy falls in Burma between the 22nd and 24th.

WESTERN DISTURBANCES.

Western disturbances were unusually active for about a month commencing from the second week of January and in March. During these periods, they took a comparatively southerly course and induced active secondaries over Gujarat or the central parts of the country. The quick succession of active disturbances in March produced a spell of abnormally wet weather over the region extending from Sind and Gujarat to northeast India and unusually cool days over most parts of the country during that month. During the rest of the year the disturbances were comparatively feeble and gave less rainfall than usual in northwest India.

A list of the disturbances (seventy-nine in number) together with a brief summary of the precipitation caused by them is given in *Table 13*. Details of the individual disturbances are given in the Monthly Weather Reviews for the different months.

*These positions are rough estimates only.

TABLE 13.

Nature of precipitation caused by the western disturbances.	Number of western disturbances.											
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Widespread	5	5	6	2	0	2	0	0	3	1	0	3
Local or Scattered . . .	2	2	3	4	6	1	0	0	1	0	0	1
Little or no rain . . .	3	2	0	4	5	2	0	0	2	4	6	4
No. of disturbances each month	10	9	9	10	11	5	0	0	6	5	6	8

Total No. of Western Disturbances during the year 1940 79

LOCAL STORMS.

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

Place.	Date.	Time.	Character of storm.	Loss of human life.	REMARKS.
Lucknow (east U. P.)	13th Feb. 1940	Afternoon	Hailstorm	..	First hailstorm of season. Caused considerable damage to rabi crops.
Sonapur (Noakhali District, Bengal).	13th Feb. 1940	..	Nor'wester squall	..	An empty railway carriage blown off the lines and trees uprooted.
Chittagong (Bengal)	1st Mar. 1940	..	Severe hailstorm	1	....
Puri (Orissa)	12th Mar. 1940	10 A.M.	Waterspout	..	Observed over sea; a waterspout nearly 5 ft. in diameter shot up in the sky. The column of water drawn up from the sea remained in the air for over half an hour.
Bhilsa (Jhansi, west U. P.)	17th Mar. 1940	..	Hailstorm	..	Hailstorm as big as a hen's egg fell for an hour extensively damaging standing crops. Many animals and hundreds of birds killed and number of trees uprooted.
Brahmanbaria (Tipperah, Bengal).	18th Mar. 1940	Evening	Thunderstorm	..	Accompanied by heavy rain and caused serious damage to property and injuries to several persons. About 100 houses in town blown away and many trees uprooted.
Bundu, Tamar and other places in Ranchi District (Chota Nagpur).	Early during the 3rd week of March.	..	Hailstorm	..	Considerable damage to tiled roofs, fruit trees etc. At some places the hailstones were as big as eggs.
Lucknow District	25th Mar. 1940	Afternoon	Hailstorm	..	The storm raged for half an hour. Electric cables snapped at places by the weight of uprooted trees falling across them. Standing wheat crop also damaged.
Rajshahi District (Bengal)	29th Mar. 1940	..	Severe hailstorm and thunder-squalls.	..	Standing crops damaged.
Sibsagar (Assam)	12th April 1940	3 A.M.	Gale	..	Many houses blown off.
Inathganj (Sylhet, Assam)	19th April 1940	..	Hailstorm	..	Lasted one hour and completely laid waste the 'buro' crops.
Jaisalmar (Dholpur, Rajputana)	21st April 1940	..	Sandstorm	4	....
Nayagarh State (Cuttack, Orissa).	26th April 1940	..	Hailstorm	5	The storm was accompanied by heavy rain.
Jubbulpore (C. P.)	23rd April to 27th April 1940.	..	Thunderstorm	..	Considerable damage to the mango crop. The thunderstorm on 27th April 1940 caused damage to an aeroplane moored at the aerodrome. The plane was torn from its moorings.
Sylhet (Assam)	2nd May 1940	Evening	Hailstorm	..	Damage to crops especially paddy. Several trees uprooted.
Krishnagarh (Nadia, Bengal).	5th May 1940	Afternoon	Hailstorm	..	Many huts blown off and serious damage caused to Lichi, Mango and other crops.
Dhubri (Goalpara District, Assam).	16th May 1940	..	Thunderstorm	..	Severe damage to crops.
Tirupur (Coimbatore District, Madras Presidency).	14th May 1940	Night	Thunderstorm	..	Considerable damage to houses, factories and other property. Several trees uprooted.
Kangra Valley (The Punjab)	19th May 1940	..	Thunderstorm	4	Considerable damage to houses and famous orchards of the valley. There were also a number of casualties.
Between Panchalam and Tindivanan (South Arcot District, Madras).	28th May 1940	3·10 P.M.	Violent thunder-storm.	5	Squall came from southwest and hit a railway train broadside. 6 carriages of the train were derailed, killing 5 people and injuring about 61.

Plate.	Date.	Time.	Character of storm.	Loss of human life.	REMARKS.
Belgaum (Bombay Presidency) .	30th May 1940 .	..	Thunderstorm .	4	Two persons were also severely burnt.
Jubbulpore (C. P.) . . .	4th June 1940 .	..	Thunderstorm .	..	Caused damage to property worth about Rs. 2,000.
Dhuli (Almora District, U. P.)	5th June 1940 .	Night .	Thunderstorm .	1	....
Charghat (Rajshahi, Bengal) .	12th June 1940 .	Evening .	Thundersquall .	..	A steam-launch sank.
Bezwada (Kistna District, Madras).	3rd July 1940 .	Evening .	Severe thunder-storm.	Over 60	The storm lasted for one hour. A number of houses blown off. Two country boats carrying more than 30 passengers capsized and all the passengers were drowned.
Motihari (Champaran, Bihar) .	20th July 1940 .	Evening .	Thunderstorm .	3	....
About 80 villages in Gujranwala and Sheikhpura.	28th Nov. 1940 .	..	Hailstorm . .	..	Paddy crop chiefly damaged. A few heads of cattle also reported to have been destroyed.

GIPD—81—90 DG of Obs. Poona—18-2 42—410

REG. No. 1454 E'37. 1,500-1,100'38-1,100'39-1,100'40.-1,100'41. ENGRAVED HELIO S. I. O. CALCUTTA.

The portion of the track of the Arabian sea storm of 3rd to 13th Nov. outside the boundaries of this map, is defined by the following positions :-

7th	10° 3/4	Lat.	N.	64°	Long.	E.
8th	11° 1/2	"	"	61°	"	"
9th	13° 1/4	"	"	58 1/4°	"	"
10th	14°	"	"	57° 3/4	"	"

CIRCLE INDICATES POSITION OF CYCLONE OR DEPRESSION AT 8 HRS.

DOT " " " " " " " OTHER THAN 8 HRS.

- - - - - - - - - *Depression.* ——— *Storm.* ——— *Severe Storm.*

REG. No. 1454 E'37. 1,500-1,100'38-1,100'39-1,100'40-1,100'41.

ENGRAVED HELIO S. I. O CALCUTTA

CIRCLE INDICATES POSITION OF DEPRESSION AT 8 HRS.

DOT " " " " " OTHER THAN 8 HRS.

1891-1938
1892-1940

Registered No. B-3919

MONTHLY FREQUENCY TABLES

~~CONFIDENTIAL~~

of

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

January 1940

Supplement to the Monthly Weather Report, January 1940

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 April 1941.

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		2	1				4		24	26	7		2	1	1		1	4	1
ϕ = 27° 08′ N ...	26–50												2			1		1		5	
λ = 78° 01′ E ...	51–75																				
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	31		14	3						14	30	2	3	5			2	1	5	2
ϕ = 23° 02′ N ...	26–50													1	5				1		
λ = 72° 35′ E ...	51–75														2						
H_s = 55 metres ...	>75														1						
Bangalore ...	6–25	31		11	14	6						30	2	4	7	1		2			
ϕ = 12° 58′ N ...	26–50													5	7	1					
λ = 77° 35′ E ...	51–75														1						
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	31	1	3	1			1			25	31	5	6	3				1	3	
ϕ = 23° 15′ N ...	26–50												1	5	5			1	1		
λ = 69° 48′ E ...	51–75																				
H_s = 113 metres ...	>75																				
Chittagong ...	6–25	31	7	14							10	31	16	9	1						1
ϕ = 22° 21′ N ...	26–50												4								
λ = 91° 50′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Dacca ...	6–25	31									31	31	16	2	1	1	1		1	5	4
ϕ = 23° 43′ N ...	26–50																				
λ = 90° 24′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25	31		2	1			1			27	28	1	6	1	1	1	5	6	2	3
ϕ = 31° 21′ N ...	26–50												1					1			
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	31				2					29	31		1	11	9					
ϕ = 17° 26′ N ...	26–50														2	8					
λ = 78° 27′ E ...	51–75																				
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	31				15	1				15	30	1	8	8	2	4	1	2		
ϕ = 23° 10′ N ...	26–50													2	1			1			
λ = 79° 57′ E ...	51–75																				
H_s = 402 metres ...	>75																				
Lahore ...	6–25	31	2	1	2	1					25	26	2	1		1	2		1	14	2
ϕ = 31° 35′ N ...	26–50													1		1				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 metres ...	>75																				
Madras ...	6–25	31		1							30	31		16	7						
ϕ = 13° 04′ N ...	26–50													8							
λ = 80° 15′ E ...	51–75																				
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	31					1	1	3	5	21	31	4	2	8	7	2				
ϕ = 20° 33′ N ...	26–50														1	4	2		1		
λ = 74° 32′ E ...	51–75																				
H_s = 443 metres ...	>75																				
*Mangalore ...	6–25	26			26							26	4	3	5					2	1
ϕ = 12° 52′ N ...	26–50														10						
λ = 74° 51′ E ...	51–75														1						
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	31				1		8			22	30	5	2			1	1	4	9	8
ϕ = 34° 01′ N ...	26–50																				
λ = 71° 35′ E ...	51–75																				
H_s = 363 metres ...	>75																				
Poona ...	6–25	31		2			1	12			16	31		3	3	8	1			4	1
ϕ = 18° 32′ N ...	26–50													1		9			1		
λ = 73° 51′ E ...	51–75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	31	7	13				1		1	8	31	3	14	4	1					1
ϕ = 11° 40′ N ...	26–50			1									1	4	2					1	
λ = 92° 43′ E ...	51–75																				
H_s = 87 metres ...	>75																				
†Raj Samand (Kankroli)	6–25	25	1				1			12	10	22	2	3		10		2	3		1
ϕ = 25° 03′ N ...	26–50									1							1				
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				
Sambalpur ...	6–25	31									31	30	4	6	2	2	3	1	2	5	3
ϕ = 21° 28′ N ...	26–50												1	1							
λ = 83° 58′ E ...	51–75																				
H_s = 153 metres ...	>75																				
Tezpur ...	6–25	31		11	1			1			18	30		3	16	3	1	2	1		4
ϕ = 26° 37′ N ...	26–50																				
λ = 92° 47′ E ...	51–75																				
H_s = 80 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 ...	26	4		1	2		1	2	6	2	27	3						7	4	
ϕ = 27° 08′ N ...								1	7									4	8	
λ = 78° 01′ E ...																		1		
H_s = 182 metres ...																				
Ahmedabad ...	31	2		5	2	4	1	7	1	4	29		3			1	1	7	6	2
ϕ = 23° 02′ N ...				1	2			2									3	4		
λ = 72° 35′ E ...																		1		
H_s = 55 metres ...																				
Bangalore ...	31			26	3	1					28	5	5	3	2	1	2	2	1	2
ϕ = 12° 58′ N ...				1									1	3	1					
λ = 77° 35′ E ...																				
H_s = 936 metres ...																				
Bhuj ...	31	3	5	4	1	2		2	2	3	29	1		4		4	3	5	5	2
ϕ = 23° 15′ N ...			2	3			3		1							3		1		
λ = 69° 48′ E ...																	1			
H_s = 113 metres ...																				
Chittagong ...	31	11	1	2	4	2	2		3	3	31	2				2	2	7	8	
ϕ = 22° 21′ N ...		3										3					1	1	5	
λ = 91° 50′ E ...																				
H_s = 21 metres ...																				
Dacca ...	31	10	3	3	1	1		5	3	4	31	3	3		1			2	5	2
ϕ = 23° 43′ N ...		1																3	11	
λ = 90° 24′ E ...																			1	
H_s = 21 metres ...																				
Fort Sandeman ...											28	2	3		3		4	6	5	3
ϕ = 31° 21′ N ...												1					1			
λ = 69° 27′ E ...																				
H_s = 1421 metres ...																				
Hyderabad (Begumpet).	31		1	11	8						31	8	4	2	5		1	1	2	
ϕ = 17° 26′ N ...				2	9								5	2	1					
λ = 78° 27′ E ...																				
H_s = 555 metres ...																				
Jubbulpore ...	30	3	7	8	2	3	2	2	1		31	4	1		1	2		6	6	
ϕ = 23° 10′ N ...			1				1									1	2	2	6	
λ = 79° 57′ E ...																				
H_s = 402 metres ...																				
Lahore ...	26	1	1		2	1		2	13	4	26	3	1		3	2	2	4	7	1
ϕ = 31° 35′ N ...									2							1			2	
λ = 74° 20′ E ...																				
H_s = 221 metres ...																				
Madho Sagar (Gwalior).																				
ϕ = 26° 13′ N ...																				
λ = 78° 08′ E ...																				
H_s = 233 metres ...																				
Madras ...	31	1	11	7							25	2	2	7	1	2		1	1	1
ϕ = 13° 04′ N ...		1	9	2								1	3	2					2	
λ = 80° 15′ E ...																				
H_s = 13 metres ...																				
Malegaon ...	31	4	3	7	7	2					31			3	3	8	7		1	
ϕ = 20° 33′ N ...					5	2		1								7	2			
λ = 74° 32′ E ...																				
H_s = 443 metres ...																				
*Mangalore ...	26	2	4	3	5	1		1			26		3	4	7	4	4	3	1	
ϕ = 12° 52′ N ...				4	1															
λ = 74° 51′ E ...																				
H_s = 40 metres ...																				
Peshawar ...	30	6		1		1	1	3	13	5	29	7	2	2	3	1	1		7	1
ϕ = 34° 01′ N ...																			5	
λ = 71° 35′ E ...																				
H_s = 363 metres ...																				
Poona ...	31	3	3	4	9	1			2	1	31		1	6	10	7				
ϕ = 18° 32′ N ...			1	1	5			1						2	1	3	1			
λ = 73° 51′ E ...																				
H_s = 588 metres ...																				
Port Blair ...	31	2	10	6	1				2		24		3	3	2	2		1	4	1
ϕ = 11° 40′ N ...			4	6										4	1			1	2	
λ = 92° 43′ E ...																				
H_s = 87 metres ...																				
†Raj Samand (Kankroli)	22	1	4	2	9		2	3			21		1			2	5	3	1	1
ϕ = 25° 03′ N ...						1											3	2	1	
λ = 73° 53′ E ...																1	1			
H_s = 587 metres ...																				
Sambalpur ...	31	6	5	2	2	1		1	9	4	30	6		2			1	1	6	2
ϕ = 21° 28′ N ...		1										5							7	
λ = 83° 58′ E ...																				
H_s = 153 metres ...																				
Tezpur ...	30	1	2	13	1		6	2		5	29		6	4	3	1	5	2		5
ϕ = 26° 37′ N ...														1				2		
λ = 92° 47′ E ...																				
H_s = 80 metres ...																				

* Wind frequency tables prepared from 26 observations made in the morning.

† Only on 25 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	
26	3						3	4		1 — 10	1					1	2			27	2	1			9	18	1				Agra
						1	9	3																							
						1	1	1		9 or 10	1					1				2											
19	1				2	2	4	4		1 — 10								2	1	28						2	2	27			Ahmedabad
					4	2																									
										9 or 10										3											
24		1	1	1	7	4	2	3		1 — 10		2			3	6	3	2		15					1	1	25	4			Bangalore
			1		1		1	2																							
										9 or 10		2			1		2			6											
25	2	3	1	2	4	4	4			1 — 10			1		1	2	3	2		22						1	5	25			Bhuj
						2	2	1																							
										9 or 10										4											
29		1					4	1		1 — 10								1		30					1	7	23				Chittagong
						2	11	6																							
							2	2		9 or 10										5											
29				1			3	1		1 — 10									2	29					1	28	2				Dacca
							11	6																							
							1	6		9 or 10										1											
24	3	1				5	2	4	1	1 — 10					3	1	1	2	2	22				1	2	1	3	23	1		Fort Sandeman
	1				1	2	2	2																							
										9 or 10					3	1	1	2		7											
30	1	1	1	5	4	5	6	4		1 — 10									1	30					1	9	13	8			Hyderabad (Begumpet)
					1	1																									
	1									9 or 10										1											
29	3						3	4		1 — 10	1								4	26				1			12	18			Jubbulpore
	1					3	7	8																							
										9 or 10	1									3											
25	6			2	3	1	3	7		1 — 10	2			1	1	1			1	25		1		2	14	13	1				Lahore
						1	1	1																							
										9 or 10	2			1	1	1			1	10											
										1 — 10																1	5	25			Madho Sagar (Gwalior)
										9 or 10																					
19				4	2	4	4	2	2	1 — 10						5	10	4	2	10							1	30			Madras
			1																												
										9 or 10						1		1	1	4											
29	1	2	2		9	4	4	5		1 — 10								1	4	26							1	29	1		Malegaon
						1																									
					1					9 or 10										2											
24		2	5	2	2		6	1	2	1 — 10					7	11		3	5	5							9	19	3		Mangalore
				1		1	1	1																							
										9 or 10									1	1											
25	2	5	1	2	1	2	2	4	1	1 — 10					1		3	2	3	22					1	1	3	3	8	15	Peshawar
		1		1		1		2																							
										9 or 10					1		2	1		13											
31			1	5	7	8	3	1	1	1 — 10	1								3	27			1				1	2	27		Poona
				1	1	1	2																								
										9 or 10	1									1											
7				1		3		2		1 — 10					4		25			2							13	13			Port Blair
					1																										
										9 or 10										7											
18		2		1		1	3	1		1 — 10	2					1	2	3	1	16			1		1		1	4	24		Baj Samand (Kankroli)
	1					4	5																								
										9 or 10	2						1	2		5											
21	3					1	4	4	1	1 — 10										31							17	14			Sambalpur
							2	6																							
										9 or 10										2											
12		1	5			1	3		1	1 — 10	6							1	8	16		1	1	1	5	13	9	1			Tezpur
			1																												
										9 or 10	6							1	7											

TABLE 1—WIN

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
Trichinopoly ...	6–25	31	2	18							11	31		4	4							31	2	8	2						28	8	2	5	3			1	4	1
ϕ = 10° 49′ N ...	26–50													22	1									17	2								1		3						
λ = 78° 42′ E ...	51–75																																								
H_s = 88 metres ...	>75																																								
Trivandrum ...	6–25	31	1	16					1		13	30	5	6	4	2	2	4			7	30	2	7	10	2	1	1	1	2	4	30	1	1	1	3	7	3	8	5	
ϕ = 08° 29′ N ...	26–50																																							1	
λ = 76° 57′ E ...	51–75																																								
H_s = 76 metres ...	>75																																								
Vizagapatam ...	6–25	31	8	3					5	2	18	30		7	10	2	2	2	1		2	31	2	11	5		2	1		1	3	29	4	4	6		1		1		1
ϕ = 17° 42′ N ...	26–50													1	3									2	4								3	5	2					1	
λ = 83° 18′ E ...	51–75																																	1							
H_s = 56 metres ...	>75																																								

TABLE 4—WIN

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
Allahabad (Bamrauli)	6–25	31		1	1	2	3	1	8	2	13	31	2	2	2		3		4	12	2	31	6			1		1	5	12		30	3				1		3	3	
ϕ = 25° 26′ N ...	26–50															1				3							1			4								1	5	12	
λ = 81° 44′ E ...	51–75																													1									1	1	
H_s = 98 metres ...	>75																																								
Bahrain ...	6–25	31			1	8	3		2	11	6	30	3	1	1	2	3		1	4	1	30	6			1	3	3	2	2		29	1				1	2	4	1	
ϕ = 26° 14′ N ...	26–50												1			3	3	1		4			2			1	4	1	1	1							1	3	6	3	
λ = 50° 35′ E ...	51–75												1			1							1				1			1							1	1	2	1	
H_s = 14 metres ...	>75																																					1			
Bombay (Juhu) ...	6–25	31		8	3	3					17	31	5	5	6		1			2	4	31	2	5	6	7		1	3	3	1	31		1	2	11	9	1			
ϕ = 19° 07′ N ...	26–50												1		2	5									1	2											5	1	1		
λ = 72° 50′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	31	6	3						5	17	31	12	5		1		2	1	2	7	31	11	4					3	8		31	1						6	11	
ϕ = 22° 39′ N ...	26–50													1									2							3			1							11	
λ = 88° 27′ E ...	51–75																																							1	
H_s = 21 metres ...	>75																																								
Gaya ...	6–25	31				4	7	12	2		6	31	2		3			2	7	12	2	31	1	3					9	12	1	31		1					3	6	1
ϕ = 24° 49′ N ...	26–50																			3									2	3									3	12	
λ = 85° 01′ E ...	51–75																																						1	4	
H_s = 117 metres ...	>75																																								
Jacobabad ...	6–25	31			6	1				2	22	30	2	3	6	3	1		2	2	8	30	5			3	6	6	2	3	3	30	3	2	2	2	3	6	7	2	1
ϕ = 28° 17′ N ...	26–50														2	1									1		1						1				1				
λ = 68° 29′ E ...	51–75																																								
H_s = 56 metres ...	>75																																								
Jiwani ...	6–25	31	3	15		1	1			3	8	31	4	3	2	4	3		4	2	4	31	1	4	2	4	7		4		5	30	1	1	2	3	4	3	5	4	1
ϕ = 25° 10′ N ...	26–50														1		2		1	1			1				2						1		1			1	2		
λ = 61° 47′ E ...	51–75																													1											
H_s = 5 metres ...	>75																																						1		
Jodhpur ...	6–25	31		22	1	2		1			4	31	3	6	5	5	2		1	1	1	31	6	6	6	2	3	1	1	1	1	30	3	1	2	1	3	5	2	5	1
ϕ = 26° 18′ N ...	26–50			1										2		1	2	1	1								1	1	1				1				1	2	2		
λ = 73° 01′ E ...	51–75																										1										1				
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	31	1	14	1	1				1	9	31	1	2	5	1		1		5	2	30	3	4	5	2		4	3	1	2	26	1	2	4	3	2	3	3	2	1
ϕ = 24° 53′ N ...	26–50			4										4	5				1					2	1	1		1						1		1	1	3		1	
λ = 67° 07′ E ...	51–75													4										1																	
H_s = 29 metres ...	>75																																								
New Delhi ...	6–25	31	1		3			3	12	3	8	30			1		2	2		12	3	30			1	1	3		1	13	1	30	1			1	3	2	4	6	
ϕ = 28° 39′ N ...	26–50				1											1				8									2	7			1						4	8	
λ = 77° 15′ E ...	51–75															1										1															
H_s = 227 metres ...	>75																																								
*Raj Samand (Kankroli)	6–25	10	1	3	1					1	4	8	1		1	3	1		1	1		9	2		1	3	2		1			8			1	1	1	4			
ϕ = 25° 03′ N ...	26–50																																					1			
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sharjah ...	6–25	31		1	5	4	2	2	2	1	11	31	2	3	2	4		1	3	3	3	31	1	2	3	1	4	2	5	4	1	29	5	1	1			3	3	4	
ϕ = 25° 20′ N ...	26–50						1		1	1						1	3	1	3	1						1	2	1	2	2						1	5	4	3	
λ = 55° 24′ E ...	51–75																1																				1				
H_s = 11 metres ...	>75																																								

*Only on 10 days in the month, pilot balloon ascents were made in the forenoon.

ENCY (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	
14	2	1	3	3		2	2 1			1 — 10					1	4	5	4	6	11								14	12	5	Trichinopoly
										9 or 10						1			2	5											
26	1	2	2	4	2	4	5 2	2	2	1 — 10						6			1	24					3	18	10				Trivandrum
										9 or 10																					
7					1		3 1	1 1		1 — 10						3	2	1		25						12	19				Vizagapatam
										9 or 10							1	1		5											

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

26							9 2	2 10 2 1		1 — 10						2			2	27						7	24				Allahabad (Bamrauli)
										9 or 10										3											
15	1				1	1 3	3 4 1	1		1 — 10	1					1	1	4	2	22				1	1	3	12	14			Bahrain
										9 or 10	1							1		5											
27	1	1	1	1 1	1 3	6 2	9	1		1 — 10									2	29							26	5			Bombay (Juhu)
										9 or 10										2											
29	1			1	1	1	3 12	2 7 1		1 — 10										31					8	20	3				Calcutta (Dum Dum)
										9 or 10										2											
24							3 7	1 10 2	1	1 — 10								1		30							28	3			Gaya
										9 or 10										3											
27	2 1			1	2	7 1 1	4 2	6		1 — 10				1		1		1		28				2	1	2	11	15			Jacobabad
										9 or 10										4											
15			2		3		2 4	3	1	1 — 10						19				12							12	19			Jiwani
										9 or 10										3											
24	1		1		1 1	5 2 1	2 6	2 1	1	1 — 10				1	2	1	1	1	1	24							4	27			Jodhpur
										9 or 10										4											
28	1		1	2	1	2 5 1	9 1	3 1	1	1 — 10					4	3	1			23				1		1	3	8	18		Karachi (Drigh Road)
										9 or 10					2					4											
26						3 1 1	4 6 1	5 4 1		1 — 10			2				1	1	1	26		1	1			2	7	20			New Delhi
										9 or 10			1							4											
7		1				1 1	3		1	1 — 10	1				1		1	1	1	5											*Raj Samand (Kankroli)
										9 or 10	1				1					2											
27	2 2					1 4	3 6 3	4 1	1	1 — 10							3	7	5	16					1	1		5	24		Sharjah
										9 or 10							1			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	NW	C
Agra ...	6–25	31			2		2	1	8	4	14	31	1		2	2	3	2	5	12	1	31	1		1		4	2	6	12	1	29	2					4	2	11	
	26–50																		1	2							1			3								2	4	3	
	51–75																																							1	
	>75																																								
Ahmedabad ...	6–25	31		5	7	2		3	1		13	31	2	5	8	2	3	2	3	1	4	31	4	2	6	4	3	3	5		2	31	1		1	5	2	3	6	2	
	26–50														1										1			1								1	3		6		
	51–75																																						1		
	>75																																								
Allahabad (Bamrauli)	6–25	31	1		2			1	9	6	12	31	1	1	1	1			9	15	2	31	2	1		1	1		5	15	1	30	3						4	4	
	26–50																		1										2	3								1	6	8	
	51–75																																						1	3	
	>75																																								
Bahrain ...	6–25	31	2	1		11	2		1	12	2	31	3	1	1	1	4	3	1	1		31	5			1	3	2	4	4		28	1				1	1	7	2	
	26–50												3			2	2	2		4			1				3	3		2							2	4	5	3	
	51–75												1			1	1			1							1	3									1			1	
	>75																																								
Bangalore ...	6–25	31		10	12	5		1			2	30	2	4	17	2	1			1		30	1	5	17	3			1		1	29	2	4	9	8	1		1		1
	26–50				1										3										2										3						
	51–75																																								
	>75																																								
Bhuj ...	6–25	31		16	2			3		2	7	31	2	7	7	1	1		2	1	4	31	2	4	6	2	2		2	3	5	29	1	2	2	1	6	6	2	4	
	26–50							1						4				2						2	1			1									1	2				
	51–75																											1											1	1		
	>75																																								
Bombay (Juhu) ...	6–25	31		1		1		3	8	18		31	2	1	2	2	3	5	2	4	8	31		3	3	5	8	2	1	1		30		2	5	5	6	3			1
	26–50																	2									3								2	1	5				
	51–75																																								
	>75																																								
Calcutta (Dum Dum)	6–25	31	3	1						16	11	31	6						4	20	1	31	8						4	17	2	31	4					1	3	11	
	26–50																																							10	
	51–75																																							2	
	>75																																								
Chittagong ...	6–25	31	3					1	17	7	3	31	13	2			1	1	4	5	4	31	16	4	1	2	4	1		1	2	31	1				2	5	4	12	1
	26–50												1																				1					1		4	
	51–75																																								
	>75																																								
Dacca ...	6–25	31							3	4	24	31	7					1	8	10	5	31	8	5				1	4	8	5	31	3		1	1	1	1	9	6	
	26–50																																						1	7	
	51–75																																							1	
	>75																																								
Fort Sandeman ...	6–25	31		3	1	1		6			20	29	1	1	2	2	3	6	1	2	8											28	2		1	1	3	6	2	1	9
	26–50													1				2																1				2			
	51–75																																								
	>75																																								
Gaya ...	6–25	31	2						7	17	5	31	1		1			2	11	11	1	31	1					1	5	15	1	30	1						4	5	
	26–50												1						2	1			1						4	3									5	10	
	51–75																																1						2	2	
	>75																																								
Hyderabad (Begumpet).	6–25	31		1	14	10		2			4	31	1	1	16	8	2				1	31	1	1	16	8	2				1	31	3	4	10	9	3	1	1		
	26–50														2										2									2	3	1					
	51–75																																								
	>75																																								
Jacobabad ...	6–25	31	3	3		1		1	2	3	18	31	3	5	3	1	3	3	3	1	9	29	6	3	3	1	5	4	2	2	3	28	1	2		1	4	4	5	5	1
	26–50																																1				4				
	51–75																																								
	>75																																								
Jiwani ...	6–25	31	1	1		7	1	14	2	2	3	31	1		3	5	4	4	3	2	4	31	2	5		5	1	2	6	2	3	29	1	3	1	2		3	6	4	2
	26–50																	1	2	1					1				3								1		1	3	
	51–75																1											1										1	1		
	>75																																								
Jodhpur ...	6–25	31	1	9	1	3	1	2	2	3	7	31	3	9	4	2	2	1	3	1	3	31	3	4	3	2		3	3	2	4	27	1	1	2		1	5	5	5	2
	26–50			1															2										1									3	2		
	51–75							1										1										1													
	>75																																								
Jubbulpore ...	6–25	31	7	1		3	1		1	3	15	30	9	6		2	2	1	1	4	4	30	7	5		2	1	1	2	3	8	30	4	2			3	4	2	8	2
	26–50																1										1											1		4	
	51–75																																								
	>75																																								
Karachi (Drigh Road) ...	6–25	31		9	4	3	1	7	1		4	31	1	6	4	2	4	1	3		2	31	1	9	5	1	2	2	2	3	1	31	2	4	3	1	3	3	5	3	
	26–50			1	1									3	3	1		1						2	1			1	1							1			3	1	1	
	51–75																																						1		
	>75																																								
Lahore ...	6–25	31		1		2			3	12	15	28	3	1	1	3	2	1	5	11	1	27	3	1	1		2		2	11	3	27	1			1	3	1	7	9	
	26–50																									1			1	2							1			4	
	51–75																																								
	>75																																								
Madho Sagar (Gwalior).	6–25	31		1		3		1	2	4	20	30	3	1		3	3	1	2	12	5	30	4	2		2	4	1	3	9	4	30		1				5	8	5	
	26–50																											1										2	4	4	
	51–75																																							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	2	3	4	5	6	7	8	9	
29						2	2	3		1 — 10							2		5	24							27	4			Agra
						3	8	8																							
							3			9 or 10							2			5											
28		2	1	1	2	5	2	2		1 — 10								6		25							2	27	2		Ahmedabad
					4	3	3																								
						3				9 or 10										4											
27						1				1 — 10						1		2	1	27							27	4			Allahabad (Bamrauli)
							14	11																							
										9 or 10						1				4											
								1																							
25	1					4	2			1 — 10					1			5	1	24						1	2	28			Bahrain
						4	5	2																							
						3	2	1		9 or 10									1	5											
							1																								
21	2			1	5	3	4	4	1	1 — 10							11	3	9	8							11	15	5		Bangalore
						1																									
										9 or 10							4	1		5											
25		2	2		3	4	3	3		1 — 10						1	8	3		19								31			Bhuj
					1	2	3																								
					1					9 or 10										2											
						1																									
25	1	2	1	3	3	2	7		1	1 — 10								2	6	23							1	30			Bombay (Juhu)
			1	1	1	2																									
										9 or 10										1											
31	1						4	1		1 — 10								1		30							31				Calcutta (Dum Dum)
						1	15	3																							
							2	4		9 or 10										2											
31						1	4	3		1 — 10						1	4			26							1	30			Chittagong
						1	15	5																							
								2		9 or 10										1											
28		1				1	5			1 — 10							3	4	1	23							31				Dacca
							10	3																							
							4	4		9 or 10										2											
25	1				4	7	8	3		1 — 10					1		5	4	1	20					1	1	1	14	14		Fort Sandeman
						2																									
										9 or 10					1		2	1		8											
26								2		1 — 10							1	1		29						1	21	9			Gaya
							8	8																							
							3	5		9 or 10																					
30	2	2	1	3	6	5	4	2	3	1 — 10								1	14	16									31		Hyderabad (Begumpet)
		1				1																									
										9 or 10										2											
25						5	4	4		1 — 10					1	1	1	1	3	24							3	28			Jacobabad
						5	3	1																							
					1	2				9 or 10										3											
10						1	1	3		1 — 10					1	23	1			6							4	26	1		Jiwani
							3	1																							
							1			9 or 10										2											
24	1		1		1	3	3	3		1 — 10						2	2		2	25					1		1	26	3		Jodhpur
						3	8																								
					1					9 or 10							1			7											
31	1	1			2	3	5	6	1	1 — 10									5	26								20	11		Jubbulpore
						2	5	4																							
								1		9 or 10										2											
28			1		2	7	3	4		1 — 10					2	3	11			15						1	3	5	22		Karachi (Drigh Road)
	1					4	5	1																							
										9 or 10					1					3											
24	1				4	4	7	4	1	1 — 10						3	2	2		24						3	21	7			Lahore
	1					1	1																								
										9 or 10						2	2			6											
26	1						3	2		1 — 10						2	2		3	24						1		27	3		Madho Sagar (Gwalior)
						3	11	4																							
							2			9 or 10										3											

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
Madras ...	6–25	31		24	1	4					2	31	1	16	4	1					
	26–50												1	8							
	51–75																				
	>75																				
Malegaon ...	6–25	31	1		3	11	5	1	2		8	31		1	4	7	11	2	1		3
	26–50																1	1			
	51–75																				
	>75																				
Mangalore ...	6–25																				
	26–50																				
	51–75																				
	>75																				
New Delhi ...	6–25	31	1			3		1	6	10	6	29	1			4	1	1	5	9	2
	26–50				1					3										6	
	51–75																				
	>75																				
Peshawar ...	6–25	31	1	2		3		2	1	2	20	30	7	2	1			2	1	7	10
	26–50																				
	51–75																				
	>75																				
Poona ...	6–25	31	2	7	6	6	1	3	3	1	2	31		2	9	8	4	2			6
	26–50																				
	51–75																				
	>75																				
Port Blair ...	6–25	31		29						1		31	4	15	3						1
	26–50			1										7						1	
	51–75																				
	>75																				
*Raj-Samand (Kankroli)	6–25	23	1		5	5	2		2		8	22			3	5	4	1	1		6
	26–50																1		1		
	51–75																				
	>75																				
Sambalpur ...	6–25	31					1	1	1	4	24	28	3	5	2	1	1	2	3	7	4
	26–50																				
	51–75																				
	>75																				
Sharjah ...	6–25	31	5	1		1	1	4	5	13		31	3	1	2	1	3	3	4	5	1
	26–50		1													1		1	3	1	
	51–75												1						1		
	>75																				
Tezpur ...	6–25	31		3	1	3	3	4			17	30	1	2	10			2	4		11
	26–50																				
	51–75																				
	>75																				
Trichinopoly ...	6–25	31	1	17	6						7	31	2	24	2						1
	26–50													1	1						
	51–75																				
	>75																				
Trivandrum ...	6–25																				
	26–50																				
	51–75																				
	>75																				
Vizagapatam ...	6–25	31		3	18	6	4					31		10	11	4					1
	26–50													3	2						
	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	C
Madras ...	6–25	29	8	13							1	22	3	7	3	1			2		1
	26–50		1	5	1								1	1	1				1	1	
	51–75																				
	>75																				
Malegaon ...	6–25	31		1	3	8	9	3	1		4	31			4	3	14	6	1		1
	26–50						1	1										1			
	51–75																	1			
	>75																				
Mangalore ...	6–25																				
	26–50																				
	51–75																				
	>75																				
New Delhi ...	6–25	29				2	3		1	14	2	26				1		3	3	6	2
	26–50						1		2	4									3	7	
	51–75																			1	
	>75																				
Peshawar ...	6–25	30	6		2		1	1		11	9	28	4	3			4	1	4	8	3
	26–50																			1	
	51–75																				
	>75																				
Poona ...	6–25	31		2	11	7	4	1			5	31			3	10	7	3	1		2
	26–50								1						1	2	1	1			
	51–75																				
	>75																				
Port Blair ...	6–25	31	5	7	6	1				4	2	27	1	3	6	3	4	4		2	
	26–50			3	2					1				1	1				1	1	
	51–75																				
	>75																				
*Raj-Samand (Kankroli)	6–25	22			3	4	5	1	1		6	22					1	3	8	1	3
	26–50						1		1							1	1	2	2		
	51–75																				
	>75																				
Sambalpur ...	6–25	30	3	4	4	1	1	2	2	9	4	31	3	2			1		1	14	3
	26–50												3						1	3	
	51–75																				
	>75																				
Sharjah ...	6–25	31		2	1	5	2	4	6	1	1	28	3	3				4	3	2	2
	26–50						2	1	3	1								3	4	2	
	51–75		1						1								1				
	>75																		1		
Tezpur ...	6–25	30			13	1	1	4	3		8	30		1	5	3	6	9	2		3
	26–50																		1		
	51–75																				
	>75																				
Trichinopoly ...	6–25	31	1	24							1	28	2	5	8	1			3	5	
	26–50			5									1	1	2						
	51–75																				
	>75																				
Trivandrum ...	6–25																				
	26–50																				
	51–75																				
	>75																				
Vizagapatam ...	6–25	31	4	17	2				2	1	2	31	6	5	2	1			1	4	1
	26–50			1	2								4	5	1					1	
	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.

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	
14						3	7	1		1 — 10						5	13	4		9									15	16	Madras
			1			1	1			9 or 10										2											
25			1	1	6	5	6	2		1 — 10							1		16	14								28	3		Malegaon
					2	2				9 or 10										2											
										1 — 10																	1	6	15	9	Mangalore
										9 or 10																					
20	1					1	5	2		1 — 10					1		3	5	1	21							2	29			New Delhi
							6	4		9 or 10										5											
							1																								
27	4	2	1	2	3	4	2	2	1	1 — 10					1	2	3	7	2	16						2	6	4	6	13	Peshawar
					1	2	1	2		9 or 10					4	1		1		11											
29			1	5	8	3	2	1	3	1 — 10								2	14	15									31		Poona
					2	4				9 or 10										2											
20		4	3	2		3	1	4		1 — 10					2	1	28										19	12			Port Blair
			2				1			9 or 10										4											
22		1				3	1	2		1 — 10					1	1	3	1	2	15								1	30		* Raj-Samand (Kankroli)
					1	5	7			9 or 10					1					2											
						1																									
						1																									
30						1	12	6		1 — 10								2	1	28								31			Sambalpur
	1						4	6		9 or 10										1											
24	2					3	3	5		1 — 10					1	1	5	13	5	6					2	1	2	7	19		Sharjah
						2	6	1		9 or 10					1					5											
						1		1																							
28	2	5	1		1	7	3	3	1	1 — 10								3	7	21					1			18	12		Tezpur
						2	2	1		9 or 10								1		2											
15	3			3	1	1	3	1	1	1 — 10							7	15	3	6							1	1	9	20	Trichinopoly
						1	1			9 or 10							1			5											
										1 — 10																	2	29			Trivandrum
										9 or 10																					
20	1		1	2	3	3	1	1	2	1 — 10						1	3			27							30	1			Vizagapatam
		1					3	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	C
Allahabad (Bamrauli)...	6–25	31	2						1	5	23	31	5	4		1	1		3	13		31	2			2			2	19		29						2	4	8	
	26–50																			4								1	1	4								3	2	9	
	51–75																																						1		
	>75																																								
Bahrain ...	6–25	31	2		2	6	2	1	3	8	6	31	3	1			7	5	1	3		30				1	2	7	2	5		17					1	2	3	2	
	26–50									1			1				2	1		5			2					5		5			1						5	2	
	51–75																2																							1	
	>75																										1														
Bombay (Juhu) ...	6–25	31		2	1						28	31	14	5	4	1		1		3	1	31	6	5	2	4		1	4	8		24			1	14	7				
	26–50														1	1									1											1				1		
	51–75																																								
	>75																																								
Calcutta (Dum Dum) ...	6–25	31	1	8					3	8	11	31	18	2					2	6	2	31	13						1	10	1	23	1						7	7	1
	26–50												1										3							3										6		
	51–75																																							1	
	>75																																								
Gaya ...	6–25	31				16	3		1	1	10	31	6				1		3	14	1	31					1	1	5	16		20							4	4	1
	26–50																			6										2	6									3	8	
	51–75																																								
	>75																																								
Jacobabad ...	6–25	31	1	2	3					2	23	29	2	2	6	4	2	4	4	1	4	29	2	1	2	1	6	9	3	2	2	23	2	1			1	2	6	6	4
	26–50												1										1										1								
	51–75																																								
	>75																																								
Jiwani ...	6–25	31	1	6	1	2		3	1	5	12	31	1	1		4	5	3	6	5	4	30	3	1	1	6	5	2	8	2	2	15	1		2	2	1	1	5	1	
	26–50												1							1															1				1		
	51–75																																								
	>75																																								
Jodhpur ...	6–25	31	1	23	1	1				2	2	30	3	7	7	2	2	2		1	4	30	5	3	2	4	3	2	5	4	1	23			2		1	5	6	5	
	26–50			1												1			1										1									2	1	1	
	51–75																																								
	>75																																								
Karachi (Drigh Road) ...	6–25	31		14						4	13	31	3	4	5	3	1	2	5	3	1	31	6	4	3	2	1	2	4	1	3	30		2		3	2	2	4	6	5
	26–50													1	2				1					1	1			1	2					1				2	1	1	
	51–75																																					1			
	>75																																								
Madho Sagar (Gwalior)...	6–25	31				1	1	6		1	22	31	4	3	4	3	2	1	2	8	3	31	3	1			2	6	6	10	1	26	2					9	4	1
	26–50																			1								1		1								1	6	3	
	51–75																																								
	>75																																								
New Delhi ...	6–25	31	1		3	1			6	10	10	29	2			4	1		2	13	1	29				1	3		4	12	2	27	1					1	12	7	
	26–50																			6								1	1	5									3	3	
	51–75																																								
	>75																																								
*Raj Samand (Kankroli).	6–25	6	1		1				1	2	1	6			2	1		1	1	1		6			2	1		1	1	1		6			1		1	1	2		
	26–50																																						1		
	51–75																																								
	>75																																								
Sharjah ...	6–25	31		1	5	7	3	1	1	2	10	31	4	2	2	2	2	1	6	5	3	29	1	3	1		2	1	8	7	1	24	3	1			1	2	2	4	1
	26–50																1			1							2	2		1								5	2	3	
	51–75									1								1		1																					
	>75																																								

*Only on 6 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 were recorded only on days of night ascents.

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	
12						1	3	2		1 — 10									1	30					1	1	29				Allahabad (Bamrauli)
							3	2																							
							1			9 or 10										5											
4						1	1			1 — 10					2	1				28						1	30				Bahrain
							1	1																							
										9 or 10						1				5											
16						5	4	1		1 — 10							2		1	28							27	4			Bombay (Juhu)
						1	4	1																							
										9 or 10										1											
10								2		1 — 10									1	30						14	17				Calcutta (Dum Dum)
							8																								
										9 or 10										2											
10						1	1	3		1 — 10								1		30							31				Gaya
							1	3																							
							1			9 or 10										2											
15		1				2	4	2	1	1 — 10							2	3		26					1	4	24	2			Jacobabad
	1						3																								
								1		9 or 10										4											
6					1	1	2			1 — 10					1	10				20						1	30				Jiwani
							2																								
										9 or 10					1					1											
16	1					2	4	1		1 — 10					1		2		1	27							2	29			Jodhpur
						3	4	1																							
										9 or 10										5											
6							2	1	1	1 — 10						1				30						1	2	27	1		Karachi (Drigh Road)
						1		1																							
										9 or 10										4											
14	1						4	3		1 — 10							2			29							3	28			Madho Sagar (Gwalior)
							5	1																							
										9 or 10							1			4											
24						1	5	5		1 — 10					1		1	1		28					2	1	11	17			New Delhi
							10	3																							
										9 or 10										6											
6							2	1		1 — 10									1	5								3	3		*Raj Samand (Kankroli)
					1		2																								
										9 or 10																					
21	1					3	3	1		1 — 10						1	6	1		23			1				1	29			Sharjah
	1					1	6	3																							
							2			9 or 10										3											

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

February 1940

Supplement to the Monthly Weather Report, February 1940

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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 May 1941.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U 18

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	29	1	3					4	3	18	27	3	2	2	1	2	2		3	
φ = 27° 08′ N ...	26–50												3	1	1			1		6	
λ = 78° 01′ E ...	51–75																				
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	29		10					2	1	16	29	1	3	6				3	3	
φ = 23° 02′ N ...	26–50													1	6				1	1	
λ = 72° 35′ E ...	51–75														4						
H_s = 55 metres ...	>75																				
Bangalore ...	6–25	29		6	11	4		6	1		1	28	1	1	2	1	2	4	1	1	
φ = 12° 58′ N ...	26–50													2	13						
λ = 77° 35′ E ...	51–75																				
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	29	1		1			1	1		25	29	7	3	1				2	2	
φ = 23° 15′ N ...	26–50												2	3	4				3	1	
λ = 69° 48′ E ...	51–75																		1		
H_s = 113 metres ...	>75																				
Chittagong ...	6–25	29	10	3	1	2				1	12	29	10	1			2	1	1	4	2
φ = 22° 21′ N ...	26–50												5				2				
λ = 91° 50′ E ...	51–75														1						
H_s = 21 metres ...	>75																				
Dacca ...	6–25	29				1		1			27	27	10	2	3	1		2	2	2	1
φ = 23° 43′ N ...	26–50												2						1	1	
λ = 90° 24′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Fort Sandeman ...	6–25	29			3	1		3			22	29	2	4		1	3	7	5	3	4
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	29			7	7	1	2		3	9	28	1		3	3	1	1		1	
φ = 17° 26′ N ...	26–50												1	1	1	11	1	1		2	
λ = 78° 27′ E ...	51–75																				
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	29	1		1	2				1	24	28	2	7	5	4	1	1	2		2
φ = 23° 10′ N ...	26–50													3			1				
λ = 79° 57′ E ...	51–75																				
H_s = 402 metres ...	>75																				
Lahore ...	6–25	29	1	1		2					25	28	3	1	2	1			2	13	1
φ = 31° 35′ N ...	26–50													1		1			1	1	
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	29		1							28	29		10	8	4	5	2			
φ = 13° 04′ N ...	26–50																				
λ = 80° 15′ E ...	51–75																				
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	29							1	6	22	28	6	2	1	4	1	2	2	2	1
φ = 20° 33′ N ...	26–50														2		1	1		3	
λ = 74° 32′ E ...	51–75																				
H_s = 443 metres ...	>75																				
*Mangalore ...	6–25	28		6	21	1						28	10	2	1	1				5	3
φ = 12° 52′ N ...	26–50														5	1					
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	29		1		3		8		1	16	29	7		2		1		4	5	10
φ = 34° 01′ N ...	26–50																				
λ = 71° 35′ E ...	51–75																				
H_s = 368 metres ...	>75																				
Poona ...	6–25	29	1				2	17	2	1	6	29	3	1	3	1	2	1	2	6	
φ = 18° 32′ N ...	26–50												1			4		2	1	2	
λ = 73° 51′ E ...	51–75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	29	3	8	1					3	14	29		14	9	1				1	1
φ = 11° 40′ N ...	26–50													3							
λ = 92° 43′ E ...	51–75																				
H_s = 87 metres ...	>75																				
†Rai Samand (Kankroli)	6–25	30	2	1		2			2	9	4	20		1	9	1	2	3	1	1	
φ = 25° 03′ N ...	26–50																		1	1	
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				
Sambalpur ...	6–25	29	2								27	27	2	4		2	3	7	2	2	1
φ = 21° 28′ N ...	26–50												1	1			1	1			
λ = 83° 58′ E ...	51–75																				
H_s = 153 metres ...	>75																				
Tezpur ...	6–25	29		6	4						19	25		3	11			1	2		2
φ = 26° 37′ N ...	26–50														5				1		
λ = 92° 47′ E ...	51–75																				
H_s = 80 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	27	2		3	2	1	1	1	7		26	2			1				4	
φ = 27° 08′ N ...	26–50		2					1		7								1	3	11	
λ = 78° 01′ E ...	51–75																	1	2	1	
H_s = 182 metres ...	>75																				
Ahmedabad ...	6–25	29	4	3	7	1	1		4	5	1	25	1	1	1		1	2	8	1	1
φ = 23° 02′ N ...	26–50				1					1								3	5		
λ = 72° 35′ E ...	51–75								1									1			
H_s = 55 metres ...	>75																				
Bangalore ...	6–25	29		3	10	4	1	6	2			28	1	8	4	3		3	3		1
φ = 12° 58′ N ...	26–50				2	1								4	1						
λ = 77° 35′ E ...	51–75																				
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	29	4	7				1	3	3	3	28	4	1	2		1	4	3	1	
φ = 23° 15′ N ...	26–50			2				1	4	1							2	3	4	2	
λ = 69° 48′ E ...	51–75																	1			
H_s = 113 metres ...	>75																				
Chittagong ...	6–25	29	13		1	2		1	3	7		28	1					2	8	4	
φ = 22° 21′ N ...	26–50							2									1	1	3	5	
λ = 91° 50′ E ...	51–75																			3	
H_s = 21 metres ...	>75																				
Dacca ...	6–25	27	2	3	1	1		1	2	9	2	27							6	1	1
φ = 23° 43′ N ...	26–50							1	2	3								3	5	7	
λ = 90° 24′ E ...	51–75																		1	2	
H_s = 21 metres ...	>75																		1		
Fort Sandeman ...	6–25											29	2	1	2		3	6	8	4	3
φ = 31° 21′ N ...	26–50																				
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	28	1		3	3	1	1		1		28	5	2	3	1	2	1	2	3	
φ = 17° 26′ N ...	26–50		1	1	1	11	1	1		2			1	1				3	4		
λ = 78° 27′ E ...	51–75																				
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	28	1	8	4	4	1	3	2	1		28						3	3	5	
φ = 23° 10′ N ...	26–50		1	2			1											3	5	8	
λ = 79° 57′ E ...	51–75																	1			
H_s = 402 metres ...	>75																				
Lahore ...	6–25	28	3	3	2				2	14		25	1	1	1	1	2		2	9	1
φ = 31° 35′ N ...	26–50					2				1			1			1			1	4	
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	29		3	10	4	1	1			1	26	8	5	3	2		1	1	2	1
φ = 13° 04′ N ...	26–50			4	5									7	1						
λ = 80° 15′ E ...	51–75																				
H_s = 13 metres ...	>75																				
Malegaon ...	6–25	28	7	2	1	3	2	2	2	1		29	5			4	2	2	3	2	
φ = 20° 33′ N ...	26–50		1		2		1	1	1	2							1	6	3		
λ = 74° 32′ E ...	51–75																	1			
H_s = 443 metres ...	>75																				
*Mangalore ...	6–25	28	1	3	6	3		2	1	7		28		1	8	9	2		3		1
φ = 12° 52′ N ...	26–50				1	4									3	1					
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Peshawar ...	6–25	28	6		1			1	4	9	5	27	6	4	1	2			1	9	2
φ = 34° 01′ N ...	26–50																			2	
λ = 71° 35′ E ...	51–75																				
H_s = 368 metres ...	>75																				
Poona ...	6–25	29	1	1	3	1	2		5	6	1	29		2	1	3	3		3	1	1
φ = 18° 32′ N ...	26–50		1		1	3		1	2	1			1			1	2	2	4		
λ = 73° 51′ E ...	51–75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	27	1	6	8	3	1			1		24	2	1	6	2		2	1	1	
φ = 11° 40′ N ...	26–50			1	4	2									6	3					
λ = 92° 43′ E ...	51–75																				
H_s = 87 metres ...	>75																				
†Rai Samand (Kankroli)	6–25	20		1	8	1	4	1	1	1		19	1	1				3	3	2	1
φ = 25° 03′ N ...	26–50				1			1		1								1	5		
λ = 73° 53′ E ...	51–75																	1	1		
H_s = 587 metres ...	>75																				
Sambalpur ...	6–25	27	4		2	1	4	3	2	4		27	2		1			2	5	5	
φ = 21° 28′ N ...	26–50		2				2	1	1	1			1					1	4	5	
λ = 83° 58′ E ...	51–75												1								
H_s = 153 metres ...	>75																				
Tezpur ...	6–25	24		4	14	1	1	1	1		1	23		4	6			5	1	1	5
φ = 26° 37′ N ...	26–50							1										1			
λ = 92° 47′ E ...	51–75																				
H_s = 80 metres ...	>75																				

* Wind frequency tables were prepared from 28 observations made in the morning.

† Only on 20 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.

d ss ./	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	24								1		1 — 10	1		1			1	1	1	1	23	1		1		3	21	3				Agra
50					1			9	5																							
75							1	3	4		9 or 10	1		1			1		1		5											
75																																
25	19	1				2		2	1		1 — 10								1		28							2	27			Ahmedabad
50							5	3	1																							
75							2	1	1		9 or 10										2											
75																																
25	26	3	5	6	3	3	1	1	2		1 — 10		1	3		2	3	3	1		16						1	26	2			Bangalore
50			1		1																											
75											9 or 10		1	3							4											
75																																
25	23	1	1		1	1	1	1	1		1 — 10			1				1	1		26						1	1	27			Bhuj
50		1				1		8	2																							
75								3	1		9 or 10			1							2											
75																																
25	24					1	2	6	1		1 — 10					1	1	1		2	24							28	1			Chittagong
50								5	4																							
75								3	2		9 or 10									1	4											
75																																
25	20							1	2		1 — 10	2				2			1	2	22		1			2	17	9				Dacca
50							1	8	3																							
75								3	1		9 or 10	2				1					6											
75								1																								
25	27	2				3	1	2	3		1 — 10					1	1	1	5	1	20							3	25	1		Fort Sandeman
50		1					2	4	9																							
75											9 or 10					1	1		1	1	11											
75																																
25	28	7	1		1	1	1	5	5	1	1 — 10				1	3				6	19						4	10	10	4	1	Hyderabad (Begumpet)
50		2					1	3																								
75											9 or 10				1	1					2											
75																																
25	27						1		2		1 — 10			1					1	1	26		1				1	9	18			Jubbulpore
50							1	7	6																							
75							1	5	3		9 or 10			1							1											
75								1																								
25	24	1	1		1	2	1	2	6	1	1 — 10	1	1					2	1		24		1	1	1	5	17	4				Lahore
50		1				2		1	5																							
75											9 or 10	1	1					2			10											
75																																
25											1 — 10																2	1	23	3		Madho Sagar (Gwalior)
50																																
75											9 or 10																					
75																																
25	24	6	2	4	2		2	2	2		1 — 10						1	13			15								29			Madras
50		1		2			1																									
75											9 or 10										1											
75																																
25	28	1	1			5	6	1	3		1 — 10									1	28								26	3		Malegaon
50							6	1																								
75							1	3			9 or 10									1	2											
75																																
25	25	1	6	5	4		1	2	2	1	1 — 10					13	4	1	4	2	5					3	3	16	7			*Mangalore
50			1	2																												
75											9 or 10																					
75																																
25	25	2	1	3	2		1	5	3	3	1 — 10					1		2	1	4	21							2	1	2	24	Peshawar
50									4																							
75									1		9 or 10					1		1		2	11											
75																																
25	28		3		6	3		3	2	1	1 — 10								3	1	25									29		Poona
50						1	5	2																								
75								2			9 or 10										1											
75																																
25	11	1		2	2			1	1		1 — 10					12		14			3							27	2			Port Blair
50				2	1			1																								
75											9 or 10										7											
75																																
25	18	1					2	1		1	1 — 10					1				1	18							1	3	25		†Raj Samand (Kankroli)
50							3	4																								
75							3	2			9 or 10					1				1	4											
75								1																								
25	25						1	3	6		1 — 10			1		1			1	2	24							6	23			Sambalpur
50								5	7																							
75								2	1		9 or 10					1					4											
75																																
25	14		1	2	1	2	3	1		2	1 — 10	1				4	1	1	2	10	10	1	1	1		1	1	16	8			Tezpur
50							1																									
75								1			9 or 10	1				4	1	1	1	2	12											
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
Trichinopoly ...	6–25	29		14							15	28		3	6	2	3		1		1	28	1	5	7	2	1		1	1		28	2	7	10		2				
ϕ = 10° 49′ N ...	26–50													10	2									6	4									5	1						
λ = 78° 42′ E ...	51–75																																	1							
H_s = 88 metres ...	>75																																								
Trivandrum ...	6–25	29	5	9							15	28	5		4	3	8	2		2	4	28	1	8	3	2	5			3	5	28	2	10	6	5			1		1
ϕ = 08° 29′ N ...	26–50																							1										1	1	1					
λ = 76° 57′ E ...	51–75																																								
H_s = 76 metres ...	>75																																								
Vizagapatam ...	6–25	29		3					7	1	18	29		3	3	3	5	7			3	28	3	5	1	2	1	6	2		2	28	3	6	1		1	3	2	2	
ϕ = 17° 42′ N ...	26–50														1			3	1				2	1				3					1	2					1	1	
λ = 83° 18′ E ...	51–75																																								
H_s = 56 metres ...	>75																																								

TABLE 4—WIND

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	29		1		5	1	6	2	2	12	29	4	1		5	1	1	3	8		28	2			4	1	2	4	5		27						1	3	1	
ϕ = 25° 26′ N ...	26–50															2			1	2			2				1	1	2	4							1		9	8	
λ = 81° 44′ E ...	51–75															1																							1	3	
H_s = 98 metres ...	>75																																								
Bahrain ...	6–25	29	1		3	4	5	1		10	5	28	5	1			1	1		2	1	28	3				1			4		28						5	3		
ϕ = 26° 14′ N ...	26–50												1			1	3	2		5			1			1	2	4		7							2	4	2	7	
λ = 50° 35′ E ...	51–75																3	1									3	1										1	1		3	
H_s = 14 metres ...	>75																1																								
Bombay (Juhu) ...	6–25	29	2	10	2	4				1	10	29	10	3	2	3		1	1	1	1	28	6	1	1	2	1	1		6		25	2	1	1	1	7		4		1
ϕ = 19° 07′ N ...	26–50												2	1		3		1					2	2		2	2	1		1							5	1		1	
λ = 72° 50′ E ...	51–75																																					1			
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	29	2	8		5		2		6	6	29	6	2	2	1	2	3	4	1	2	29	5	2			3	3	3	4	1	29	1				2	1	6	3	
ϕ = 22° 39′ N ...	26–50												3	1				1		1								1	1	5							1	2	4	8	
λ = 88° 27′ E ...	51–75																													1									1		
H_s = 21 metres ...	>75																																								
Gaya ...	6–25	29			1	8	5	9	4		7	29	2	1	4	3		2	2	9		29	1	2	3				5	6	1	26				1		2	4	3	
ϕ = 24° 49′ N ...	26–50														1		1		3	1						1			4	5								1	6	6	
λ = 85° 01′ E ...	51–75																											1										1	2		
H_s = 117 metres ...	>75																																								
Jacobabad ...	6–25	29		3	7	1			1	1	15	29	1		7	8	2	1		3	5	29			1	1	7	3	6	1	6	29	1		2	1		7	5	5	1
ϕ = 28° 17′ N ...	26–50		1											1					1						1				1	2			1					2	1	3	
λ = 68° 29′ E ...	51–75																																								
H_s = 56 metres ...	>75																																								
Jiwani ...	6–25	29	1	11		1	1	1		1	13	29	2	4	1	1	4	4	9	1		29	4	1	1		3	3	7	6	2	28	2			3	1	1	8	7	1
ϕ = 25° 10′ N ...	26–50												1				1			1							1		1										3	1	
λ = 61° 47′ E ...	51–75																																						1		
H_s = 5 metres ...	>75																																								
Jodhpur ...	6–25	29		17	2	1		2	1		5	29		4	6	2	2	2	2	1		29	1	8	1	1	2		5	1		28	7	3		1	1	1	4	2	
ϕ = 26° 18′ N ...	26–50							1						2	4				3	1				2	2			1	1	3							1	2	6		
λ = 73° 01′ E ...	51–75																											1													
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	29	1	10				1		3	12	28	3	2	2		1	1	3	5	3	28		1	6		1	3	5	4	3	26	2		4		1	1	6	5	2
ϕ = 24° 53′ N ...	26–50			1					1					2	2					3			1		1				2	1								1	1	2	
λ = 67° 07′ E ...	51–75																		1																				1		
H_s = 29 metres ...	>75																																						1	1	
New Delhi ...	6–25	29	1		2	1	1	3	11	2	8	27	2			3	3		3	5	1	26	1	1		1	4	1	3	5		24	2			1			1	5	1
ϕ = 28° 39′ N ...	26–50																	1	1	8									1	9			1				1		1	10	
λ = 77° 15′ E ...	51–75																																						1		
H_s = 227 metres ...	>75																																								
*Raj Samand (Kankroli)	6–25	7	2					1		3	1	7			2			1	1	3		7			2				2	3		6			1				1		
ϕ = 25° 09′ N ...	26–50																																						2	2	
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sharjah ...	6–25	29		1	1	5	5	3	4	1	9	29	2	1		2	4	2	5	2	1	28	2		1	1	6	1	3	4	1	28	2				3	2	5	2	
ϕ = 25° 20′ N ...	26–50																5	1	2	1							2		5	1			1				3		1	6	
λ = 55° 24′ E ...	51–75																			1							1												3		
H_s = 11 metres ...	>75																																								

*Only on 7 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)

ed is /	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	20	3	3	1	2	2			2		1 — 10					5	2	4	1		17							1	20	6	2		Trichinopoly
·50		1	1	3	2																												
·75											9 or 10					3					2												
·75																																	
·25	24	2	3	4	3		2	4	1		1 — 10						3				26					4	17	8				Trivandrum
·50		1		1	2				1																								
·75											9 or 10										1												
·75																																	
·25	10	1	3					1	1		1 — 10					1	6	2	1		19						9	20				Visagapatam
·50		2						1	1																								
·75											9 or 10					1	1				4												
·75																																	

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

·25	21										1 — 10			1				1	2	3	22		1				4	21	3			Allahabad (Bamrauli)
·50							1	6	3																							
·75							1	6	3		9 or 10			1				1			5											
·75									1																							
·25	15				1	1					1 — 10					1	2		1	1	24							15	14			Bahrain
·50							1	7	4																							
·75								1			9 or 10										5											
·75																																
·25	25		1	1	1	3	4	3	2		1 — 10						1	4			24							27	2			Bombay (Juhu)
·50						5		1	2																							
·75							1	1			9 or 10							1			1											
·75																																
·25	23							1	2		1 — 10					3	4		1	2	19	1		1	1	5	10	11				Calcutta (Dum Dum)
·50							1	8	7																							
·75								2	1		9 or 10										1											
·75								1																								
·25	19						1	3			1 — 10						1	1	1	1	25				1		2	20	6			Gaya
·50								6	4																							
·75								4	1		9 or 10										2											
>75																																
·25	23	2				1	4	3	6		1 — 10							1	2	1	25						1	1	15	12		Jacobabad
·50							1	1	3																							
·75		1							1		9 or 10									1	5											
>75																																
·25	13			1	1				3		1 — 10						22		1		6		1		1			12	15			Jiwani
·50								5	1																							
·75									2		9 or 10																					
>75																																
·25	22	1	1				2	1	4		1 — 10					1	1	1			26						1	8	25			Jodhpur
·50							4	6																								
·75							1	2			9 or 10					1					6											
>75																																
·25	25	3	1	2			2	1			1 — 10					1	3	4			21						2	1	14	12		Karachi (Drigh Road)
·50		1					2	5	6																							
·75								2			9 or 10					1					5											
>75																																
·25	18	1				1		1	1		1 — 10	1				1	2		1		24		1	1			2	6	19			New Delhi
·50					1	1		4	6																							
·75									2		9 or 10	1				1			1		7											
>75																																
·25	6						1	2			1 — 10					1					6											Raj Samand (Kankroli)
·50								1																								
·75								1	1		9 or 10					1					1											
>75																																
·25	22	2					1	3	2	1	1 — 10					1	1	3	5	2	17							1	12	16		Sharjah
·50					1		1	6	2																							
·75								2			9 or 10										3											
>75								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	29	1	1	2				5	7	13	28	5	1		1	2	1	5	8	1
	26-50																		1	3	
	51-75																				
	>75																				
Ahmedabad ...	6-25	29	1	11	3	2		1	1	5	5	29	3	8	7	1		1	3	4	
	26-50																		2		
	51-75																				
	>75																				
Allahabad (Bamrauli)	6-25	29	1	4				2	6	14	2	28	1	1	2				8	10	
	26-50														1				2	3	
	51-75																				
	>75																				
Bahrain ...	6-25	29	2	2	3	10				11	1	29	3	1		2	1			1	2
	26-50												2			1	6	1		6	
	51-75															1	1			1	
	>75																				
Bangalore ...	6-25	29		8	12	1				4	3	28		3	16		1	2	3		
	26-50			1											3						
	51-75																				
	>75																				
Bhuj ...	6-25	29	5	10				2	3	2	6	29	4	9	5				3	4	1
	26-50								1										3		
	51-75																				
	>75																				
Bombay (Juhu) ...	6-25	29						3	10	15	1	29	3	2			4	4	4	7	1
	26-50												2							2	
	51-75																				
	>75																				
Calcutta (Dum Dum)	6-25	29	2	1		2	4	1	2	14	3	29	5	2			3	3	2	6	5
	26-50																2			1	
	51-75																				
	>75																				
Chittagong ...	6-25	29	1				2	7	8	10	1	29	14						6	3	3
	26-50																2		1		
	51-75																				
	>75																				
Dacca ...	6-25	29		1		1		3	1	6	17	29	3			2	3	3	6	11	1
	26-50																				
	51-75																				
	>75																				
Fort Sandeman ...	6-25	29		1				4	2	4	18	28	4	1			1	7	6	1	4
	26-50																		1	3	
	51-75																				
	>75																				
Gaya ...	6-25	29	8	3	1			1	6	11	4	29		2	1	2		1	3	11	2
	26-50																		1	1	
	51-75																				
	>75																				
Hyderabad (Begumpet)	6-25	29			3	14	1	3	2	1	5	29	1	1	5	11	1	3	2	1	3
	26-50														1						
	51-75																				
	>75																				
Jacobabad ...	6-25	29		4	1	2	2	3	3	4	10	28	1	1	2	4		2	8	2	7
	26-50													1							
	51-75																				
	>75																				
Jiwani ...	6-25	29		1		2	2	18			5	29	1	2		2	5	3	7	2	3
	26-50							1										1	2	1	
	51-75																				
	>75																				
Jodhpur ...	6-25	29	1	10	3	1		4	2	5		29	5	3	9			1	3	2	
	26-50							3							1			3	2		
	51-75																				
	>75																				
Jubbulpore ...	6-25	29	1				2	1	3	11	11	29	7	3		1	2	1	4	8	1
	26-50																1		1		
	51-75																				
	>75																				
Karachi (Drigh Road) ...	6-25	29		8	1	2	1	5	3	6	5	29	2	3	3			5	4	3	5
	26-50				1			2						1					2	1	
	51-75																				
	>75																				
Lahore ...	6-25	29	1	1		1	1		7	9	9	29		2			1	2	8	8	7
	26-50																		1		
	51-75																				
	>75																				
Madho Sagar (Gwalior)	6-25	29		5				2		7	13	29	4	3	3		1		4	8	2
	26-50									2									2	2	
	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	C
Agra ...	6-25	29	2	1	1	1	1	2	2	12	1	29	1		1			2	3	5	
	26-50								2	4			1					1	10	4	
	51-75																			1	
	>75																				
Ahmedabad ...	6-25	29	3	5	7	2		1	3	5	1	28	1	3	1	2		2	7	2	
	26-50								1	1							2	1	5	2	
	51-75																				
	>75																				
Allahabad (Bamrauli)	6-25	28	1		1		1	2	5	9	1	27					1	1	4	1	
	26-50								4	4								3	9	3	
	51-75																			2	
	>75																				
Bahrain ...	6-25	28	1	1		2	1	1	1	3		25				1	1		1	2	
	26-50		1			1	5	3	1	6							3	5	4	7	
	51-75						1													1	
	>75																				
Bangalore ...	6-25	28	1	4	13	2			2	1	2	28		5	13	3		1	2		2
	26-50				3									1	1						
	51-75																				
	>75																				
Bhuj ...	6-25	29	5	7	5	2		1	4	1	1	29	1	5	2			6	2	5	
	26-50								3										3	2	
	51-75																	2	1		
	>75																				
Bombay (Juhu) ...	6-25	29	4	3		3	5	2	3	2	3	28			4	4	6	2	1	3	
	26-50		1				1		1	1							3	3	1		
	51-75																	1			
	>75																				
Calcutta (Dum Dum)	6-25	29	4		1		1	4	3	8	1	28	1			1		1	3	8	
	26-50		1				2		1	3								1	5	7	
	51-75																			1	
	>75																				
Chittagong ...	6-25	29	10	1			2	1	4	3	3	28	4	1			1	3	2	5	
	26-50		1				2	1										3	4	5	
	51-75							1													
	>75																				
Dacca ...	6-25	28	8					3	8	6	2	25						1	5	2	
	26-50						1												7	7	
	51-75																		1	2	
	>75																				
Fort Sandeman ...	6-25											28	2	1			1	7	6	6	3
	26-50																		1	1	
	51-75																				
	>75																				
Gaya ...	6-25	29		1	1	1	1	2	7	10	1	27			1			1	5	2	
	26-50								4	1								3	6	6	
	51-75																		1	2	
	>75																				
Hyderabad (Begumpet)	6-25	29	1	1	5	11	1	3	1	2	3	29	4	3	2	5	3	5	2	1	1
	26-50				1													1	2		
	51-75																				
	>75																				
Jacobabad ...	6-25	29	1	2	1	1	3	6	6	4	5	28	1	1	1			5	6	6	1
	26-50																	3	1	2	
	51-75																			1	
	>75																				
Jiwani ...	6-25	28	2		1	2	1	4	10	5	1	28				3		2	5	8	
	26-50								1	1							1		4	5	
	51-75																				
	>75																				
Jodhpur ...	6-25	29	6	3	7	1		1	2	3	1	23	5	1	1		1	2	3	1	1
	26-50							2	3					1				1	3	2	
	51-75																	1			
	>75																				
Jubbulpore ...	6-25	29	6	3			2	2	4	9	1	28					1	6	8	4	
	26-50						1		1									1	6	2	
	51-75																				
	>75																				
Karachi (Drigh Road) ...	6-25	29	2	5	3	1	1	5	2	3	3	29	4	2	3	2	2	2	1	2	
	26-50								2	1							1		2	6	
	51-75								1									1	1		
	>75																				
Lahore ...	6-25	29	1	1	1	2	1	2	6	11	2	25	1			2	2	2	4	6	
	26-50						1			1						1	1	1	1	4	
	51-75																				
	>75																				
Madho Sagar (Gwalior)	6-25	29	7		1	2		1	5	8	2	26					1		5	4	
	26-50								2	1								1	3	6	
	51-75																	2		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	2	3	4	5	6	7	8	9	
24							1	3		1 — 10					1		2	1	7	18						1	8	20			Agra
						1	11	4																							
							3	1		9 or 10										8											
25					2	3	1			1 — 10								4	3	22								29			Ahmedabad
					1	6	4	2																							
						1	3	1		9 or 10								1		2											
							1																								
19										1 — 10								4	4	21						1	16	12			Allahabad (Bamrauli)
						2	6	5																							
						1	4	1		9 or 10								1		5											
18				1		1	2			1 — 10						1	1	1	2	24							6	23			Bahrain
						1	6	4																							
							2	1		9 or 10										7											
26	1	6	4	3	2	3			1	1 — 10								8	7	14							8	18	3		Bangalore
		3	2			1																									
										9 or 10																					
22		1				3	1	2	1	1 — 10							7			22								29			Bhuj
		1				2	4	2																							
							4			9 or 10										4											
						1																									
26		2	1		4	2	5	1	1	1 — 10							3	1		25							2	26	1		Bombay (Juhu)
					2	2	2	1																							
						2	1			9 or 10										1											
22							2	6		1 — 10						3	6	3		17						1	27	1			Calcutta (Dum Dum)
							4	4																							
							3	2		9 or 10								1		4											
							1																								
27						2	5	1		1 — 10					1	2	2	2		22							1	28			Chittagong
	1						12	1																							
						1	4			9 or 10					1					5											
16							3	1		1 — 10					2	4	5	3	1	14							29				Dacca
						1	4	2																							
							3	1		9 or 10										4											
							1																								
27					2	3	5	5		1 — 10					1		1	4	5	18			1				2	12	14		Fort Sandeman
						3	4	5																							
										9 or 10					1			1	1	10											
19							1	1		1 — 10					1	1	2	1	1	23							9	20			Gaya
							6	5																							
							3	1		9 or 10										2											
						1		1																							
27	5	4	1		1	2	7		1	1 — 10								6	11	12									1	28	Hyderabad (Begumpet)
	1					1	4																								
										9 or 10																					
23	1				2	2	5	3		1 — 10							2	5		22						1		16	12		Jacobabad
						1	2	4																							
	1									9 or 10										3											
	1							1																							
13		1				1		1		1 — 10					1	13				15				1		1	6	21			Jiwani
			1				4	3																							
							1	1		9 or 10										4											
17	1	2	1					2		1 — 10						1	1	3		24						3	2	24			Jodhpur
						3	5	1																							
								1		9 or 10										5											
						1																									
23						2				1 — 10							1	5	7	16							1	20	8		Jubbulpore
						3	6	7																							
						2	3			9 or 10							1			3											
15			5			1	1	3		1 — 10					1	1	7			20						1	2	4	20	2	Karachi (Drigh Road)
					1	2	4	5																							
							1	2		9 or 10					1					4											
12	2				3	1	5	3		1 — 10						1	6	2	1	19						4	11	14			Lahore
					1		2	5																							
										9 or 10						1	1			8											
30								1		1 — 10					1	1	2	4		21						1		16	12		Madho Sagar (Gwalior)
							10	5																							
							2	1		9 or 10						1				7											
							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
Madras ...	6–25	29		9	6	11	1				2	29		7	8	3	5	2		1	1	28		4	4	3	2	2	1	1		22	1	8	2				4	1
	26–50													2										6	3	1					1			4	1					
	51–75																																							
	>75																																							
Malegaon ...	6–25	29		2	2	4	2	4	5	5	5	29	1	3	1	5	3	3	3	3	4	29	1	3	1	4	6	3	4	3	2	29	1		2		4	5	7	2
	26–50																1		2							2											1	3	2	
	51–75																																						1	
	>75																																							
Mangalore ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
New Delhi ...	6–25	29		1	1	3			6	8	4	28	3			1	4		3	11	1	27	2				3		4	8	2	25	1		1			3	4	5
	26–50									6						1				4						1				7									3	7
	51–75																																							
	>75																																							
Peshawar ...	6–25	29		6		2			1	5	15	29	3	2	2	1	1	1	1	7	10	29	3	2	3	1	1	1	3	9	5	27	4	2	1	2		1	7	5
	26–50																			1										1									1	3
	51–75																																							
	>75																																							
Poona ...	6–25	29	5	2	2	3	1	3	5	2	4	28		1	6	3	3	3	6	2	1	28	1	1	7	3	4	1	6	2		29			4	3	2	5	7	1
	26–50							2										2	1									1	2									4	2	
	51–75																																							
	>75																																							
Port Blair ...	6–25	29		28								29	3	12	9	1			1			29	3	3	10	3	2			3	2	27	1	1	9	2	1	2	3	1
	26–50			1										2	1										2	1								1	3	2					
	51–75																																							
	>75																																							
*Raj-Samand (Kankroli)	6–25	22	2		5	3	1		1	1	8	21	4	1	4	5	1	1			3	21	4	1	4	5	1	1			3	22			1	1	2	4	5	4
	26–50							1										1	1									1	1										4	
	51–75																																					1		
	>75																																							
Sambalpur ...	6–25	29	2	1	1		3	5	2	5	10	29	6	2			5	5	2	2	4	29	5	1		2	3	6	4	4	2	27	1						8	4
	26–50																1	1		1								1		1				2			1			5	5
	51–75																																					1		
	>75																																							
Sharjah ...	6–25	29	4				1	2	4	17		29	2		1			2	13	5		29			1	3	6	3	6	2		29	3				4	4	2	3
	26–50								1								1	1	3	1							1		5	1							2	1	6	2
	51–75																												1										1	
	>75																																							
Tezpur ...	6–25	29		4	4		1	2	1	1	16	29		4	10		3	2	2		6	29		4	7	1	4	3	1	1	6	25		1	6	3	3	3	1	
	26–50														1			1										2									1		3	
	51–75																																					1	1	
	>75																																							
Trichinopoly ...	6–25	29	1	17	4	3					4	29		6	11	2		1			2	29		13	5	3		1			3	29	1	12	3	1		1		
	26–50													7										4										6	3					
	51–75																																							
	>75																																							
Trivandrum ...	6–25																																							
	26–50																																							
	51–75																																							
	>75																																							
Vizagapatam ...	6–25	29			5	10	9	3	1		1	29		4	3	3	9	1	1			29	2		3	1	2	9	1	1	1	27	8	6		1		1	1	4
	26–50													2			1	4	1				3	3				2	1				2					1	2	
	51–75																																							
	>75																																							

*Only on 28 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, record 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	
22	6	1	2	2		2		5		1 — 10						4	7	1		17									5	24	Madras
	1	1							2																						
										9 or 10																					
26	1	1	1			5	2	1	1	1 — 10								1	16	12								27	2		Malegaon
						5	6																								
							3			9 or 10										1											
										1 — 10																1		11	15	2	Mangalore
										9 or 10																					
20						2	1	2		1 — 10					2		3	5	1	18					1		2	26			New Delhi
						1	8	5																							
								1		9 or 10										4											
26	1	1	1	2	1	2	8	4	2	1 — 10						2	4	3	6	14							1	2	3	23	Peshawar
				1				2																							
								1		9 or 10						1	1	1		12											
27	2	1	2	1	1	4	3	2		1 — 10								2	7	20									29		Poona
						4	5																								
						1	1			9 or 10																					
13			4		2	1		2	1	1 — 10					2		23	3		1							21	8			Port Blair
			1				2																								
										9 or 10										1											
21							1	2	1	1 — 10								3	1	18							2	3	24		*Raj-Samand (Kankroli)
						6	7																								
						2	2			9 or 10																					
21							3	1		1 — 10						3	1	11		14								27	2		Sambalpur
	1					2	3	11																							
										9 or 10								1		2											
22			1	1		2	2		1	1 — 10							3	11	1	14						1		14	14		Sharjah
						1	4	5																							
					1		3	1		9 or 10										5											
20	1	1		1		3	2	1	1	1 — 10					1		3	2	12	11							2	23	4		Tezpur
							6	1																							
							3			9 or 10							1			7											
18		4	4			3	3	2	1	1 — 10							1	8	7	13									5	24	Trichinopoly
	1																														
										9 or 10										1											
										1 — 10																	2	27			Trivandrum
										9 or 10																					
22	6	3					3	2		1 — 10							4	1		24							29				Vizagapatam
	4					1		3																							
										9 or 10										2											

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
*Ahmedabad ...	6-25	2							1	1		2										2										2								
	26-50																			1									1									1	1	
	51-75																		1										1											
	>75																																							
Allahabad (Bamrauli)...	6-25	29		3					1	3	22	29	3	3	2	1		2	1	11	1	29	1	1		1		3	7	7		24						2	4	2
	26-50															1				4								1	4	4								2	11	2
	51-75																																							1
	>75																																							
Bahrain ...	6-25	29		1	2	8	1	4		8	5	29	1			2		3	2	5		29					2	4	1	4		22				2	1	1	4	1
	26-50												2			2	2			5							7	3		8								1	7	5
	51-75																5																							
	>75																																							
Bombay (Juhu) ...	6-25	29		1							28	29	16	2	1			1	4	4		29	8	4		1	1	1	9	5		21		1		7	5	1	1	1
	26-50																			1																		2	2	1
	51-75																																							
	>75																																							
Calcutta (Dum Dum) ...	6-25	29	3	11		1	1	4		1	8	29	6	2	2	1	1	3	5	2	5	27	3	1		1	1	2	2	9	4	17						4	4	
	26-50																	1	1										1	3									3	5	
	51-75																																							1
	>75																																							
Gaya ...	6-25	29		1	1	12	3	1		1	10	28	3	1	2	1	1	1	2	12	2	28	2					2	8	10	1	19						1	1	2
	26-50																1			2							1		2	2									10	4
	51-75																																						1	
	>75																																							
Jacobabad ...	6-25	29	1	1	7	1			1	1	16	29	3	1	5	3	3	3	4	1	3	29			2	2	4	5	4	4	4	26			1		1	9	5	2
	26-50									1					1					2					1				2	1								1	2	3
	51-75																																							
	>75																																							
Jiwani ...	6-25	29	1	2	1		1	4	1	3	15	29	1	1		1	5	4	9	5	2	29	1	1		2	3	5	4	11		16				1		1	2	4
	26-50									1									1								1			1									3	2
	51-75																																						1	
	>75																																							
Jodhpur ...	6-25	29		19	1			2	1	1	4	28	3	4	6	3		3	1	1		28	4	2	2	2	2	3	3	1	1	25	2					4	4	6
	26-50								1					1	2			1	1	1				1	2				2	2			1						4	3	
	51-75																	1										1												
	>75																																							
Karachi (Drigh Road) ...	6-25	29		10				1	1	6	11	29	3	2	2		2	3	6	3	4	27	3	1	2	2	3	4	4		4	24	1	7		1		4	2	3
	26-50														1				1	2									2	2									3	2
	51-75																																							1
	>75																																							
Madho Sagar (Gwalior)...	6-25	29	1			2		3	1	1	21	29	4	4	2	3	1	1	2	6	1	29	4		1	2		2	6	10		24						1	3	3
	26-50															1		1	1	2								1	2	1								1	12	4
	51-75																																							
	>75																																							
New Delhi ...	6-25	29	1	1	2	1			3	7	14	27	3	1	2	2			1	11	1	26	2			1	1		6	9		24					1	2	1	4
	26-50																			6									1	6								1	5	8
	51-75																																						1	1
	>75																																							
†Raj Samand (Kankroli).	6-25	9	1	1				1		6		9		2	2	1			1	2		9		2	2	1			1	2		9						2	5	1
	26-50																			1										1										1
	51-75																																							
	>75																																							
Sharjah ...	6-25	29		1	3	2	2		3	3	15	29			3	3	2	1	8	4	2	28	1		2	2	4	3	6	3	1	24					5	3	5	4
	26-50																1	1	3	1							1	1	4									1	3	2
	51-75																																						1	
	>75																																							

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

† Only on 9 days in the month, pilot balloon ascents were made in the late night. On the remaining days the ascents were made in the morning. Visibility observations in the late ni were recorded only on days of night ascents.

CLOUD HEIGHTS (LATE NIGHT) 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	
										1 — 10										2							2				*Ahmedabad ...
										9 or 10																					
11						1	2 3	2		1 — 10	1							2	6	20				1		1	25	2			Allahabad (Bamrauli)
							2	1		9 or 10	1								1	4											
8					1		2 2	3		1 — 10							1			28							92				Bahrain
										9 or 10							1			3											
11				1		5	1	1		1 — 10						2	1			26							26	3			Bombay (Juhu)
							2	1		9 or 10																					
9							1 4 2	2		1 — 10					2	1	2		1	23				1		19	9				Calcutta (Dum Dum)
										9 or 10					1					3											
6						1	3	1 1		1 — 10							1		1	27						2	27				Gaya
										9 or 10										3											
23			1			2 2 1	2 7 1	5 2		1 — 10							2	3	1	23							12	17			Jacobabad
										9 or 10										3											
4						1	1	2		1 — 10					3	7				19				1			28				Jiwani
										9 or 10						1				2											
18	2					2 3	2 4 1	3 1		1 — 10						1	1			27								29			Jodhpur
										9 or 10							1			4											
3	1					1	1			1 — 10					2	3	1			23				1		1	3	24			Karachi (Drigh Road)
										9 or 10					1					5											
7						1	4 1	1		1 — 10					1		1	2		25						1	3	25			Madho Sagar (Gwalior)
										9 or 10							1			3											
17						1 2	2	3 8 1		1 — 10					2	1	1			25						2	8	19			New Delhi
										9 or 10						1				5											
9						2	2 3 1	1		1 — 10										9								4	5		†Raj Samand (Kankroli)
										9 or 10																					
17	1					1	4 3	3 5		1 — 10					1		1	6	1	20							1	28			Sharjah
										9 or 10										2											

N. P. P.—S 98—950—5-41

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 1940

Supplement to the Monthly Weather Report, March 1940

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 16th May 1941.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U 25

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		3	3	1		1	4	1	18	31	2	8		4	2		1	4		31	4			2	2		3	3		31	1	1		1	2	2	5	4
φ = 27° 08′ N ...	26–50													1	1	1	1		2	2				3	2	3	2		3	3						1		1	6	6
λ = 78° 01′ E ...	51–75															1			1										1											1
H_s = 182 metres ...	>75																																							
Bangalore ...	6–25	31			1	4	3	9	6	3	5	31	2		1		10	7	2	3		31	1		1	5	5	10	9			31	1	2	2		7	9	2	1
φ = 12° 58′ N ...	26–50															2	1	1	1	1														1	2		1	3			
λ = 77° 35′ E ...	51–75																																							
H_s = 936 metres ...	>75																																							
Bhuj ...	6–25	31	1					9	5	2	14	31	6						2	3		31	6			1		2	5	4		31	2				2	3	1	3
φ = 23° 15′ N ...	26–50												2						8	9			1						5	5			2			1		3	7	1
λ = 69° 48′ E ...	51–75																		1										2									1	2	
H_s = 113 metres ...	>75																																					1	1	
Chittagong ...	6–25	31	1		2	7					21	31	2			1	6	8	2	2	2	31	2				2	4	12	1	2	26	3	1			1	1	2	3
φ = 22° 21′ N ...	26–50												1				5	1		1							1	5	2								1	2	6	4
λ = 91° 50′ E ...	51–75																																					1		1
H_s = 21 metres ...	>75																																							
Dacca ...	6–25	31	1	1	1	2		4			22	28	2	1		2	4	4	5	2		26	1			1	1	1	9	4	1	23	1				1	3	1	
φ = 23° 43′ N ...	26–50													1			3	2	1	1							1	2	3	2								2	9	3
λ = 90° 24′ E ...	51–75																																						1	1
H_s = 21 metres ...	>75																																						1	
Fort Sandeman ...	6–25	31			2	1	2	1	2		23	31	2	4	1		2	5	8	4	4											30	4		2		1	8	6	4
φ = 31° 21′ N ...	26–50																		1																				1	
λ = 69° 27′ E ...	51–75																																							
H_s = 1421 metres ...	>75																																							
Hyderabad (Begumpet).	6–25	31			2	2	2	2	5	6	12	31	3	2	2	3	3	2	4	2		31	3	2	2	3	3	2	4	2		31	4	1			2	6	10	1
φ = 17° 26′ N ...	26–50												3					2	1	4			3					2	1	3							1	3	2	
λ = 78° 27′ E ...	51–75																													1										
H_s = 555 metres ...	>75																																							
Jubbulpore ...	6–25	31	1		1	4	1	2	2		20	31		4	4	1	2	1	1	5		31	2	4	2	1		3		5	1	30	1	1				3	3	4
φ = 23° 10′ N ...	26–50												1	2	2		1		1	5			1	3	1		1		1	5							1	1	7	7
λ = 79° 57′ E ...	51–75															1										1													1	1
H_s = 402 metres ...	>75																																							
Lahore ...	6–25	31	2	2	1				1	1	24	31	3	4	4	2			1	8	2	31	5	3	3	3	1		3	6		31	3	2	2	3	2	1	1	6
φ = 31° 35′ N ...	26–50												1			1	2	1		1			1			1	2	1		1							3	1	1	4
λ = 74° 20′ E ...	51–75																			1										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	2	1			27	31				1	8	1				31				5	9			1	1	27	4	2	2	1	1	8	5	
φ = 13° 04′ N ...	26–50																18	2							1		9	5						1	1			1	1	
λ = 80° 15′ E ...	51–75																	1																						
H_s = 13 metres ...	>75																																							
Malegaon ...	6–25	31							12	4	15	31	4	4				1	3	12		31	4	5				2	2	12		31	1		1	2	2	2	3	4
φ = 20° 33′ N ...	26–50												2						2	3			1						2	3			1				1	5	5	1
λ = 74° 32′ E ...	51–75																																							
H_s = 443 metres ...	>75																																							
*Mangalore ...	6–25	27		9	15		1				2	27	5				1	1	1	18	1	27	1	1			2	2	8	9	1	27	1		2	5	3	4	4	1
φ = 12° 52′ N ...	26–50																											1		2					2	1	1	1	2	
λ = 74° 51′ E ...	51–75																																							
H_s = 40 metres ...	>75																																							
Peshawar ...	6–25	31		1		2		8	2		18	31	9	4	1	2	1		1	7	4	31	11	4	2	1	1		2	6	3	30	5	1	3	2	1	1	3	5
φ = 34° 01′ N ...	26–50																		2										1				1			1	1	1	1	4
λ = 71° 35′ E ...	51–75																																							
H_s = 363 metres ...	>75																																							
Poona ...	6–25	31				1		24	3		3	31	4	5	1				5	7		31	3	2	2			2	7	9		31		1	3	2	1		4	2
φ = 18° 32′ N ...	26–50																	2	3	4									3	3			1	1		3	5	1	6	1
λ = 73° 51′ E ...	51–75																																							
H_s = 588 metres ...	>75																																							
Port Blair ...	6–25	31	2	2	2					4	21	31	4	11	7	2	2			1	4	31	7	5	3	3	3	2	1	3	4	30		2	2	6	3	7	1	2
φ = 11° 40′ N ...	26–50																																				1		2	
λ = 92° 43′ E ...	51–75																																							
H_s = 87 metres ...	>75																																							
†Raj Samand (Kankroli)	6–25	21		1		1	1	3	2	8	4	21	5	1		2	2	1	2			21	5	1		2	2	2	2			20		1		1	1	1		4
φ = 25° 03′ N ...	26–50									1					1			1	4	2					1			1	2	3								2	5	2
λ = 73° 53′ E ...	51–75																																					1	1	
H_s = 587 metres ...	>75																																					1		
Sambalpur ...	6–25	31	1	2				1		1	26	31	1	4	3	5	5	3			1	31	3	2	3	2	4	3	1	3	1	31				1		1	5	2
φ = 21° 28′ N ...	26–50													1	1	2	1	3	1								4	2	3									4	14	3
λ = 83° 58′ E ...	51–75																																					1		
H_s = 153 metres ...	>75																																							
Tezpur ...	6–25	31		10	6	1					14	27			8	3	1	2	2		1	25		1	9	3	2	3	2			24		1	1		1		6	2
φ = 26° 37′ N ...	26–50														9				1						2				3									1	7	
λ = 92° 47′ E ...	51–75																																					1	2	
H_s = 80 metres ...	>75																																						1	
Trichinopoly ...	6–25	31		2	2	1	1	1	2	1	21	31			1	9	10	4	5			31			2	2	14	7	4			31		6	2	7	6	3	3	
φ = 10° 49′ N ...	26–50																	1	1								1	1						2	1					
λ = 78° 42′ E ...	51–75																																							
H_s = 88 metres ...	>75																																							

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

† Only on 21 days in the month 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	
5	30				1	2	2	2			1 — 10					1				3	27						6	24	1			Agra
0							1	7	5																							
5							1	6	3		9 or 10									1	4											
5																																
5	30	5	3	1	1	3	3	3	2		1 — 10					1	2	1	3	3	21							30	1			Bangalore
0			1	2			4	2																								
5											9 or 10										6											
5																																
5	20	2					2	2	1		1 — 10						2	3	1		25							4	27			Bhuj
0		1						6	4																							
5							1	1			9 or 10										3											
5																																
5	23	1					1	3	2		1 — 10	1			2	7	5	1			15					1	1	21	8			Chittagong
0						1	1	3	3																							
5								3	5		9 or 10	1				2					15											
5																																
5	13						1	1			1 — 10	1				9	3	1		1	16			1	1	1	2	26				Dacca
0								4	1																							
5								2	1		9 or 10	1				1					10											
5								2	1																							
5	28	3	1	1	1	1	3	2	3		1 — 10						1	2	3	1	24			1		2		6	21	1		Fort Sandeman
0						1	1	3	6																							
5								1	1		9 or 10						1	2		1	5											
5																																
5	30	2	2				3	7	2		1 — 10				2	1				3	25							7	11	13		Hyderabad (Begumpet)
0						1	7	3																								
5							3				9 or 10				1						1											
5																																
5	20						1	1			1 — 10								3		28					1		2	28			Jubbulpore
0							4	5	1																							
5							3	2	1		9 or 10										2											
5								1	1																							
5	24	4		2		2	1	2	3		1 — 10								2	1	28					4	11	16				Lahore
0			1					3	5																							
5						1					9 or 10										8											
5																																
5											1 — 10													1			1	2	25	2		Madho Sagar (Gwalior)
0																																
5											9 or 10																					
5																																
5	22	3					4	3	4		1 — 10						9	3	1	1	17							1	30			Madras
0		2	1	1			1	1	2																							
5											9 or 10										8											
5																																
5	29					1	2	5			1 — 10									3	28							6	21	4		Malegaon
0		1				3	7	5	1																							
5							3	1			9 or 10										1											
5																																
5	24			3	2	3	1	3		1	1 — 10					10	8	3	4	3	3						6	20	5			*Mangalore
0			2	1		3	1	4																								
5											9 or 10										1											
5																																
5	29	3	1	2		4	3	3	4		1 — 10								5	5	21						1	1	2	4	23	Peshawar
0					1	1	2		4																							
5					1						9 or 10								2		7											
5																																
5	31			1	3	4	2	3			1 — 10								1	3	27								1	30		Poona
0		1				3	4	6																								
5							2	1	1		9 or 10																					
5																																
5	24			1	2	6	6	5	1	1	1 — 10					6	1	14			10							7	24			Port Blair
0					1			1																								
5											9 or 10										4											
5																																
5	18						2	2	2		1 — 10						1				20						2	5	12	12		†Raj Samand (Kankroli)
0							1	5	2																							
5						1		2			9 or 10						1				2											
5							1																									
5	26						2	2			1 — 10							1	6	5	19							3	26	2		Sambalpur
0							1	8	5																							
5							2	4	2		9 or 10								1		1											
5																																
5	11			1				2	2	1	1 — 10			2	3	3	1		6	8	8						5	11	15			Tezpur
0								4																								
5								1			9 or 10			2	2	2	1		2	1	14											
5																																
5	27	4	4	1	1	2	2	3	1	3	1 — 10					2		6	1	3	19								11	19	1	Trichinopoly
0		1	1	2				1	1																							
5											9 or 10										2											
5																																

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
Trivandrum ...	6–25	31	21	1						5	4	31	1						3	15		31	2	3	1	3			1	13	1	31	3	7	6	2	2	1	1	2	5
ϕ = 08° 29′ N ...	26–50												1							11										7				2								
λ = 76° 57′ E ...	51–75																																								
H_s = 76 metres ...	>75																																								
Vizagapatam ...	6–25	31	1					1	11	1	17	31				2	1	12			1	31					4	10	5			22	2					2	7	5	
ϕ = 17° 42′ N ...	26–50																	12	3									10									1		4		
λ = 83° 18′ E ...	51–75																											2										1			
H_s = 56 metres ...	>75																																								

TABLE 4—WIN

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
Ahmedabad ...	6–25	31	1	2				3	4	14	7	31	2	1	2		1	1	3	9		31	2	2			1	3	7	6		30	1		1			2	1	4	
ϕ = 23° 02′ N ...	26–50												2	1						7	1		1						6	1	2		2				2	3	10		
λ = 72° 35′ E ...	51–75																		1											-			1					2	1		
H_s = 55 metres ...	>75																																								
Allahabad (Bamrauli)	6–25	31		3	3	5	2	3	3		11	31	3		3	3	1	3	3	4	1	31	2		2	3	1	2	4	7	1	28				2		2	6	1	
ϕ = 25° 26′ N ...	26–50			1												3		1	6	1					1	3			3	2								3	5	5	
λ = 81° 44′ E ...	51–75														1	1																							2	2	
H_s = 98 metres ...	>75																																								
Bahrain ...	6–25	31	4			3	1	2	2	18	1	31	3	1		1		1	3			31	4		1	1		1	2	2		30			1		1	1	1	6	2
ϕ = 26° 14′ N ...	26–50												8			1		2		5			7				2	1		7			3				1	2	3	6	
λ = 50° 35′ E ...	51–75												4				1			1			2							1			1						1		
H_s = 14 metres ...	>75																																							1	
Bombay (Juhu) ...	6–25	31	5	7	3	6				4	6	31	11	1			2	2	1	7	1	31	9	3	1			1	5	6		29	2		2	1	5	3	5	2	
ϕ = 19° 07′ N ...	26–50												4	2									2	1				1		2			1				2	2	2	2	
λ = 72° 50′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	31		2	1	5	3	6	1	4	6	31			1	3	3	5	2	4	4	28	1		1	2	5	2	6	2	1	22						3	6	2	
ϕ = 22° 39′ N ...	26–50					1		2									2	4	3									5	2	1								2	4	3	
λ = 88° 27′ E ...	51–75																																						1	1	
H_s = 21 metres ...	>75																																								
Gaya ...	6–25	31	1	1	3	4		9	6		6	31	2	1	3	2	3	2	6	3	1	31	1	1	2	3	2	1	5	3		31						4	3	1	1
ϕ = 24° 49′ N ...	26–50				1										2	2			3	1						1		1	6	5							1	5	4	3	
λ = 85° 01′ E ...	51–75																																							2	
H_s = 117 metres ...	>75																																							1	1
Jacobabad ...	6–25	31	1	1	5	2				4	16	31	4	2	1	4	2	3		1	3	29	2	3	2	4	3	3	3	2	1	29	3		1			3	7	5	
ϕ = 28° 17′ N ...	26–50				1					1			3		2	2			2	1								2	1	3					1			3	2	4	
λ = 68° 29′ E ...	51–75												1																												
H_s = 56 metres ...	>75																																								
Jiwani ...	6–25	31		5				5	4	3	10	31	3	3	1		2	2	6	4		30	3	3			1	1	5	2	3	29	1	1		1		2	2	5	1
ϕ = 25° 10′ N ...	26–50			1					2	1				3					3	1			1	2			1		3	3			2	1					5	3	
λ = 61° 47′ E ...	51–75																		3										1	1			1						3		
H_s = 5 metres ...	>75																																						1		
Jodhpur ...	6–25	31		9		1		10		1	8	31	3	2	3	1		1	4	2	1	31	4	1	1	1	1	2	2	4	1	29	2				1	3		3	
ϕ = 26° 18′ N ...	26–50			1				1					1	1			1	7	1	2							1	5	3	3			1			1		9	3	3	
λ = 73° 01′ E ...	51–75															1										1		1										2	1		
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	31		1				3	6	12	2	31	4	1	1				4	3		31	3		1				2	5		28		1	1	1		1	2	6	
ϕ = 24° 53′ N ...	26–50			1				2	2	2			1	1					10	6			2	2					5	7				2					5	2	
λ = 67° 07′ E ...	51–75																							1					2	1									4	2	
H_s = 29 metres ...	>75																																								
New Delhi ...	6–25	31		2	2	5		3	7	1	9	30	2	1	2	1	2	1	7	4		29	2			2	5		4	6		28	1	1	1	2	1	1	4	2	
ϕ = 28° 39′ N ...	26–50								1	1					1	4			2	2					1	3			3	2							2	1	2	10	
λ = 77° 15′ E ...	51–75															1										1															
H_s = 227 metres ...	>75																																								
*Raj Samand (Kankroli)	6–25	10				1			1	1	7	10		2		1	1	3	2	1		10		2		1	1	3	2	1		9	1					1	2	1	
ϕ = 25° 09′ N ...	26–50																																							4	
λ = 73° 58′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sharjah ...	6–25	31	1	1	2	2	2	11	3	2	6	31		3	1	1		1	7	6		31	1	3	2		1	2	1	5	1	29	3		2			1	3	3	
ϕ = 25° 20′ N ...	26–50									1							2	1	5	3									5	8				2				2	7	2	
λ = 55° 24′ E ...	51–75																			1							1			1									1	2	
H_s = 11 metres ...	>75																																							1	

* Only on 10 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)

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	27		8	4	3	2	3	3	1	2	1 — 10						2	8		1	20						3	18	10			Trivandrum
50			1																													
75											9 or 10										2											
75																																
15	10	1						1	2		1 — 10					12	3	4	1		6							30	1			Vizagapatam
50		3						2	1																							
75											9 or 10					2	1	1			10											
75																																

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

15	22	1			1		1	4	2		1 — 10						1	1	1	1	27						1	4	26			Ahmedabad
50		1				1	2	7																								
75											9 or 10						1	1			5											
75							1	1																								
15	23				1		1				1 — 10						1	1	3	3	23						1	25	5			Allahabad (Bamrauli)
50							1	8	3																							
75							1	3	3		9 or 10						1			1	4											
75								2																								
15	19	2					1	2	3		1 — 10	1					1			2	27			1				7	23			Bahrain
50		1						8	2																							
75											9 or 10	1									4											
75																																
15	27	1			2	1	4	2	2		1 — 10						7	4	3		17						1	24	6			Bombay (Juhu)
50		1				2	5	4	1																							
75								1	1		9 or 10										4											
75																																
15	14						1	2	3		1 — 10					6	9	3	3	3	7				1	1	7	22				Calcutta (Dum Dum)
50								5	1																							
75								2	1		9 or 10					2			1		6											
75																																
25	20							1	1		1 — 10						1	1	1	1	27							20	10	1		Gaya
50							1	4																								
75							1	5	2		9 or 10										1											
75								3	2																							
25	23	4						3	6	1	1 — 10					1				1	29					3	4	4	14	6		Jacobabad
50			2				3	1	1																							
75								2			9 or 10					1					6											
75																																
25	7		1						3		1 — 10					1	7				23				1		6	22	2			Jiwani
50									2																							
75								1			9 or 10										3											
75																																
25	17		1			1		3	2	1	1 — 10								3		28						2	7	22			Jodhpur
50		1					1	2	2																							
75								1			9 or 10										5											
75							1	1																								
25	22	3	2	1			1	2			1 — 10						4	7			20						7	8	13	3		Karachi (Drigh Road)
50							1	6	3																							
75							1	1			9 or 10										4											
75		1																														
25	26		1		2	3	1		3		1 — 10							3		1	27				1			14	16			New Delhi
50							2	3	10																							
75								1			9 or 10										6											
75																																
25	9							1			1 — 10						1			1	8											*Raj Samand (Kankroli)
50		1					3	3																								
75							1				9 or 10						1				1											
75																																
25	20	1	1				1	2	2		1 — 10							7	5	1	18							3	20	8		Sharjah
50		2					4	2	1																							
75		1						1	1		9 or 10										1											
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	C
Agra ...	6-25	31	2	1	1		2	4	7	5	9	30	3	1		1	3	1	6	5	4	31	2	1		1	5	2	7	8	2	29	1				2	3	4	4	1
	26-50														1	1				4					1					2			1				2	2	4	5	
	51-75																																								
	>75																																								
Ahmedabad ...	6-25	31	1			1		11	3	8	7	31	2				2	2	11	6	2	31	3					7	10	6		31	1				1	1	1	7	1
	26-50																	1	3	2								2		2								1	11	2	
	51-75																												1										2	3	
	>75																																								
Allahabad (Bamrauli)	6-25	31		2	1			2	6	10	6	31	1	1	2			1	6	12	2	31	1		2	1	1		9	7	1	22				1		1	5	4	1
	26-50				1				1	2					1	1			3	1						1	1		4	3						1		1	4	3	
	51-75																																						1		
	>75																																								
Bahrain ...	6-25	31	5	2	1	2		1		19	1	31	3			1	2	3		5		31	3				1	5	3	3		28	2	1				1	4	5	
	26-50												8					1		6			4	1				1		6			1					1	8	4	
	51-75												1							1										3										1	
	>75																													1											
Bangalore ...	6-25	31	1	2		5	1	10	2	5	3	31	1	3	2	1	2	7	7		3	31	1		4	3		9	5	3	5	31		2	3	2	3	7	7	3	
	26-50				1			1							2			1	2						1										1				2	1		
	51-75																																								
	>75																																								
Bhuj ...	6-25	31	1				2	6	12	9	1	30	1	1			1	4	6	8		31	2				2	2	8	7	2	30			1		1	6	6	
	26-50																1	1	6	1								1	5	1							1	2	5	4	
	51-75																												1					1				1	1		
	>75																																					1			
Bombay (Juhu) ...	6-25	31						4	2	24		31	6					2	6	13		31	7	4		2	1	1	6	3	1	30	3			3	1	2	5	4	1
	26-50									1			1							3			1					2		3							3	2	4	2	
	51-75																																								
	>75																																								
Calcutta (Dum Dum)	6-25	31				3	5	7	3	6	6	31				2	5	6	8	2	4	31	1		1	1	4	6	9	1	1	27					1	7	1	
	26-50				1													2	1									2	5									4	9	3	
	51-75														1																								1	1	
	>75																																								
Chittagong ...	6-25	31	2		1	2	5	13	4		4	30	4	1	1	1	4	9	2	3		29	5	2		1	1	8	4	1	2	26				1	1	2	7	2	
	26-50															1	3	1									1	3	1									1	6	5	
	51-75																																					1			
	>75																																								
Dacca ...	6-25	31		1		6	4	7	2	1	10	31		1	1	2	5	5	5	3	2	29	1		2	1	2	10	6		1	26	1						4	4	
	26-50															1	2	4										3	3									3	8	3	
	51-75																																					1	1	1	
	>75																																								
Fort Sandeman ...	6-25	31	2	3		2	2	6	4	2	10	31	3	3		1	2	5	10	4	2											31	2	3			2	8	9	4	2
	26-50																		1																				1		
	51-75																																								
	>75																																								
Gaya ...	6-25	31	2	3		2	1	2	8	4	3	31		3	1	2	1		10	4	2	31	1	1	1	2		1	8	5	3	27		1				7	1	1
	26-50								2	4					1				1	6						1			2	6								1	5	2	
	51-75																																						3	1	
	>75																																						1		
Hyderabad (Begumpet).	6-25	31		3		2	2	9	4	1	10	31		3	2		4	9	5	3	3	31		3	2		4	10	3	4	3	31		3			2	9	8	2	2
	26-50																	2										2								1			3	1		
	51-75																																								
	>75																																								
Jacobabad ...	6-25	31	2	1	3	6		2	1	5	9	31		3	2	7	3	3	1	4	4	31		3	3	5	3	6	1	4	3	28	1	3	1		1	4	2	4	2
	26-50									2								1		2									1	2				1				4	3	2	
	51-75																		1																						
	>75																																								
Jiwani ...	6-25	31		1			2	19	1		1	31	1			2	2	6	2	3	1	31	1	1		1	2	3	3	5		26	1		2			1	2	3	
	26-50							7										2	7	1				1				1	8	2			3					3	5	3	
	51-75																		4										3										2		
	>75																																								
Jodhpur ...	6-25	31		4		1	1	11	4	5	2	31	2	1	1		1	8	4	2	2	29	2	1	1	1	2	7	7	1	3	26	1			1	1	2	5	6	1
	26-50							2								1	1	6	1									3	1									1	4	4		
	51-75							1										1																							
	>75																																								
Jubbulpore ...	6-25	31		1		1	2	3	7	10	7	31	4			1	1	2	5	11	1	31	3	1		1	2		5	11	1	30	1				2	1	13	6	
	26-50																1	1	3	1							1	2	4								1	4	2		
	51-75																																								
	>75																																								
Karachi (Drigh Road) ..	6-25	31					1	6	1	8	1	31	3				1	1	5	6		31	3	1	1				2	10	1	29	2	2	1	1		2	2	6	
	26-50			1				5	5	3			1	1					12	1				1					5	4									3	6	
	51-75																												2	1									4		
	>75																																								
Lahore ...	6-25	31		2	5	4			6	9	4	30	1	2	3	5	1	1	5	8	1	30	2		5	4	3	2	2	7	3	28	1	1	2	3	2	3	5	5	1
	26-50					1									1	1								1	1												1	1	2		1	
	51-75																																								
	>75															1																									
Madho Sagar (Gwalior).	6-25	31	3	4		1		4	7	2	9	31	2	1	1		2	4	9	5	2	31	1	1			4	2	8	6	1	30					3	2	3	6	1
	26-50									1				2					2	1				1	2				5							1			1	10	3	
	51-75																																								
	>75																																								

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	29					3	2	4			1 — 10							3	4	3	21					1		23	7			Agra
50		1				1		5	6																							
75							1	6			9 or 10										3											
75																																
25	27						2	1	2		1 — 10								3	6	22					1			30			Ahmedabad
50		1					2	11	2																							
75							2	3			9 or 10									1	5											
75							1																									
25	16							4			1 — 10							4	3	8	16						1	17	13			Allahabad (Bamrauli)
50							3	1	3																							
75								4			9 or 10									2	2											
75								1																								
25	19	1					1		2		1 — 10					1		2	1		27							6	25			Bahrain
50							1	4	6																							
75		1						3			9 or 10										3											
75																																
25	29	1	2	1		1	5	8	1		1 — 10							3	16	9	3						2	11	16	2		Bangalore
50			1	2			3	3																								
75								1			9 or 10										1											
75																																
25	16	1						1			1 — 10							5	8	2	16							8	23			Bhuj
50		1						7																								
75		1						3			9 or 10										2											
75							1	1																								
25	25	1	2		1	1	1	3		1	1 — 10						2	6		1	22								26	5		Bombay (Juhu)
50		1				3	5	4																								
75								1	1		9 or 10										1											
75																																
25	17						2	1			1 — 10					1	9	13		1	7						2	27	2			Calcutta (Dum Dum)
50								3	2																							
75								5	2		9 or 10						1				6											
75								1	1																							
25	24					1	1	3	3		1 — 10					4	5	11			11						2	3	26			Chittagong
50							1	5	6																							
75								2			9 or 10					2	2	1			10											
75								1	1																							
25	15						1	2			1 — 10					1	6	10	7	4	3						1	30				Dacca
50								5	3																							
75								2	1		9 or 10					1	1	1			5											
75							1																									
25	29	1	1		1	4	3	6	3		1 — 10							5	10	1	15						4	5	19	3		Fort Sandeman
50			1	1		4	1	1	1																							
75								1			9 or 10								4	1	10											
75																																
25	15						1	3			1 — 10						2	3	6	5	15							8	21	2		Gaya
50							2	3																								
75								2	2		9 or 10										2											
75								1	1																							
25	31	3	2				5	6	1		1 — 10									20	11									12	19	Hyderabad (Begumpet)
50						1	5	3																								
75						1	4				9 or 10										3											
75																																
25	22		1				1	5	3		1 — 10							1	5	5	20					1	4	5	14	7		Jacobabad
50			1				4	3	1																							
75								2			9 or 10										5											
75									1																							
25	9								1		1 — 10						6				25	1			1		5	23	1			Jiwani
50		2						2	2																							
75							1		1		9 or 10										7											
75																																
25	16				1		1	4	1		1 — 10							5	8	1	17					1	2	5	22	1		Jodhpur
50						1		5	1																							
75								2			9 or 10								1		6											
75																																
25	23				1		1	3	2		1 — 10						1	1	1	10	18						2	2	24	5		Jubbulpore
50						1	2	5	3																							
75							2	4			9 or 10										1											
75																																
25	17	1	2		1			2		1	1 — 10							14			17						2	11	8	10		Karachi (Drigh Road)
50		1	1				1	2	3																							
75									2		9 or 10										4											
75																																
25	22	2		1		2	2	3	5		1 — 10								8	2	21						3	6	22			Lahore
50					1	1	3	1	1																							
75											9 or 10										7											
75																																
25	25					3	1	2	2		1 — 10						1		9	3	18						1	2	24	4		Madho Sagar (Gwalior)
50							2	9	3																							
75							1	2			9 or 10						1				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	W	NW	C
Madras ...	6–25	31		1		28	2					31		1		5	10	4				31		1		3	5	11	3	1	1	30	5	3	2		4	5	3	1	
	26–50															1	10										1	5							2			2	1	1	1
	51–75																																								
	>75																																								
Malegaon ...	6–25	31	4	1	1	4		7	5	5	4	31	2	1	1	1	2	3	11	5	4	31	2	1	1	1		5	12	6	2	31					1	6	11	5	1
	26–50																		1										1									4	2	1	
	51–75																																								
	>75																																								
Mangalore ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
New Delhi ...	6–25	31	5	3	2	2			5	4	6	31	3	1	2	4	1	2	3	5	2	30	1		3	5	1	2	2	7	2	29	1	3		3	1	4	8	2	
	26–50								1	3				1		1			1	5					2				1	4						1			2	4	
	51–75																																								
	>75																																								
Peshawar ...	6–25	31	6	1		4		1		7	12	30	7	6	5	3	1		1	3	3	30	8	4	6	3	1	1	1	2	3	30	2	1	2	1	5	3	4	5	3
	26–50																1										1										2			1		
	51–75																																			1					
	>75																																								
Poona ...	6–25	31	2	1		4		6	11	5		30	1		2	1		1	5	8	2	30	1	1	1	1	2	1	7	5	1	30	1	1	1	3		7	8	3	
	26–50							1	1									3	6	1								3	6	1								3	3		
	51–75																																								
	>75																																								
Port Blair ...	6–25	31		24	5	1						31	4	10	3	4	2	3	2	1	2	31	4	1	3	1	2	2	6	8	4	29		1	3	5	5	1	3	5	2
	26–50					1																												1			1	1	1		
	51–75																																								
	>75																																								
*Raj-Samand (Kankroli)	6–25	21	1		1	1	2	3	2	6	3	21	1		2	2	2	2	3	5		21	1	1	1	2	2	2	2	4		21	1				2	1	2	3	1
	26–50							1	1									2	2									2	3	1							1	6	4		
	51–75																																								
	>75																																								
Sambalpur ...	6–25	31	1	1		1	1	8	4	1	14	31	2		1	1	1	8	9	2	5	31	2		1	1	3	5	12	3	3	30						5	8	5	
	26–50																	1	1									1										2	7	2	
	51–75																																					1			
	>75																																								
Sharjah ...	6–25	31	4			1		1	8	10		31	5	1			1		7	4		31	2	1	1	2		1	5	3		28	2		1			1	5	3	1
	26–50							2	3	2				1				1	8	1			1				1	2	8	1			2			1	2	1	3	3	
	51–75																		1	1									1	2									1	1	
	>75																																						1		
Tezpur ...	6–25	31		4	4	2	3	6	2		10	29	1	3	7	2	2		3		4	27	1	3	5	1	3	3	2		1	18			2		1	2	1		2
	26–50														1			5							1			4	2										4			
	51–75																		1										1									1	4			
	>75																																						1		
Trichinopoly ...	6–25	31		8	4	4		4		2	9	31		2	8	4	6	3	1		7	31		1	4	9	8	5			4	31	1	4	1	2	6	1	1	3	7
	26–50																																	1	2			2				
	51–75																																								
	>75																																								
Trivandrum ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Visagapatam ...	6–25	31			2	1	21	5	2			31					4	8				30					1	10	3		1	25	2	1				5	4	3	
	26–50																2	15	1									12	2					2				1	2	2		
	51–75																	1										1										2	1		
	>75																																								

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

d s /	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	
35	26	2	2				6	2	4		1 — 10					1		6	1		23									11	20	Madras
50		3	1				3	2	1																							
75											9 or 10																					
75																																
35	28	1					2	6	2		1 — 10									12	19							7	22	2		Malegaon
50		1					6	5	2																							
75							2	1			9 or 10																					
75																																
35											1 — 10																1		18	8	4	Mangalore
50																																
75											9 or 10																					
75																																
35	22				1	3	1	2	4		1 — 10							2	3	6	20							4	27			New Delhi
50							1	5	4																							
75								1			9 or 10										6											
75																																
35	27		3		1	2	4	4	3	1	1 — 10					2	1		4	13	11							3	1	6	21	Peshawar
50						3	2	1	2																							
75											9 or 10								1		10											
75					1																											
35	28	1			2	2	3	3	1	1	1 — 10									11	20									31		Poona
50		1				1	6	2	1																							
75							3				9 or 10																					
75							1																									
35	15		1			2	2	4	2	1	1 — 10						2	25	4									1	30			Port Blair
50					1	1	1																									
75											9 or 10										3											
75																																
35	21	1			1		1	2	1		1 — 10							2		4	15						1	4	14	12		*Raj-Samand (Kankroli)
50						1	2	3	2																							
75						1	1	3			9 or 10							1			2											
75							1	1																								
35	27						1				1 — 10							1	13	5	12							3	24	4		Sambalpur
50		1					4	8	6																							
75							1	5	1		9 or 10										1											
75																																
35	25	2		1				4	4		1 — 10							4	6		21						1	5	18	7		Sharjah
50		2						7	1																							
75		1						2	1		9 or 10							1			5											
75																																
35	10		1				1	1	1		1 — 10					4	1	2	4	11	9						1	10	17	3		Tezpur
50						1		2																								
75								3			9 or 10					3					10											
75																																
35	25	3	2		1	3	5	1	1	1	1 — 10								4	18	9									3	28	Trichinopoly
50		1	2	1				3	1																							
75											9 or 10										2											
75																																
35											1 — 10																	1	30			Trivandrum
50																																
75											9 or 10																					
75																																
35	17							5	1		1 — 10						8	9			14							30	1			Vizagapatam
50		6					1	3	1																							
75											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
Ahmedabad ...	6-25	31			1			2	5	8	15	31	2	1		1		2	5	5		31	2				1	5	8	6		31			1	1		6	5	3	
	26-50												1						2	11			1					3	3	2							1	2	7	1	
	51-75																		1																			2	1	1	
	>75																																								
Allahabad (Bamrauli)..	6-25	31	1	1	4	1		1	1	5	17	31	5	3	1	2	2		2	5		31	2	1		3	1		6	5	2	24					1	1	3	1	1
	26-50														3	2				5					1	2			3	5								1	12	4	
	51-75													1																											
	>75																																								
Bahrain ...	6-25	31	4			4	3	1	1	11	5	31	7	1	1			1	2	2		31	3		1	2	1	1	3	7	1	23	1					1	3	7	1
	26-50									2			8			1		2		5			2					1		7								1	7	2	
	51-75																1											1		1											
	>75																																								
Bombay (Juhu) ...	6-25	31			1	1				3	26	31	5	2			1	4	3	13		30	7	3	1			4	4	11		22		2		1	6	3	5	1	1
	26-50												3																				1						1	1	
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	31	1	2	1	7	3	13			4	29			1	2	4	5	5	1		27				2	3	4	6	3		16						3	1	
	26-50																2	4	4	1								4	3	1								2	5	3	
	51-75																											1									1		1		
	>75																																								
Gáya ...	6-25	31		2	7	6	2	3	2		9	31	1	4	2	3	3	1	3	6	1	31		3	2	2	2		7	6	2	26						1	5	1	2
	26-50												1		1	1				4						1				6							1	1	6	2	
	51-75																																						4	2	
	>75																																						1		
Jacobabad ...	6-25	31	3		5		1	1	1	2	18	31	1	3	4	4	2	5	1	4	3	31	3	2	2		3	5	7	3	3	28	2		1		3	5	5	7	1
	26-50												1					1	1										2						1					3	
	51-75																			1										1											
	>75																																								
Jiwani ...	6-25	31		1				5	4	9	8	31	2	2				3	6	7		29	2	2				2	9	6		15	2	1	1				3	1	
	26-50							2	1										8	3			2						5	1			1					1	4		
	51-75								1																																
	>75																																1								
Jodhpur ...	6-25	31	3	10	1			8	3	3	3	31	3	2	1		1	3	2	3	1	31	2	1		2		2	6	2	1	25				1	2	1	8		1
	26-50												1		2	1	1	4	4	1			1		1	1	1	6	3	1			1					3	6		
	51-75																		1									1										2			
	>75																																								
Karachi (Drigh Road) ...	6-25	31						5	9	3	11	30							4	7		30							6	6	1	15	3			2			4	2	
	26-50								1	2			1						12	4				1					8	5									2	2	
	51-75																		2										3												
	>75																																								
Madho Sagar (Gwalior)...	6-25	31		1	1			9		2	18	31	3	4	2	2	2	3	3	9	1	31	2	2	3	2	1	1	7	11		25					1	2	5	2	
	26-50														1				1										1	1							1		1	7	4	
	51-75																																						1		1
	>75																																								
New Delhi ...	6-25	31			4	3	1	1	1	3	18	31	4	3	1	4	2	2		6	2	31	1	1	4	1	1	1	3	10	2	30			1	3		4	4	2	
	26-50														1	2			2	2					1		2		2	2								1	7	7	
	51-75																																					1			
	>75																																								
*Raj Samand (Kankroli).	6-25	10						1	3	4	2	10						1	2	3		10						1	2	3		10					1	2	2		
	26-50														1			1	1	1					1			1	1	1									3	2	
	51-75																																								
	>75																																								
Sharjah ...	6-25	31	1	1		2	3	4	5	2	11	31	2	1		1	2		12	6		31	2	1	1	1		1	5	4	1	27		4	1			1	4	4	
	26-50								1	1									3	3							1	1	4	7			1					3	2	2	
	51-75																													1									2	3	
	>75																			1										1											

*Only on 10 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 recorded on days of ascents only.

QUENCY (LATE NIGHT)

TABLE 11 FREQUENCY OF LOW CLOUD HEIGHTS (LATE NIGHT)

TABLE [illegible] FREQUENCY OF VISIBILITY (LATE NIGHT)

ed its ./).	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	1				1		5	1		1 — 10									1	30							31				Ahmedabad
-50							4	8	2																							
-75											9 or 10										1											
>75								1																								
-25	13										1 — 10								2	2	27						1	27	3			Allahabad (Bamrauli)
-50							1	7																								
-75							1	3			9 or 10									1	2											
>75									1																							
-25	12								6		1 — 10					2					29						1	29	1			Bahrain
-50								5																								
-75								1			9 or 10										3											
>75																																
-25	12					2	1	2	2		1 — 10						10	2			19							31				Bombay (Juhu)
-50						1		1	2																							
-75								1			9 or 10						1				3											
>75																																
-25	3							1			1 — 10				1	6	3		4		17					1	17	13				Calcutta (Dum Dum)
-50									2																							
-75											9 or 10					1	2				3											
>75																																
-25	9							2			1 — 10						1		3	2	25							30	1			Gaya
-50								1	4																							
-75								2			9 or 10										2											
>75																																
-25	21	1		1	1			2	5		1 — 10									2	29					2	1	8	20			Jacobabad
-50				1			2	6	2																							
-75											9 or 10										4											
>75																																
-25	5		1					1			1 — 10					1	7				23						8	23				Jiwani
-50								1	1																							
-75								1			9 or 10						1				5											
>75																																
-25	10					2	1	3	1		1 — 10							2	1		28					1		3	27			Jodhpur
-50								2	1																							
-75											9 or 10										4											
>75																																
-25	2								1		1 — 10					1	2				28					1	2	7	21			Karachi (Drigh Road)
-50								1																								
-75											9 or 10					1					3		1									
>75																																
-25	7										1 — 10							1	4	1	25							3	28			Madho Sagar (Gwalior).
-50							1	2	2																							
-75							1	1			9 or 10										2											
>75																																
-25	22					2	2	4	3	1	1 — 10								1	2	28							8	23			New Delhi
-50							2	6	2																							
-75											9 or 10										5											
>75																																
-25	8					1		2			1 — 10								2		8								8	2		*Raj Samand (Kankroli)
-50								3	1																							
-75								1			9 or 10																					
>75																																
-25	15	1					1	1	1		1 — 10							3	3		25							3	28			Sharjah
-50			1					6	3																							
-75								1			9 or 10								1		4											
>75																																

. W. P. P.—S 212—250—5-41

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

April 1940

Supplement to the Monthly Weather Report, April 1940

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 30th May 1941.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U 37

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	2		2	1	1	1	3	3	17	29	2	2	1	2	2	1	1	4	
φ =27° 08′ N ...	26–50												6			1	3		1	2	
λ =78° 01′ E ...	51–75																			1	
H_s =182 metres ...	>75																				
Bangalore ...	6–25	30			2	11	1	6	4	4	2	29		1	1	10	10	3	2	2	
φ =12° 58′ N ...	26–50																				
λ =77° 35′ E ...	51–75																				
H_s =936 metres ...	>75																				
Bhuj ...	6–25	30						6	4	1	19	30	3					1	3	7	
φ =23° 15′ N ...	26–50												2	2					4	8	
λ =69° 48′ E ...	51–75																				
H_s =113 metres ...	>75																				
Car Nicobar ...	6–25	9		1							8	8	4	1	2					1	
φ =09° 15′ N ...	26–50																				
λ =92° 48′ E ...	51–75																				
H_s =4 metres ...	>75																				
Chittagong ...	6–25	30	1	1		4					24	30	5	1		2	4	3	5	2	1
φ =22° 21′ N ...	26–50												1				5	1			
λ =91° 50′ E ...	51–75																				
H_s =21 metres ...	>75																				
Dacca ...	6–25	30		2		2	5	1			20	29	2		1		2	3	7	2	
φ =23° 43′ N ...	26–50																1	5	5	1	
λ =90° 24′ E ...	51–75																				
H_s =21 metres ...	>75																				
*Dalbandin ...	6–25	30		1	1			2		1	25	30	1	4	3	1	2	5	6	2	2
φ =28° 54′ N ...	26–50														2			1	1		
λ =64° 26′ E ...	51–75																				
H_s =855 metres ...	>75																				
Fort Sandeman ...	6–25	30	1		4	3		1	1		20	30	3	1	2	3	1	10	1	3	4
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		3	4	3	3	2	1	13	30	2			2	5	1	1	2	2
φ =17° 26′ N ...	26–50												1		2	7	2	2	1		
λ =78° 27′ E ...	51–75																				
H_s =555 metres ...	>75																				
Jubbulpore ...	6–25	30	2	2		2	1		1		22	30		4	3		2	4	1		
φ =23° 10′ N ...	26–50												3	2	1		5	2	1	1	
λ =79° 57′ E ...	51–75																1				
H_s =402 metres ...	>75																				
Lahore ...	6–25	30	3							3	24	30	4	2	1	4	3		1	6	2
φ =31° 35′ N ...	26–50												1	1	1					3	
λ =74° 20′ E ...	51–75												1								
H_s =221 metres ...	>75																				
Madho Sagar (Gwalior).	6–25	30			1	1		4	1	3	20	29	2	4	2	3	1		1	3	2
φ =26° 13′ N ...	26–50												1	2	2	1	2		2	1	
λ =78° 08′ E ...	51–75																				
H_s =233 metres ...	>75																				
†Madras ...	6–25	30						1			29	30			1	6	13	3			
φ =13° 04′ N ...	26–50																6	1			
λ =80° 15′ E ...	51–75																				
H_s =13 metres ...	>75																				
Malegaon ...	6–25	30	1	1				2	7	10	9	30	9	5	1		1		3	5	
φ =20° 33′ N ...	26–50													2					1	3	
λ =74° 32′ E ...	51–75																				
H_s =443 metres ...	>75																				
‡Mangalore ...	6–25	28	3	4	14						7	28	4	1	1	5	1	1		5	8
φ =12° 52′ N ...	26–50												1		1						
λ =74° 51′ E ...	51–75																				
H_s =40 metres ...	>75																				
Multan ...	6–25	30	3	3	4	2		1		3	14	29	4	1	2	1	4			3	2
φ =30° 11′ N ...	26–50													3	1	5	1			1	
λ =71° 25′ E ...	51–75														1						
H_s =128 metres ...	>75																				
Peshawar ...	6–25	30			1	2	4	8		2	13	30	5		4		1	2	3	9	3
φ =34° 01′ N ...	26–50																			3	
λ =71° 35′ E ...	51–75																				
H_s =363 metres ...	>75																				
Poona ...	6–25	30				1		14			15	30	5	9	5	1			4	3	1
φ =18° 32′ N ...	26–50													2							
λ =73° 51′ E ...	51–75																				
H_s =588 metres ...	>75																				
Port Blair ...	6–25	30	1	2					3	11	13	30	4	6	6				4	5	5
φ =11° 40′ N ...	26–50																				
λ =92° 43′ E ...	51–75																				
H_s =87 metres ...	>75																				
§Raj Samand (Kankroli)	6–25	21							3	13	5	21	4	2	5	1			4		
φ =25° 03′ N ...	26–50													2				2	1		
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	29	2	2		1	3		1	3	2	29			1			4	7	1
φ =27° 08′ N ...	26–50		5			2	2		1	5								2	8	4
λ =78° 01′ E ...	51–75																		2	
H_s =182 metres ...	>75																			
Bangalore ...	6–25	28				6	10	4	4	4		30		5	8	8				1
φ =12° 58′ N ...	26–50														6	2				
λ =77° 35′ E ...	51–75																			
H_s =936 metres ...	>75																			
Bhuj ...	6–25	30	1	3		2	1	3	4	7	1	29	1	1		1	3	3	6	4
φ =23° 15′ N ...	26–50			1				1	2	4						2		3	3	
λ =69° 48′ E ...	51–75																			
H_s =113 metres ...	>75																			
Car Nicobar ...	6–25	9		4	3						2	7			4					
φ =09° 15′ N ...	26–50														2	1				
λ =92° 48′ E ...	51–75																			
H_s =4 metres ...	>75																			
Chittagong ...	6–25	27	3		1			5	7	6	1	25	1					1	4	6
φ =22° 21′ N ...	26–50						1	2	1										4	9
λ =91° 50′ E ...	51–75																			
H_s =21 metres ...	>75																			
Dacca ...	6–25	26				1	1	4	8	2		21						2	7	
φ =23° 43′ N ...	26–50								9	1								1	6	2
λ =90° 24′ E ...	51–75																		3	
H_s =21 metres ...	>75																			
*Dalbandin ...	6–25	29	1		9	3		2	5	3	2	30	3	2	2	1		7	3	6
φ =28° 54′ N ...	26–50			2					2								1		2	3
λ =64° 26′ E ...	51–75																			
H_s =855 metres ...	>75																			
Fort Sandeman ...	6–25											30	3	1	1	3	3	8	3	4
φ =31° 21′ N ...	26–50													1					1	
λ =69° 27′ E ...	51–75																			
H_s =1421 metres ...	>75																			
Hyderabad (Begumpet).	6–25	30	2			2	5	1	1	1	2	30		3	5	3	6	5		2
φ =17° 26′ N ...	26–50		1		2	7	2	2	1	1				1		3	2			
λ =78° 27′ E ...	51–75																			
H_s =555 metres ...	>75																			
Jubbulpore ...	6–25	30		3	4		2	3	2	2		29	1			2	2	4	4	3
φ =23° 10′ N ...	26–50		3	2	1		4	2					1					4	4	3
λ =79° 57′ E ...	51–75						1		1											
H_s =402 metres ...	>75																			
Lahore ...	6–25	30	4	1	2	5	1		2	9	1	30	2	2	3	1	1	2	2	8
φ =31° 35′ N ...	26–50		1	1	1					2					2			1		5
λ =74° 20′ E ...	51–75																1			
H_s =221 metres ...	>75																			
Madho Sagar (Gwalior).	6–25	29	1	3	1	3	3	1	3	7		29	1	1			1	4	8	3
φ =26° 13′ N ...	26–50				1	2	1		1	1								1	6	1
λ =78° 08′ E ...	51–75								1										1	
H_s =233 metres ...	>75																			
†Madras ...	6–25	30			2	8	17	1				28		2	6	8	2			
φ =13° 04′ N ...	26–50						2							1	5	4				
λ =80° 15′ E ...	51–75																			
H_s =13 metres ...	>75																			
Malegaon ...	6–25	30	9	6	1		1		3	4		30	5	9	1	1	1	2	3	2
φ =20° 33′ N ...	26–50			2					1	3				1				1	2	
λ =74° 32′ E ...	51–75																			
H_s =443 metres ...	>75																			
‡Mangalore ...	6–25	28	7	1	1	2	3	2	3	5	4	28	6	8	8	3	1			1
φ =12° 52′ N ...	26–50																			
λ =74° 51′ E ...	51–75																			
H_s =40 metres ...	>75																			
Multan ...	6–25	28	2	4	1	3	2	2	2	4	1	29		1			1	4	10	2
φ =30° 11′ N ...	26–50		1	1		3		2					2	1	1			3	3	
λ =71° 25′ E ...	51–75																			
H_s =128 metres ...	>75																			
Peshawar ...	6–25	30	3	2	3		1	1	2	12	3	30	7	2	1	1	1	1	4	9
φ =34° 01′ N ...	26–50									3										2
λ =71° 35′ E ...	51–75																			
H_s =363 metres ...	>75																			
Poona ...	6–25	30	8	4	5	1			3	7	2	30	3	6	1	2		3	1	3
φ =18° 32′ N ...	26–50													5	4			1		
λ =73° 51′ E ...	51–75																			
H_s =588 metres ...	>75																			
Port Blair ...	6–25	30	3	5	7	4	2		2	4	3	29	3	5	10	4				
φ =11° 40′ N ...	26–50													1	5	1				
λ =92° 43′ E ...	51–75																			
H_s =87 metres ...	>75																			
§Raj Samand (Kankroli)	6–25	21	4	2	4	1			4			21	2			1	1	4	4	4
φ =25° 03′ N ...	26–50			2	1			2	1									2	2	
λ =73° 53′ E ...	51–75																			
H_s =587 metres ...	>75																			

* Visibility Observations were recorded only on 24 days in the month.

† Visibility Observations were recorded only on 28 days in the month.

‡ Wind frequency table prepared from 28 observations made in the morning.

§ Only on 21 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	
28	1					2	3			1 — 10								1		29				1	1	4	23	1			Agra
						1	9	5																							
							5			9 or 10										1											
							2																								
29		5	4							1 — 10				1		1	3	3	2	20							20	6	4		Bangalore
		8	11	1																											
										9 or 10									1	8											
21	2		1		2	1	1	2		1 — 10					2	3		1		24							3	27			Bhuj
		2		2		3	3																								
						1	1			9 or 10										2											
5			3	1						1 — 10																					Car Nicobar
			1																												
										9 or 10																					
24						1	4	3		1 — 10	1		3		8					18						6	21				Chittagong
	2						6	6																							
							1	1		9 or 10	1		2		1					10											
16						1	1	1		1 — 10	1		1	5	3	1		1		18						2	28				Dacca
						1	4	1																							
						1	3	1		9 or 10	1		1	3		1				10											
							1	1																							
30	6			1	1	1	6	3		1 — 10								1		29							1	4	13	6	*Dalbandin
	2						2	7																							
								1		9 or 10																					
29	1	1	1		3	1	2	3		1 — 10							4	3	4	19				1		2	7	20			Fort Sandeman
	3					2	3	7																							
	1						1			9 or 10							1		1	5											
30	1	6	2	5	4	2	2	2		1 — 10							4		4	22						1	4	12	10	3	Hyderabad (Begumpet)
	1	3		1	1																										
										9 or 10										6											
24	2	1					4	1	2	1 — 10								7	1	22				1			14	15			Jubbulpore
					1	3	8	1																							
							1			9 or 10										7											
30	1	1	2	2	2		2	5		1 — 10							1			29					3	11	12	4			Lahore
			1			1	3	7																							
					1	1	1			9 or 10										1											
22	1					2	5			1 — 10							2	1		27					1		2	26	1		Madho Sagar (Gwalior)
						1	5	3																							
						1	3			9 or 10										1											
								1																							
24		2	6	3						1 — 10					2	7	2			19								19	7	2	†Madras
		2	10	1																											
										9 or 10										10											
28		3	5	1	4	5	3		1	1 — 10									8	22							11	19			Malegaon
					1	4																									
							1			9 or 10										4											
29	1	8	5							1 — 10					8	11	3	4	4							2	10	17	1		‡Mangalore
		3	11																												
										9 or 10										4											
26				1		2	6	4		1 — 10							1			29				1		1	26	2			Multan
	2				1	2	3	4																							
						1				9 or 10										4											
29	1	2	1		2	3	4	9	1	1 — 10								1	6	28								1	4	25	Peshawar
			1	1				4																							
										9 or 10										5											
30	1	4	4	4	4	3	1	2	1	1 — 10									2	28								2	28		Poona
			1		2	3																									
										9 or 10										6											
26		3	9	1						1 — 10					5	2	18			5						2	28				Port Blair
		3	9	1																											
										9 or 10										5											
19	3		1		1		2	1	1	1 — 10										21					1	1	9	15	4		§Raj Samand (Kankroli)
						2	2	1																							
						1	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	1			1			27	30	5	1	1	4	5	3	5	1	
φ = 21° 28′ N ...	26–50												1	1				3			
λ = 83° 58′ E ...	51–75																				
H_s = 153 metres ...	>75																				
Tezpur ...	6–25	30	1	9	5				1		13	30	1	1	7	2	1	3			
φ = 26° 37′ N ...	26–50				1										12				1		
λ = 92° 47′ E ...	51–75														2						
H_s = 80 metres ...	>75																				
Trichinopoly ...	6–25	30		3		1				2	24	30				12	9	5	2		1
φ = 10° 49′ N ...	26–50																1				
λ = 78° 42′ E ...	51–75																				
H_s = 88 metres ...	>75																				
Trivandrum ...	6–25	30	12	3	1	1					13	29	2		1	3	1	3	1	8	5
φ = 08° 29′ N ...	26–50												2							3	
λ = 76° 57′ E ...	51–75																				
H_s = 76 metres ...	>75																				
Vizagapatam ...	6–25	30			1			2	12		15	30			3		2	8	8	1	1
φ = 17° 42′ N ...	26–50																	3	3		
λ = 83° 18′ E ...	51–75																	1			
H_s = 56 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
Sambalpur ...	6–25	30	2	2	1	1	3	8	7			30	4		1	1	3	6	5	3	
φ = 21° 28′ N ...	26–50		1						3	2							1	2	3	1	
λ = 83° 58′ E ...	51–75																				
H_s = 153 metres ...	>75																				
Tezpur ...	6–25	30		3	9	4	4	1	1		2	30			1		1	6	7		
φ = 26° 37′ N ...	26–50				2			2	1	1								2	8		
λ = 92° 47′ E ...	51–75																		4		
H_s = 80 metres ...	>75																				
Trichinopoly ...	6–25	30	1	1	3	15	6	2	2			30	1	6	12	3					
φ = 10° 49′ N ...	26–50														6	1					
λ = 78° 42′ E ...	51–75																				
H_s = 88 metres ...	>75																				
Trivandrum ...	6–25	29	4	3	1	4	1			7	7	26	6	3	11				1		
φ = 08° 29′ N ...	26–50				1					1				2	2						
λ = 76° 57′ E ...	51–75														1						
H_s = 76 metres ...	>75																				
Vizagapatam ...	6–25	29	2	2		4	1	9	2	1	1	26	1	2	2	3	9	2	1	3	
φ = 17° 42′ N ...	26–50							3	4						1	1					
λ = 83° 18′ E ...	51–75																				
H_s = 56 metres ...	>75																				

TABLE 4—WI

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
Ahmedabad ...	6–25	30	1	6				5	2	13	3	29	4	2	1	1			1	6	
φ = 23° 02′ N ...	26–50												4	1	1				1	6	
λ = 72° 35′ E ...	51–75														1						
H_s = 55 metres ...	>75																				
Allahabad (Bamrauli)	6–25	30		2	2	2	1	6	3	3	6	30	3	1		4	3	1	2	6	1
φ = 25° 26′ N ...	26–50												1	1			1		1	5	
λ = 81° 44′ E ...	51–75																				
H_s = 98 metres ...	>75																				
Bahráin ...	6–25	30	5	1	1	2	1	1	3	8	8	30	1	1	2				3	3	4
φ = 26° 14′ N ...	26–50												5	1		1	1			1	1
λ = 50° 35′ E ...	51–75												2	1			2				
H_s = 14 metres ...	>75												1								
Bombay (Juhu) ...	6–25	30	1			1		3		9	16	30	10	8	2			1		1	4
φ = 19° 07′ N ...	26–50												1	3							
λ = 72° 50′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Calcutta (Dum Dum)	6–25	30		1		2	3	10	3	7	3	30	4				1	8	5	7	
φ = 22° 39′ N ...	26–50									1								1	1	3	
λ = 88° 27′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Gaya ...	6–25	30	1	1			1	13	3	3	4	28	2	1		1	1	4	4	7	1
φ = 24° 49′ N ...	26–50								2	2									2	5	
λ = 85° 01′ E ...	51–75																				
H_s = 117 metres ...	>75																				
Jacobabad ...	6–25	30		5	7	4	2			1	10	30	1		2	3	3	4		2	1
φ = 28° 17′ N ...	26–50		1										2		4	4	1	1		2	
λ = 68° 29′ E ...	51–75																				
H_s = 56 metres ...	>75																				
Jiwani ...	6–25	30	1	4	1	1		3	1	2	17	30	1	2	4	1		3	9	5	
φ = 25° 10′ N ...	26–50												1		1			1	2		
λ = 61° 47′ E ...	51–75																				
H_s = 5 metres ...	>75																				
*Jodhpur ...	6–25	30	2	10	2	3	3	2	5		3	30	3	5	4	3	1	4	1	1	1
φ = 26° 18′ N ...	26–50												1	1		1		1	2	1	
λ = 73° 01′ E ...	51–75																				
H_s = 233 metres ...	>75																				
Karachi (Drigh Road)	6–25	30	1					8	6	9	5	30	5	1	1	1		1	10	3	1
φ = 24° 53′ N ...	26–50								1				1		1				4	1	
λ = 67° 07′ E ...	51–75																				
H_s = 29 metres ...	>75																				
New Delhi ...	6–25	30	1	1	2	5		1	7	6	7	30	3	2	1	1	4		2	3	1
φ = 28° 39′ N ...	26–50														1		3			9	
λ = 77° 15′ E ...	51–75																				
H_s = 227 metres ...	>75																				
†Raj Samand (Kankroli)	6–25	9			4					3	2	9	1		2		1	1	2	1	1
φ = 25° 03′ N ...	26–50																				
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				
‡Sharjah ...	6–25	29					1	6		1	21	30	1	2	4	3	3	1	4	5	3
φ = 25° 20′ N ...	26–50																			4	
λ = 55° 24′ E ...	51–75																				
H_s = 11 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
Ahmedabad ...	6–25	30	4	4	3			2	2	8	1	30	2	1			4	6	8	2	
φ = 23° 02′ N ...	26–50								2	4								2	4		
λ = 72° 35′ E ...	51–75																	1			
H_s = 55 metres ...	>75																				
Allahabad (Bamrauli)	6–25	29		2		1	3	2	2	7	1	27			1		2	4	5	3	
φ = 25° 26′ N ...	26–50			1			1	1	2	5								1	4	4	
λ = 81° 44′ E ...	51–75									1									3		
H_s = 98 metres ...	>75																				
Bahráin ...	6–25	30	2	3		1	1	2	4	4	1	30		3		2	3	2	2	5	6
φ = 26° 14′ N ...	26–50		5				3		1	3			2				1				5
λ = 50° 35′ E ...	51–75																				
H_s = 14 metres ...	>75																				
Bombay (Juhu) ...	6–25	30	8	13	2					3	1	30	2	4	8	1	1	3	2	3	
φ = 19° 07′ N ...	26–50		2	1											1			1	3		
λ = 72° 50′ E ...	51–75																				
H_s = 5 metres ...	>75																				
Calcutta (Dum Dum)	6–25	30	2					5	11	4		26						3	9	2	
φ = 22° 39′ N ...	26–50		1						3	4								1	6	4	
λ = 88° 27′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Gaya ...	6–25	28		1			3	2	9	5		29					1	7	3	2	
φ = 24° 49′ N ...	26–50								1	5									7	5	
λ = 85° 01′ E ...	51–75									2									1	2	
H_s = 117 metres ...	>75																		1		
Jacobabad ...	6–25	30	2	1	1	4	8	7		1		29		2		1	6	7	7	2	
φ = 28° 17′ N ...	26–50				1	1	1		1	2								1	1	2	
λ = 68° 29′ E ...	51–75																				
H_s = 56 metres ...	>75																				
Jiwani ...	6–25	30	2	3	1	2		3	9	5		30	6					2	8	7	
φ = 25° 10′ N ...	26–50		2					1	1	1			1						2	1	
λ = 61° 47′ E ...	51–75																			1	
H_s = 5 metres ...	>75																				
*Jodhpur ...	6–25	29	3	3	2	2	2	2	2	5		28	2	1		1	1	1	6	4	
φ = 26° 18′ N ...	26–50		1	1		1		2	3									2	4	2	
λ = 73° 01′ E ...	51–75																		1		
H_s = 233 metres ...	>75																				
Karachi (Drigh Road)	6–25	29	5	2	1		1	1	3	6	3	29	3	4	4		1	1	2	4	
φ = 24° 53′ N ...	26–50				1				3	2			1						3	3	
λ = 67° 07′ E ...	51–75								1										1		
H_s = 29 metres ...	>75																				
New Delhi ...	6–25	30	3		1	1	3	3	1	6		26					1	5	4	2	
φ = 28° 39′ N ...	26–50				1		4			7						1		1	5	4	
λ = 77° 15′ E ...	51–75																			2	
H_s = 227 metres ...	>75																				
†Raj Samand (Kankroli)	6–25	9	1		2		1	1	2	1	1	9	1	1			1	1	2	2	
φ = 25° 03′ N ...	26–50																		1		
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				
‡Sharjah ...	6–25	30	2	2	2	1		2	4	5	4	30	2	4	2			1	7	7	
φ = 25° 20′ N ...	26–50				1				2	5									4	3	
λ = 55° 24′ E ...	51–75																				
H_s = 11 metres ...	>75																				

* Sky not discernible on two days in the month.

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

‡ Observations of surface wind were not taken on one day in the month.

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.										STATIONS
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	
29	1		1	2	2	4	7	1		1 — 10									1	29						1	7	17	5		Sambalpur
							8	3		9 or 10										4										
20				1			3		1	1 — 10					1		1	2	8	18						2	23	5			Tezpur
						1	8																								
							6			9 or 10					1				8												
25		2	7	2				1		1 — 10					3	2	6	4		15								15	11	4	Trichinopoly
		4	8																												
			1							9 or 10										7											
20	3	2	6	1				1	1	9 — 10						9			1	20						4	21	5			Trivandrum
		2	4																												
										9 or 10									1	10											
11		3		2	2	2	1			9 — 10				1	9		4	1		15						8	22				Vizagapatam
						1																									
										9 or 10					1					8											

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

26	1			1	3	3	1	2		1 — 10									1	29							2	28			Ahmedabad
						9	2																								
						4				9 or 10										6											
21					1	2	4	1	1	1 — 10									3	27						5	24	1			Allahabad (Bamrauli)
							5	2																							
						1	1	1		9 or 10										7											
							2																								
22	1	1		1	2	2	4	2		1 — 10										30					1	1	12	16			Bahrain
	2					4	1	2																							
										9 or 10										2											
29	1	1	5	2	7	2	3			1 — 10						4		1	2	23							27	3			Bombay (Juhu)
					3	4																									
						1				9 or 10										5											
13					1	3	4	1		1 — 10							2	1	2	25						21	9				Calcutta (Dum Dum)
							2	2																							
										9 or 10									1	3											
20					1		5	1		1 — 10								1		29						2	22	6			Gaya
							6	2																							
							2	2		9 or 10										5											
								1																							
24	2	2			2	2	6	5		1 — 10										30						1	13	15	1		Jacobabad
						2		2																							
							1			9 or 10										1											
11	1	1	1			2	3	1	1	1 — 10					1	6				23					1	2	27				Jiwani
								1																							
										9 or 10										2											
17		2	1		1	3	3	1		1 — 10										28					1	2	8	19			Jodhpur
						2	2	1																							
						1				9 or 10																					
26	4	1		1	2		2	7	2	1 — 10						4	3			23				1		1	5	19	4		Karachi (Drigh Road)
		2				1	1																								
							1	1		9 or 10										1											
							1																								
18						1	1	1		1 — 10								1		29					2	4	8	16			New Delhi
				1		2	6	5																							
								1		9 or 10																					
7	1				1		1		1	1 — 10										9											Raj Samand (Kankroli)
						1	1																								
							1			9 or 10																					
29	2	3	3	2		1	4	2	2	1 — 10						2		1		27			1				1	12	16		Sharjah
		1	1				7	1																							
										9 or 10						1				2											

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		4	8	8	8	30	2			3	1	3	7	9		30	1			2	3	2	4	12		30					1	4	5	5	1
	26-50																		1	4									2	4								3	3	8	
	51-75																																								
	>75																																								
Ahmedabad ...	6-25	30		2		1	1	9	3	9	5	30	2	2		1	1	9	7	2	1	30		3			1	9	8	5	1	30		1			1	5	6	7	
	26-50												1					1	2	1									2	1								4	5		1
	51-75																																								
	>75																																								
Allahabad (Bamrauli)	6-25	30	3			1			11	11	4	29	1	1				1	7	8	2	29	2		1				6	8	2	27	1				1	1	11	3	
	26-50																		5	4									4	6									6	1	
	51-75																																							3	
	>75																																								
Bahrain ...	6-25	30	8	6	3	4	1			8		30	3	2	1	2	5	2		3		30	2	1	1	1	4	3	4	5	1	29	1			2	2	3	3	4	2
	26-50												5	1	1		1			2			2				1	1		4							1	3	4	4	
	51-75												2																												
	>75																																								
Bangalore ...	6-25	30		8	4	15					3	29	2	5	12	3					1	28		5	8	13					1	27	2	6	12	3					1
	26-50														3	3										1										2	1					
	51-75																																								
	>75																																								
Bhuj ...	6-25	30	2	1				6	5	5	11	30	5	1				6	9	6	1	30	4	2	1		1	5	8	5	2	29	3	1		4		7	5	3	1
	26-50																	1	1										2									1	4			
	51-75																																								
	>75																																								
Bombay (Juhu) ...	6-25	30						6	8	16		30	8					2	2	13	2	29	8	7	2	1	1		1	7	1	30	2	3	6	3	2	1	4	2	1
	26-50												1							2										1								2	2	2	
	51-75																																								
	>75																																								
Calcutta (Dum Dum)	6-25	30					9	9	1	2	9	30					7	7	8	3	3	30			1	2		10	7	5	2	30						1	9	5	
	26-50																1			1									1	2								1	2	9	
	51-75																																						1	2	
	>75																																								
Car Nicobar ...	6-25	9	3	3	1						2	9	2	2	2				2	1		8	1		3	2				1	1	5			2	1					
	26-50																																		2						
	51-75																																								
	>75																																								
Chittagong ...	6-25	30	1				2	15	9	3		30	2	1		1	9	3	3	7	2	29	6	1		2	2	5	4	6	2	29	2						7	6	
	26-50																	1		1										1								1	7	5	
	51-75																																							1	
	>75																																								
Dacca ...	6-25	30				3	13	5	2		7	30					9	13	5			30	1				2	7	9	4		26						2	4		
	26-50																2		1									3	4									1	13	2	
	51-75																																						1	3	
	>75																																								
*Dalbandin ...	6-25	30		2	1	2	3	3	5	6	8	29	1		2		4	8	4	4	4	29	1	2	3		4	3	5	1	3	30	1	3	2	1	3	5	9	3	1
	26-50												1						1				1						5	1			1								
	51-75																																						1		
	>75																																								
Fort Sandeman ...	6-25	30	1	4		1		4	2	3	14	30	4		1	1	2	8	6	1	5											30	4		1	1	3	6	8	1	4
	26-50								1				1						1														1						1		
	51-75																																								
	>75																																								
Gaya ...	6-25	30	2					2	6	5	3	30	2					2	6	3	2	29	2		1		2		5	2	3	28	1			1		1	1	9	
	26-50					1		1	4	6						1			6	4									7	4									7	5	
	51-75																		3	1									2	1									2		
	>75																																							1	
Hyderabad (Begumpet)	6-25	30			3	7	4	2			14	30		3	2	12	3	1	1		8	30		3	2	12	3	1	1		8	30	3	4	2	8	4	3	1	1	2
	26-50																																			2					
	51-75																																								
	>75																																								
Jacobabad ...	6-25	30			1	8	3	6	2	2	8	30		1	1	6	8	5	3	3	1	30	1		1	5	11	5	2	3	1	29	1	1			6	5	6	2	
	26-50																1			1											1							2		1	3	
	51-75																																						1		
	>75																																								
Jiwani ...	6-25	30				4	5	21				30				1	8	12	3		1	30	1		2	1		7	13		1	29	1					2	14	3	2
	26-50																	2	3									2	3				2						2	3	
	51-75																																								
	>75																																								
Jodhpur ...	6-25	30	1	1	2		3	5	7	4	4	30	3	1	1		3	5	8	4		29	1	2	2			5	9	2	2	26	3		1	2		8	7	2	
	26-50							2	1									2	2	1								2	3	1									2	1	
	51-75																																								
	>75																																								
Jubbulpore ...	6-25	30	3			1	1	2	5	9	9	30	7	2		1	1	2	8	5	2	30	3	1		1	2	1	8	6	2	30	3		1	1	3	3	7	4	
	26-50												1					1										1										1	5	1	
	51-75																																								
	>75																																								
Karachi (Drigh Road) ...	6-25	30		1				22	1	2	1	30			1		1	3	11	4	1	30	1		4	1		2	5	9		30	1	3	4		1	1	8	5	1
	26-50							1	2									1	8									2	4	2									2	3	
	51-75																																						1		
	>75																																								

* Visibility Observations were recorded only on 24 days in the month.

ENCY (AFTERNOON)

TABLE 5—FREQUENCY OF LOW CLOUD HEIGHTS (AFTERNOON)

TABLE 6—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	
26	1					2	3	4		1 — 10								1	3	26					1	2	23	4			Agra
						1	7	4																							
							3	1		9 or 10										1											
29	1				1	6	5	1		1 — 10							3	4	3	20							2	28			Ahmedabad
						3	8																								
						1	3			9 or 10										7											
18						1	6	2		1 — 10								2	9	19						4	24	2			Allahabad (Bamrauli)
					1	1	5																								
							2			9 or 10										9											
23	3					2	4	5		1 — 10										30							4	26			Bahrain
					1		5	2																							
							1			9 or 10										3											
20		6	4	1						1 — 10							5	12	5	8					1	1	7	9	7	5	Bangalore
	1		8																												
										9 or 10																					
																	1			8											
25	2	3	1	1	1	3	1	3		1 — 10								6	1	23							3	27			Bhuj
						5	2																								
						2	1			9 or 10										1											
28			5	5	5	5	1	1	1	1 — 10					1	2		1		26							15	15			Bombay (Juhu)
						4	1																								
										9 or 10										9											
24						2	6	1		1 — 10							7	1		22						4	26				Calcutta (Dum Dum)
	1						1	8																							
							2	3		9 or 10										2											
4			3	1						1 — 10																					Car Nicobar
										9 or 10																					
29						2	2	5	1	1 — 10					1	1	5			23							3	27			Chittagong
	1						7	7																							
							2	2		9 or 10					1					9											
17							2	2		1 — 10						2	4	3		21							3	27			Dacca
							7	2																							
							4			9 or 10										3											
28	4	1		1	3	3	7	3	1	1 — 10							3	6	3	18				1		1	3	7	10	2	*Dalbandin
						1	2	2																							
										9 or 10										3											
27	1				2	5	6	6	2	1 — 10							3	7	6	14							6	24			Fort Sandeman
	1				1	1	1																								
						1				9 or 10								1	1	9											
19				1			3	1		1 — 10								6		24						1	18	11			Gaya
						1	5	5																							
							3			9 or 10										4											
29	2	2	8	4	2	5	2		3	1 — 10									21	9								1	6	23	Hyderabad (Begumpet)
			1																												
										9 or 10										3											
24	2	1			2	4	1	5		1 — 10								1		29					1	1	10	18			Jacobabad
					1	1		5																							
							1	1		9 or 10										3											
15	1		1				3	3	1	1 — 10						7				23					1	2	27				Jiwani
	2						3	1																							
										9 or 10																					
17						7	5	2		1 — 10								1	11	18				1	1	1	9	17	1		Jodhpur
						1	2																								
										9 or 10										1											
20					1	4	6	2		1 — 10							1	12	3	14						2	9	19			Jubbulpore
						1	4	2																							
										9 or 10										4											
26	4	3		1	1	2	2	5		1 — 10						2	6			22						3	2	14	11		Karachi (Drigh Road)
				1		1	6																								
										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	C
Lahore ...	6–25	30	1	3	1	3		2	1	13	6	29	1	1	4		2	1	4	10	2	29	1		2	4	2	2	3	10	2	29	1	1	2	1	4	2	4	8	2
	26–50												2			1		1					1					1	1						1			1	1	1		
	51–75																																								
	>75																																								
Madho Sagar (Gwalior).	6–25	30	1			1	1	2	7	4	12	30	3	2		2		2	8	4	2	30	3	1		1	1	1	8	6	2	29	2		1	1	1	3	6	6	1
	26–50									2								2	2	3								2	2	3								2	4	2	
	51–75																																								
	>75																																								
*Madras ...	6–25	30	1		2	26	1					30	2	1	3	9	9	1				30		3	1	6	13	4	2		1	30		4	6	7	1	2	1		1
	26–50															1	3	1																	7	1					
	51–75																																								
	>75																																								
Malegaon ...	6–25	30	3	5	2	3	1	2	1	3	10	29	2	6	5		2	4	3	2	5	29	1	7	5		2	3	4	2	5	29	2	4	5	1	1	2	6	2	5
	26–50																																						1		
	51–75																																								
	>75																																								
Mangalore ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Multan ...	6–25	30	1	4	1	1		3	2	4	14	28	3	3	3	2	5	4	3		3	28	4	2	3	2	5	4	3	3	2	26	1		1		4	5	6	3	2
	26–50																			2													1						3		
	51–75																																								
	>75																																								
New Delhi ...	6–25	30	2	2		3	2	1	3	8	3	30	1		1	1	2	3	5	8	2	29	1			2	2	3	2	6		29					5	4	3	7
	26–50								4	2			1	1			1	1	1	2				1		1	1	1	4	5								1	1	7
	51–75																																								1
	>75																																								
Peshawar ...	6–25	30		3		3		2	1	7	14	30	5	4	6	1	1			5	8	30	6	6	5	2				3	7	30	5	2	2	1		3	5	9	1
	26–50																													1							1				1	
	51–75																																								
	>75																																								
Poona ...	6–25	30	4	3		6	1	3	3	8	1	30	3	4	2		1	2	2	4	8	30	3	5	2	1	1	2	3	7	30	8	4	2	2		1	4	5	2
	26–50							1											3	1									2	1					1			1			
	51–75																																								
	>75																																								
Port Blair ...	6–25	30		14	9	2			3	2		30	2	8	4	1	3	4	8			29	6	3		2		2	5	6	5	29		4	15	1	1				1
	26–50																																	6		1					
	51–75																																								
	>75																																								
†Raj-Samand (Kankroli)	6–25	21	1	2	1		1	1	1	4	6	21	2	2	2	1	2	1	2	2	3	21	3	1	2	1	1	2	3	3	1	21	1	1		1	4	3	5	1	2
	26–50							1	2	1								1	2									1	2									1	1		
	51–75																	1																							
	>75																											1										1			
Sambalpur ...	6–25	30		2			1	12	6	3	6	29	2				3	7	13	1	3	30		1			1	7	13	4	3	30	1				1	6	9	5	5
	26–50																			1										1								1		2	
	51–75																																								
	>75																																								
Sharjah ...	6–25	30						5	7	12		30	1	1				2	10	11		30	2		2		2	3	7	8		30	3	1	2	1	3	2	1	4	3
	26–50								1	5									3	2									2	4								1	4	4	
	51–75																																						1		
	>75																																								
Tezpur ...	6–25	30		4	5			5			16	30		2	11		1	5	1		6	30		1	5	3	5	1	8	1	2	23						5	2		1
	26–50																	3	1									2	1									1	5		
	51–75																											1										4	4		
	>75																																						1		
Trichinopoly ...	6–25	30		8	9	5			1	1	6	30		4	9	8	1		1	2	2	30	1	1	11	5	3		1	1	4	30	1	3	11	7	2	1			2
	26–50														3										3									1	2						
	51–75																																								
	>75																																								
Trivandrum ...	6–25																																								
	26–50																																								
	51–75																																								
	>75																																								
Vizagapatam ...	6–25	30					20	9			1	30			1	1	1	10	7	1	3	30	2		1	2		10	7	1	3	28	3	3	4	3	3	3	5	1	1
	26–50																	6										2	2						1	1					
	51–75																																								
	>75																																								

* Visibility Observations were recorded only on 24 days in the month.

† 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.

ed its a./ .).	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	25	2	1	1	1	2	2	4	5	1	1 — 10								2	1	27						3	12	15			Lahore
-50				1		1		2	2																							
-75											9 or 10										4											
>75																																
-25	26		1			2	1	3	5		1 — 10							1	8	1	20							1	29			Madho Sagar (Gwalior)
-50							3	3	1																							
-75							2	4			9 or 10										2											
>75								1																								
-25	26	1	3	6	2	1				1	1 — 10						1	1			28									15	9	*Madras
-50			2	9																												
-75				1							9 or 10										6											
>75																																
-25	26	2	1	3	2	3	2	7	1		1 — 10									19	11							7	22	1		Malegaon
-50							4	1																								
-75											9 or 10										8											
>75																																
-25											1 — 10																		30			Mangalore
-50																																
-75											9 or 10																					
>75																																
-25	25	1				1	4	6	3		1 — 10								2	2	26				1	2	2	25				Multan
-50		1					3	4	2																							
-75											9 or 10										2											
>75																																
-25	21						3	5	1		1 — 10								3	9	18						1	11	18			New Delhi
-50							2	5	4																							
-75									1		9 or 10										2											
>75																																
-25	29	1	3	1		1	1	5	6	2	1 — 10								2	19	9								1	4	25	Peshawar
-50						1	2		5																							
-75						1					9 or 10										6											
>75																																
-25	28	3	4	5	2	2	2	3	2	2	1 — 10									7	23						2	1		27		Poona
-50							2	1																								
-75											9 or 10									1	6											
>75																																
-25	20		2	7							1 — 10					2	1	25	2								1	25	4			Port Blair
-50			1	8	2																											
-75											9 or 10										2											
>75																																
-25	19					1		3	5	2	1 — 10							1	4	2	14						2	6	18	4		† Raj-Samand (Kankroli)
-50							1	5																								
-75								2			9 or 10																					
>75																																
-25	29	1		1		1	3	4	3	3	1 — 10								3	10	17						1	7	12	10		Sambalpur
-50							3	5	5																							
-75											9 or 10										8											
>75																																
-25	29	2	2	3	1	2	3	2	3	2	1 — 10									2	28								17	13		Sharjah
-50			1					4	2																							
-75								2			9 or 10										3											
>75																																
-25	9							1		1	1 — 10								3	8	19						4	18	8			Tezpur
-50								1																								
-75								5			9 or 10										2											
>75								1																								
-25	22		3	4	1						1 — 10							3	3	16	8								1	13	16	Trichinopoly
-50				11	1																											
-75			1	1							9 or 10										7											
>75																																
-25											1 — 10																1	6	23			Trivandrum
-50																																
-75											9 or 10																					
>75																																
-25	12	4	5	2			1				1 — 10						3	5			22						4	26				Vizagapatam
-50																																
-75											9 or 10										6											
>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
Ahmedabad ...	6–25	30		3				1	3	5	18	30	4	2					4	9		30	6					3	6	13		29	3			1	2	7	8	2	1
	26–50												1						1	9									1	1								3	2		
	51–75																																								
	>75																																								
Allahabad (Bamrauli)..	6–25	30	2			1	2	2	4	3	16	30	5	2	1	5	2	1	1	4		30	2	2	2	4	1		6	4	3	22			1			1	6	4	1
	26–50												1							7									2	3									4	4	
	51–75																			1										1									1		
	>75																																								
Bahrain ...	6–25	30	1	2	1	4	2	3	2	7	8	30	8	1	1		5	2	2	3	2	30	6	1	1		2	6	3	6	1	26	2		1		1	4	9	3	1
	26–50															1	1	1		3			1				1			2			1				1			1	2	
	51–75																																								
	>75																																								
Bombay (Juhu) ...	6–25	30	2	1						2	25	29	9	2			2			7	3	29	13	6		1	1		2	4	1	25	1	3	1	3	1	3	7	2	3
	26–50												6										1															1			
	51–75																																								
	>75																																								
Calcutta (Dum Dum) ...	6–25	30				2	5	13	5	2	3	30	1					6	5	5	1	29	1				1	3	6	6	1	13	1					4	3	1
	26–50																	7	3	1								1	6	4								1	2	1	
	51–75																			1																					
	>75																																								
Gaya ...	6–25	30	2		1	2	9	7	6		3	30	1		2	2	1	1	3	6	2	30	1	1	1	1	1	1	5	5	2	26					1	1	7	3	
	26–50																		3	7									1	9									7	4	
	51–75																		1	1									1	1									1	2	
	>75																																								
Jacobabad ...	6–25	30		1	4	4	1	1	1	2	15	30	2			2	7	8	1	4	1	30	1	1		3	7	9	3	4	1	28	1				2	6	9	3	5
	26–50			1											3	1				1									1										1	1	
	51–75																																								
	>75																																								
Jiwani ...	6–25	30						10	2	1	17	30	1	2	1			5	15	3		30	1	1				4	12	6	1	20	3	1				1	7	6	
	26–50																		3										4	1									2		
	51–75																																								
	>75																																								
Jodhpur ...	6–25	30	1	13	2	1		5	3	1	2	30	4	4	2		1	2	4	2	3	29	4	1	2	1	1	3	4	5	2	27	1		1		1	9	6	1	2
	26–50			2										2				2	3	1								2	3	1								4	2		
	51–75																																								
	>75																																								
Karachi (Drigh Road) ...	6–25	30	1	1				5	8	2	13	30	1		1			1	6	8		29	1		1			4	7	7	2	14	1	2	1		1		4	1	2
	26–50																		11	2									4	2									2		
	51–75																												1												
	>75																																								
New Delhi ...	6–25	30	2	3		2		1	5	7	10	30	3	2	1	4		4	1	5		30	1		1	3	1	4	3	6	2	25					3	1	5	2	1
	26–50												1			1	1		1	6							1		1	7								1		8	4	
	51–75																																								
	>75																																								
*Raj Samand (Kankroli).	6–25	9							3	4	1	9	2	1					1	2		9	2	1					1	2		8		1				1	1	3	
	26–50									1								1	1	1								1	1	1									2		
	51–75																																								
	>75																																								
Sharjah ...	6–25	30		1		2	2				25	30	7		2			1	6	6	2	29	4		1			2	6	6	1	27	1	2	1	2		3	4	3	4
	26–50																		4	2									5	4								1	3	3	
	51–75																																								
	>75																																								

*Only on 9 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 were recorded only on days of night ascent.

CLOUD HEIGHTS (LATE NIGHT) OF VISIBILITY (LATE NIGHT)

ed its ./).	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	26			3	2	2	3			1	1 — 10									1	29						2	27	1			Ahmedabad
-50							11	1	2																							
-75								1			9 or 10										1											
>75																																
-25	15							4			1 — 10									5	25						1	29				Allahabad (Bamrauli)
-50							3	5	1																							
-75								2			9 or 10										2											
>75																																
-25	16	1		1		1		2	3	1	1 — 10										30						2	28				Bahrain
-50							2	1	4																							
-75											9 or 10										3											
>75																																
-25	18				5	3	3	1	1		1 — 10					1	3	1		1	24							30				Bombay (Juhu)
-50					1	4																										
-75											9 or 10										1											
>75																																
-25	2						1				1 — 10					3	2		2		23						17	13				Calcutta (Dum Dum)
-50									1																							
-75											9 or 10					1					3											
>75																																
-25	12							4	2		1 — 10										30							27	3			Gaya
-50								5	1																							
-75											9 or 10										2											
>75																																
-25	26	4			1	1	3	3	8		1 — 10									1	29						3	18	9			Jacobabad
-50							1	2	2																							
-75								1			9 or 10										1											
>75																																
-25	9	2						2	4		1 — 10					1	5				24						2	28				Jiwani
-50									1																							
-75											9 or 10										1											
>75																																
-25	17			1				3	1		1 — 10									2	28					1	1	5	23			Jodhpur
-50							1	3	1																							
-75							2				9 or 10										2											
>75																																
-25											1 — 10					4	3	1			22						1	17	12			Karachi (Drigh Road)
-50																																
-75											9 or 10																					
>75																																
-25	10							2			1 — 10									1	29					2	3	14	11			New Delhi
-50								6	2																							
-75											9 or 10																					
>75																																
-25	7		1		1	1				1	1 — 10							1	1		7							2	6	1		*Raj Samand (Kankroli)
-50							1	1																								
-75							1				9 or 10										1											
>75																																
-25	21	1	2	1		1		7		5	1 — 10										30				1				29			Sharjah
-50			2					2																								
-75											9 or 10										1											
>75																																

Y. P. P.—S 913—260—5-41

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 1940

Supplement to the Monthly Weather Report, May 1940

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 25th June 1941.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

U 49

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		2	4	1		1	2		20	31	3		1			1	2	4	
φ = 27° 08′ N ...	26–50				1								4		1	3	1	1		7	
λ = 78° 01′ E ...	51–75														1				1		
H_s = 182 metres ...	>75														1						
Bangalore ...	6–25	31				1		6	15	5	2	28				1	3		2	4	
φ = 12° 58′ N ...	26–50								1	1									9	7	
λ = 77° 35′ E ...	51–75																		2		
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	31						20	5		6	31						2	2	3	
φ = 23° 15′ N ...	26–50																	8	10	4	
λ = 69° 48′ E ...	51–75																		2		
H_s = 113 metres ...	>75																				
*Car Nicobar ...	6–25	30					2	1	1		26	28				2	4	4	4		
φ = 09° 15′ N ...	26–50																3	5	3		
λ = 92° 48′ E ...	51–75																1	2			
H_s = 4 metres ...	>75																				
Chittagong ...	6–25	31		1		6	2				22	30	1	1	2	5	4	3	1	1	1
φ = 22° 21′ N ...	26–50															2	8	1			
λ = 91° 50′ E ...	51–75																				
H_s = 21 metres ...	>75																				
Dacca ...	6–25	31		2	2	7	3				17	26		3	1	1	8	1	1		
φ = 23° 43′ N ...	26–50																5	2			
λ = 90° 24′ E ...	51–75															1	1	2			
H_s = 14 metres ...	>75																				
Dalbandin ...	6–25	31	2	2	1	1			1		24	31	7	4	4	1	2	4	1	4	
φ = 28° 54′ N ...	26–50														1			2	1		
λ = 64° 26′ E ...	51–75																				
H_s = 855 metres ...	>75																				
Fort Sandeman ...	6–25	31			2	1		3	1	1	23	31	4	3				6	6	6	3
φ = 31° 21′ N ...	26–50																		2	1	
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	31	1			2	1	3	9	2	13	30	2		2		3	2	2	1	
φ = 17° 26′ N ...	26–50												1			1	1	2	2	9	
λ = 78° 27′ E ...	51–75												1							1	
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	31	1			3	3	1	9		14	31	2			1		1	2	1	2
φ = 23° 10′ N ...	26–50												3			3	2	2	4	6	
λ = 79° 57′ E ...	51–75																		1	1	
H_s = 402 metres ...	>75																				
Lahore ...	6–25	31	1	4	1	3		1		2	19	30	2	2	1		1		2	6	
φ = 31° 35′ N ...	26–50												4	1	1	1	1		3	1	
λ = 74° 20′ E ...	51–75												1						2		
H_s = 221 metres ...	>75															1					
Madho Sagar (Gwalior).	6–25	31	2			4	1	5	5	4	8	31	3	1	1	1		2	1	3	
φ = 26° 13′ N ...	26–50							1	1				1			1	2	1	6	7	
λ = 78° 08′ E ...	51–75																			1	
H_s = 233 metres ...	>75																				
Madras ...	6–25	31	1				1	5	1		23	31	1		1	1	5	1			1
φ = 13° 04′ N ...	26–50																1	6	7	1	
λ = 80° 15′ E ...	51–75																	1	3		
H_s = 13 metres ...	>75												1						1		
Malegaon ...	6–25	31							17	4	10	31	1				1		3	4	
φ = 20° 33′ N ...	26–50												2		1				4	15	
λ = 74° 32′ E ...	51–75																				
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	25	1	3	9					6	6	25	3					1	3	15	1
φ = 12° 52′ N ...	26–50																			2	
λ = 74° 51′ E ...	51–75																				
H_s = 40 metres ...	>75																				
Multan ...	6–25	31	1	1	1		3	5			20	31	2	5	2	2	2			1	1
φ = 30° 11′ N ...	26–50												2	1	2	1	1	5	2	1	
λ = 71° 25′ E ...	51–75																	1			
H_s = 128 metres ...	>75																				
Peshawar ...	6–25	31				3	2	4		2	20	31	7	2	3	1		3	1	9	1
φ = 34° 01′ N ...	26–50																		1	3	
λ = 71° 35′ E ...	51–75																				
H_s = 363 metres ...	>75																				
‡Poona ...	6–25	27				1		12	8	5	1	27	1		2	1			3	3	
φ = 18° 32′ N ...	26–50												2						8	6	
λ = 73° 51′ E ...	51–75																			1	
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	31				2	3	13	5	3	4	31			2	2	1	4	3	1	1
φ = 11° 40′ N ...	26–50							1									5	7	3		
λ = 92° 43′ E ...	51–75																	1	1		
H_s = 87 metres ...	>75																				
§Raj Samand (Kankroli)	6–25	23		1				6	9	7		23		1	1			4	7	6	1
φ = 25° 03′ N ...	26–50																		2	1	
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	30	3		1	2		1	1	6	1	28			4		3		3	4	
φ = 27° 08′ N ...	26–50					2	1			9			2					1	3	3	
λ = 78° 01′ E ...	51–75				1				1											3	
H_s = 182 metres ...	>75					1											1			1	
Bangalore ...	6–25	28					1	1	17	3		22	6	5	4					2	
φ = 12° 58′ N ...	26–50							2	3	1									1	4	
λ = 77° 35′ E ...	51–75																				
H_s = 936 metres ...	>75																				
Bhuj ...	6–25	31				1	1	1	6	4	1	29	2	1			2	4	5	3	1
φ = 23° 15′ N ...	26–50						1	3	12	1							1	1	6	1	
λ = 69° 48′ E ...	51–75																	1	1		
H_s = 113 metres ...	>75																				
*Car Nicobar ...	6–25	20			1	3		3	2	1	1	15			3	1	2	2	1	3	
φ = 09° 15′ N ...	26–50						1	6	2							1		2			
λ = 92° 48′ E ...	51–75																				
H_s = 4 metres ...	>75																				
Chittagong ...	6–25	27	2	1		2	8	5	1		2	26	1	2	2		6	4	4	1	
φ = 22° 21′ N ...	26–50					1	2	3								1	3	1			
λ = 91° 50′ E ...	51–75																1				
H_s = 21 metres ...	>75																				
Dacca ...	6–25	21		2		3	3	1	1			19		1	2	1		3	1	1	
φ = 23° 43′ N ...	26–50			1			2	4						1	1			2	6		
λ = 90° 24′ E ...	51–75						1	3													
H_s = 14 metres ...	>75																				
Dalbandin ...	6–25	30	6	4	5		2	2	4		3	31	7	1	2			4	2	4	1
φ = 28° 54′ N ...	26–50				1	1		2					6						3	1	
λ = 64° 26′ E ...	51–75																				
H_s = 855 metres ...	>75																				
Fort Sandeman ...	6–25											31	5	1		1	1	6	6	7	
φ = 31° 21′ N ...	26–50																	1	2	1	
λ = 69° 27′ E ...	51–75																				
H_s = 1421 metres ...	>75																				
Hyderabad (Begumpet).	6–25	30	2		2		3	2	2	1		30	6	3	2	3		2	1	4	
φ = 17° 26′ N ...	26–50		1			1	1	2	2	8			2	1						2	
λ = 78° 27′ E ...	51–75		1							2			3	1							
H_s = 555 metres ...	>75																				
Jubbulpore ...	6–25	31	2			1		1		1	2	31	2		1	1	2		4	8	
φ = 23° 10′ N ...	26–50		3			3	2	1	3	10			3		1				2	5	
λ = 79° 57′ E ...	51–75								1	1											
H_s = 402 metres ...	>75																			2	
Lahore ...	6–25	29	4	1		1			1	7	1	26	2	1			1	1	4	7	
φ = 31° 35′ N ...	26–50		2	1	1	1			2	6				1				1	1	6	
λ = 74° 20′ E ...	51–75																			1	
H_s = 221 metres ...	>75					1															
Madho Sagar (Gwalior).	6–25	31	2	1	2		1		2	5	1	30	2			1	4		4	7	
φ = 26° 13′ N ...	26–50		1			1	2	1	2	8						1			1	9	
λ = 78° 08′ E ...	51–75								1	1									1		
H_s = 233 metres ...	>75																				
Madras ...	6–25	31	1	1	1		6	5	4	1		29	6	4	3	2		1	1	3	1
φ = 13° 04′ N ...	26–50								6	4			2	4					1	1	
λ = 80° 15′ E ...	51–75																				
H_s = 13 metres ...	>75		1						1												
Malegaon ...	6–25	31	3		1		1		2	4		31	5	2	2		1	1	6	4	
φ = 20° 33′ N ...	26–50		3						4	18				3					1	6	
λ = 74° 32′ E ...	51–75																				
H_s = 443 metres ...	>75																				
†Mangalore ...	6–25	25	2					2	7	8	3	17	3	3	3	1	1		1	1	
φ = 12° 52′ N ...	26–50									3			1	1						1	
λ = 74° 51′ E ...	51–75																			1	
H_s = 40 metres ...	>75																				
Multan ...	6–25	31	3	5	2	2	3	3	2	1		31	3		1	1	3	2	8	3	
φ = 30° 11′ N ...	26–50		2		2			3	2	1			1			1		2	3	3	
λ = 71° 25′ E ...	51–75																				
H_s = 128 metres ...	>75																				
Peshawar ...	6–25	31	7	2	4			1	3	9	1	31	7	1	2	2		1	1	7	3
φ = 34° 01′ N ...	26–50									3			1							5	
λ = 71° 35′ E ...	51–75								1											1	
H_s = 363 metres ...	>75																				
‡Poona ...	6–25	27			1	1	1		4	4		27	2	4	2	1		1	2	2	
φ = 18° 32′ N ...	26–50		1						10	5			2	2	1				4	4	
λ = 73° 51′ E ...	51–75																				
H_s = 588 metres ...	>75																				
Port Blair ...	6–25	29		2		3	2	2	1	1		23			3	1	4	1	2		
φ = 11° 40′ N ...	26–50					1	4	6	4	1			1	1			1	5	1		
λ = 92° 43′ E ...	51–75								2								1		2		
H_s = 87 metres ...	>75																				
§Raj Samand (Kankroli)	6–25	23	1	1	1			5	5	5	1	23		3	1	1	5	3	1	6	
φ = 25° 03′ N ...	26–50		1						3				1					1		1	
λ = 73° 53′ E ...	51–75																				
H_s = 587 metres ...	>75																				

* In the morning only 30 ascents were made during the month.

† Wind frequency table prepared from 25 ascents made in the morning.

‡ Only on 27 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.

§ Only on 23 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	
26	3			1	1		4	2		1 — 10										31				1	1	12	17				Agra
	1				1		4	2																							
							3	3		9 or 10																					
								1																							
19		4	4	1				2		1 — 10		1		1	6	9	5	1		8						2	12	10	7		Bangalore
		7	1																												
										9 or 10		1		1	4	2	1			19											
21	2					3	5	3	1	1 — 10					6	10	1	1		13					1	1	4	25			Bhuj
	2				1		4																								
										9 or 10																					
11	1		1	4	1	2	1			1 — 10																					*Car Nicobar
						1																									
										9 or 10																					
21	3		2		1	2	5	2		1 — 10					6	4	2	3	1	15					2	1	15	13			Chittagong
							2	4																							
										9 or 10					4	1				19											
11		1				1	2			1 — 10			1	2	11	2	1	2	1	11					1		30				Dacca
	1	1	1				2	1																							
					1					9 or 10			1	1	4					12											
30	2	1		1		4	1	2		1 — 10										31								5	13	8	Dalbandin
	4						2	11	1																						
	1									9 or 10																					
31	5	1				2	1	6	1	1 — 10									3	28						6	4	21			Fort Sandeman
						2	5	2																							
	1						2	3		9 or 10									1	4											
28	5	5	2	1			1	3		1 — 10				1				4	1	25							1	5	20	5	Hyderabad (Begumpet)
	4	4	1																												
		1								9 or 10				1						9											
	1																														
24	1		1	1		2	4			1 — 10							1	2	2	26						1	2	26	2		Jubbulpore
	1	4				2	4	3																							
										9 or 10										4											
								1																							
23	2	2				2	1	3	1	1 — 10									2	29				1	1	8	14	7			Lahore
	1						5	3																							
							2			9 or 10										3											
								1																							
19	2		2			1	3	2	2	1 — 10								6		25						2	11	18			Madho Sagar (Gwalior)
	1	1			1		1	2																							
								1		9 or 10										1											
28	4	3	8							1 — 10						2		1		28						1	7		15	8	Madras
	2	9																													
		1						1		9 or 10										17											
28		1	2	1	1	5	7	3		1 — 10									1	30						4	10	17			Malegaon
		3				2	2	1																							
										9 or 10										2											
14	1	1	5	3					1	1 — 10					3	28									2	1	7	20	1		†Mangalore
	1		2																												
										9 or 10					2	2				10											
25	2	1	1			1	4	3	1	1 — 10										31					1	9	20	1			Multan
	1	1				1	4	4																							
								1		9 or 10										4											
31	8	1					5	3	1	1 — 10									2	29						1	4	1	5	20	Peshawar
		1		1	1		5	3																							
								2		9 or 10										8											
26		5	5		4	3		4	1	1 — 10								1	1	25						1			30		‡Poona
	2				1	1																									
										9 or 10										4											
18		1	3	2	3	1	3	2		1 — 10					13	4	14									5	16	10			Port Blair
					2	1																									
										9 or 10					1					28											
17	1	1	2	1	3	2				1 — 10							1	1		21					1	3	6	21			§Raj Samand (Kankroli)
	1	1			3	2																									
										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	NW	C
Sambalpur ...	6–25	31		1	2	1		2			25	31		1		2	10	5		3		31	2				1	6	6	1		30	5	1	1	1			8	5	1
φ = 21° 28′ N ...	26–50														1	2	1	6								3	2	5	4				2	1			1		2	2	
λ = 83° 58′ E ...	51–75																												1												
H_s = 153 metres ...	>75																																								
Tezpur ...	6–25	31		3	12						16	28		2	6	4	2	3	2		3	27	2		5	2	5	7	3			24		2	3		2	4	1		
φ = 26° 37′ N ...	26–50														2				2						1			1							1				7		
λ = 92° 47′ E ...	51–75																												1									3	1		
H_s = 80 metres ...	>75																																								
Trichinopoly ...	6–25	31	1					1	15	8	6	31				1		3	4			31	2			2	1	1	6	2	2	31	6	5	6					4	1
φ = 10° 49′ N ...	26–50																		9	3									8	4			3	2						1	
λ = 78° 42′ E ...	51–75																		11										2	1			1						2		
H_s = 88 metres ...	>75																																								
*Trivandrum ...	6–25	27	18	1						5	3	24		1				1	2	12		24		1					4	8		20	2	1				1	5	6	2
φ = 08° 29′ N ...	26–50																			8									1	9			1						1	1	
λ = 76° 57′ E ...	51–75																													1											
H_s = 76 metres ...	>75																																								
Vizagapatam ...	6–25	31		2	1	1		5	12		10	29	1		2		2	4	1	1	1	23	1		1		1	6	3		1	14	1		1	1	1	1	1	4	1
φ = 17° 42′ N ...	26–50															1		10	2								1	6	2	1					1				1		
λ = 83° 18′ E ...	51–75																	3	1														1								
H_s = 56 metres ...	>75																																								

TABLE 4—WIND

Ahmedabad ...	6–25	31						18	2	8	3	31	2				1	10	5	5		31	2					7	6	6		21	3	1		1	1	2	5	3	1
φ = 23° 02′ N ...	26–50																		1	7								3	3	3							1	3	2		
λ = 72° 35′ E ...	51–75																													1									1		
H_s = 55 metres ...	>75																																								
Allahabad (Bamrauli)	6–25	31	2	2	6			2	6	2	11	31	2		2	3	1	5	4	3	3	31			2	1	3	3	9	5		28	2	1		1			3	6	1
φ = 25° 26′ N ...	26–50														1	1		1	1	3						1		1	2	3			1			1		1	2	6	
λ = 81° 44′ E ...	51–75																		1											1							1				2	
H_s = 98 metres ...	>75																																								
Bahrain ...	6–25	31	6	1	1			2	4	15	2	30	6			2			1	3		30	3		1		1		3	3		27	2			1		1	4	5	
φ = 26° 14′ N ...	26–50												7					1		2			10					1		4			5			1		1	1	3	
λ = 50° 35′ E ...	51–75												5							1			2							2									1	2	
H_s = 14 metres ...	>75												2																												
Bombay (Juhu) ...	6–25	31						13	3	7	8	31	5	1	5	1	4	6	2	2	3	28	5	3			1	8	1	6		24	3	3	2		1	1	5	2	
φ = 19° 07′ N ...	26–50																	2					2							2			2	2				1		2	
λ = 72° 50′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	31		2	6	4	7	6		1	4	31	1	1	3	4	3	6	1		1	29	1	1	3	1	3	5	1	2	1	24		2			1	4	7	2	
φ = 22° 39′ N ...	26–50						1									2	4	2	2								4	4	3						1	1	2	3	1		
λ = 88° 27′ E ...	51–75																	1																							
H_s = 21 metres ...	>75																																								
Gaya ...	6–25	31		2	3	5	1	7	3	1	6	31	1		4	5	3	4	7	1	1	31		2	2	4	2	4	6	2	4	29	4		2	1	1	1	5	6	
φ = 24° 49′ N ...	26–50							1	1	1						1			2	1									3	1					1				3	4	
λ = 85° 01′ E ...	51–75																		1											1											
H_s = 117 metres ...	>75																																							1	
Jacobabad ...	6–25	31	2		7	5	1	3		1	9	31	1	1	2	3	6	2	1	1		29	3		3	2	7	4		2	1	29	3			1	2	6	7	5	1
φ = 28° 17′ N ...	26–50									3			4		3	2	2			2			2		1					3			2					1		1	
λ = 68° 29′ E ...	51–75																			1																					
H_s = 56 metres ...	>75																																								
Jiwani ...	6–25	31	1	2	1	6	1	12	4		3	31		4	3	3	3	1	3	6	1	27	4	3	1	1	1	2	3	2		26	3	2	4			4	3	4	
φ = 25° 10′ N ...	26–50				1									2	2				2	1				2	1			1	2	3			1	1					3	1	
λ = 61° 47′ E ...	51–75																													1											
H_s = 5 metres ...	>75																																								
Jodhpur ...	6–25	31		2	1		1	15	3	1	1	31	1	1	1	2	1	1	7	2	1	31	1	2	1		2	1	5	2	1	27	1		2	2	6	4	2	2	1
φ = 26° 18′ N ...	26–50							7										10	3	1							1	8	6	1						1		1	1	4	
λ = 73° 01′ E ...	51–75																																								
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	31					2	14	5	5	1	31	2				1	3	11	4		31	4	2		1	1	2	4	6		25	6		2			3	3	7	
φ = 24° 53′ N ...	26–50							2	1	1			2				1		3	3			2						3	3									2	2	
λ = 67° 07′ E ...	51–75																		1										2												
H_s = 29 metres ...	>75																																								
New Delhi ...	6–25	31	1	2	2	2		1	9	5	3	30	1		1	1		1	5	8		25	1		1	2		1	2	6		21		2			2		3	5	
φ = 28° 39′ N ...	26–50					2			4				1	1		1	1			7						1			2	8									2	4	
λ = 77° 15′ E ...	51–75															1				1										1										3	
H_s = 227 metres ...	>75																																								
†Poona ...	6–25	4								2		4							2			4							2	1		4								3	
φ = 18° 32′ N ...	26–50							1	1				1						1											1										1	
λ = 73° 51′ E ...	51–75																																								
H_s = 588 metres ...	>75																																								
‡Raj Samand (Kankroli)	6–25	9						1	4	4		9			1		2	1	3	2		9			1		2		4	2		9	1	1		2	1	1	1	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	17		2	10	31	3	1	2	1	2	7	4	3	2	31	4		2	2	1	1	6	6	1	31	4	1		2	2	2	5	4	
φ = 25° 20′ N ...	26–50												1							5										7								1	4	4	
λ = 55° 24′ E ...	51–75																													1									1	1	
H_s = 11 metres ...	>75																																								

* Wind frequency table prepared from 47 ascents made in the morning.

† Only on 4 days in the month, pilot balloon ascents were made in the forenoon.

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

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	
27	3	2	1				2	5	3	1 — 10						2	3	2	2	22							1	18	12		Sambalpur
	1						1	6																							
	1	1						1		9 or 10						1				7											
16	1	1	3	1		1			1	1 — 10			1	3	7	1	2	6	5	6						3	13	15			Tezpur
			1			1	4																								
						1				9 or 10			1	1	4	1	1	1		21											
							1																								
26	3	3	7	3			1	2		1 — 10						2		2	1	26								6	15	10	Trichinopoly
		4						1																							
		1						1		9 or 10										13											
12	2	1	4			1	1	2		1 — 10		22	3	2						4						7	24				•Trivandrum
								1																							
										9 or 10		1		2						18											
4		2							1	1 — 10					6	9	3	1		12						5	25	1			Vizagapatam
								1																							
										9 or 10					2	3				11											

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

14			2	1		3	1	2		1 — 10						2	4	2		23						1	5	25			Ahmedabad
				1	1		3																								
										9 or 10																					
16	1	1		1			2	2		1 — 10								1	1	29						7	23	1			Allahabad (Bamrauli)
	1						1	5																							
								2		9 or 10										2											
10			1					2	1	1 — 10										31					1	1	12	17			Bahrain
	1		1				3	1																							
										9 or 10																					
16	2	1	3	3		2	1			1 — 10					1	18	8			4							21	10			Bombay (Juhu)
			1		1	1																									
					1					9 or 10										1											
10	1						1	2		1 — 10					3	17	3	1		7						2	23				Calcutta (Dum Dum)
						1	3	2																							
										9 or 10					2	1				8											
23	2	1	1			1	2	2		1 — 10							3	2	2	24						1	15	15			Gaya
	1						4	5																							
							1	3		9 or 10										3											
24	3		1		3	4		4	3	1 — 10										31			1			3	16	11			Jacobabad
	1	1				1	1	2																							
										9 or 10																					
5	1	1						1		1 — 10					1	9				21						6	25				Jiwani
	1																														
	1									9 or 10																					
16	1	1		2	1	4	2	1		1 — 10							1			30						6	13	12			Jodhpur
	1				1		1	1																							
										9 or 10																					
17	2		2		1		5	2		1 — 10						15	2			14				1		2	13	15			Karachi (Drigh Road)
	1						2	2																							
										9 or 10						1	1			2											
17							4	2		1 — 10								1	2	28				2	1	7	12	9			New Delhi
	2						3	5																							
								1		9 or 10																					
4						1	3			1 — 10								2		2											†Poona
										9 or 10																					
7	1		1			1		1	1	1 — 10										9											‡Raj Samand (Kankroli)
				2																											
										9 or 10																					
28	3		1	1	3	1	2	5		1 — 10					2				1	28			1			1		20	9		Sharjah
				1		3	3	3																							
							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
Agra ...	6–25	31	5		1	2			11	4	8	31	2	1	1	2			5	4		31	1	1	2	1		1	8	5	1	30	1	1		2	1		4	6
	26–50												1			1		1	6	6			2	1					2	6			1						3	5
	51–75												1																										1	4
	>75																																							
Ahmedabad ...	6–25	31						18	8	4	1	31		1			2	5	10	4		31		1			1	9	8	4		30		1		1		6	11	1
	26–50																2	3	4									5	3									3	7	
	51–75																																							
	>75																																							
Allahabad (Bamrauli)	6–25	31		3	2	1			6	13	5	31	4	2	3	1			3	7		31	2	1	3				2	12	1	26	2	1		1			4	7
	26–50								1										3	8					1				3	6					1				2	8
	51–75																																							
	>75																																							
Bahrain ...	6–25	31	7	6	2	2				13	1	31	6	1	2		1	4		1		31	3		1		1		3	8	1	31			1	2			5	5
	26–50												7	1						2			7				1			2			3					2		10
	51–75												4							1			1							2										3
	>75												1										1																	
Bangalore ...	6–25	31		3		1	1	4	5	14	1	31		2	3	1			8	9	1	31		2	1		1	4	11	10		30	3	5	3				1	13
	26–50								1	1									3	4									2											4
	51–75																																							1
	>75																																							
Bhuj ...	6–25	31					2	17	9	3		31						5	7	3		31						7	9	1		28	4	1			2	2	6	4
	26–50																	11	5									9	5									3	5	1
	51–75																																							
	>75																																							
Bombay (Juhu) ...	6–25	31		1				15	2	13		31	1					7	10	9		27	7					3	7	3		25	4	3	3				4	2
	26–50												1					1		2			1					1		5			1	1					3	3
	51–75																																							
	>75																																							
Calcutta (Dum Dum)	6–25	31	3			7	11	7		1		31	2	1	2	2	9	6				31	2		4	1	5	4	2		2	25	3	2	1		1	1	9	2
	26–50							2									7	1								2	1	4	2							1	1	1	1	1
	51–75																1										1	1											1	
	>75																																							
Car Nicobar ...	6–25	31				4	3	9	1	1	13	29				1	3	6	4		2	23				2		5	1	1	1	14			1	1	3	3	2		1
	26–50																2	8	1								1	9	2								1	1	1	
	51–75																	1	1									1												
	>75																																							
Chittagong ...	6–25	31				4	5	10	7		5	29	1			4	2	8	3	1		28		2		3	6	4	2	1	1	26		2		2		7	4	2	2
	26–50															1	6	2									6	3									2	4	1		
	51–75																	1																						
	>75																																							
Dacca ...	6–25	31		3		6	7	7			8	31	2	2		4	6	3	1	1	1	28		3		2	4	7	3		1	19		2	1		3	1	4	1
	26–50													1		1	5	3									2	5										2	3		
	51–75																	1										1										1	1		
	>75																																							
Dalbandin ...	6–25	31	3	4	4	2	4	3	1	2	8	31	2	1	1	5	5	2	3	2		31	3	3	2	3	4	4	5	2		31	2	1	2	2	2	3	5	4	
	26–50												2				1	2			4		2						1		1		1				1	2			6
	51–75																1										1														
	>75																																							
Fort Sandeman ...	6–25	31	1			1	1	5	6	5	10	31	1	2	1		3	3	7	3	2											31	2	2		1	4	2	6	2	3
	26–50			1		1								1	1			3	3	1														1	1			4	1	2	
	51–75																																							
	>75																																							
Gaya ...	6–25	31	2	7		1	1	2		8		30	5	5		3	1		3	5		30	4	6	1	3	1		3	6		24	1	2	1	2			5	9	
	26–50						2		2	4	2								1	6									2	4										4	
	51–75																			1																					
	>75																																							
Hyderabad (Begumpet).	6–25	31	6	2	1				3	8	11	30	4	4	4	1			1	7	5	30	5	3	4	2				6	4	30	6	3	4	1			2	3	2
	26–50												1							3			1						1	4			3	2						4	
	51–75																																							
	>75																																							
Jacobabad ...	6–25	31	1			8	3	7		2	9	31	1		1	5	9	3	3	3	1	31		1	1	3	10	3	2	4	1	28	4	1	1	1	7	5	2	3	2
	26–50								1				2					3					2		1		1	1		1										2	
	51–75																																							
	>75																																							
Jiwani ...	6–25	31				4	5	17				31				1	8	8	3		1	31	2		1	3	1	7	6	5	1	29	2	2	1	1		3	5	4	3
	26–50							5								2	1	1	6									2	3				2						1	3	2	
	51–75																																							
	>75																																							
Jodhpur ...	6–25	31	1					7	11	2	2	31	1			1	2	9	6	1		31			1		1	8	11	2		22	1	1	1			6	4	2	
	26–50							6	2									7	3								1	6	1								1	4	2		
	51–75																		1																						
	>75																																							
Jubbulpore ...	6–25	31			1	1	1	1	3	9	15	31	2	2	3				8	6	2	31	2	3	2				6	10	1	30	3		2	1		1	6	9
	26–50												1						2	5			1						2	4					1				2	5
	51–75																																							
	>75																																							
Karachi (Drigh Road) ..	6–25	31					1	10	2	2		31	1			1		4	6	1		31	2	2		3		2	4	4	2	27	3	3	2			8	5	1
	26–50							15	1							1	1	3	5	6				1				2	4	3				1				1	3	
	51–75																		2										1											
	>75																												1											

Table 8—Frequency of low cloud heights (Afternoon)

Table 9—Frequency of Visibility (Afternoon)

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.
6-25	26	1	1		1		2	4	3		1 — 10									4	27				1	2	11	17				Agra
6-50		1						3	6																							
-75								1	3		9 or 10																					
>75																																
6-25	25		1	2	1		1	8	1		1 — 10							2	6	2	21						2		29			Ahmedabad
6-50					1	1	3	7	1	2																						
-75								1			9 or 10																					
>75																																
6-25	16	1	1					2	1		1 — 10								5	6	20						11	18	2			Allahabad (Bamrauli)
6-50								3	6																							
-75								1	1		9 or 10										1											
>75																																
6-25	17				1	1	1		3	1	1 — 10										31							10	21			Bahrain
6-50		4					1	4	1																							
-75											9 or 10																					
>75																																
6-25	22	4	1	9	1				2		1 — 10						1	14	8	4	4						1	4	9	13	4	Bangalore
6-50		2		1	1				1																							
-75											9 or 10						1	1			12											
>75																																
6-25	24	1	3			1		3	4		1 — 10						1	3	6		21						2	3	26			Bhuj
6-50						1	5	2	3																							
-75								1			9 or 10							1	1		2											
>75																																
6-25	20	1	1	2	1	2	1	4	1		1 — 10					3	13	4			11							8	23			Bombay (Juhu)
6-50				1	1	2	3																									
-75											9 or 10										1											
>75																																
6-25	15		1				1	3	2		1 — 10					2	10	7	1	1	10						2	29				Calcutta (Dum Dum)
6-50		1	2				1	2	1																							
-75									1		9 or 10										7											
>75																																
6-25	8			1	3	1		2			1 — 10																					Car Nicobar
6-50							1																									
-75											9 or 10																					
>75																																
6-25	23	1		1		1	1	3	2	3	1 — 10				1	4	6	4	2		14						1	4	26			Chittagong
6-50			2			1	2	2	4																							
-75											9 or 10				1	2	2				17											
>75																																
6-25	12		1			1	1	2			1 — 10					4	2	18	7								1	30				Dacca
6-50				1			1	5																								
-75											9 or 10										5											
>75																																
6-25	30	2	4		1	1	2	2	5		1 — 10								3	5	23							2	9	16	4	Dalbandin
6-50		3					1	1	4	3																						
-75							1				9 or 10																					
>75																																
6-25	29	3	2			3	4	6		4	1 — 10					1		1	3	9	17						1	9	21			Fort Sandeman
6-50					1		2	3																								
-75									1		9 or 10							1		1	5											
>75																																
6-25	19	2				2		3	2		1 — 10						1	2	7	11	11						3	8	18	2		Gaya
6-50		2						2	5																							
-75									1		9 or 10						1				4											
>75																																
6-25	28	6	3	3	2			1	1	1	1 — 10					1			5	17	8							1	1	18	11	Hyderabad (Begumpet)
6-50		6		1					2																							
-75		1	1								9 or 10					1			1		6											
>75																																
6-25	21	3	3		2	1	6	2	1		1 — 10									1	30						3	14	14			Jacobabad
6-50		2							1																							
-75											9 or 10																					
>75																																
6-25	12	2		1	1		2	2		1	1 — 10						8				23				1	1	8	21				Jiwani
6-50								1	2																							
-75											9 or 10																					
>75																																
6-25	18	2		1	1	1	2	4	3		1 — 10							1		7	23					1	11	5	12	2		Jodhpur
6-50							3	1																								
-75											9 or 10																					
>75																																
6-25	21	1	1				1	3	3		1 — 10							1	9	7	14						4	4	22	1		Jubbulpore
6-50		1	1	1				3	6																							
-75											9 or 10										3											
>75																																
6-25	22	3	2	3	1			4	2	2	1 — 10						5	6			20						5	11	15			Karachi (Drigh Road)
6-50		1	1					1	2																							
-75											9 or 10							2			2											
>75																																

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
Lahore ...	6–25	31	1	1	1	1		3	6	9	8	29	3			3	1	1	10	8	
	26–50					1													1	2	
	51–75																				
	>75																				
Madho Sagar (Gwalior).	6–25	31	1		1	1	1	3	13	2	7	31	1		3		1	2	8	9	1
	26–50							1	1				1						2	2	
	51–75																		1		
	>75																				
Madras ...	6–25	31	1	2	1	17	1	3	2	2	2	30	1	3	2	3	3	4	4	3	2
	26–50													1			2	1			
	51–75																	1			
	>75																				
Malegaon ...	6–25	31	6	1	1	2		2	6	13		31	3	2		1		3	5	4	4
	26–50												1						2	6	
	51–75																				
	>75																				
Mangalore ...	6–25																				
	26–50																				
	51–75																				
	>75																				
Multan ...	6–25	31		4			1	9	3	1	13	31	2	4	2	1		5	1	1	6
	26–50																1	7	1		
	51–75																				
	>75																				
New Delhi ...	6–25	31	2	1	1	2	2	1		7	4	30	3	1	1	1	2		1	7	1
	26–50								5	6						1			3	9	
	51–75																				
	>75																				
Peshawar ...	6–25	31		13	2	4		1		5	6	31	3	7	6	2	2			3	5
	26–50																		1	2	
	51–75																				
	>75																				
Poona ...	6–25	31	1	1	2			2	7	10		31	3	2				1	5	3	
	26–50							1	5	2									8	9	
	51–75																				
	>75																				
Port Blair ...	6–25	31		1	3	4	3	3	9	1	1	29			1		3	1	4		
	26–50							6								1	5	5	5		
	51–75																	3	1		
	>75																				
*Raj-Samand (Kankroli)	6–25	24		1	1			4	7	9		24	2		1		2	4	5	4	1
	26–50								1	1				1				1	3		
	51–75																				
	>75																				
Sambalpur ...	6–25	31		1	2	3	1	6	2	2	14	30	3	2	1	2	4	8	5	1	3
	26–50															1					
	51–75																				
	>75																				
Sharjah ...	6–25	31	1					1	7	18		31	3	1			1	4	9	5	
	26–50							2	1	1									5	3	
	51–75																				
	>75																				
Tezpur ...	6–25	31		3	7		1	5			15	29		3	5	2		6	4	2	4
	26–50														2						
	51–75														1						
	>75																				
Trichinopoly ...	6–25	31			3	3		3	14	8		31		1	3	2		1	10	1	
	26–50																		8	2	
	51–75																		3		
	>75																				
Trivandrum ...	6–25																				
	26–50																				
	51–75																				
	>75																				
Visagapatam ...	6–25	31		2	4	2	11	9	1		1	29			2	1	1	7	9		
	26–50							1							1	1		7			
	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
Lahore ...	6–25	29	3			2	1	1	11	8	1	26		1		1	4	2	9	4
	26–50									1									1	3
	51–75									1									1	
	>75																			
Madho Sagar (Gwalior).	6–25	31		1	2	2	1	1	7	11		31	1		2	2	1	1	6	8
	26–50		1					1	2	2			1						2	6
	51–75																		1	
	>75																			
Madras ...	6–25	30	1				4	3	9	6	2	29	1	2	3		2		3	6
	26–50		2						2				2	1						5
	51–75							1												
	>75																		1	
Malegaon ...	6–25	31	3	2		1		1	7	4		30	7		2			1	7	7
	26–50		1						2	6	4		1						2	3
	51–75																			
	>75																			
Mangalore ...	6–25																			
	26–50																			
	51–75																			
	>75																			
Multan ...	6–25	31	2	2	3		1	4	4	2	5	23	3		1	1	2	3	6	1
	26–50						3	5										2	3	1
	51–75																			
	>75																			
New Delhi ...	6–25	28	1		1	2	2		2	9	2	22			1	1	2	1	2	5
	26–50								2	7									3	6
	51–75																			1
	>75																			
Peshawar ...	6–25	31	5	5	3	4	1	1		3	6	31		1			2	4	10	7
	26–50								1	2									2	2
	51–75																			
	>75																			
Poona ...	6–25	31	2	3				1	6	3		31	4	1	3			2	6	5
	26–50								7	9									6	3
	51–75																			
	>75																			
Port Blair ...	6–25	28				2	2	1	2	1	2	17	1		1	3	1	1	1	1
	26–50					1	4	6	6							1	1	1	3	1
	51–75							1												
	>75																			
*Raj-Samand (Kankroli)	6–25	24	1		1		3	3	5	4	3	24	4			1	2	9	4	1
	26–50			1				2	1									2		
	51–75																			
	>75																			
Sambalpur ...	6–25	30	4			3	3	8	3	3	5	29	6	1	1	1	1	1	6	7
	26–50					1							3			1				1
	51–75																			
	>75																			
Sharjah ...	6–25	31	3			2	1	2	8	6	1	31	3		2	2		1	6	7
	26–50							1	2	4								1	4	3
	51–75								1										2	
	>75																			
Tezpur ...	6–25	29		2	2	6		3	6		3	19			1		1	3		
	26–50				2			2	2						1		1	2		
	51–75				1														9	
	>75																		1	
Trichinopoly ...	6–25	31			2	4		3	7	4		31	4		5	1		1	6	5
	26–50								8	2			2						1	
	51–75									1									1	1
	>75																			
Trivandrum ...	6–25																			
	26–50																			
	51–75																			
	>75																			
Visagapatam ...	6–25	29		2	1			5	10	2	1	21	5		3	1				6
	26–50				1			3	2	1			3							3
	51–75					1														
	>75																			

* Only on 24 days in the month, pilot balloon ascents were made in the afternoon. Visibility observations were, however, recorded in the afternoon throughout the month.

Table 8—Frequency of low cloud heights (Afternoon)

Table 9—Frequency of Visibility (Afternoon)

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.
3–25	21					1		2	6	1	1 — 10									2	29				1	1	7	8	14			Lahore
3–50							1	5	3																							
1–75							1		1		9 or 10										4											
>75																																
3–25	16	1					2	2	4	1	1 — 10								15		16						2	12	17			Madho Sagar (Gwalior)
3–50		1					1	2	2																							
1–75											9 or 10										1											
>75																																
3–25	28	4	5	5	1				4		1 — 10					1			3	1	26								1	10	20	Madras
3–50			4	1					2																							
1–75		1									9 or 10								1		13											
>75								1																								
6–25	25	3	2			3	2	4	1	1	1 — 10									22	9						3	5	23			Malegaon
6–50			1				3	2	2																							
1–75									1		9 or 10										2											
>75																																
6–25											1 — 10																	3	23			Mangalore
6–50																																
1–75											9 or 10																					
>75																																
6–25	17						2	4	2		1 — 10									2	23						14	15	2			Multan
6–50							1	7	1																							
1–75											9 or 10										2											
>75																																
6–25	11	1					1	1	5		1 — 10	3							2	7	19					3	7	9	12			New Delhi
6–50							1		2																							
1–75											9 or 10	3									1											
>75																																
6–25	30	1					3	9	5	2	1 — 10									15	16						4	3	2		22	Peshawar
6–50					1		1	4	4																							
1–75											9 or 10										2											
>75																																
6–25	31	2	3	2	2	4	5	6	4	1	1 — 10									4	27								1	30		Poona
6–50		1	1																													
1–75											9 or 10										3											
>75																																
6–25	8				3	1		1	1		1 — 10					20	4	7								1	10	15	5			Port Blair
6–50					1	1																										
1–75											9 or 10						1				22											
>75																																
6–25	23		1		1	3	3	4	2	3	1 — 10								3	8	13							5	19	7		*Raj-Samand (Kankroli)
26–50								1																								
51–75											9 or 10																					
>75																																
6–25	26	4			1		1	3	5	2	1 — 10						1	2	4	18	6							4	16	11		Sambalpur
26–50		2	1	1				1	4																							
51–75		1									9 or 10							1			4											
>75																																
6–25	29	1	1	1	3	1	2	4	3		1 — 10										31								23	8		Sharjah
26–50					1		2	3	3																							
51–75							1	1	2		9 or 10																					
>75																																
6–25	9			1					1	1	1 — 10				2	2		5	9	10	3							7	22	2		Tezpur
26–50							1	4																								
51–75								1			9 or 10					1			2		11											
>75																																
6–25	29	2	5	5	2			2	2	3	1 — 10							2	12	5	12								1	13	17	Trichinopoly
26–50		3	1	1				1																								
51–75			1					1			9 or 10										10											
>75																																
6–25											1 — 10																4	15	12			Trivandrum
26–50																																
51–75											9 or 10																					
>75																																
6–25	17	6	3	2					1	1	1 — 10					6	5	5		1	14					2	6	17	6			Vizagapatam
26–50		1		1					1																							
51–75		1									9 or 10					1	2				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
Ahmedabad ...	6-25	31						10	8	5	8	31	1					4	5	5		31	1					7	11	5		28	1	1	1	2	2	6	1	5	1
	26-50																	3	7	6									3	4			1				2	1	4		
	51-75																																								
	>75																																								
Allahabad (Bamrauli) .	6-25	31		3	5	2	2	2	6	3	8	31	2		3	3	2	1	1	5	2	31	1		1	3	2	2	6	5		21				1	3	2	3	3	1
	26-50												1		1	2	1	1	3	3			1		1	1	1	1	3	3			2						2	4	
	51-75																																								
	>75																																								
Bahrain ...	6-25	31	5	1					6	10	9	31	5	2			1	1	2	2	2	31	3	1	1		3		1	6	1	20			2	1		1		6	
	26-50												11							4			9							6			2					1	2	5	
	51-75												1																												
	>75																																								
Bombay (Juhu) ...	6-25	31						6	2		23	31	6					8	8	8	1	31	6			1		5	7	7		20	3	2	2	1		2	2	7	
	26-50																						1							4			1								
	51-75																																								
	>75																																								
Calcutta (Dum Dum) ...	6-25	31		1		9	5	12		1	3	31		1	1		6	5	2		1	27	2	2	2	1	2	7	3	1		13		1	1			1	1	4	1
	26-50															1	5	6	1	1				1				5		1				2					1	1		
	51-75																	1																							
	>75																																								
Gaya ...	6-25	31	2	2	6	3	2	3	2		11	31	3		1	3	7	3	1	1	2	31	1		1	5	5		3	7	1	25	1		3	1		1	1	5	1
	26-50															2	2	1	1	4						2	1		1	4									8	4	
	51-75																																								
	>75																																								
Jacobabad ...	6-25	31	2		5	8	4	3	1	3	5	31	1			4	5	6	1	1	3	30	1	1		3	3	9	3	3	3	29	2	1			1	5	9	8	2
	26-50												1		2		1	2		4									1	3										1	
	51-75																																								
	>75																																								
Jiwani ...	6-25	31			1			13	3		14	31	2	1	1	1	2	3	4	5	1	29	1	1	1			2	4	7	1	20				3		1	2	6	1
	26-50													1					5	5				1				1	3	6				1	1					3	2	
	51-75																												1												
	>75																																								
Jodhpur ...	6-25	31	1	4	1			12	5	4		31	2			1		1	1			31	2				2	1	1	3		24	2	1		1	1	5	6	1	
	26-50		1					3					2	1				3	4	3			2	2				7	2	1								1	3	3	
	51-75													2				6	3	1								3	5												
	>75																		1																						
Karachi (Drigh Road) ...	6-25	31			1			11	7	5	7	31				1		1	8	6		27	1	1	1			2	5	6		12	3	1	2			1	3	1	
	26-50													1				1	8	2									7	1									1		
	51-75																		2	1									3												
	>75																																								
New Delhi ...	6-25	31			1	4		1	7	7	10	31	3	2	1	4		1		6	1	31	3	1			2		5	5	2	22	1					3	4	2	
	26-50								1				2			2	1		3	4						2		1	1	7									4	7	
	51-75																		1										2											1	
	>75																																								
*Poona ...	6-25	4						2	2			4							2	2		4							2	1		2								2	
	26-50																												1												
	51-75																																								
	>75																																								
†Raj Samand (Kankroli).	6-25	8				1		3	2	2		8		1				1	2	3		8		1				1	2	3		8	1		2					3	
	26-50																		1										1										2		
	51-75																																								
	>75																																								
Sharjah ...	6-25	31				8	10	2			16	31	1	1			1	1	7	11	1	31			1		1	1	6	10	2	31	2	1			4	2	6	5	1
	26-50																			8									2	8								1	3	5	
	51-75																																						1		
	>75																																								

*Only on 4 days in the month pilot balloon ascents were made in the late night. On the remaining days ascents were made in the morning.

† 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. Visibility observations in the late nigh were recorded only on days of night ascent.

CLOUD HEIGHTS (LATE NIGHT) 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	22	2		3	2	1	2	3	2		1 — 10						1			1	29						2	29				Ahmedabad
0					2		1	3		1																						
5											9 or 10																					
5																																
5	11	1				1		2		1	1 — 10								2	1	28						1	30				Allahabad (Bamrauli)
0		2						1	3																							
5											9 or 10									1	2											
5																																
5	7	1		1	1			1	1		1 — 10								1		30							29	2			Bahrain
0								2																								
5											9 or 10																					
5																																
5	6			1	1	2	2				1 — 10						21				10							31				Bombay (Juhu)
0																																
5											9 or 10										1											
5																																
5	5	1		1					1		1 — 10					8	3		2		18						9	22				Calcutta (Dum Dum)
0									2																							
5											9 or 10					1					4											
5																																
5	16	3	1	1	1				1		1 — 10								1		30							22	9			Gaya
0								3	4																							
5									2		9 or 10										4											
5																																
5	21	6				2	2	2	7		1 — 10										31					1	1	17	12			Jacobabad
0			1						1																							
5											9 or 10																					
5																																
5	12	2	1			1	1	1	5		1 — 10					3	3				25						3	28				Jiwani
0								1																								
5											9 or 10					1					1											
5																																
5	15		1	1	1	2	2	1		1	1 — 10									1	30						5	12	14			Jodhpur
0				1				2	3																							
5											9 or 10																					
5																																
5	1		1								1 — 10					4	8				19						1	12	18			Karachi (Drigh Road)
0																																
5											9 or 10					4					4											
5																																
5	12							2	1	1	1 — 10									1	30						9	21	1			New Delhi
0								2	5																							
5								1			9 or 10																					
5																																
5											1 — 10									1	3											*Poona
0																																
5											9 or 10																					
5																																
5	2				1			1			1 — 10										8					1	2	4	1			†Raj Samand (Kankroli)
0																																
5											9 or 10																					
5																																
5	29	2	1	1	5	2	1	3	4	2	1 — 10										31							1	30			Sharjah
0					2		1	2	2																							
5									1		9 or 10																					
5																																

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INDIA METEOROLOGICAL DEPARTMENT

The publication of further issues of Monthly Frequency Tables is suspended for the duration of the War.

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

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

June 1940

Supplement to the Monthly Weather Report, June 1940

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 16th July 1941.

C. W. B. NORMAND,

Director-General of Observatories.

[Price 6 annas.]

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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
Agra	6–25	30			4		1	3	6		16	30					3	1	3	3	
ϕ = 27° 08′ N	26–50														2	2		1	5	9	
λ = 78° 01′ E	51–75																				
H_s = 182 metres	>75																				
Bangalore	6–25	30	[illegible]					11	8			[illegible]									
ϕ = 12° 58′ N	26–50																				
λ = 77° 35′ E	51–75																				
H_s = 936 metres	>75																				
Bhuj	6–25	30					1	22	4		3	29						2	2	1	
ϕ = 23° 15′ N	26–50																		13		
λ = 69° 48′ E	51–75																				
H_s = 113 metres	>75																				
Car Nicobar	6–25	30	[illegible]									26	[illegible]						3		
ϕ = 09° 15′ N	26–50																		11		
λ = 92° 48′ E	51–75																		9		
H_s = 4 metres	>75																				
Chittagong	6–25	30	1	1		11	1				16	27			1	1	3	8			
ϕ = 22° 21′ N	26–50																2	11			
λ = 91° 50′ E	51–75																	1			
H_s = 21 metres	>75																				
Dacca	6–25	30	[illegible]									[illegible]									
ϕ = 23° 43′ N	26–50																				
λ = 90° 24′ E	51–75																				
H_s = 14 metres	>75																				
Dalbandin	6–25	30	1	[illegible]								30	[illegible]								
ϕ = 28° 54′ N	26–50																				
λ = 64° 26′ E	51–75																				
H_s = 855 metres	>75																				
Fort Sandeman	6–25	30	1	6	[illegible]							28	[illegible]								
ϕ = 31° 21′ N	26–50																				
λ = 69° 27′ E	51–75																				
H_s = 1421 metres	>75																				
Hyderabad (Begumpet).	6–25	30						3	18	9	2	30							2	3	
ϕ = 17° 26′ N	26–50								3									1	6	8	
λ = 78° 27′ E	51–75																				
H_s = 555 metres	>75																				
Jubbulpore	6–25	30	[illegible]									30	[illegible]								
ϕ = 23° 10′ N	26–50																				
λ = 79° 57′ E	51–75																				
H_s = 402 metres	>75																				
Lahore	6–25	30	2	1	1	7	1	[illegible]				30	[illegible]								
ϕ = 31° 35′ N	26–50																				
λ = 74° 20′ E	51–75																				
H_s = 221 metres	>75																				
Madho Sagar (Gwalior).	6–25	30	1	2				7	13	2	3	30	1				1	1	3	2	
ϕ = 26° 13′ N	26–50						1	1							2	1		1	9	8	
λ = 78° 08′ E	51–75																				
H_s = 233 metres	>75																				
Madras	6–25	30					1	11	3		15	30						2	1		
ϕ = 13° 04′ N	26–50																	3	16	1	
λ = 80° 15′ E	51–75																				
H_s = 13 metres	>75																				
Malegaon	6–25	30							22	2	6	30	1						11	5	
ϕ = 20° 33′ N	26–50												1						1	4	
λ = 74° 32′ E	51–75																				
H_s = 443 metres	>75																				
*Mangalore	6–25	27		2	14	1		2	6		2	26	1					2	5	7	
ϕ = 12° 52′ N	26–50																	1	6		
λ = 74° 51′ E	51–75																		2		
H_s = 40 metres	>75																				
Multan	6–25	30	1		8	3	9	7			30	29		5	1	1	5	2	2		
ϕ = 30° 11′ N	26–50													1			2	12			
λ = 71° 25′ E	51–75																	3			
H_s = 130 metres	>75																				
Peshawar	6–25	30	1	[illegible]								30	[illegible]								
ϕ = 34° 01′ N	26–50												1								
λ = 71° 35′ E	51–75																				
H_s = 363 metres	>75																				
Port Blair	6–25	[illegible]						15				29						2			
ϕ = 11° 40′ N	26–50							8										10	1		
λ = 92° 43′ E	51–75																	12	1		
H_s = 87 metres	>75																				
†Raj Samand (Kankroli)	6–25	22		1		1		11	5	3		22	3					3	10	2	
ϕ = 25° 03′ N	26–50		1											1				1	2		
λ = 73° 53′ E	51–75																				
H_s = 587 metres	>75																				
Sambalpur	6–25	30	1		1	1		9		1	17	29	2				1	8	4		
ϕ = 21° 28′ N	26–50												2					5	6		
λ = 83° 58′ E	51–75																1				
H_s = 153 metres	>75																				

STATION.	Speed limits (km./hr.)	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
Agra	6–25	30				1	3	1	2	2	1	30	1		2		2		2	3	1
	26–50		1		2				5	9			1		1				5	8	
	51–75								2	1									2	2	
	>75																				
Bangalore	6–25	[illegible]										10	[illegible]								2
	26–50																		3	1	
	51–75																				
	>75																		1		
Bhuj	6–25	29	1					1	4		1	24			1	2	3	3		2	2
	26–50							9	12	1					2		1	5	1	1	
	51–75																		1		
	>75																				
Car Nicobar	6–25	20							1			12						3	1		
	26–50								[illegible]									5	2		
	51–75								4	2											
	>75								1										1		
Chittagong	6–25	27	1	1	2	2	4	3				19		3			3	3	1		1
	26–50					1	9	3						1	1	1	2	3			
	51–75					1															
	>75																				
Dacca	6–25	[illegible]										[illegible]				1			1		2
	26–50															1					
	51–75																				
	>75																				
Dalbandin	6–25	30	[illegible]									30	5	1	2		1	3	2	3	
	26–50												6							3	4
	51–75																				
	>75																				
Fort Sandeman	6–25	[illegible]										28	3	4	2	1	1	10			7
	26–50																				
	51–75																				
	>75																				
Hyderabad (Begumpet).	6–25	30							1	3		27	1	2		3		4	4	2	
	26–50							1	8	8			8					1	3		
	51–75								2										3		
	>75								1										1		
Jubbulpore	6–25	30	[illegible]									[illegible]						1	5	3	1
	26–50																		2	6	
	51–75																				
	>75																				
Lahore	6–25	[illegible]										26	1		1	1	1	1	8	3	2
	26–50																1	1	4	2	
	51–75																				
	>75																				
Madho Sagar (Gwalior).	6–25	30	2				1	3	1	1		29		2	1	1	1		4	8	1
	26–50				1	2			9	6			1		1			2	3	9	
	51–75																				
	>75																				
Madras	6–25	30	1				1	3	4	3		29	2	3				1	3	9	
	26–50						1		3	4			1							2	
	51–75																		4		
	>75																		4		
Malegaon	6–25	30	1						10	6		29	3	5	2	2	4	2	3	2	1
	26–50		1						4	5								2	1		
	51–75								2										1		
	>75																		1		
*Mangalore	6–25	24						1	5	7		17							7	2	
	26–50								5	1									3	1	
	51–75								4										2	1	
	>75								1										1		
Multan	6–25	27				1	5	7	3	1		23	[illegible]				3	4	4		2
	26–50			1				5	2									4	1	1	
	51–75							2													
	>75																				
Peshawar	6–25	30	[illegible]						5		2	30	4		3	1	1	4	2	4	3
	26–50								4										1	7	
	51–75																				
	>75																				
Port Blair	6–25	29					1	2	2		1	16						4	2		1
	26–50							6	1									6	2		
	51–75							8	2										1		
	>75																				
†Raj Samand (Kankroli)	6–25	22	3					3	10	2		21		2	2	3	2	1	3	3	
	26–50			1				1	2						1		1	2	1		
	51–75																				
	>75																				
Sambalpur	6–25	28	[illegible]									[illegible]						2	4	4	
	26–50		2																5	2	
	51–75																				
	>75																				

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

† Only on 22 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.

ENCY (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	
25	1	1					2	3	1	1 — 10									1	29				1		7	17	5			Agra
	1		2				5	6																							
								3		9 or 10										1											
10	2	2		1			1	1	1	1 — 10		2	6	4	10	3	2	1		2							16	8	5	1	Bangalore
							1																								
							1			9 or 10		1	6	2	8	1				26											
17	3	4		1			1		1	1 — 10					9	13	4			4							2	23			Bhuj
		1	5																												
						1				9 or 10							1			8											
5	1					1	1			1 — 10																					Car Nicobar
							2																								
										9 or 10																					
16		2	1	2			2	1		1 — 10				4	5	1	4	5	2	9						5	6	19			Chittagong
				1	1	1	2	1																							
			1			1				9 or 10				3	2	1	1	2	1	27											
9		3	2					2		1 — 10				2	19	2		1		6							30				Dacca
	1			1																											
										9 or 10				1	4					18											
28	8	3	3		1	1	1			1 — 10									1	29							2	10	13	5	Dalbandin
	5	1						4	1																						
										9 or 10																					
27	7	2			2	2		7		1 — 10										30				2	9	2	14	3			Fort Sandeman
						2	2	3																							
										9 or 10																					
23	1	1	2	5		2	2	2	3	1 — 10					8	2	1	5	2	12						1		1	17	11	Hyderabad (Begumpet)
	2	1						1																							
							1			9 or 10						1				13											
21	2	2	2		1	3		5	1	1 — 10						3	7	7	5	8						1	4	24	1		Jubbulpore
	1					1	1																								
	1	1								9 or 10								1		16											
13	2	1					3	2		1 — 10							2		6	22					2	14	12	2			Lahore
	1						4																								
										9 or 10									2	5											
23	5	3	1	1				5	1	1 — 10							1	8		21						2	4	24			Madho Sagar (Gwalior)
		1			1		3	1																							
			1							9 or 10										3											
23	8	1					4	3	1	1 — 10									2	28								1	18	11	Madras
	1						2																								
							2			9 or 10										19											
							1																								
23		4	2		5	4	1			1 — 10							5	2	7	16						3	12	8	7		Malegaon
		2		2	1	1	1																								
										9 or 10										10											
9	1	2						1	1	1 — 10					16	14									3	6	5	16			*Mangalore
							3	1																							
										9 or 10					4	1				22											
17	2	2	1	1	2		1	2		1 — 10								2		28				2	3	19	5	1			Multan
		2	1				2	1																							
										9 or 10										2											
28	4			1	1		5	8	1	1 — 10								1	4	25				1		5	5	5	5	9	Peshawar
	1						4	3																							
										9 or 10								1		2											
10						4	1		2	1 — 10					21	1	8									3	27				Port Blair
							2																								
						1				9 or 10					1					25											
20	2	3		1	2	3	2			1 — 10							1			21							3	20	7		†Raj Samand (Kankroli)
		4	1			2																									
										9 or 10										1											
21	6	2	2	1			4	2		1 — 10				1	2	3	2	3	5	14							2	13	15		Sambalpur
	1						1	1																							
								1		9 or 10				1		3			1	22											

MFT 6—a

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
Tezpur ...	6–25	30		5	3	1		2			19	26		1	10	3	2	1	3		4	25		1	5	1	3	3	2		5	16			3	1		3	2	1	1
ϕ = 26° 37′ N ...	26–50																	1							3				1									2	1		
λ = 92° 47′ E ...	51–75					1																						1										1	1		
H_s = 80 metres ...	>75																																								
Trichinopoly ...	6–25	30						5	18	5	2	30										30							1	2		29	4	1				1	7	4	1
ϕ = 10° 49′ N ...	26–50																	1	12	2									9	6									2		
λ = 78° 42′ E ...	51–75																		13										4										5		
H_s = 88 metres ...	>75																		2										8										4		
Trivandrum ...	6–25	30	15						2	9	4	25								4		23							1	1		15	1								
ϕ = 08° 29′ N ...	26–50																		8	11									2	11									3	6	
λ = 76° 57′ E ...	51–75																		1	1									6	2									3	2	
H_s = 76 metres ...	>75																																								
Vizagapatam ...	6–25	30						9	9	2	10	29	1				1	4		3		29	3					6	2	1		17	1				1	1	3	4	2
ϕ = 17° 42′ N ...	26–50																	9	6									5	4										8		
λ = 83° 18′ E ...	51–75																	2	2									1	4										2		
H_s = 56 metres ...	>75																		1										3												

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
Ahmedabad ...	6–25	30				1	1	15	7	3	3	30				1		6	10	4		26						1	13	3	1	20	1	1	4			4	1	1	
ϕ = 23° 02′ N ...	26–50																	5	3	1								2	5	1				1				6			
λ = 72° 35′ E ...	51–75																																						1		
H_s = 55 metres ...	>75																																								
Allahabad (Bamrauli)	6–25	30		1	4			1	11	5	8	30	1	1	1	1	2		3	5	1	29	1	1		1	1	1	1	2		21		1	1	1		1	1	2	
ϕ = 25° 26′ N ...	26–50												1		3				3	7			1		3				3	10				1	1				2	9	
λ = 81° 44′ E ...	51–75																		1										1	3											
H_s = 98 metres ...	>75																																						1		
Bahrain ...	6–25	30	1	1					3	24	1	30	2					1		1	1	30	2		2					1		26	1		1				1	1	1
ϕ = 26° 14′ N ...	26–50												9							3			9							2			7	1				1		5	
λ = 50° 35′ E ...	51–75												7							1			5							5			1							4	
H_s = 14 metres ...	>75												4							1			2							2										2	
Bombay (Juhu) ...	6–25	30				5		7	1	8	9	28		1			2	8	5	7		23		1				4	8	5		11		2	3		2		1	1	
ϕ = 19° 07′ N ...	26–50																	1	3									2										2			
λ = 72° 50′ E ...	51–75																		1										3												
H_s = 5 metres ...	>75																																								
Calcutta (Dum Dum)	6–25	30	1	1	3	4	6	4		1	5	30		2	1	5	4	4	2		1	21			1	3	3	1	2	2		18		2	2			2	4	3	1
ϕ = 22° 39′ N ...	26–50				1			4							1		2	5						1	1			6	1					1	1			2			
λ = 88° 27′ E ...	51–75														1			2																							
H_s = 21 metres ...	>75																																								
Gaya ...	6–25	30		3	1	4		8	5	5	2	30		1	1	1	1		13	4	1	30	1	1	1	2		2	8	6		25	1	1	3	1				4	
ϕ = 24° 49′ N ...	26–50				1								1		3				1	3					2				1	5			2	1		1			4	6	
λ = 85° 01′ E ...	51–75		1																						1																
H_s = 117 metres ...	>75																																		1						
Jacobabad ...	6–25	30			5	14	3				7	30	1	1	1	4	7	10			3	29	1	1		3	13	3		1	5	28	5	2		2	3	5	1	8	2
ϕ = 28° 17′ N ...	26–50				1										1	1	1										1	1													
λ = 68° 29′ E ...	51–75																																								
H_s = 56 metres ...	>75																																								
Jiwani ...	6–25	30			1	2	4	13			10	30		2	4	11	8	1	2		2	24	2	4		2	1	4	9	1		21	4	5			1	3	1	3	
ϕ = 25° 10′ N ...	26–50																						1										1	1						2	
λ = 61° 47′ E ...	51–75																																								
H_s = 5 metres ...	>75																																								
Jodhpur ...	6–25	30						13	4	1		30	1					4	4	2		30		1		1		1	2	3		19	3	1	1		3	3	2	1	
ϕ = 26° 18′ N ...	26–50							12										15	4							1		17	5				1		1		1	1			
λ = 73° 01′ E ...	51–75																																					1			
H_s = 233 metres ...	>75																																								
Karachi (Drigh Road)	6–25	30						7	4	1		30	1					1	7			22	1	1				1	4			12	3		1					3	
ϕ = 24° 53′ N ...	26–50							13	5										16									1	12	1					1				1	2	
λ = 67° 07′ E ...	51–75																		5										1										1		
H_s = 29 metres ...	>75																																								
New Delhi ...	6–25	30				7	1		1	3	3	26			1	3		1	2	2	1	24			2	3	1		2		17	1	1	2		2			1	
ϕ = 28° 39′ N ...	26–50			1		1			7	6				1	1	3			4	4				1		3			3	7					1	1			2	3	
λ = 77° 15′ E ...	51–75																		1	2									1	1										3	
H_s = 227 metres ...	>75																																								
Poona ...	6–25	30						9	12	8	1	30						1	14	5		30						2	13	4		15	2	1	4		3		1		
ϕ = 18° 32′ N ...	26–50																	1	7									2	8										2		
λ = 73° 51′ E ...	51–75																	1	1									1											1		
H_s = 588 metres ...	>75																																								
*Raj Samand (Kankroli)	6–25	5						2		2		5	1					1	3			5	1					1	3			5		1				3			
ϕ = 25° 03′ N ...	26–50							1																															1		
λ = 73° 53′ E ...	51–75																																								
H_s = 587 metres ...	>75																																								
Sharjah ...	6–25	30	1			2	3	14		1	6	29		2	1	3	2	9	5	2	1	30	1	2	2	4	1	2	5	5		29	3	1		2	5	3	3	1
ϕ = 25° 20′ N ...	26–50						1	2										2	1	1					1			1	1	4			3		2	1		1	3		
λ = 55° 24′ E ...	51–75																								1																
H_s = 11 metres ...	>75																																								

* Only on 5 days in the month, pilot balloon ascents were made in the forenoon; on the remaining days the ascents were 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			1			3	1			1 — 10				2	6		6	7	6	3							18	11	1		Tezpur
										9 or 10				1	5		1			21											
15	1	3	1				3 1	5	1	1 — 10								4	4	22								2	12	16	Trichinopoly
										9 or 10								1		15											
6	1						1	2		1 — 10						24	3			3					6	9	11	3	1		Trivandrum
							2			9 or 10						6				20											
8	1					1	2	4		1 — 10					6	6	4	1	3	10					1	3	19	7			Vizagapatam
										9 or 10						2				20											

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

7			2			4	1			1 — 10					3	5	16	1		5					1		8	21			Ahmedabad
										9 or 10					1	1	1			10											
·8		1	1	2			1	1	2	1 — 10						2	2	6	1	19						3	18	9			Allahabad (Bamrauli)
										9 or 10										4											
11	2	1 1	1	1	1		1	1 1 1		1 — 10										30						1	17	12			Bahrain
										9 or 10																					
9	1	1	2		1 2	2				1 — 10					10	13	6			1						2	24	4			Bombay (Juhu)
										9 or 10					4	1				21											
9	2	1	1		1			1 2	1	1 — 10					12	13	3			2						3	27				Calcutta (Dum Dum)
										9 or 10					1					10											
15	1 1	1	1	2			4 3	2		1 — 10					1	1	5	2	3	18						1	16	10	3		Gaya
										9 or 10										10											
24	6 2	3	2	1		1	1	7	1	— 10										30					1	2	21	6			Jacobabad
										or 10																					
9	1 2	1 2			1			1 1		1 — 10					5	14	1		1	3							30				Jiwani
										9 or 10					1	2				7											
9		5 1	1 1				1			1 — 10						7	3	1	1	18						1	14	15			Jodhpur
										9 or 10						1				1											
6	1	1	2 2							1 — 10					1	13	13			3						1	19	10			Karachi (Drigh Road)
										9 or 10						6	5			13											
10		2 1	1		1 1	1	1	1 1		1 — 10							1		5	24				2	3	4	11	10			New Delhi
										9 or 10									1	3											
11	2	1	1	3	1 2	1				1 — 10						7	16	2	1	4						1	5	4	20		Poona
										9 or 10						1	2			13											
5			1		1		2	1		1 — 10								1	2	2							3	20	7		*Raj Samand (Kankroli)
										9 or 10										1											
25	1	1	2	1	3	5	1	1	1	1 — 10								1		29				2		1	5	20	2		Sharjah
25	1		1	2	2	2				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	NW	C
Agra ...	6-25	30	4	3	4			2	9	6	2	30	3	1	3		1	1	4	2		30	2	3	1		1	2	1		29	1		2			1	2	4	
	26-50												2	1	2				4	5				1	4				7	6			2		1			1	7	1	
	51-75												1										1							1					2						
	>75																																						1		
Ahmedabad ...	6-25	30	1					21	1	2	4	30				1	3	9	10	2		30	1			1	2	9	7	3		27	2		1			6	4	2	1
	26-50							1										4										5	2						1			5	4		
	51-75																		1																						
	>75																																								
Allahabad (Bamrauli)	6-25	30		3	3	1			6	10	7	30	3	1	2	2	1		3	8		28	1	1	1	1	1		4	8	1	22		2		1		1	4	3	2
	26-50													1	2				2	4			1	1	2				1	5				1	1					7	
	51-75																		1																						
	>75																																								
Bahrain ...	6-25	30	5	3						22		30	2		2					2	1	29	2	3					1	1		24	3	1					3		
	26-50												6							4			4							5			4							5	
	51-75												6							3			6							5			1							5	
	>75												3							1			1							1										2	
Bangalore ...	6-25	30						5	9	5		30							12	3		30						1	13	3		22	1						4	6	1
	26-50							4	7									1	9	1								1	11										6		
	51-75																		4										1										4		
	>75																																								
Bhuj ...	6-25	30						21	4		2	30					2	7	4		1	30		1			1	5	6		24			1	1	1	6	4	1	2
	26-50							2	1									11	4									8	8					1	1			4	1		
	51-75																	1										1													
	>75																																					1			
Bombay (Juhu) ...	6-25	30				1		14	5	9	1	25						4	10	4		24	1	1				7	3	7	1	18	1	1	5		4	4	1	1	
	26-50																1	3	1	2							1		1									1			
	51-75																												2												
	>75																																								
Calcutta (Dum Dum)	6-25	30		1	2	7	6	5		1	5	30			3	6	3	3	1		1	28			4		5	5	1	3		20	2		1	2	1	1	5		1
	26-50				1		1	1						1	1	1	8	1						1	1	2	3	3					1	2	2				1	1	
	51-75																1																								
	>75																																								
Car Nicobar ...	6-25	30					1	12	7	1	9	27						4	1			14							1			4						1	1		
	26-50																	15	1									4		1								2			
	51-75																	6										5	3												
	>75																																								
Chittagong ...	6-25	30	1	1		3	11	7	4		3	30		1	1	1	5	7	2	2		28	1	3			9	1		2		20	2		2	3	2	1	2	1	
	26-50															1	8	2								2	3	5								1	1	4			
	51-75																										2										1				
	>75																																								
Dacca ...	6-25	30	1	1		9	8	1	1			29	1	1	3	5	9					19	1	2	2	1	3	1			1	6		1				1	2		
	26-50					1					8					4	5									2		4						1					1		
	51-75															1										2															
	>75																																								
Dalbandin ...	6-25	30	1	4	1		4	8	3	4	5	30	2	4	1	2	2	8	2	2		30	1	3	3		4	7	3	3		30	2	3	1	4	1	3	4	3	
	26-50												2	1				1	1		2		2	2					1		1		2					2	2	1	2
	51-75																																								
	>75																																								
Fort Sandeman ...	6-25	30		2	1	1	2	4	2	8	10	30	3	3	1	1	4	2	6	4	4										30	2	3	2	1	3	3	8	4	4
	26-50													1	1																										
	51-75																																								
	>75																																								
Gaya ...	6-25	30	1	8	1	1		2	2	9	3	30	6	1	4			1	1	9		29	5	1	3	1			3	9		22	3	2	1	1			1	3	1
	26-50			1					1	1					3				2	3					3				1	3					2	1			2	4	
	51-75																																		1						
	>75																																								
Hyderabad (Begumpet)	6-25	30	3	1				3	3	7	5	30	6					1	6	8		30	6					1	5	8		27	3				1	1	5	9	
	26-50								2	1			1						5	1			1						6	1			1						4		
	51-75																		1										1										1		
	>75																		1										1										2		
Jacobabad ...	6-25	30			1	14	6	1			8	30				7	18	2			2	30			1	8	15	3	1	2		29	3	4	1	3	2	6	3	5	2
	26-50														1																										
	51-75																																								
	>75																																								
Jiwani ...	6-25	30				3	15	11				30				4	17	7				30	1		2	2	5	4	10	1	3	28	7	2				1	3	5	
	26-50							1									1	1											1	1				5	4						1	
	51-75																																								
	>75																																								
Jodhpur ...	6-25	30			1		1	9	5		2	30		2				5	5	1	1	30	1	1			1	5	6	1	1	17	1	2	2		2	1	2	2	
	26-50		1					10	1									14	1									11									1	3			
	51-75																	1										8										1			
	>75																																								
Jubbulpore ...	6-25	30	3	3	1		1	5	6	7	4	30	8	2	1		1	1	5	7		30	7	2	1		1	2	5	8		25	7	2			1		2	9	1
	26-50													1				1	3					1					3										1	2	
	51-75																																								
	>75																																								
Karachi (Drigh Road) ...	6-25	30						10				30						2	6	1		29	2		1		1	1	3	3		18	3	2	2				3	1	1
	26-50							20										1	16										12	3					1			2	1	2	
	51-75																	1	3										3												
	>75																																								

ENCY (AFTERNOON) CLOUD HEIGHTS (AFTERNOON) 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	
5	24					1	1	2	3		1 — 10							1	3	7	19						10	20				Agra
0				1				3	5																							
5		1		2		1		3			9 or 10							1			1											
5				1																												
5	17		1	1		1	6	5			1 — 10						4	4	12	2	8							2	28			Ahmedabad
0			1				1																									
5							1				9 or 10						1		1		7											
5																																
5	8		1					1			1 — 10							3	12	1	14						13	7	10			Allahabad (Bamrauli)
0			1					3	2																							
5											9 or 10										2											
5																																
5	11					1	1	1	2		1 — 10										30							6	24			Bahrain
0		2							2																							
5									2		9 or 10																					
5																																
5	12	1	1	2				5		1	1 — 10					1	9	7	7	6								1	11	12	6	Bangalore
50								2																								
75											9 or 10						6	2	1		19											
75																																
25	15	4	3	1				1	2		1 — 10						1	12	10	2	5							5	24	1		Bhuj
50			2	1																												
75							1				9 or 10							2	2		10											
75																																
25	13		1	2	1	1	2	1	1		1 — 10					7	14	5			4						4	13	13			Bombay (Juhu)
50						3	1																									
75											9 or 10					2					12											
75																																
25	9	2			1			1	1		1 — 10					5	19	3	1	2							1	29				Calcutta (Dum Dum)
50			1	2					1																							
75											9 or 10										15											
75																																
25	3						2				1 — 10																					Car Nicobar
50								1																								
75											9 or 10																					
>75																																
25	10	1		1	1		2			1	1 — 10			1		8	10	3	3	1	4							4	26			Chittagong
50				1	1			2																								
75											9 or 10					1	1				18											
>75																																
25	3								1		1 — 10			1	2	7	12	6	1		1				1			29				Dacca
50				1				1																								
75											9 or 10				2	3					15											
>75																																
25	30	4	5	1		1	1	6	6		1 — 10								4	3	23							3	8	9	10	Dalbandin
50		2						2	1	1																						
75											9 or 10																					
>75																																
25	27	3	1		2	4	6	5	2	2	1 — 10							1	5	7	17				2	6	2	7	13			Fort Sandeman
50							1	1																								
75											9 or 10									1	1											
>75																																
25	17	2	2	1				2			1 — 10					1	1	2	15	3	8					1	1	15	10	3		Gaya
50		1		2	1			2	3																							
75									1		9 or 10								1		5											
>75																																
25	16	1	1	2	4		2	2		1	1 — 10						1	9	9	11								1	1	8	20	Hyderabad (Begumpet)
50								1	2																							
75											9 or 10							1	2		11											
>75																																
25	21	5	1	1	1	2		4	3	1	1 — 10									2	28					1	2	21	6			Jacobabad
50		1							1																							
75					1						9 or 10																					
>75																																
25	8	2							2		1 — 10					2	11	1			16					1		29				Jiwani
50		2	2																													
75											9 or 10																					
>75																																
25	8	1		2		1		3			1 — 10						2	7	2	4	15					3	5	12	10			Jodhpur
50			1																													
75											9 or 10										2											
>75																																
25	15	5		1			1	2	2		1 — 10						2	13	7	6	2						3	4	22	1		Jubbulpore
50		1						1	2																							
75											9 or 10						1				9											
>75																																
25	11	3	1	1	1			1	1		1 — 10						9	16			5						2	26	2			Karachi (Drigh Road)
50				2					1																							
75											9 or 10						1	3			6											
>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	1	1	6	1	5	1	3	11	30	2		1	4	3	7	3	5	3	30		1		3	5	7	3	6	3	27	2		1		3	1	11	6	2
	26-50															2										2												1			
	51-75																																								
	>75																																								
Madho Sagar (Gwalior).	6-25	30	1	2	1	1	1	1	11	5	6	30	3	1	3	1		2	9	4	1	30	3	1	3			2	7	6	1	29	2	1	3				4	7	
	26-50							1							1				4	1					2				3	2			1		2			1	5	2	
	51-75																																						1		
	>75																																								
Madras ...	6-25	30		4	1	9		4	1	6	2	30	1		3		5	1	7	1	1	30					1	2	10	6	1	27	4					1	6	2	
	26-50							1	2									2	6	1									8				1						1	7		
	51-75																		2										1											4		
	>75																												1											1		
Malegaon ...	6-25	30		1			1	7	7	9	4	28	2					5	5	6	2	28	2				1	3	7	5	2	23	2	2	1		1	3	5	4	2
	26-50							1					1					2	4	1			1					2	3	1								1		1	
	51-75																												1											1		
	>75																																								
Mangalore ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
Multan ...	6-25	30				1	4	15	1		9	30		2	2	1	5	11	1	1		27	2	2	1	3	5	7	2			22	1	1	1	5	4	5	2		2
	26-50															1	1	5									2	3											1		
	51-75																																								
	>75																																								
New Delhi ...	6-25	30	1	3	4	2		1	2	5	2	27	2	2	3	1		2	4	3		24	1	2	4	1		2		6		16	1	1	2	2		2	2	5	
	26-50								4	6			1			2			1	5						1			3	3							1				
	51-75																			1										1											
	>75																																								
Peshawar ...	6-25	30		15	2	3			1	2	7	30	3	7	9	3	1	1			4	30	3	5	5	3	1	1			9	29	2	1			5	5	7	7	
	26-50												1							1			1	1						1								1			1	
	51-75																																								
	>75																																								
Poona ...	6-25	30						9	11	5		30				1		2	7	4		30					1	2	6	4		19	1					1	9	5	
	26-50							2	3									2	10									4	10								1		2		
	51-75																		4										3												
	>75																																								
Port Blair ...	6-25	30					1	17	2			29						5	1			28					1	5		1		13					1	4	1		
	26-50							9	1								1	10										9										3	2		
	51-75																	11	1									5	2									1			
	>75																																						1		
*Raj-Samand (Kankroli)	6-25	25		2			1	6	8	7	1	25	2	1				9	3	5	1	25	1	1				8	4	6	1	25	5	2	1			6	5		
	26-50													1			1	2						1			1	2						1		1		2	2		
	51-75																																								
	>75																																								
Sambalpur ...	6-25	30		1			2	19	2		6	30	2					10	9	1	1	28	2	3				4	10	3		24	2	2					5	7	1
	26-50																1	2	3	1			1					2	3				3	1					2		
	51-75																																1								
	>75																																								
Sharjah ...	6-25	30	1					1	5	10		30		1	2			8	4	7	1	30	1		2	1	2	3	9	4		29	2	2	2	1	1	5	5	2	1
	26-50			1				5	3	4								2	4						1		2	1	3	1			2				1	1	3		
	51-75														1																				1						
	>75																																								
Tezpur ...	6-25	30	1		4		1	1	1	1	21	28	1	2	7		2	4	4	1	3	24			4		3	5	5		1	10		1	1		2	1	3		2
	26-50														2			1							3			2	1												
	51-75														1																										
	>75																																								
Trichinopoly ...	6-25	30					1		13	13		30						2	8			30						1	9			24	2						4	6	2
	26-50							1	2										11	1									13										4	2	
	51-75																		7										6										3		
	>75																		1										1										1		
Trivandrum ...	6-25																																								
	26-50																																								
	51-75																																								
	>75																																								
Visagapatam ...	6-25	30				1	14	7	2	1	4	30	1				1	9	3	3		25	3					4	5	4	1	19	3						4	4	
	26-50								1								1	6	5									1	4					4								
	51-75																		1										2										4		
	>75																												1												

* Only on 25 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, however, recorded in the afternoon throughout the month.

CLOUD HEIGHTS (AFTERNOON)

ed its n./ .).	8·0 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	19	2				1	1	4	6		1 — 10								2	5	23					1	11	11	7			Lahore
–50							2	1	2																							
–75											9 or 10										3											
>75																																
–25	18			3				2	3	1	1 — 10						2		20	1	7						1	11	17	1		Madho Sagar (Gwalior)
–50		1	1	1		1		1	3																							
–75		1									9 or 10						1				4											
>75																																
–25	20	7		1			1	2	3		1 — 10							1	5	13	11									15	15	Madras
–50							1	2	1																							
–75								1			9 or 10									2	16											
>75								1																								
6–25	16		1	2	1	2	3	2	1	1	1 — 10						1	3	8	16	2						2	10	10	8		Malegaon
6–50							3																									
1–75											9 or 10						1				12											
>75																																
6–25											1 — 10															1	4	9	15	1		Mangalore
6–50																																
1–75											9 or 10																					
>75																																
6–25	15	1		2		2	2	3	1	3	1 — 10								3	2	25				1	3	19	7				Multan
26–50								1																								
51–75											9 or 10										1											
>75																																
6–25	6	1	1	1							1 — 10							1	2	10	11				1	4	3	11	11			New Delhi
26–50		1			1		1																									
51–75											9 or 10							1			3											
>75																																
6–25	26	1		1	1	1	3	10	3		1 — 10								1	17	12				1		4	7	2	4	12	Peshawar
26–50								2	4																							
51–75											9 or 10										1											
>75																																
6–25	11		1	2		2	2		1		1 — 10						7	9	12	1	1						1	2	6	21		Poona
26–50				1		1		1																								
51–75											9 or 10						2	1	1		11											
>75																																
6–25	8	1					1	2			1 — 10					25	3	2									4	23	3			Port Blair
26–50							1		1																							
51–75							1	1			9 or 10										26											
>75																																
6–25	22		5	1		2	3	5		4	1 — 10						2	1	5	14	3							2	15	13		*Raj-Samand (Kankroli)
26–50			1																													
51–75						1					9 or 10						1				3											
>75																																
6–25	16	3		2				5	2	1	1 — 10					4	3	1	4	12	6							3	17	9	1	Sambalpur
26–50		2	1																													
51–75											9 or 10					2	2				18											
>75																																
6–25	27	2	3	5	1	4	2		1		1 — 10								1		29						2	7	20	1		Sharjah
26–50				1		3	2	1	1																							
51–75						1					9 or 10																					
>75																																
6–25	5							2	1	2	1 — 10				3	2	3	9	9	3	1							4	22	4		Tezpur
26–50																																
51–75											9 or 10						1				16											
>75																																
6–25	21	2	1	2				6	4	2	1 — 10							1	9	9	11								4	8	18	Trichinopoly
26–50								3																								
51–75											9 or 10								2		14											
>75								1																								
6–25											1 — 10																3	15	12			Trivandrum
26–50																																
51–75											9 or 10																					
>75																																
6–25	15	1	2	2	2			1	1		1 — 10					3	10	5			12							24	6			Visagapatam
26–50		3					1	1																								
51–75		1									9 or 10										13											
>75																																

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
Ahmedabad ...	6-25	30					1	19	5	2	3	30					1	5	6	1	
	26-50																	2	12	3	
	51-75																				
	>75																				
Allahabad (Bamrauli)...	6-25	30	1		5	1		6	5	5	7	30				3	2	1	4		
	26-50												1		3			4	4	4	
	51-75																		2	1	
	>75																		1		
Bahrain ...	6-25	30	1			1		2	7	17	2	30	3		1						1
	26-50												8							5	
	51-75												11							1	
	>75																				
Bombay (Juhu) ...	6-25	30				8		9	2	1	10	27	1					8	8	4	
	26-50																	4	2		
	51-75																				
	>75																				
Calcutta (Dum Dum) ...	6-25	30	1	1	1	4	5	8			10	29	1	1	1	2	2	9	1		1
	26-50														2		1	5	2		
	51-75																	1			
	>75																				
Gaya ...	6-25	30	1	1	7	4	3	7	2	2	3	30	1	1	2	2	2	5	9	4	1
	26-50														1				1	1	
	51-75																				
	>75																				
Jacobabad ...	6-25	30		1	6	14	6	1			2	30				3	12	3	1		1
	26-50																7	3			
	51-75																				
	>75																				
Jiwani ...	6-25	30				4	4	9			13	30				2	12	5	3	4	3
	26-50																	1			
	51-75																				
	>75																				
Jodhpur ...	6-25	30		1				13	4			30						4	6		
	26-50							12										12	3		
	51-75																	4			
	>75																	1			
Karachi (Drigh Road) ...	6-25	30						11	13	1	1	29						2	10		
	26-50							3	1										14		
	51-75																		3		
	>75																				
New Delhi ...	6-25	30	1		3	7		1	10	1	2	30				2	1		3	4	1
	26-50								5						1	3	1		7	4	
	51-75																		3		
	>75																				
*Poona ...	6-25	30						6	17	4	2	30	3						11	2	
	26-50								1									5	6	2	
	51-75																	1			
	>75																				
†Raj Samand (Kankroli).	6-25	8	1					5	1		1	8							5		1
	26-50																	1	1		
	51-75																				
	>75																				
Sharjah ...	6-25	30	1		1	1	9	6	2		10	30		1	1	3	1	4	10	2	2
	26-50																		2	4	
	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	C
Ahmedabad ...	6-25	30				1		7	9	4		26	1	2	2	2	8	2	2		3
	26-50							3	6						1			3			
	51-75																				
	>75																				
Allahabad (Bamrauli)...	6-25	30			3		2	2	3	3		14	1	1	1			1	1	1	1
	26-50					1		3	3	5					1			1	1	2	
	51-75				2					2										2	
	>75								1												
Bahrain ...	6-25	30	4	1						1		17	1							2	1
	26-50		6							11			5						1	7	
	51-75		3							4											
	>75																				
Bombay (Juhu) ...	6-25	24	1				1	4	9	3	1	15	1		1	2	2	2	3	2	1
	26-50							2	3								1				
	51-75																				
	>75																				
Calcutta (Dum Dum) ...	6-25	27	2	1	5	1		7	4	2	1	11		3	2			1		1	1
	26-50				1		1	2						1						2	
	51-75																				
	>75																				
Gaya ...	6-25	30	1		2	2	3	1	7	2	2	20		2	1		1		4	2	
	26-50				1				7	2					2				2	6	
	51-75																				
	>75																				
Jacobabad ...	6-25	30			4	2	8	10	1		3	28	2	4	2	1		5	9	5	
	26-50							2													
	51-75																				
	>75																				
Jiwani ...	6-25	22	3	1		1	2	1	6	5	3	11	3	2	1					4	1
	26-50																				
	51-75																				
	>75																				
Jodhpur ...	6-25	30			1	1		4	5			20		2	5	3	2	2	3		1
	26-50							13							1		1				
	51-75							5													
	>75							1													
Karachi (Drigh Road) ...	6-25	23				1			7	2		7	1		2				1	2	
	26-50								12									1			
	51-75								1												
	>75																				
New Delhi ...	6-25	29	1	1		3	3			4		19	1	3	1		1	2	1	6	1
	26-50				1	1			10	3										3	
	51-75								1	1											
	>75																				
*Poona ...	6-25	30	1					1	9	5		16	2	1	1	1	1	1	3	1	
	26-50							5	6	2								2	2		
	51-75							1												1	
	>75																				
†Raj Samand (Kankroli).	6-25	8							5		1	6	1	1			3	1			
	26-50							1	1												
	51-75																				
	>75																				
Sharjah ...	6-25	30		1		2	2		8	4		30	2	1	1	1	2	7	5	3	1
	26-50					1	1	1	5	5			1			1	4		1		
	51-75																				
	>75																				

* Visibility observations were not recorded in the late night.

† 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.

CLOUD HEIGHTS (

	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	25	2			2	4	6	2	1		1 — 10						4				26						3	27				Ahmedabad
0			2	2	1		2	1																								
5											9 or 10										7											
5																																
5	2								1	1	1 — 10							1	4	1	24							26	4			Allahabad (Bamrauli)
0																																
5											9 or 10								1		4											
5																																
5	2							1			1 — 10										30							22	8			Bahrain
0									1																							
75											9 or 10																					
75																																
25	5			1	1	1	1	1			1 — 10					9	18	2			1						4	26				Bombay (Juhu)
50																																
75											9 or 10					3					8											
75																																
25											1 — 10					10	5		3		12						13	17				Calcutta (Dum Dum)
50																																
75											9 or 10					1	1				12											
75																																
25	10			1	1	1					1 — 10						1	3	3	1	22							21	9			Gaya
50								2	4																							
75									1		9 or 10								1		4											
75																																
25	22	8	2	1				1	7		1 — 10										30						3	24	3			Jacobabad
50		2	1																													
75											9 or 10																					
75																																
25	5	3	1						1		1 — 10					15	4	1			10							30				Jiwani
50																																
75											9 or 10					4	8				9											
75																																
25	16	4	4	1	1	1		1		1	1 — 10							1	2		27							15	15			Jodhpur
50			3																													
75											9 or 10										1											
75																																
6-25											1 — 10					4	17	3			6							24	6			Karachi (Drigh Road)
6-50																																
1-75											9 or 10					2	5	1			9											
>75																																
6-25	7	1	2	1			1	1	1		1 — 10						1		1	3	25				1		11	10	8			New Delhi
6-50																																
51-75											9 or 10										2											
>75																																
6-25	13	1	1		2	2	3	1			1 — 10					1	6	6		1	16											*Poona
26-50						2	1																									
51-75											9 or 10						1	1			10											
>75																																
6-25	6	1	1		1	1	1				1 — 10								1		7							4	4			†Raj Samand (Kankroli)
26-50		1																														
51-75											9 or 10																					
>75																																
6-25	29	1	3	3	6	3	3	2	2		1 — 10					1					29			1				3	26			Sharjah
26-50				1	1	1	2		1																							
51-75											9 or 10					1					1											
>75																																

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